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**THIS CIRCULAR IS IMPORTANT AND REQUIRES YOUR IMMEDIATE ATTENTION**

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**If you are in any doubt** as to any aspect of this circular or as to the action to be taken, you should consult your licensed securities dealer, bank manager, solicitor, professional accountant or other professional adviser.

**If you have sold or transferred** all your shares in Brainhole Technology Limited, you should at once hand this circular to the purchaser or transferee or to the bank, licensed securities dealer or other agent through whom the sale or transfer was effected for transmission to the purchaser or the transferee.

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**BRAINHOLE**  
TECHNOLOGY  
**BRAINHOLE TECHNOLOGY LIMITED**  
**脑洞科技有限公司**  
*(Incorporated in the Cayman Islands with limited liability)*  
**(Stock Code: 2203)**

**MAJOR TRANSACTIONS IN RELATION TO  
(1) ACQUISITIONS OF LISTED SECURITIES;  
AND  
(2) FURTHER ACQUISITIONS OF LISTED SECURITIES**

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Capitalised terms used on this cover page shall have the same meanings as those defined in the section headed “Definitions” in this circular, unless the context requires otherwise.

A letter from the Board is set out on pages 4 to 18 of this circular.

This circular is being despatched to the Shareholders for information only. The transactions being the subject matter of this circular have been approved by the written approval pursuant to Rule 14.44 of the Listing Rules.

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## DEFINITIONS

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*In this circular, the following expressions have the meanings set out below unless the context otherwise requires:*

“Acquisition of Micron Shares”	acquisition of 23,200 Micron Shares by the Company as disclosed in the announcement dated 22 March 2024
“Acquisition of Pop Mart Shares”	acquisition of 650,000 Pop Mart Shares by the Company as disclosed in the announcement dated 22 March 2024
“April Further Acquisition of Pop Mart Shares”	further acquisition of 145,000 Pop Mart Shares by the Company as disclosed in the announcement dated 23 April 2024
“Board”	the board of Directors
“Company”	Brainhole Technology Limited, a company incorporated in the Cayman Islands with limited liability, the issued Shares of which are listed on the Main Board of the Stock Exchange (stock code: 2203)
“connected person”	has the meaning ascribed to it under the Listing Rules
“Director(s)”	the director(s) of the Company
“Further Acquisition of Micron Shares”	further acquisition of 10,400 Micron Shares by the Company as disclosed in the announcement dated 2 April 2024
“Further Acquisition of Pop Mart Shares”	further acquisition of 166,000 Pop Mart Shares by the Company as disclosed in the announcement dated 2 April 2024
“Group”	the Company and its subsidiaries
“HK\$”	Hong Kong dollars, the lawful currency of Hong Kong
“Hong Kong”	means the Hong Kong Special Administrative Region of the PRC

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## DEFINITIONS

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“Independent Third Party(ies)”	third party(ies) independent of and not connected with the Company and its connected persons and is not acting in concert (as defined in the Codes on Takeovers and Mergers and Share Buy-backs) with any of the connected persons of the Company or any of their respective associates (as defined under the Listing Rules)
“Latest Practicable Date”	14 May 2024, being the latest practicable date prior to the printing of this circular for the purpose of ascertaining certain information contained in this circular
“Listing Rules”	the Rules Governing the Listing of Securities on the Stock Exchange
“Micron”	Micron Technology, Inc., a Delaware corporation whose common stocks are listed on Nasdaq (trading symbol: MU)
“Micron Group”	Micron and its subsidiaries
“Micron Share(s)”	Common stock(s) of Micron
“Nasdaq”	National Association of Securities Dealers Automated Quotations Stock Market
“Pop Mart”	Pop Mart International Group Limited, an exempted company incorporated in Cayman Islands with limited liability whose issued shares are listed on the Main Board of the Stock Exchange (stock code: 9992)
“Pop Mart Group”	Pop Mart and its subsidiaries
“Pop Mart Share(s)”	ordinary share(s) in the share capital of Pop Mart
“PRC”	the People’s Republic of China
“RMB”	Renminbi, the lawful currency of the PRC
“SFO”	the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong)
“Shareholder(s)”	shareholder(s) of the Company

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## DEFINITIONS

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“Share(s)”	ordinary share(s) in the issued share capital of the Company
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“United States”	the United States of America
“US\$”	United States dollars, the lawful currency of the United States
“%”	per cent.

*Certain figures set out in this circular have been subject to rounding adjustments. Accordingly, figures shown as the currency conversion or percentage equivalents may not be an arithmetic sum of such figures.*

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LETTER FROM THE BOARD

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**BRAINHOLE**  
TECHNOLOGY  
**BRAINHOLE TECHNOLOGY LIMITED**  
**脑洞科技有限公司**

*(Incorporated in the Cayman Islands with limited liability)*

**(Stock Code: 2203)**

*Executive Directors:*

Mr. Zhang Liang Johnson (*Chairman*)  
Ms. Wan Duo

*Independent Non-executive Directors:*

Mr. Xu Liang  
Mr. Chen Johnson Xi  
Ms. Zhang Yibo

*Registered office:*

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*in Hong Kong:*  
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One Taikoo Place  
979 King's Road  
Quarry Bay  
Hong Kong

24 May 2024

*To the Shareholders*

Dear Sir or Madam,

**MAJOR TRANSACTIONS IN RELATION TO  
(1) ACQUISITIONS OF LISTED SECURITIES  
AND  
(2) FURTHER ACQUISITIONS OF LISTED SECURITIES**

**INTRODUCTION**

Reference is made to the announcements of the Company dated 22 March 2024, 2 April 2024 and 23 April 2024 respectively, in relation to the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares.

The purpose of this circular is to provide you with (i) the details of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares; and (ii) further information required to be disclosed under the Listing Rules.

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## LETTER FROM THE BOARD

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### ACQUISITION OF MICRON SHARES

On 21 March 2024 (after trading hours of the Stock Exchange), the Company has acquired of an aggregate of 23,200 Micron Shares through the open market at an aggregate consideration of approximately US\$2.6 million (equivalent to approximately HK\$19.8 million) (excluding transaction costs). The average price (excluding transaction costs) for the acquisition of each Micron Share was approximately US\$109.92 (equivalent to approximately HK\$855.17). The aggregate consideration of approximately US\$2.6 million (equivalent to approximately HK\$19.8 million) (excluding transaction costs) was financed by the Group's existing internal financial resources.

As the Acquisition of Micron Shares was conducted in the open market, the identities of the counterparties of the acquired Micron Shares cannot be ascertained. To the best knowledge, information and belief of the Directors and having made all reasonable enquiries, the counterparties and the ultimate beneficial owner(s) of the counterparties of the acquired Micron Shares are Independent Third Parties.

### ACQUISITION OF POP MART SHARES

On 22 March 2024, the Company has acquired an aggregate of 650,000 Pop Mart Shares through the open market at an aggregate consideration of approximately HK\$18.0 million (excluding transaction costs). The average price (excluding transaction costs) for the acquisition of each Pop Mart Share was approximately HK\$27.67. The aggregate consideration of approximately HK\$18.0 million (excluding transaction costs) was financed by the Group's existing internal financial resources.

As the Acquisition of Pop Mart Shares was conducted in the open market, the identities of the counterparties of the acquired Pop Mart Shares cannot be ascertained. To the best knowledge, information and belief of the Directors and having made all reasonable enquiries, the counterparties and the ultimate beneficial owner(s) of the counterparties of the acquired Pop Mart Shares are Independent Third Parties.

### FURTHER ACQUISITION OF MICRON SHARES

On 1 April 2024, further to the Acquisition of Micron Shares as disclosed in this circular, the Company has acquired an aggregate of 10,400 Micron Shares through the open market at an aggregate consideration of approximately US\$1.3 million (equivalent to approximately HK\$10.0 million) (excluding transaction costs). The average price (excluding transaction costs) for the acquisition of each Micron Share was approximately US\$123.04 (equivalent to approximately HK\$957.22). The aggregate consideration of approximately US\$1.3 million (equivalent to approximately HK\$10.0 million) (excluding transaction costs) was financed by the Group's existing internal financial resources and existing shareholder's loan from Yoho Bravo Limited, a controlling Shareholder of the Company. The total consideration for the aggregate following the completion of all transactions contemplated under (i) the Acquisition of Micron Shares and (ii)

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## LETTER FROM THE BOARD

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the Further Acquisition of Micron Shares, is approximately US\$3.8 million (equivalent to approximately HK\$29.8 million).

As the Further Acquisition of Micron Shares was conducted in the open market, the identities of the counterparties of the acquired Micron Shares cannot be ascertained. To the best knowledge, information and belief of the Directors and having made all reasonable enquiries, the counterparties and the ultimate beneficial owner(s) of the counterparties of the acquired Micron Shares are Independent Third Parties.

As at the Latest Practicable Date, following the completion of all transactions contemplated under the Acquisition of Micron Shares and the Further Acquisition of Micron Shares, the Company is interested in 33,600 Micron Shares (representing approximately 0.003% of the total issued share capital of Micron). The Company had already complied with the notifiable transaction requirements in respect of the acquisitions of Micron Shares as disclosed in the previous relevant announcements of the Company and the balance of such acquisitions which were conducted within a 12-month period from the Acquisition of Micron Shares was aggregated with the Further Acquisition of Micron Shares.

### **FURTHER ACQUISITION OF POP MART SHARES**

On 2 April 2024, further to the Acquisition of Pop Mart Shares as disclosed in page 5 of this circular, the Company has acquired an aggregate of 166,000 Pop Mart Shares through the open market at an aggregate consideration of approximately HK\$5.0 million (excluding transaction costs). The average price (excluding transaction costs) for the acquisition of each Pop Mart Share was approximately HK\$30.075. The aggregate consideration of approximately HK\$5.0 million (excluding transaction costs) was financed by the Group's existing internal financial resources and existing shareholder's loan from Yoho Bravo Limited, a controlling Shareholder of the Company. The total consideration for the aggregate following the completion of all transactions contemplated under (i) the Acquisition of Pop Mart Shares and (ii) the Further Acquisition of Pop Mart Shares, is approximately HK\$23.0 million.

As the Further Acquisition of Pop Mart Shares was conducted in the open market, the identities of the counterparties of the acquired Pop Mart Shares cannot be ascertained. To the best knowledge, information and belief of the Directors and having made all reasonable enquiries, the counterparties and the ultimate beneficial owner(s) of the counterparties of the acquired Pop Mart Shares are Independent Third Parties.

### **APRIL FURTHER ACQUISITION OF POP MART SHARES**

On 23 April 2024, further to:

- (i) the Acquisition of Pop Mart Shares as disclosed in page 5 of this circular; and
- (ii) the Further Acquisition of Pop Mart Shares as disclosed in page 6 of this circular,



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## LETTER FROM THE BOARD

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the Company has acquired an aggregate of 145,000 Pop Mart Shares through the open market at an aggregate consideration of approximately HK\$5.0 million (excluding transaction costs). The average price (excluding transaction costs) for the acquisition of each Pop Mart Share was approximately HK\$34.447. The aggregate consideration of approximately HK\$5.0 million (excluding transaction costs) was financed by the Group's existing internal financial resources and existing shareholder's loan from Yoho Bravo Limited, a controlling Shareholder of the Company. The total consideration for the aggregate following the completion of all transactions contemplated under (i) the Acquisition of Pop Mart Shares, (ii) the Further Acquisition of Pop Mart Shares and (iii) the April Further Acquisition of Pop Mart Shares, is approximately HK\$28.0 million.

As the April Further Acquisition of Pop Mart Shares was conducted in the open market, the identities of the counterparties of the acquired Pop Mart Shares cannot be ascertained. To the best knowledge, information and belief of the Directors and having made all reasonable enquiries, the counterparties and the ultimate beneficial owner(s) of the counterparties of the acquired Pop Mart Shares are Independent Third Parties.

As at the Latest Practicable Date, following the completion of all transactions contemplated under the Acquisition of Pop Mart Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares, the Company is interested in 961,000 Pop Mart Shares (representing approximately 0.072% of the total issued share capital of Pop Mart). The Company had already complied with the notifiable transaction requirements in respect of the acquisitions of Pop Mart Shares as disclosed in the previous relevant announcements of the Company and the balance of such acquisitions which were conducted within a 12-month period from the Acquisition of Pop Mart Shares and the Further Acquisition of Pop Mart Shares was aggregated with the April Further Acquisition of Pop Mart Shares.

### INFORMATION ON THE COMPANY

The Company is an investment holding company and the Group is principally engaged in the manufacture and trading of electronic and electrical parts and components. The Group operates its business through three segments: (i) The Manufacturing segment is engaged in the sale of electronics and electrical parts and components produced by the Company. The products manufactured by the Company are mainly applied in smart consumer electronic devices; (ii) The Broadband Infrastructure and Smart Domain segment is engaged in the provision of broadband infrastructure construction services, broadband promotion services, and smart domain solutions; and (iii) The Trading segment is engaged in the trading of electronic and electrical parts and components sourced from third party suppliers.

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## LETTER FROM THE BOARD

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### INFORMATION ON MICRON AND POP MART

#### Micron

Micron is a Delaware corporation and a global leader in innovative memory and storage solutions. It produces computer memory and computer data storage including dynamic random-access memory, flash memory, and USB flash drives. As the leader in innovative memory solutions, Micron is helping the world make sense of data by delivering technology that is transforming how the world uses information to enrich life for all. Through its global brands, Micron and Crucial, Micron offers the industry's broadest portfolio. Micron is the only company manufacturing today's major memory and storage technologies: DRAM, NAND, and NOR technology.

The following financial information is extracted from the published documents of the Micron Group:

	<b>For the year ended 2 September 2021</b>		<b>For the year ended 1 September 2022</b>		<b>For the year ended 31 August 2023</b>	
	<i>US\$'000</i>	<i>HK\$'000</i>	<i>US\$'000</i>	<i>HK\$'000</i>	<i>US\$'000</i>	<i>HK\$'000</i>
Revenue	27,705,000	215,544,900	30,758,000	239,297,240	15,540,000	120,901,200
Net (loss)/ income	5,861,000	45,598,580	8,687,000	67,584,860	(5,833,000)	(45,380,740)

Based on Micron's published documents, the Micron Group has an audited consolidated net assets value of approximately US\$43,933 million (equivalent to approximately HK\$341.8 billion) as at 2 September 2021, approximately US\$49,907 million (equivalent to approximately HK\$388.3 billion) as at 1 September 2022 and approximately US\$44,120 million (equivalent to approximately HK\$343.3 billion) as at 31 August 2023.

Based on Micron's published documents, the Micron Group has an unaudited consolidated net assets value of approximately US\$43,870 million (equivalent to approximately HK\$341.3 billion) as at 29 February 2024.

#### Pop Mart

Pop Mart is an exempted company incorporated in Cayman Islands with limited liability and a holding company with no material operations of its own. Pop Mart is a market leading player in character-based entertainment, renowned for pioneering the designer toy culture worldwide. It conducts its business through its subsidiaries, which are principally engaged in the product design and development and sale of pop toys in the PRC and certain overseas countries and regions.

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## LETTER FROM THE BOARD

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The following financial information is extracted from the published documents of the Pop Mart Group:

	<b>For the year ended</b>		<b>For the year ended</b>		<b>For the year ended</b>	
	<b>31 December 2021</b>		<b>31 December 2022</b>		<b>31 December 2023</b>	
	<i>RMB'000</i>	<i>HK\$'000</i>	<i>RMB'000</i>	<i>HK\$'000</i>	<i>RMB'000</i>	<i>HK\$'000</i>
Revenue	4,490,651	215,544,900	4,617,324	5,079,056	6,301,002	6,931,102
Profit before income tax	1,171,191	1,288,310	639,529	703,482	1,415,755	1,557,331
Profit for the year	854,567	940,024	475,801	523,381	1,088,771	1,197,648
Profit attributable to owners of the Company	854,339	939,773	475,660	523,226	1,082,344	1,190,578

Based on Pop Mart's published documents, the Pop Mart Group has an audited consolidated net assets value of approximately RMB6,820 million (equivalent to approximately HK\$7,502 million) as at 31 December 2021, approximately RMB6,965 million (equivalent to approximately HK\$7,662 million) as at 31 December 2022 and approximately RMB7,780 million (equivalent to approximately HK\$8,558 million) as at 31 December 2023.

### **FINANCIAL EFFECT OF (I) THE ACQUISITION OF MICRON SHARES; (II) THE ACQUISITION OF POP MART SHARES; (III) THE FURTHER ACQUISITION OF MICRON SHARES; (IV) THE FURTHER ACQUISITION OF POP MART SHARES; AND (V) THE APRIL FURTHER ACQUISITION OF POP MART SHARES**

#### **Acquisition of Micron Shares**

The Acquisition of Micron Shares was accounted for as financial assets at fair value through profit or loss in the consolidated financial statements of the Group. The Acquisition of Micron Shares was initially recognised at fair value in the consolidated statement of financial position of the Group. Any fair value gain or loss arising from the Acquisition of Micron Shares will be recognised in the consolidated statement of profit and loss of the Group at the end of each reporting period.

As the Acquisition of Micron Shares was financed by internally generated funds, the assets and liabilities of the Group are expected to remain unchanged.

Save as disclosed above, there will be no immediate material effect on the earnings and assets and liabilities of the Group associated with the Acquisition of Micron Shares.

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## LETTER FROM THE BOARD

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### **Acquisition of Pop Mart Shares**

The Acquisition of Pop Mart Shares was accounted for as financial assets at fair value through profit or loss in the consolidated financial statements of the Group. The Acquisition of Pop Mart Shares was initially recognised at fair value in the consolidated statement of financial position of the Group. Any fair value gain or loss arising from the Acquisition of Pop Mart Shares will be recognised in the consolidated statement of profit and loss of the Group at the end of each reporting period.

As the Acquisition of Pop Mart Shares was financed by internally generated funds, the assets and liabilities of the Group are expected to remain unchanged.

Save as disclosed above, there will be no immediate material effect on the earnings and assets and liabilities of the Group associated with the Acquisition of Pop Mart Shares.

### **Further Acquisition of Micron Shares**

The total consideration for the aggregate of all transactions respectively contemplated under (i) the Acquisition of Micron Shares and (ii) the Further Acquisition of Micron Shares is approximately US\$3.8 million (equivalent to approximately HK\$29.8 million).

The Further Acquisition of Micron Shares was accounted for as financial assets at fair value through profit or loss in the consolidated financial statements of the Group. The Further Acquisition of Micron Shares was initially recognised at fair value in the consolidated statement of financial position of the Group. Any fair value gain or loss arising from the Further Acquisition of Micron Shares will be recognised in the consolidated statement of profit and loss of the Group at the end of each reporting period.

The Further Acquisition of Micron Shares was financed by internally generated funds and existing shareholder's loan. It is expected that there will not be any material effect on the assets and liabilities of the Group.

### **Further Acquisition of Pop Mart Shares**

The total consideration for the aggregate of all transactions respectively contemplated under (i) the Acquisition of Pop Mart Shares and (ii) the Further Acquisition of Pop Mart Shares is approximately HK\$23.0 million.

The Further Acquisition of Pop Mart Shares was accounted for as financial assets at fair value through profit or loss in the consolidated financial statements of the Group. The Further Acquisition of Pop Mart Shares was initially recognised at fair value in the consolidated statement of financial position of the Group. Any fair value gain or loss arising from the Further Acquisition of Pop Mart Shares will be recognised in the consolidated statement of profit and loss of the Group at the end of each reporting period.

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## LETTER FROM THE BOARD

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The Further Acquisition of Pop Mart Shares was financed by internally generated funds and existing shareholder's loan. It is expected that there will not be any material effect on the assets and liabilities of the Group.

### **April Further Acquisition of Pop Mart Shares**

The total consideration for the aggregate of all transactions respectively contemplated under (i) the Acquisition of Pop Mart Shares, (ii) the Further Acquisition of Pop Mart Shares and (iii) the April Further Acquisition of Pop Mart Shares is approximately HK\$28.0 million.

The April Further Acquisition of Pop Mart Shares was accounted for as financial assets at fair value through profit or loss in the consolidated financial statements of the Group. The April Further Acquisition of Pop Mart Shares was initially recognised at fair value in the consolidated statement of financial position of the Group. Any fair value gain or loss arising from the April Further Acquisition of Pop Mart Shares will be recognised in the consolidated statement of profit and loss of the Group at the end of each reporting period.

The April Further Acquisition of Pop Mart Shares was financed by internally generated funds and existing shareholder's loan. It is expected that there will not be any material effect on the assets and liabilities of the Group.

It should be noted that the above financial effects of (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares are for illustrative purposes only. The actual impact of (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares to be recognised by the Group will be subject to final audit by the Company's auditors.

### **REASONS FOR AND BENEFITS OF (I) THE ACQUISITION OF MICRON SHARES, (II) THE ACQUISITION OF POP MART SHARES, (III) THE FURTHER ACQUISITION OF MICRON SHARES, (IV) THE FURTHER ACQUISITION OF POP MART SHARES AND (V) THE APRIL FURTHER ACQUISITION OF POP MART SHARES**

The Group is principally engaged in the manufacturing and trading of semiconductors, broadband infrastructure construction and the provision of integrated solution for smart domain application (including smart home, smart campus and smart communities).

The Group believes that technological innovation is an important engine for future economic development, and it can also drive the emerging applications in the smart living sector. The Group always hopes to leverage our own advantages in the field of smart technology to actively diversify the investments in the field of innovative technologies, in order to facilitate the technological development and create greater value for the Shareholders.

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## LETTER FROM THE BOARD

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Micron is a global leader in innovative memory and storage solutions. Pop Mart is a market leading player in character-based entertainment, renowned for pioneering the designer toy culture worldwide. The Board holds positive views towards the financial performance and future prospects of Micron and Pop Mart. At the relevant times, the Group considered that (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares represent good opportunities to acquire attractive investment and to expand its investment portfolio with quality assets, which would enhance investment return for the Group.

As each of (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares was made in the open market at prevailing market prices, the Directors (including the independent non-executive Directors) are of the view that the terms of each of (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares are fair and reasonable and in the interests of the Company and the Shareholders as a whole.

### **LISTING RULES IMPLICATIONS**

#### **Acquisition of Micron Shares**

As the highest applicable percentage ratio under Rule 14.07 of the Listing Rules in respect of the Acquisition of Micron Shares exceeds 25% but is less than 100%, the Acquisition of Micron Shares constitutes a major transaction for the Company under Chapter 14 of the Listing Rules and will be subject to the reporting, announcement, circular and Shareholders' approval requirements under the Listing Rules.

#### **Acquisition of Pop Mart Shares**

As the highest applicable percentage ratio under Rule 14.07 of the Listing Rules in respect of the Acquisition of Pop Mart Shares exceeds 25% but is less than 100%, the Acquisition of Pop Mart Shares constitutes a major transaction for the Company under Chapter 14 of the Listing Rules and will be subject to the reporting, announcement, circular and Shareholders' approval requirements under the Listing Rules.

#### **Further Acquisition of Micron Shares**

Pursuant to Rule 14.22 and Rule 14.23 of the Listing Rules for the purpose of classification of the transactions, as the Acquisition of Micron Shares and the Further Acquisition of Micron Shares involve the acquisition of Micron Shares within a 12-month period, all transactions respectively contemplated thereunder are considered and are aggregated as one transaction at a total consideration of approximately US\$3.8 million (equivalent to approximately HK\$29.8 million).

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## LETTER FROM THE BOARD

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The Further Acquisition of Micron Shares, on a standalone basis, constitutes a discloseable transaction since one or more of the applicable percentage ratios (as defined under the Listing Rules) are more than 5% but all of such ratios are less than 25%.

As the highest applicable percentage ratio under Rule 14.07 of the Listing Rules in respect of the Further Acquisition of Micron Shares, when aggregated with the Acquisition of Micron Shares by the Company in the preceding 12-month period, exceeds 25% but is less than 100%, the Further Acquisition of Micron Shares constitutes a major transaction of the Company under Chapter 14 of the Listing Rules and will be subject to reporting, announcement, circular and Shareholders' approval requirements under Chapter 14 of the Listing Rules.

### **Further Acquisition of Pop Mart Shares**

Pursuant to Rule 14.22 and Rule 14.23 of the Listing Rules for the purpose of classification of the transactions, as the Acquisition of Pop Mart Shares and the Further Acquisition of Pop Mart Shares involve the acquisition of Pop Mart Shares within a 12-month period, all transactions respectively contemplated thereunder are considered and are aggregated as one transaction at a total consideration of approximately HK\$23.0 million.

The Further Acquisition of Pop Mart Shares, on a standalone basis, constitutes a discloseable transaction since one or more of the applicable percentage ratios (as defined under the Listing Rules) are more than 5% but all of such ratios are less than 25%.

As the highest applicable percentage ratio under Rule 14.07 of the Listing Rules in respect of the Further Acquisition of Pop Mart Shares, when aggregated with the Acquisition of Pop Mart Shares by the Company in the preceding 12-month period, exceeds 25% but is less than 100%, the Further Acquisition of Pop Mart Shares constitutes a major transaction of the Company under Chapter 14 of the Listing Rules and will be subject to reporting, announcement, circular and Shareholders' approval requirements under Chapter 14 of the Listing Rules.

### **April Further Acquisition of Pop Mart Shares**

Pursuant to Rule 14.22 and Rule 14.23 of the Listing Rules for the purpose of classification of the transactions, as the Acquisitions of Pop Mart Shares and the Further Acquisition of Pop Mart Shares involve the acquisition of Pop Mart Shares within a 12-month period, all transactions respectively contemplated thereunder are considered and are aggregated as one transaction at a total consideration of approximately HK\$28.0 million.

The Further Acquisition of Pop Mart Shares, on a standalone basis, constitutes a discloseable transaction since one or more of the applicable percentage ratios (as defined under the Listing Rules) are more than 5% but all of such ratios are less than 25%.

As the highest applicable percentage ratio under Rule 14.07 of the Listing Rules in respect of the Further Acquisition of Pop Mart Shares, when aggregated with the Acquisitions of Pop Mart Shares by the Company in the preceding 12-month period, exceeds 25% but is less than

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## LETTER FROM THE BOARD

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100%, the Further Acquisition of Pop Mart Shares constitutes a major transaction of the Company under Chapter 14 of the Listing Rules and will be subject to reporting, announcement, circular and Shareholders' approval requirements under Chapter 14 of the Listing Rules.

### **WAIVER FROM STRICT COMPLIANCE WITH THE REQUIREMENTS UNDER THE LISTING RULES**

#### **Waiver from strict compliance with Rule 14.67(6)(a)(i) and Rule 14.67(7) of the Listing Rules**

Pursuant to Rules 14.67(6)(a)(i) and 14.67(7) of the Listing Rules, the Company is required to include in this circular an accountant's report on Micron which is prepared in accordance with Chapter 4 of the Listing Rules and a discussion and analysis on results of Micron covering all those matters set out in paragraph 32 of Appendix D2 to the Listing Rules for the period reported in such accountant's report.

As the Company considers that the strict compliance with Rules 14.67(6)(a)(i) and 14.67(7) of the Listing Rules would be unduly burdensome, the Company has applied for waiver from strict compliance of the aforesaid Listing Rules on the following grounds:

- (a) The Acquisition of Micron Shares and the Further Acquisition of Micron Shares are part of the Group's strategic investments business, and the Group may make appropriate investment opportunities as and when appropriate, including but not limited to acquisition(s) and disposal(s) of listed equity securities. Subsequent to the Acquisition of Micron Shares and the Further Acquisition of Micron Shares, the percentage of Micron Shares held by the Company would be approximately 0.003%. The Company also does not have any board seats in Micron. It is submitted that the Company's minority interest in Micron is minimal and insignificant to exert any form of control over Micron.
- (b) Following the Acquisition of Micron Shares and the Further Acquisition of Micron Shares, Micron will not become a subsidiary or an associate of the Company and the financial results of Micron will not be consolidated in the financial statements of the Group nor be equity accounted for in the Group's consolidated financial statements as an associate. Requiring the Company to arrange for an accountants' report on Micron will be out of proportion to the size of each of the Acquisition of Micron Shares and the Further Acquisition of Micron Shares in terms of time and costs involved.
- (c) As each of the Acquisition of Micron Shares and the Further Acquisition of Micron Shares was a transaction made in the open market, Micron was not obliged to assist the Company to prepare the accountants' report on Micron for the Acquisition of Micron Shares and the Further Acquisition of Micron Shares. In addition, the Company does not have access to Micro's books and records to prepare the accountants' report on it in accordance with the Listing Rules.



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## LETTER FROM THE BOARD

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- (d) The preparation of the accountants' report under Rule 14.67(a)(i) of the Listing Rules for inclusion in the circular would require converting the financial information of Micron based on the Hong Kong Financial Reporting Standards. Even assuming Micron is prepared to provide extensive access to its accounting records and provide explanations in relation to the same, the Company considers that it would be unduly onerous to require the Company to set out an accountants' report of Micron in its circular as the auditors of the Company would have to carry out audit procedures on Micron, which would not provide meaningful information to the Shareholders given the above.
- (e) The Company's reporting accountant considers that the accounting policies of Micron, i.e. the accounting principles generally accepted in the United States as contained in the Financial Accounting Standards Board Accounting Standards Codification (the "U.S. GAAP"), are materially consistent with the accounting policies of the Company, i.e. Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants.
- (f) Micron, being a listed company incorporated in the United States, is required to publish its audited financial statements, on a regular basis, for each financial year, on its website. Micron has its financial results audited by PricewaterhouseCoopers LLP and prepared based on the U.S. GAAP. Micron had been publishing financial information to the market on a regular basis to enable investors to assess its activities and financial position, and such filings can be easily obtained by the Shareholders and will enable them and potential investors to make a properly informed assessment of Micron. Further, Micron would publish its unaudited quarterly results on its website. The unaudited quarterly results were prepared based on the U.S. GAAP, and therefore, such information is publicly available.
- (g) As stated in the reasons set out in points (c) and (f) above, the Company could not access the books and records of Micron and Micron was not prepared to disclose any additional financial information. Thus, the Company were not able to prepare the discussion and analysis of results of Micron for the incorporation into this circular. In addition, the Company could not express any view as to the truth, accuracy or completeness on the discussion and analysis of the results of Micron as stated in its published information.

In light of the above, the Company considers that strict compliance with requirements under Rules 14.67(6)(a)(i) and 14.67(7) of the Listing Rules would be unduly burdensome and impractical, and a relaxation of such requirements would unlikely result in undue risks to the Shareholders and potential investors of the Company.

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## LETTER FROM THE BOARD

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### Alternative disclosures

The Company has included the following information in this circular as alternative disclosures to an accountants' report required under Rule 14.67(6)(a)(i) of the Listing Rules and a management discussion and analysis required under Rule 14.67(7) of the Listing Rules:

- (a) the annual audited consolidated financial statements of Micron for the year ended 2 September 2021 as extracted from the published documents of Micron, which is set out on page II-2 to II-38 in Appendix II to this circular;
- (b) the annual audited consolidated financial statements of Micron for the year ended 1 September 2022 as extracted from the published documents of Micron, which is set out on page II-39 to II-76 in Appendix II to this circular;
- (c) the annual audited consolidated financial statements of Micron for the year ended 31 August 2023 as extracted from the published documents of Micron, which is set out on page II-77 to II-114 in Appendix II to this circular;
- (d) the unaudited consolidated financial statements of Micron for the six months ended 29 February 2024 as extracted from the published documents of Micron, which is set out on page II-115 to II-136 in Appendix II to this circular; and
- (e) the management discussion and analysis of the results of operations of Micron for the three years ended 2 September 2021, 1 September 2022 and 31 August 2023 and the six months ended 29 February 2024 as extracted from the published documents of Micron, which are set out on pages III-1 to III-38 in Appendix III to this circular.

Based on the information provided by the Company and the alternative disclosures above, the Stock Exchange granted the waiver from strict compliance with Rules 14.67(6)(a)(i) and 14.67(7) under the Listing Rules.

### WRITTEN SHAREHOLDER'S APPROVAL

Pursuant to Rule 14.44 of the Listing Rules, shareholders' approval may be obtained by written shareholders' approval in lieu of convening a general meeting if (a) no shareholder is required to abstain from voting if the Company were to convene a general meeting for the approval of each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares; and (b) written approval has been obtained from a shareholder or a closely allied group of shareholders who together hold more than 50% of the issued share capital of the Company giving the right to attend and vote at general meetings to approve each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares.

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## LETTER FROM THE BOARD

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To the best of the Directors' knowledge, information and belief, having made all reasonable enquiries, no Shareholder has any material interest in each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares. Thus, if the Company were to convene a general meeting to approve each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares, no Shareholder is required to abstain from voting on the resolutions in relation to each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares. As such, each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares may be approved by written Shareholders' approval in accordance with Rule 14.44 of the Listing Rules.

In relation to written approval in lieu of holding a general meeting in respect of each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares, the Company obtained shareholder's approval from Yoho Bravo Limited which holds 599,658,000 shares (representing approximately 74.96% of the total issued share capital of the Company as at the date of the written approval by Yoho Bravo Limited and the Latest Practicable Date respectively) pursuant to Rule 14.44 of the Listing Rules. As a result, no extraordinary general meeting will be convened to consider each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares.

### RECOMMENDATION

The Directors (including the independent non-executive Directors) consider that each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares are on normal commercial terms, which is fair and reasonable and in the interests of the Company and its Shareholders as a whole. The Directors would recommend the Shareholders to vote in favour of each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares if a physical meeting were to be held.

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## LETTER FROM THE BOARD

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### ADDITIONAL INFORMATION

Your attention is drawn to the additional information set out in the appendices to this circular.

By Order of the Board  
**Brainhole Technology Limited**  
**Zhang Liang Johnson**  
*Chairman and Executive Director*

## 1. FINANCIAL INFORMATION OF THE GROUP

Details of the financial information of the Company for the three years ended 31 December 2021, 2022 and 2023 have been published and are available on the website of the Stock Exchange ([www.hkex.com.hk](http://www.hkex.com.hk)) and the website of the Company (<http://www.brainholetechnology.com>) respectively:

- the annual report of the Company for the year ended 31 December 2021 (pages 84 to 169) published on 28 April 2022, available on:

<https://www1.hkexnews.hk/listedco/listconews/sehk/2022/0428/2022042800574.pdf>

- the annual report of the Company for the year ended 31 December 2022 (pages 81 to 169) published on 26 April 2023, available on:

<https://www1.hkexnews.hk/listedco/listconews/sehk/2023/0426/2023042600894.pdf>

- the annual report of the Company for the year ended 31 December 2023 (pages 83 to 173) published on 29 April 2024, available on:

<https://www1.hkexnews.hk/listedco/listconews/sehk/2024/0429/2024042902560.pdf>

## 2. STATEMENT OF INDEBTEDNESS OF THE GROUP

At the close of business on 31 March 2024, being the latest practicable date for the purpose of ascertaining the indebtedness of the Group prior to the printing of this Circular, the Group had outstanding indebtedness as follows:

	<b>31 March 2024 HK\$'000</b>
Lease liabilities	4,907
Loan from immediate holding company	Nil
Loans from related companies	49,590
Loan from ultimate controlling party	110,743

As at 31 March 2024, all the loan from immediate holding company, loans from related companies and loan from ultimate controlling party of the Group disclosed above are unsecured and unguaranteed.

Save as disclosed above, the Group did not, as of the close of business on 31 March 2024, have any debt securities issued and outstanding, or authorised or otherwise created but unissued, any other term loans, any other borrowings or indebtedness in the nature of borrowings including bank overdrafts and liabilities under acceptance (other than normal trade bills) or acceptance credits or hire purchase commitments, any other mortgages and charges or any guarantees or any finance lease commitments or material contingent liabilities.

### **3. WORKING CAPITAL STATEMENT OF THE GROUP**

The Directors, after due and careful consideration, are of the opinion that, taking into account the financial resources available to the Group, including internally generated funds and the available facilities, and the impact of (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares, the Group will have sufficient working capital for its business for at least 12 months from the date of this circular.

The Company has obtained the relevant confirmation as required under Rule 14.66 (12) of the Listing Rules.

### **4. MATERIAL ADVERSE CHANGE**

At the Latest Practicable Date and to the best knowledge of the Directors, there was no material adverse change in the financial or trading position of the Group since 31 December 2023 (being the date to which the latest published audited financial statements of the Group were made up).

### **5. FINANCIAL AND TRADING PROSPECTS OF THE GROUP**

The Group is principally engaged in the manufacturing and trading of semiconductors, broadband infrastructure construction and the provision of integrated solution for smart domain application (including smart home, smart campus and smart communities). The Group believes that technological innovation is an important engine for future economic development, and it can also drive the emerging applications in the smart living sector. The Group aims to leverage our own advantages in the field of smart technology to capture investment opportunities and actively diversify the investments in the field of innovative technologies, in order to create greater value for the Shareholders.

Since 2022, the Group commenced the strategic investments business which engages in trading of cryptocurrencies and listed equity securities. In particular to the listed equity securities, the investment portfolio mainly comprises leading technology companies and high-quality large companies listed in the United States and Hong Kong. As stated in the paragraphs headed “REASONS FOR AND BENEFITS OF (I)THE ACQUISITION OF MICRON SHARES, (II) THE ACQUISITION OF POP MART SHARES, (III) THE FURTHER ACQUISITION OF MICRON SHARES, (IV) THE FURTHER ACQUISITION OF POP MART

SHARES AND (V) THE APRIL FURTHER ACQUISITION OF POP MART SHARES” in the section headed “LETTER FROM THE BOARD”, the Group considers that (i) the Acquisition of Micron Shares, (ii) the Acquisition of Pop Mart Shares, (iii) the Further Acquisition of Micron Shares, (iv) the Further Acquisition of Pop Mart Shares and (v) the April Further Acquisition of Pop Mart Shares represent opportunities to allow the Group to reallocate the resources and investment portfolio. The Group will closely monitor and assess the performance of these listed equity securities and make timely and appropriate adjustments on the investment portfolio to enhance the returns for the Group and realise the investments as and when appropriate.

**FINANCIAL INFORMATION OF MICRON FOR (I) EACH OF THE THREE YEARS ENDED 2 SEPTEMBER 2021, 1 SEPTEMBER 2022 AND 31 AUGUST 2023 AND (II) THE SIX MONTHS ENDED 29 FEBRUARY 2024**

For the purpose of this section only, unless the context requires otherwise, references to the “Company” are to Micron, and references to “we”, “us” and “our” shall be construed accordingly.

The following is an extract of the audited consolidated financial statements of Micron for the three years ended 2 September 2021, 1 September 2022 and 31 August 2023 and the unaudited consolidated financial statements of Micron for the six months ended 29 February 2024, which were prepared in accordance with the accounting principles generally accepted in the United States as contained in the Financial Accounting Standards Board Accounting Standards Codification (the “U.S. GAAP”), as extracted from the respective annual reports/second quarterly report of Micron for the three years ended 2 September 2021, 1 September 2022 and 31 August 2023 and for the six months ended 29 February 2024. These financial statements were issued in English and the Chinese translated version is provided for information purposes only. In case of discrepancies between the two versions, the English version shall prevail.

The annual reports/second quarterly report and consolidated financial statements of Micron for the three years ended 2 September 2021, 1 September 2022 and 31 August 2023 and for the six months ended 29 February 2024 are available at the website of Micron (<https://investors.micron.com/sec-filings>).

The Directors wish to emphasise that the extracts reproduced below are not prepared for incorporation into this circular and the Company has not participated in their preparation. As such, the Directors do not express any view as to their truth, accuracy or completeness, and the Shareholders and investors should exercise caution and should not place undue reliance on such information.



## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

## Micron Technology, Inc.

### Consolidated Statements of Operations

(in millions, except per share amounts)

For the year ended	September 2, 2021	September 3, 2020	August 29, 2019
Revenue	\$ 27,705	\$ 21,435	\$ 23,406
Cost of goods sold	17,282	14,883	12,704
Gross margin	10,423	6,552	10,702
Research and development	2,663	2,600	2,441
Selling, general, and administrative	894	881	836
Restructure and asset impairments	488	60	(29)
Other operating (income) expense, net	95	8	78
Operating income	6,283	3,003	7,376
Interest income	37	114	205
Interest expense	(183)	(194)	(128)
Other non-operating income (expense), net	81	60	(405)
	6,218	2,983	7,048
Income tax (provision) benefit	(394)	(280)	(693)
Equity in net income (loss) of equity method investees	37	7	3
Net income	5,861	2,710	6,358
Net income attributable to noncontrolling interests	—	(23)	(45)
Net income attributable to Micron	\$ 5,861	\$ 2,687	\$ 6,313
Earnings per share			
Basic	\$ 5.23	\$ 2.42	\$ 5.67
Diluted	5.14	2.37	5.51
Number of shares used in per share calculations			
Basic	1,120	1,110	1,114
Diluted	1,141	1,131	1,143

See accompanying notes to consolidated financial statements.

## Micron Technology, Inc. Consolidated Statements of Comprehensive Income

(in millions)

For the year ended	September 2, 2021	September 3, 2020	August 29, 2019
Net income	\$ 5,861	\$ 2,710	\$ 6,358
Other comprehensive income (loss), net of tax			
Gains (losses) on derivative instruments	(67)	46	(3)
Gains (losses) on investments	(7)	1	9
Pension liability adjustments	3	15	(6)
Foreign currency translation adjustments	2	—	(1)
Other comprehensive income (loss)	(69)	62	(1)
Total comprehensive income	5,792	2,772	6,357
Comprehensive income attributable to noncontrolling interests	—	(23)	(45)
Comprehensive income attributable to Micron	\$ 5,792	\$ 2,749	\$ 6,312

See accompanying notes to consolidated financial statements.

## Micron Technology, Inc. Consolidated Balance Sheets

(in millions, except par value amounts)

As of	September 2, 2021	September 3, 2020
<b>Assets</b>		
Cash and equivalents	\$ 7,763	\$ 7,624
Short-term investments	870	518
Receivables	5,311	3,912
Inventories	4,487	5,373
Assets held for sale	974	—
Other current assets	502	538
Total current assets	19,907	17,965
Long-term marketable investments	1,765	1,048
Property, plant, and equipment	33,213	31,031
Operating lease right-of-use assets	551	584
Intangible assets	349	334
Deferred tax assets	782	707
Goodwill	1,228	1,228
Other noncurrent assets	1,054	781
Total assets	<u>\$ 58,849</u>	<u>\$ 53,678</u>
<b>Liabilities and equity</b>		
Accounts payable and accrued expenses	\$ 5,325	\$ 5,817
Current debt	155	270
Other current liabilities	944	548
Total current liabilities	6,424	6,635
Long-term debt	6,621	6,373
Noncurrent operating lease liabilities	504	533
Noncurrent unearned government incentives	808	643
Other noncurrent liabilities	559	498
Total liabilities	<u>14,916</u>	<u>14,682</u>
<b>Commitments and contingencies</b>		
<b>Micron shareholders' equity</b>		
Common stock, \$0.10 par value, 3,000 shares authorized, 1,216 shares issued and 1,119 outstanding (1,194 shares issued and 1,113 outstanding as of September 3, 2020)	122	119
Additional capital	9,453	8,917
Retained earnings	39,051	33,384
Treasury stock, 97 shares held (81 shares as of September 3, 2020)	(4,695)	(3,495)
Accumulated other comprehensive income (loss)	2	71
Total equity	<u>43,933</u>	<u>38,996</u>
Total liabilities and equity	<u>\$ 58,849</u>	<u>\$ 53,678</u>

See accompanying notes to consolidated financial statements.

## Micron Technology, Inc. Consolidated Statements of Changes in Equity

(in millions, except per share amounts)

	Micron Shareholders								
	Common Stock			Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Micron Shareholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
	Number of Shares	Amount	Additional Capital						
<b>Balance at August 30, 2018</b>	1,170	\$ 117	\$ 8,201	\$ 24,395	\$ (429)	\$ 10	\$ 32,294	\$ 870	\$33,164
Cumulative effect from adoption of new accounting standards	—	—	—	92	—	—	92	—	92
Net income	—	—	—	6,313	—	—	6,313	36	6,349
Other comprehensive income (loss), net	—	—	—	—	—	(1)	(1)	—	(1)
Stock issued under stock plans	14	1	178	—	—	—	179	—	179
Stock-based compensation expense	—	—	243	—	—	—	243	—	243
Repurchase of stock	(2)	—	103	(39)	(2,792)	—	(2,728)	—	(2,728)
Acquisitions of noncontrolling interest	—	—	1	—	—	—	1	(17)	(16)
Reclassification of redeemable convertible notes, net	—	—	3	—	—	—	3	—	3
Cash settlement of convertible notes	—	—	(515)	—	—	—	(515)	—	(515)
<b>Balance at August 29, 2019</b>	1,182	\$ 118	\$ 8,214	\$ 30,761	\$ (3,221)	\$ 9	\$ 35,881	\$ 889	\$36,770
Net income	—	—	—	2,687	—	—	2,687	15	2,702
Other comprehensive income (loss), net	—	—	—	—	—	62	62	—	62
Stock issued under stock plans	14	1	224	—	—	—	225	—	225
Stock-based compensation expense	—	—	328	—	—	—	328	—	328
Repurchase of stock	(2)	—	(11)	(64)	(176)	—	(251)	—	(251)
Settlement of capped calls	—	—	98	—	(98)	—	—	—	—
Acquisitions of noncontrolling interest	—	—	120	—	—	—	120	(904)	(784)
Cash settlement of convertible notes	—	—	(56)	—	—	—	(56)	—	(56)
<b>Balance at September 3, 2020</b>	1,194	\$ 119	\$ 8,917	\$ 33,384	\$ (3,495)	\$ 71	\$ 38,996	\$ —	\$38,996
Net income	—	—	—	5,861	—	—	5,861	—	5,861
Other comprehensive income (loss), net	—	—	—	—	—	(69)	(69)	—	(69)
Stock issued under stock plans	13	2	223	—	—	—	225	—	225
Stock-based compensation expense	—	—	378	—	—	—	378	—	378
Repurchase of stock	(2)	—	(12)	(82)	(1,200)	—	(1,294)	—	(1,294)
Stock issued for convertible notes	11	1	(1)	—	—	—	—	—	—
Cash settlement of convertible notes	—	—	(52)	—	—	—	(52)	—	(52)
Cash dividends declared (\$0.10 per share)	—	—	—	(112)	—	—	(112)	—	(112)
<b>Balance at September 2, 2021</b>	1,216	\$ 122	\$ 9,453	\$ 39,051	\$ (4,695)	\$ 2	\$ 43,933	\$ —	\$43,933

See accompanying notes to consolidated financial statements.

## Micron Technology, Inc.

### Consolidated Statements of Cash Flows

(in millions)

For the year ended	September 2, 2021	September 3, 2020	August 29, 2019
<b>Cash flows from operating activities</b>			
Net income	\$ 5,861	\$ 2,710	\$ 6,358
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation expense and amortization of intangible assets	6,214	5,650	5,424
Amortization of debt discount and other costs	30	26	49
Restructure and asset impairments	454	40	(97)
Stock-based compensation	378	328	243
(Gains) losses on debt prepayments, repurchases, and conversions	1	(40)	396
Change in operating assets and liabilities			
Receivables	(1,446)	(723)	2,431
Inventories	866	(435)	(1,489)
Accounts payable and accrued expenses	210	725	(174)
Deferred income taxes, net	(50)	79	150
Other	(50)	(54)	(102)
Net cash provided by operating activities	12,468	8,306	13,189
<b>Cash flows from investing activities</b>			
Expenditures for property, plant, and equipment	(10,030)	(8,223)	(9,780)
Purchases of available-for-sale securities	(3,163)	(1,857)	(4,218)
Proceeds from maturities of available-for-sale securities	1,250	814	1,541
Proceeds from sales of available-for-sale securities	856	1,458	1,504
Proceeds from government incentives	495	262	748
Other	3	(43)	120
Net cash provided by (used for) investing activities	(10,589)	(7,589)	(10,085)
<b>Cash flows from financing activities</b>			
Repayments of debt	(1,520)	(4,366)	(3,340)
Payments to acquire treasury stock	(1,294)	(251)	(2,729)
Payments on equipment purchase contracts	(295)	(63)	(75)
Acquisition of noncontrolling interest in IMFT	—	(744)	—
Proceeds from issuance of debt	1,188	5,000	3,550
Other	140	107	156
Net cash provided by (used for) financing activities	(1,781)	(317)	(2,438)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	41	11	26
Net increase (decrease) in cash, cash equivalents, and restricted cash	139	411	692
Cash, cash equivalents, and restricted cash at beginning of period	7,690	7,279	6,587
Cash, cash equivalents, and restricted cash at end of period	\$ 7,829	\$ 7,690	\$ 7,279
<b>Supplemental disclosures</b>			
Income taxes paid, net	\$ (361)	\$ (167)	\$ (524)
Interest paid, net of amounts capitalized	(171)	(165)	(53)
Noncash equipment acquisitions on contracts payable and finance leases	684	278	119

See accompanying notes to consolidated financial statements.

# Micron Technology, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All tabular amounts in millions, except per share amounts)

## Significant Accounting Policies

### Basis of Presentation

Micron Technology, Inc., including its consolidated subsidiaries, is an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life *for all*. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND, and NOR memory and storage products through our Micron® and Crucial® brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience.

The accompanying consolidated financial statements include the accounts of Micron Technology, Inc. and our consolidated subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America. Intercompany balances and transactions have been eliminated in consolidation. Certain reclassifications have been made to prior period amounts to conform to current period presentation. See “Inventories” below for changes to our significant accounting policies, and the “Inventories” note for additional information.

Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2021 contained 52 weeks, fiscal 2020 contained 53 weeks, and fiscal 2019 contained 52 weeks. Our fourth quarter of fiscal 2020 contained 14 weeks and all other fiscal quarters in the years presented contained 13 weeks. All period references are to our fiscal periods unless otherwise indicated.

### Derivative and Hedging Instruments

We use derivative instruments to manage our exposure to changes in currency exchange rates from (1) our monetary assets and liabilities denominated in currencies other than the U.S. dollar and (2) forecasted cash flows for certain capital expenditures and manufacturing costs. We also use derivative instruments to manage our exposure to changes in commodity prices for manufacturing supplies and to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Derivative instruments are measured at their fair values and recognized as either assets or liabilities.

The accounting for changes in the fair value of derivative instruments is based on the intended use of the derivative and the resulting designation. For derivative instruments that are not designated for hedge accounting, gains or losses from changes in fair values are recognized in other non-operating income (expense). For derivative instruments designated as cash flow hedges, gains or losses are included as a component of accumulated other comprehensive income and reclassified into earnings in the same line items and in the same periods in which the underlying transactions affect earnings. For derivative instruments designated as cash flow hedges, time value is excluded from the assessment of effectiveness and the gains and losses attributable to time value are recognized in earnings. For derivative instruments designated as fair value hedges, changes in the fair values of the derivative instruments and the offsetting changes in the fair values of the underlying hedged items are both recognized in earnings.

We enter into master netting arrangements with our counterparties to mitigate credit risk in derivative hedge transactions. These master netting arrangements allow us and our counterparties to net settle amounts owed to each other. Derivative assets and liabilities that can be net settled with each counterparty have been presented in our consolidated balance sheet on a net basis.

### Financial Instruments

Cash equivalents include highly liquid short-term investments with original maturities to us of three months or less that are readily convertible to known amounts of cash. Other investments with remaining maturities of less than one year are included in short-term investments. Investments with remaining maturities greater than one year are included in long-term marketable investments. The carrying value of investment securities sold is determined using the specific identification method.

### Functional Currency

The U.S. dollar is the functional currency for us and all of our consolidated subsidiaries.

### Goodwill

We perform an annual impairment assessment for goodwill in our fourth quarter each year.

### Government Incentives

We receive incentives from governmental entities related to expenses, assets, and other activities. Our government incentives may require that we meet or maintain specified spending levels and other operational metrics and may be subject to reimbursement if such conditions are not met or maintained. Government incentives are recorded in the financial statements in accordance with their purpose: as a reduction of expenses, a reduction of asset costs, or other income. Incentives related to specific operating activities are offset against the related expense in the period the expense is incurred. Incentives related to the acquisition or construction of fixed assets are recognized as a reduction in the carrying amounts of the related assets and reduce depreciation expense over the useful lives of the assets. Other incentives are recognized as other operating income. Government incentives received prior to being earned are recognized in current or noncurrent deferred income, whereas government incentives earned prior to being received are recognized in current or noncurrent receivables. Cash received from government incentives related to operating expenses is included as an operating activity in the statement of cash flows, whereas cash received from incentives related to the acquisition of property, plant, and equipment is included as an investing activity.

### Inventories

Effective as of the beginning of the second quarter of 2021, we changed the method of inventory costing from average cost to FIFO. The difference between average cost and FIFO was not material to any previously reported financial statements. Therefore, we have recognized the cumulative effect of the change as a reduction of inventories and a charge to cost of goods sold of \$133 million as of the beginning of the second quarter of 2021.

Inventories are stated at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. When net realizable value (which requires projecting future average selling prices, sales volumes, and costs to complete products in work in process inventories) is below cost, we record a charge to cost of goods sold to write down inventories to their estimated net realizable value in advance of when inventories are actually sold. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group. We remove amounts from inventory and charge such amounts to cost of goods sold on a FIFO basis.

### Leases

We adopted ASC 842 in the first quarter of 2020 under the modified retrospective method and elected to not recast prior periods. We determine if an arrangement is a lease, or contains a lease, at the inception of the arrangement and evaluate whether the lease is an operating lease or a finance lease at the commencement date. We recognize right-of-use assets and lease liabilities for operating and finance leases with terms greater than 12 months. Right-of-use assets represent our right to use an asset for the lease term, while lease liabilities represent our obligation to make lease payments. We do not separate lease and non-lease components for real-estate and gas plant leases. Sublease income is presented within lease expense.

### Product and Process Technology

Costs incurred to (1) acquire product and process technology, (2) patent technology, and (3) maintain patent technology, are capitalized and amortized on a straight-line basis over periods ranging up to 12.5 years. We capitalize a portion of costs incurred to patent technology based on historical data of patents issued as a percent of patents we file. Product and process technology costs are amortized over the shorter of (1) the estimated useful life of the technology, (2) the patent term, or (3) the term of the technology agreement. Fully-amortized assets are removed from product and process technology and accumulated amortization.

### Product Warranty

We generally provide a limited warranty that our products are in compliance with applicable specifications existing at the time of delivery. Under our standard terms and conditions of sale, liability for certain failures of product during a stated warranty period is usually limited to repair or replacement of defective items or return of, or a credit with respect to, amounts paid for such items. Under certain circumstances, we provide more extensive limited warranty coverage than that provided under our standard terms and conditions. Our warranty obligations are not material.

### Property, Plant, and Equipment

Property, plant, and equipment is stated at cost and depreciated using the straight-line method over estimated useful lives of generally 10 to 30 years for buildings, 5 to 7 years for equipment, and 3 to 5 years for software. Assets held for sale are carried at the lower of estimated fair value or carrying value and are included in current assets. When property, plant, or equipment is retired or otherwise disposed, the net book value is removed and we recognize any gain or loss in results of operations.

We capitalize interest on borrowings during the period of time we carry out the activities necessary to bring assets to the condition of their intended use and location. Capitalized interest becomes part of the cost of assets.

### Research and Development

Costs related to the conceptual formulation and design of products and processes are charged to R&D expense as incurred. Development of a product is deemed complete when it is qualified through reviews and tests for performance and reliability. Subsequent to product qualification, product costs are included in cost of goods sold. Amounts from cost-sharing arrangements are reflected as a reduction of R&D expense.

### Revenue Recognition

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.



### Stock-based Compensation

Stock-based compensation is measured at the grant date, based on the fair value of the award, and recognized as expense under the straight-line attribution method over the requisite service period. We account for forfeitures as they occur. We issue new shares upon the exercise of stock options or conversion of share units.

### Treasury Stock

Treasury stock is carried at cost. When we retire our treasury stock, any excess of the repurchase price paid over par value is allocated between additional capital and retained earnings.

### Use of Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. Actual results could differ from estimates.

## Recently Adopted Accounting Standards

In November 2018, the Financial Accounting Standards Board (“FASB”) issued ASU 2018-18 – *Collaborative Arrangements*, which clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. We adopted ASU 2018-18 in the first quarter of 2021 under the retrospective adoption method to the date we adopted ASC 606, which was August 31, 2018. The adoption of this ASU did not have a significant impact on our financial statements.

In June 2016, the FASB issued ASU 2016-13 – *Measurement of Credit Losses on Financial Instruments*, which requires a financial asset (or a group of financial assets) measured on the basis of amortized cost to be presented at the net amount expected to be collected. This ASU requires that the income statement reflect the measurement of credit losses for newly recognized financial assets as well as the increases or decreases of expected credit losses that have taken place during the period. This ASU requires that credit losses of debt securities designated as available-for-sale be recorded through an allowance for credit losses and limits the credit loss to the amount by which fair value is below amortized cost. We adopted ASU 2016-13 in the first quarter of 2021 under the modified retrospective adoption method. The adoption of this ASU did not have a significant impact on our financial statements.

## Lehi, Utah Fab and 3D XPoint

In the second quarter of 2021, we updated our portfolio strategy to further strengthen our focus on memory and storage innovations for the data center market. In connection therewith, we determined that there was insufficient market validation to justify the ongoing investments required to commercialize 3D XPoint at scale. Accordingly, we ceased development of 3D XPoint technology and engaged in discussions with potential buyers for the sale of our facility located in Lehi that was dedicated to 3D XPoint production. As a result, we classified the property, plant, and equipment as held for sale and ceased depreciating the assets. On June 30, 2021, we announced a definitive agreement to sell our Lehi facility to TI for cash consideration of \$900 million. The sale is anticipated to close in the first quarter of 2022.

In the third quarter of 2021, we recognized a charge of \$435 million included in restructure and asset impairments (and a tax benefit of \$104 million included in income tax (provision) benefit) to write down the assets held for sale to the expected consideration, net of estimated selling costs, to be realized from the sale of these assets and liabilities. The impairment charge was based on Level 3 inputs including expected consideration and the composition of assets included in the sale, which were derived from the agreement with TI. In the second quarter of 2021, we also recognized a charge of \$49 million to cost of goods sold to write down 3D XPoint inventory due to our decision to cease further development of this technology.

As of September 2, 2021, the significant balances of assets held for sale in connection with our Lehi facility were as follows:

As of	September 2, 2021
Property, plant, and equipment	\$ 1,334
Other current assets	50
Impairment	(435)
Lehi assets held for sale	<u>\$ 949</u>

As of September 2, 2021, we also had a \$50 million finance lease obligation included in the current portion of long-term debt and \$11 million of other liabilities that we expect to transfer with the sale. The expected cash consideration, net of estimated selling expenses, approximates the carrying value of the net assets and liabilities expected to transfer in the sale, after giving effect to the impairment charge discussed above.

## Variable Interest Entities

We have interests in entities that are variable interest entities (“VIEs”). If we are the primary beneficiary of a VIE, we are required to consolidate it. To determine if we are the primary beneficiary, we evaluate whether we have the power to direct the activities that most significantly impact the VIE’s economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. Our evaluation includes identification of significant activities and an assessment of our ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding, financing, and other applicable agreements and circumstances. Our assessments of whether we are the primary beneficiary of our VIEs require significant assumptions and judgments.

Through October 31, 2019, IMFT was a VIE because all of its costs were passed to us and its other member, Intel, through product purchase agreements and because IMFT was dependent upon us or Intel for additional cash requirements. The primary activities of IMFT were driven by the constant introduction of product and process technology. Because we performed a significant majority of the technology development, we had the power to direct its key activities. We consolidated IMFT due to this power and our obligation to absorb losses and the right to receive benefits from IMFT that could have been potentially significant to it.

On October 31, 2019, we paid \$1.25 billion to acquire Intel’s noncontrolling interest in IMFT and settle IMFT’s debt obligations to Intel, at which time IMFT (now known as MTU) became a wholly-owned subsidiary. In connection therewith, we recognized a \$160 million adjustment to equity for the difference between the \$744 million of cash consideration allocated to Intel’s noncontrolling interest and its \$904 million carrying value.

IMFT manufactured semiconductor products exclusively for its members under a long-term supply agreement at prices approximating cost. In 2018, IMFT discontinued production of NAND and subsequent to that time manufactured 3D XPoint memory. IMFT sales to Intel were \$158 million through the date of our purchase of Intel’s noncontrolling interest in 2020, and \$731 million in 2019.

## Cash and Investments

Substantially all of our marketable debt and equity investments were classified as available-for-sale as of the dates noted below. Cash and equivalents and the fair values of our available-for-sale investments, which approximated amortized costs, were as follows:

As of	2021				2020			
	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value
Cash	\$ 5,796	\$ —	\$ —	\$ 5,796	\$ 3,996	\$ —	\$ —	\$ 3,996
Level 1 <sup>(2)</sup>								
Money market funds	38	—	—	38	1,828	—	—	1,828
Level 2 <sup>(3)</sup>								
Certificates of deposits	1,907	69	—	1,976	1,740	10	2	1,752
Corporate bonds	9	429	1,134	1,572	3	266	592	861
Asset-backed securities	8	95	509	612	1	31	211	243
Government securities	1	190	122	313	6	115	243	364
Commercial paper	4	87	—	91	50	96	—	146
	7,763	\$ 870	\$ 1,765	\$ 10,398	7,624	\$ 518	\$ 1,048	\$ 9,190
Restricted cash <sup>(4)</sup>	66				66			
Cash, cash equivalents, and restricted cash	\$ 7,829				\$ 7,690			

<sup>(1)</sup> The maturities of long-term marketable securities range from one to four years.

<sup>(2)</sup> The fair value of Level 1 securities is measured based on quoted prices in active markets for identical assets.

<sup>(3)</sup> The fair value of Level 2 securities is measured using information obtained from pricing services, which obtain quoted market prices for similar instruments, non-binding market consensus prices that are corroborated by observable market data, or various other methodologies, to determine the appropriate value at the measurement date. We perform supplemental analysis to validate information obtained from these pricing services. No adjustments were made to the fair values indicated by such pricing information as of September 2, 2021 or September 3, 2020.

<sup>(4)</sup> Restricted cash is included in other noncurrent assets and primarily relates to certain government incentives received prior to being earned and for which restrictions lapse upon achieving certain performance conditions.

Gross realized gains and losses from sales of available-for-sale securities were not significant for any period presented.

In addition to the amounts included in the table above, we had \$153 million and \$92 million of non-marketable equity investments without a readily determinable fair value that were included in other noncurrent assets as of September 2, 2021 and September 3, 2020, respectively. We recognized gains in other non-operating income on these non-marketable investments of \$70 million and \$13 million for 2021 and 2020, respectively. These gains primarily resulted from adjustments of these investments to the value indicated by transactions in the same or similar investments.

## Receivables

As of	2021	2020
Trade receivables	\$ 4,920	\$ 3,494
Income and other taxes	264	232
Other	127	186
	\$ 5,311	\$ 3,912

## Inventories

As of	2021	2020
Finished goods	\$ 513	\$ 1,001
Work in process	3,469	3,854
Raw materials and supplies	505	518
	<u>\$ 4,487</u>	<u>\$ 5,373</u>

Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to FIFO. This change in accounting principle is preferable because in an environment with continuously changing production costs FIFO more closely matches the actual cost of goods sold with the revenues from sales of those specific units, better represents the actual cost of inventories remaining on hand at any period-end, and improves comparability with our semiconductor industry peers. The change to FIFO was not material to any prior periods, nor was the cumulative effect of \$133 million material to the second quarter of 2021. As such, prior periods were not retrospectively adjusted, and the cumulative effect was reported as an increase to cost of goods sold for the second quarter of 2021 of \$133 million, with an offsetting reduction to beginning inventories. This charge resulted in a corresponding reduction to operating income, a \$128 million reduction to net income, and an \$0.11 reduction to diluted earnings per share for both the second quarter and the year ended 2021.

Beginning in the second quarter of 2021, we changed the classification of spare parts for equipment to better align with the manner in which they are used in operations. As a result, we now present spare parts as other current assets and no longer as a component of raw materials inventories. This reclassification was applied on a retrospective basis. As a result, \$254 million of spare parts were presented in other current assets as of September 2, 2021, and we reclassified \$234 million of spare parts from inventories to other current assets in the accompanying balance sheet as of September 3, 2020.

## Property, Plant, and Equipment

As of	2021	2020
Land	\$ 280	\$ 352
Buildings	14,776	13,981
Equipment <sup>(1)</sup>	51,902	48,525
Construction in progress <sup>(2)</sup>	1,517	1,600
Software	987	873
	<u>69,462</u>	<u>65,331</u>
Accumulated depreciation	<u>(36,249)</u>	<u>(34,300)</u>
	<u>\$ 33,213</u>	<u>\$ 31,031</u>

<sup>(1)</sup> Includes costs related to equipment not placed into service of \$1.99 billion as of September 2, 2021 and \$1.63 billion as of September 3, 2020.

<sup>(2)</sup> Includes building-related construction, tool installation, and software costs for assets not placed into service.

Depreciation expense was \$6.13 billion, \$5.57 billion, and \$5.34 billion for 2021, 2020, and 2019, respectively. Interest capitalized as part of the cost of property, plant, and equipment was \$66 million, \$77 million, and \$103 million for 2021, 2020, and 2019, respectively.

We periodically assess the estimated useful lives of our property, plant, and equipment. Based on our assessment of planned technology node transitions, capital spending, and re-use rates, we revised the estimated useful lives of the existing equipment in our NAND wafer fabrication facilities and our research and development ("R&D") facilities from five years to seven years as of the beginning of the first quarter of 2020. This revision reduced our aggregate depreciation expense by approximately \$675 million in 2020, of which approximately \$165 million remained capitalized in inventory as of the end of 2020. After adjusting for the effect of the reduced amount of depreciation

expense remaining in inventory, the revision in estimated useful lives benefited both operating income and net income by approximately \$510 million and diluted earnings per share by approximately \$0.45 for 2020.

## Intangible Assets and Goodwill

As of	2021		2020	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Product and process technology	\$ 633	\$ (284)	\$ 616	\$ (282)
Goodwill	1,228		1,228	

In 2021, 2020, and 2019, we capitalized \$106 million, \$73 million, and \$91 million, respectively, for product and process technology with weighted-average useful lives of 9 years, 10 years, and 8 years, respectively. Amortization expense was \$82 million, \$78 million, and \$82 million for 2021, 2020, and 2019, respectively. Expected amortization expense is \$72 million for 2022, \$61 million for 2023, \$55 million for 2024, \$34 million for 2025, and \$26 million for 2026.

## Leases

We have finance and operating leases through which we obtain the right to use equipment and facilities in our manufacturing operations and R&D activities as well as office space and other facilities used in our SG&A functions. Our finance leases consist primarily of gas or other supply agreements that are deemed to contain embedded leases in which we effectively control the underlying gas plants or other assets used to fulfill the supply agreements. Our operating leases consist primarily of offices, other facilities, and land used in SG&A, R&D, and certain of our manufacturing operations. Certain of our operating leases include one or more options to extend the lease term for periods from one year to 10 years for real estate and one year to 30 years for land.

Certain supply or service agreements require us to exercise significant judgment to determine whether the agreement contains a lease of a right-of-use asset. Our assessment includes determining whether we or the supplier control the assets used to fulfill the supply or service agreement by identifying whether we or the supplier have the right to change the type, quantity, timing, or location of the output of the assets. Our gas supply arrangements generally are deemed to contain a lease because we have the right to substantially all of the output of the assets used to produce the supply and we have the right to change the quantity and timing of the output of those assets. In determining the lease term, we assess whether we are reasonably certain to exercise options to renew or terminate a lease, and when or whether we would exercise an option to purchase the right-of-use asset. Measuring the present value of the initial lease liability requires judgment to determine the discount rate, which we base on interest rates for borrowings with similar terms and collateral issued by entities with credit ratings similar to ours.

Operating lease costs include short-term and variable lease expenses. Short-term, variable leases, and sublease income are not material for the periods presented. The components of lease expense are presented below:

For the year ended	2021	2020
Finance lease cost		
Amortization of right-of-use asset	\$ 69	\$ 140
Interest on lease liability	20	22
Operating lease cost	108	102
	<u>\$ 197</u>	<u>\$ 264</u>

Operating lease expense under the previous ASC 840 lease accounting guidance was \$93 million for 2019.

Supplemental cash flow information related to leases was as follows:

For the year ended	2021	2020
Cash flows used for operating activities		
Finance leases	\$ 21	\$ 24
Operating leases <sup>(1)</sup>	106	39
Cash flows used for financing activities from financing leases	85	248
Noncash acquisitions of right-of-use assets		
Finance leases	395	107
Operating leases	27	11

<sup>(1)</sup> Includes \$48 million of reimbursements received for tenant improvements for 2020.

Supplemental balance sheet information related to leases was as follows:

As of	2021	2020
Finance lease right-of-use assets (included in property, plant, and equipment and assets held for sale)	\$ 766	\$ 426
Current operating lease liabilities (included in accounts payable and accrued expenses)	55	54
Weighted-average remaining lease term (in years)		
Finance leases	5	5
Operating leases	7	7
Weighted-average discount rate		
Finance leases	3.14 %	4.51 %
Operating leases	2.63 %	2.67 %

Maturities of lease liabilities existing as of September 2, 2021 were as follows:

For the year ending	Finance Leases	Operating Leases
2022	\$ 127	\$ 68
2023	115	69
2024	89	61
2025	74	50
2026	74	47
2027 and thereafter	454	372
Less imputed interest	(130)	(108)
	<u>\$ 803</u>	<u>\$ 559</u>

The table above excludes any lease liabilities for leases that have been executed but have not yet commenced. As of September 2, 2021, we had such lease liabilities relating to (1) operating lease payment obligations of \$147 million for the initial 10-year lease term for a building, which may, at our election, be terminated after 3 years or extended for an additional 10 years, and (2) finance lease obligations of \$553 million over a weighted-average period of 15 years for gas supply arrangements deemed to contain embedded leases. We will recognize right-of-use assets and associated lease liabilities at the time such assets become available for our use.

## Accounts Payable and Accrued Expenses

As of	2021	2020
Accounts payable	\$ 1,744	\$ 2,191
Property, plant, and equipment	1,887	2,374
Salaries, wages, and benefits	984	849
Income and other taxes	364	237
Other	346	166
	<u>\$ 5,325</u>	<u>\$ 5,817</u>

## Debt

As of	2021						2020			
	Stated Rate	Effective Rate	Principal	Net Carrying Amount			Principal	Current	Net Carrying Amount	
				Current	Long-Term	Total			Long-Term	Total
Finance lease obligations	N/A	3.14 %	\$ 803	\$ 154	\$ 649	\$ 803	\$ 486	\$ 76	\$ 410	\$ 486
2023 Notes	2.497 %	2.64 %	1,250	—	1,247	1,247	1,250	—	1,245	1,245
2024 Notes	4.640 %	4.76 %	600	—	598	598	600	—	598	598
2024 Term Loan A	0.975 %	1.01 %	1,188	—	1,186	1,186	—	—	—	—
2026 Notes	4.975 %	5.07 %	500	—	498	498	500	—	498	498
2027 Notes <sup>(1)</sup>	4.185 %	4.27 %	900	—	901	901	900	—	895	895
2029 Notes	5.327 %	5.40 %	700	—	696	696	700	—	696	696
2030 Notes	4.663 %	4.73 %	850	—	846	846	850	—	845	845
2032D Notes	N/A	N/A	—	—	—	—	134	131	—	131
Extinguished 2024 Term Loan A	N/A	N/A	—	—	—	—	1,250	62	1,186	1,248
Other	N/A	N/A	1	1	—	1	1	1	—	1
			<u>\$ 6,792</u>	<u>\$ 155</u>	<u>\$ 6,621</u>	<u>\$ 6,776</u>	<u>\$ 6,671</u>	<u>\$ 270</u>	<u>\$ 6,373</u>	<u>\$ 6,643</u>

<sup>(1)</sup> In 2021, we entered into fixed-to-floating interest rate swaps on the 2027 Notes with an aggregate \$900 million notional amount equal to the principal amount of the 2027 Notes. The resulting variable interest paid is at a rate equal to SOFR plus approximately 3.33%. The fixed-to-floating interest rate swaps are accounted for as fair value hedges, as a result, the carrying value of our 2027 Notes reflects adjustments in fair value.

As of September 2, 2021, all of our debt, other than our finance leases, are unsecured obligations that rank equally in right of payment with all of our other existing and future unsecured indebtedness and are effectively subordinated to all of our other existing and future secured indebtedness, to the extent of the value of the assets securing such indebtedness. As of September 2, 2021, Micron had \$5.97 billion of unsecured debt (net of unamortized discount and debt issuance costs) that was structurally subordinated to all liabilities of its subsidiaries, including trade payables. The terms of our indebtedness generally contain cross payment default and cross acceleration provisions. Micron's guarantees of its subsidiary debt obligations are unsecured obligations ranking equally in right of payment with all of Micron's other existing and future unsecured indebtedness.

### Senior Unsecured Notes

Our 2023 Notes, 2024 Notes, 2026 Notes, 2027 Notes, 2029 Notes, and 2030 Notes (the "Senior Unsecured Notes") each contain covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries (which are generally domestic subsidiaries in which we own at least 80% of the voting stock and which own principal property, as defined in the indenture governing such notes) to (1) create or incur certain liens; (2) enter into certain sale and lease-back transactions; and (3) consolidate with or merge with or into, or convey, transfer, or lease all or substantially all of our properties and assets, to another entity. These covenants

are subject to a number of limitations and exceptions. Additionally, if a change of control triggering event occurs, as defined in the indentures governing our senior unsecured notes, we will be required to offer to purchase such notes at 101% of the outstanding aggregate principal amount plus accrued interest up to the purchase date.

### Revolving Credit Facility

On May 14, 2021, we terminated our existing undrawn credit facility and entered into a new five-year unsecured Revolving Credit Facility. Under the Revolving Credit Facility, we can draw up to \$2.50 billion which would generally bear interest at a rate equal to LIBOR plus 1.00% to 1.75%, depending on our corporate credit ratings. Any amounts outstanding under the Revolving Credit Facility would mature in May 2026 and amounts borrowed may be prepaid without penalty. As of September 2, 2021, no amounts were outstanding under the Revolving Credit Facility and \$2.50 billion was available to us.

Under the terms of the Revolving Credit Facility, we must maintain a leverage ratio, calculated as of the last day of each fiscal quarter, of total indebtedness to adjusted EBITDA not to exceed 3.25 to 1.00. The Revolving Credit Facility contains other covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries to (1) create or incur certain liens and enter into sale and lease-back transactions, (2) create, assume, incur, or guarantee certain additional secured indebtedness and unsecured indebtedness of our restricted subsidiaries, and (3) consolidate with or merge with or into, or convey, transfer, lease, or otherwise dispose of all or substantially all of our assets, to another entity. These covenants are subject to a number of limitations, exceptions, and qualifications.

### 2024 Term Loans

On May 14, 2021, we drew \$1.19 billion under an unsecured 2024 Term Loan A and used the proceeds to repay the \$1.19 billion Extinguished 2024 Term Loan A. The 2024 Term Loan A bears interest at a rate equal to LIBOR plus 0.625% to 1.375% based on our current corporate credit ratings. The principal amount is due October 2024 and may be prepaid without penalty. The 2024 Term Loan A contains the same leverage ratio and substantially the same other covenants as the Revolving Credit Facility.

### Debt Activity

The table below presents the effects of issuances, prepayments, and settlements of debt conversions in 2021.

	Increase (Decrease) in Principal	Increase (Decrease) in Carrying Value	Increase (Decrease) in Cash	Decrease in Equity	Gain (Loss)
Issuance of 2024 Term Loan A	\$ 1,188	\$ 1,186	\$ 1,186	\$ —	\$ —
Prepayment of Extinguished 2024 Term Loan A	(1,188)	(1,186)	(1,188)	—	(2)
Settlement of Conversions of 2032D Notes <sup>(1)</sup>	(134)	(134)	(185)	(52)	1
	<u>\$ (134)</u>	<u>\$ (134)</u>	<u>\$ (187)</u>	<u>\$ (52)</u>	<u>\$ (1)</u>

<sup>(1)</sup> In 2021, substantially all holders of our 2032D Notes converted their notes. We settled these conversions and all remaining 2032D Notes with \$185 million in cash and 11.1 million shares of our stock.

In 2020, we recognized aggregate non-operating gains of \$40 million in connection with debt prepayments and conversions of \$3.77 billion of principal amount of notes (carrying value of \$3.90 billion) for an aggregate of \$3.92 billion in cash.

In 2019, we recognized aggregate non-operating losses of \$396 million in connection with debt prepayments, repurchases, and conversions of \$1.80 billion of principal amount of notes (carrying value of \$1.60 billion) for an aggregate of \$2.38 billion in cash.



### Maturities of Notes Payable

As of September 2, 2021, maturities of notes payable were as follows:

2022	\$	1
2023		1,250
2024		600
2025		1,188
2026		500
2027 and thereafter		2,450
Unamortized discounts		(21)
	<u>\$</u>	<u>5,968</u>

## Commitments

As of September 2, 2021, we had commitments of approximately \$6.5 billion for purchase obligations, of which approximately \$5.0 billion will be due within one year. Purchase obligations include payments for the acquisition of property, plant, and equipment, and other goods or services of either a fixed or minimum quantity and exclude any lease payments for leases that have been executed but have not yet commenced.

## Contingencies

We are currently a party to legal actions other than those described below arising from the normal course of business, none of which are expected to have a material adverse effect on our business, results of operations, or financial condition.

### Patent Matters

As is typical in the semiconductor and other high-tech industries, from time to time, others have asserted, and may in the future assert, that our products or manufacturing processes infringe upon their intellectual property rights.

On August 12, 2014, MLC Intellectual Property, LLC filed a patent infringement action against Micron in the U.S. District Court for the Northern District of California. The complaint alleges that Micron infringes a single U.S. patent and seeks damages, attorneys' fees, and costs.

On November 21, 2014, Elm 3DS Innovations, LLC ("Elm") filed a patent infringement action against Micron; Micron Semiconductor Products, Inc.; and Micron Consumer Products Group, Inc. in the U.S. District Court for the District of Delaware. On March 27, 2015, Elm filed an amended complaint against the same entities. The amended complaint alleges that unspecified semiconductor products of ours that incorporate multiple stacked die infringe 13 U.S. patents and seeks damages, attorneys' fees, and costs. On July 14, 2021, the action was dismissed with prejudice pursuant to a stipulation of dismissal filed by the parties.

On December 15, 2014, Innovative Memory Solutions, Inc. filed a patent infringement action against Micron in the U.S. District Court for the District of Delaware. The complaint alleges that a variety of our NAND products infringe eight U.S. patents and seeks damages, attorneys' fees, and costs. Subsequently, six patents were invalidated or withdrawn, leaving two asserted patents in the District Court.

On March 19, 2018, Micron Semiconductor (Xi'an) Co., Ltd. ("MXA") was served with a patent infringement complaint filed by Fujian Jinhua Integrated Circuit Co., Ltd. ("Jinhua") in the Fuzhou Intermediate People's Court in Fujian Province, China (the "Fuzhou Court"). On April 3, 2018, Micron Semiconductor (Shanghai) Co. Ltd. ("MSS") was served with the same complaint. The complaint alleges that MXA and MSS infringe a Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China;

to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred.

On March 21, 2018, MXA was served with a patent infringement complaint filed by United Microelectronics Corporation (“UMC”) in the Fuzhou Court. On April 3, 2018, MSS was served with the same complaint. The complaint alleges that MXA and MSS infringe a Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred.

On April 3, 2018, MSS was served with another patent infringement complaint filed by Jinhua and an additional complaint filed by UMC in the Fuzhou Court. The additional complaints allege that MSS infringes two Chinese patents by manufacturing and selling certain Crucial MX300 SSDs. The complaint filed by UMC seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. The complaint filed by Jinhua seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred.

On July 5, 2018, MXA and MSS were notified that the Fuzhou Court granted a preliminary injunction against those entities that enjoins them from manufacturing, selling, or importing certain Crucial and Ballistix-branded DRAM modules and solid-state drives in China. The affected products made up slightly more than 1% of our annualized revenue in 2018. We are complying with the ruling and have requested the Fuzhou Court to reconsider or stay its decision.

On May 4, 2020, Flash-Control, LLC filed a patent infringement action against Micron in the U.S. District Court for the Western District of Texas. The complaint alleges that four U.S. patents are infringed by unspecified DDR4 SDRAM, NVRDIMM, NVDIMM, 3D XPoint, and/or SSD products that incorporate memory controllers and flash memory. The complaint seeks damages, attorneys’ fees, and costs. On July 21, 2020, in a separate matter, the District Court ruled that two of the four asserted patents are invalid, and on July 14, 2021, the U.S. Court of Appeals for the Federal Circuit affirmed the ruling of invalidity.

On April 28, 2021, Neitlist, Inc. filed two patent infringement actions against Micron, Micron Semiconductor Products, Inc. and Micron Technology Texas, LLC in the U.S. District Court for the Western District of Texas. The first complaint alleges that a single U.S. patent is infringed by certain of our non-volatile dual in-line memory modules. The second complaint alleges that three U.S. patents are infringed by certain of our load-reduced dual in-line memory modules. Each complaint seeks injunctive relief, damages, attorneys’ fees, and costs.

On May 10, 2021, Vervain, LLC filed a patent infringement action against Micron, Micron Semiconductor Products, Inc., and Micron Technology Texas, LLC in the U.S. District Court for the Western District of Texas. The complaint alleges that four U.S. patents are infringed by certain SSD products. The complaint seeks injunctive relief, damages, attorneys’ fees, and costs.

Among other things, the above lawsuits pertain to substantially all of our DRAM, NAND, and other memory and storage products we manufacture, which account for substantially all of our revenue.

### Qimonda

On January 20, 2011, Dr. Michael Jaffé, administrator for Qimonda’s insolvency proceedings, filed suit against Micron and Micron Semiconductor B.V. (“Micron B.V.”), in the District Court of Munich, Civil Chamber. The complaint seeks to void, under Section 133 of the German Insolvency Act, a share purchase agreement between Micron B.V. and Qimonda signed in fall 2008, pursuant to which Micron B.V. purchased substantially all of Qimonda’s shares of Inotera (the “Inotera Shares”), representing approximately 18% of Inotera’s outstanding shares at that time, and seeks an order requiring us to re-transfer those shares to the Qimonda estate. The complaint also seeks, among other things, to recover damages for the alleged value of the joint venture relationship with Inotera and to terminate,

under Sections 103 or 133 of the German Insolvency Code, a patent cross-license between us and Qimonda entered into at the same time as the share purchase agreement.

Following a series of hearings with pleadings, arguments, and witnesses on behalf of the Qimonda estate, on March 13, 2014, the court issued judgments: (1) ordering Micron B.V. to pay approximately \$1 million in respect of certain Inotera Shares sold in connection with the original share purchase; (2) ordering Micron B.V. to disclose certain information with respect to any Inotera Shares sold by it to third parties; (3) ordering Micron B.V. to disclose the benefits derived by it from ownership of the Inotera Shares, including in particular, any profits distributed on the Inotera Shares and all other benefits; (4) denying Qimonda's claims against Micron for any damages relating to the joint venture relationship with Inotera; and (5) determining that Qimonda's obligations under the patent cross-license agreement are canceled. In addition, the court issued interlocutory judgments ordering, among other things: (1) that Micron B.V. transfer to the Qimonda estate the Inotera Shares still owned by Micron B.V. and pay to the Qimonda estate compensation in an amount to be specified for any Inotera Shares sold to third parties; and (2) that Micron B.V. pay the Qimonda estate as compensation an amount to be specified for benefits derived by Micron B.V. from ownership of the Inotera Shares. The interlocutory judgments had no immediate, enforceable effect and Micron, accordingly, has been able to continue to operate with full control of the Inotera Shares subject to further developments in the case. On April 17, 2014, Micron and Micron B.V. filed a notice of appeal with the German Appeals Court challenging the District Court's decision. After opening briefs, the Appeals Court held a hearing on the matter on July 9, 2015, and thereafter appointed an independent expert to perform an evaluation of Dr. Jaffé's claims that the amount Micron paid for Qimonda was less than fair market value. On January 25, 2018, the court-appointed expert issued a report concluding that the amount paid by Micron was within an acceptable fair-value range. The Appeals Court held a subsequent hearing on April 30, 2019, and on May 28, 2019, the Appeals Court remanded the case to the expert for supplemental expert opinion. On March 31, 2020, the expert presented a revised opinion to the Appeals Court which reaffirmed the earlier view that the amount paid by Micron was still within an acceptable range of fair value. On March 4, 2021, the Appeals Court issued an order setting forth a new legal view that whether the 2008 sale of Inotera Shares is voidable depends on the question whether, in October 2008, Qimonda had a restructuring plan in place, and whether Micron was aware of and reasonably relied on that restructuring plan sufficient to form a belief that Qimonda was not imminently illiquid.

### Antitrust Matters

On April 27, 2018, a complaint was filed against Micron and other DRAM suppliers in the U.S. District Court for the Northern District of California. Subsequently, two substantially identical cases were filed in the same court. The lawsuits purported to be on behalf of a nationwide class of indirect purchasers of DRAM products. On September 3, 2019, the District Court granted Micron's motion to dismiss and allowed the plaintiffs the opportunity to file a consolidated, amended complaint. On October 28, 2019, the plaintiffs filed a consolidated, amended complaint that purported to be on behalf of a nationwide class of indirect purchasers of DRAM products. The amended complaint asserted claims based on alleged price-fixing of DRAM products under federal and state law during the period from June 1, 2016 to at least February 1, 2018, and sought treble monetary damages, costs, interest, attorneys' fees, and other injunctive and equitable relief. On December 21, 2020, the District Court dismissed the plaintiffs' claims and entered judgment against them. On January 19, 2021, the plaintiffs filed a notice of appeal to the U.S. Court of Appeals for the Ninth Circuit. On May 3, 2021, several plaintiffs filed a substantially identical complaint in the U.S. District Court for the Northern District of California purportedly on behalf of a nationwide class of indirect purchasers of DRAM products. On July 19, 2021, the District Court dismissed the May 3, 2021 complaint pursuant to an agreement between the plaintiffs and Micron providing that the plaintiffs may refile the complaint if the District Court's December 21, 2020 dismissal order is not affirmed on appeal.

On June 26, 2018, a complaint was filed against Micron and other DRAM suppliers in the U.S. District Court for the Northern District of California. Subsequently, four substantially identical cases were filed in the same court. On October 28, 2019, the plaintiffs filed a consolidated, amended complaint. The consolidated complaint purported to be on behalf of a nationwide class of direct purchasers of DRAM products. The consolidated complaint asserted claims based on alleged price-fixing of DRAM products under federal and state law during the period from June 1, 2016 through at least February 1, 2018, and sought treble monetary damages, costs, interest, attorneys' fees, and other injunctive and equitable relief. On December 21, 2020, the District Court granted Micron's motion to dismiss and granted the plaintiffs permission to file a further amended complaint. On January 11, 2021, the plaintiffs filed a further amended complaint asserting substantially the same claims and seeking the same relief. On September 3, 2021, the District Court granted Micron's motion to dismiss the further amended complaint with prejudice.

Additionally, six cases have been filed in the following Canadian courts: Superior Court of Quebec, the Federal Court of Canada, the Ontario Superior Court of Justice, and the Supreme Court of British Columbia. The substantive allegations in these cases are similar to those asserted in the cases filed in the United States.

On May 15, 2018, the Chinese State Administration for Market Regulation (“SAMR”) notified Micron that it was investigating potential collusion and other anticompetitive conduct by DRAM suppliers in China. On May 31, 2018, SAMR made unannounced visits to our sales offices in Beijing, Shanghai, and Shenzhen to seek certain information as part of its investigation. We are cooperating with SAMR in its investigation.

### Securities Matters

On March 5, 2019, a derivative complaint was filed by a shareholder against certain current and former officers and directors of Micron, allegedly on behalf of and for the benefit of Micron, in the U.S. District Court for the District of Delaware alleging securities fraud, breaches of fiduciary duties, and other violations of law involving misrepresentations about purported anticompetitive behavior in the DRAM industry. The complaint seeks damages, fees, interest, costs, and other appropriate relief.

On February 9, 2021, a derivative complaint was filed by a shareholder against Sanjay Mehrotra and other current and former directors of Micron, allegedly on behalf of and for the benefit of Micron, in the U.S. District Court for the District of Delaware alleging violations of securities laws, breaches of fiduciary duties, and other violations of law involving allegedly false and misleading statements about Micron’s commitment to diversity and progress in diversifying its workforce, executive leadership, and Board of Directors. The complaint seeks damages, fees, interest, costs, and an order requiring Micron to take various actions to allegedly improve its corporate governance and internal procedures.

### Other

On December 5, 2017, Micron filed a complaint against UMC and Jinhua in the U.S. District Court for the Northern District of California. The complaint alleges that UMC and Jinhua violated the Defend Trade Secrets Act, the civil provisions of the Racketeer Influenced and Corrupt Organizations Act, and California’s Uniform Trade Secrets Act by misappropriating Micron’s trade secrets and other misconduct. Micron’s complaint seeks damages, restitution, disgorgement of profits, injunctive relief, and other appropriate relief.

On June 13, 2019, current Micron employee, Chris Manning, filed a putative class action lawsuit on behalf of Micron employees subject to the Idaho Wage Claim Act who earned a performance-based bonus after the conclusion of 2018 whose performance rating was calculated based upon a mandatory percentage distribution range of performance ratings. On July 12, 2019, Manning and three other Company employees filed an amended complaint as putative class action representatives. On behalf of themselves and the putative class, Manning and the three other plaintiffs assert claims for violation of the Idaho Wage Claim Act, breach of contract, breach of the covenant of good faith and fair dealing, and fraud. On June 24, 2020, the court entered judgment in favor of Micron based on the statute of limitations, and the plaintiffs filed a notice of appeal on July 23, 2020.

On July 31, 2020, Micron and Intel entered into a binding arbitration agreement under which the parties agreed to present to an arbitral panel various financial disputes related to the IMFT joint venture between Micron and Intel, which ended October 31, 2019, and to other agreements relating to the joint development, production, and sale of non-volatile memory products. Each party alleges that the other owes damages relating to allegations of breach of one or more agreements.

On July 13, 2015, Allied Telesis, Inc. and Allied Telesis International (Asia) Pte Ltd. filed a complaint against Micron in the Superior Court of California in Santa Clara alleging breach of implied and express warranties and fraudulent inducement to contract arising from plaintiffs’ purchase of certain allegedly defective DDR1 products between 2008 and 2010. Through subsequent amendments to the complaint, the plaintiffs substituted Allied Telesis K.K. as plaintiff, withdrew the warranty claims, and added claims of fraudulent concealment, negligent misrepresentation, negligence, and strict products liability. The plaintiff’s amended complaint seeks an unspecified award of damages, including punitive damages and lost profits. On September 3, 2020, the Superior Court granted summary judgment dismissing the claims for negligence and strict products liability and denied summary judgment as to the claims for negligent misrepresentation, fraudulent concealment, and fraudulent inducement to contract. A trial is scheduled to begin on January 10, 2022.

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify another party. It is not possible to predict the maximum potential amount of future payments under these types of agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, our payments under these types of agreements have not had a material adverse effect on our business, results of operations, or financial condition.

We are unable to predict the outcome of the patent matters, Qimonda matter, antitrust matters, securities matters, binding arbitration with Intel, or any other matters noted above, and cannot make a reasonable estimate of the potential loss or range of possible losses. A determination that our products or manufacturing processes infringe the intellectual property rights of others or entering into a license agreement covering such intellectual property could result in significant liability and/or require us to make material changes to our products and/or manufacturing processes. Any of the foregoing, as well as the resolution of any other legal matter noted above, could have a material adverse effect on our business, results of operations, or financial condition.

We are currently a party to legal actions other than those described in this note arising from the normal course of business, none of which are expected to have a material adverse effect on our business, results of operations, or financial condition.

## Equity

### Micron Shareholders' Equity

**Common Stock Repurchases:** Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. We repurchased 15.6 million shares of our common stock for \$1.20 billion in 2021 and 3.6 million shares for \$176 million in 2020. Through September 2, 2021, we had repurchased an aggregate of \$4.04 billion under the authorization. Amounts repurchased are included in treasury stock.

**Dividends:** On August 2, 2021, we announced that our Board of Directors had declared a quarterly dividend of \$0.10 per share, payable in cash on October 18, 2021, to shareholders of record as of the close of business on October 1, 2021.

**Accumulated Other Comprehensive Income:** Changes in accumulated other comprehensive income by component for the year ended September 2, 2021 were as follows:

	Gains (Losses) on Derivative Instruments	Pension Liability Adjustments	Unrealized Gains (Losses) on Investments	Cumulative Foreign Currency Translation Adjustment	Total
<b>As of September 3, 2020</b>	\$ 45	\$ 19	\$ 8	\$ (1)	\$ 71
Other comprehensive income before reclassifications	(52)	8	(6)	2	(48)
Amount reclassified out of accumulated other comprehensive income	(41)	(1)	(3)	—	(45)
Tax effects	26	(4)	2	—	24
Other comprehensive income (loss)	(67)	3	(7)	2	(69)
<b>As of September 2, 2021</b>	<u>\$ (22)</u>	<u>\$ 22</u>	<u>\$ 1</u>	<u>\$ 1</u>	<u>\$ 2</u>

## Fair Value Measurements

The estimated fair values and carrying values of our outstanding debt instruments (excluding the carrying value of equity components of our convertible notes) were as follows:

As of	2021		2020	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Notes	\$ 6,584	\$ 5,973	\$ 6,710	\$ 6,026
Convertible notes	—	—	634	131

The fair values of our convertible notes were determined based on Level 2 inputs, including the trading price of our convertible notes when available, our stock price, and interest rates based on similar debt issued by parties with credit ratings similar to ours. The fair values of our other debt instruments were estimated based on Level 2 inputs, including the trading price of our notes when available, discounted cash flows, and interest rates based on similar debt issued by parties with credit ratings similar to ours.

Assets classified as held for sale are carried at the lower of estimated fair value or carrying value. Significant judgments and assumptions are required to estimate their fair values. Actual selling prices could vary significantly from our estimated fair value and we could recognize additional losses in the event that the sales prices of assets classified as held for sale are lower than their carrying values.

## Derivative Instruments

As of	Notional or Contractual Amount	Fair Value of	
		Assets <sup>(1)</sup>	Liabilities <sup>(2)</sup>
<b>As of September 2, 2021</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 3,601	\$ 10	\$ (66)
Cash flow commodity hedges	45	2	—
Fair value interest rate hedges	900	5	—
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	996	3	(2)
		\$ 20	\$ (68)
<b>As of September 3, 2020</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 1,845	\$ 41	\$ (2)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	1,587	4	(1)
		\$ 45	\$ (3)

<sup>(1)</sup> Included in receivables – other and other noncurrent assets.

<sup>(2)</sup> Included in accounts payable and accrued expenses – other and other noncurrent liabilities.

### Derivative Instruments with Hedge Accounting Designation

**Cash Flow Hedges:** We utilize forward and swap contracts that generally mature within two years designated as cash flow hedges for our exposure to changes in currency exchange rates or commodity prices for certain capital expenditures and manufacturing costs. Forward and swap contracts are measured at fair value based on market-

based observable inputs including market spot and forward rates, interest rates, and credit-risk spreads (Level 2). We do not use derivative instruments for speculative purposes. We recognized losses of \$52 million and gains of \$51 million for 2021 and 2020, respectively, in accumulated other comprehensive income from cash flow hedges. The amounts recognized in 2019 were not significant. We recognized losses of \$14 million in 2021 in cost of goods sold related to the amounts excluded from hedge effectiveness testing. The amounts recognized in 2020 and 2019 were not significant. We reclassified \$41 million of gains in 2021 from accumulated other comprehensive income to earnings, primarily to cost of goods sold. The reclassifications were not significant in 2020 or 2019. As of September 2, 2021, we expect to reclassify \$12 million of pre-tax losses related to cash flow hedges from accumulated other comprehensive income into earnings in the next 12 months. Substantially all of the cash flow hedging relates to foreign currency contracts for all periods presented, and the commodity hedges had an immaterial impact.

**Fair Value Hedges:** We utilize fixed-to-floating interest rate swaps designated as fair value hedges to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Interest rate swaps are measured at fair value based on market-based observable inputs including interest rates and credit-risk spreads (Level 2). The changes in the fair values of derivatives designated as fair value hedges and the offsetting changes in the underlying fair values of the hedged items are both recognized in earnings. When a derivative is no longer designated as a fair value hedge for any reason, including termination and maturity, the remaining unamortized difference between the carrying value of the hedged item at that time and the face value of the hedged item is amortized to earnings over the remaining life of the hedged item, or immediately if the hedged item has matured or been extinguished. The effects of fair value hedges on our consolidated statements of operations, recognized in interest expense, were not significant for the periods presented.

#### Derivative Instruments without Hedge Accounting Designation

**Currency Derivatives:** We generally utilize a rolling hedge strategy with currency forward contracts that mature within three months to hedge our exposures of monetary assets and liabilities from changes in currency exchange rates. At the end of each reporting period, monetary assets and liabilities denominated in currencies other than the U.S. dollar are remeasured into U.S. dollars and the associated outstanding forward contracts are marked to market. Currency forward contracts are valued at fair values based on the middle of bid and ask prices of dealers or exchange quotations (Level 2). Realized and unrealized gains and losses on derivative instruments without hedge accounting designation as well as the changes in the underlying monetary assets and liabilities from changes in currency exchange rates are included in other non-operating income (expense), net. For derivative instruments without hedge accounting designation, we recognized gains of \$21 million and losses of \$32 million for 2020 and 2019, respectively. The amounts recognized in 2021 were not significant.

**Convertible Notes Settlement Obligations:** For settlement obligations associated with our convertible notes subject to mark-to-market accounting treatment, the fair values of the underlying derivative settlement obligations were initially determined using the Black-Scholes option valuation model (Level 2), which requires inputs of stock price, expected stock-price volatility, estimated option life, risk-free interest rate, and dividend rate. The subsequent measurement amounts were based on the volume-weighted-average trading price of our common stock (Level 2). (See "Debt.") We recognized losses \$14 million and \$58 million for 2020 and 2019, respectively, in other non-operating income (expense), net for the changes in fair value of the derivative settlement obligations. The amounts recognized in 2021 were not significant.

#### Derivative Counterparty Credit Risk and Master Netting Arrangements

Our derivative instruments expose us to credit risk to the extent counterparties may be unable to meet the terms of the contracts. Our maximum exposure to loss due to credit risk if counterparties fail completely to perform according to the terms of the contracts would generally equal the fair value of assets for these contracts as listed in the tables above. We seek to mitigate such risk by limiting our counterparties to major financial institutions and by spreading risk across multiple financial institutions. As of September 2, 2021 and September 3, 2020, amounts netted under our master netting arrangements were not significant.

## Equity Plans

As of September 2, 2021, 104 million shares of our common stock were available for future awards under our equity plans, including 23 million shares approved for issuance under our employee stock purchase plan (“ESPP”).

### Restricted Stock and Restricted Stock Units (“Restricted Stock Awards”)

As of September 2, 2021, there were 20 million shares of Restricted Stock Awards outstanding, 17 million of which contained only service conditions. For service-based Restricted Stock Awards, restrictions generally lapse in one-fourth or one-third increments during each year of employment after the grant date. Restrictions generally lapse on Restricted Stock with performance or market conditions as conditions are met over a 3-year period. At the end of the performance period, the number of actual shares to be awarded will vary between 0% and 200% of target amounts, depending upon the achievement level. Restricted Stock Awards activity for 2021 is summarized as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding as of September 3, 2020	17	\$ 42.13
Granted	11	53.58
Restrictions lapsed	(6)	38.99
Canceled	(2)	41.54
Outstanding as of September 2, 2021	20	49.39

For the year ended	2021	2020	2019
Restricted stock award shares granted	11	8	9
Weighted-average grant-date fair value per share	\$ 53.58	\$ 46.44	\$ 41.11
Aggregate vesting-date fair value of shares vested	\$ 385	\$ 294	\$ 248

### Employee Stock Purchase Plan (“ESPP”)

Our ESPP was offered to substantially all employees beginning in August 2018 and permitted eligible employees to purchase shares of our common stock through payroll deductions of up to 10% of their eligible compensation, subject to certain limitations prior to August 2021. Beginning in August 2021, employees are permitted to deduct up to 15% of their eligible compensation to purchase shares under the ESPP. The purchase price of the shares under the ESPP equals 85% of the lower of the fair market value of our common stock on either the first or last day of each six-month offering period. Compensation expense is calculated as of the beginning of the offering period as the fair value of the employees’ purchase rights utilizing the Black-Scholes option valuation model and is recognized over the offering period. Grant-date fair value and assumptions used in the Black-Scholes option valuation model were as follows:

For the year ended	2021	2020	2019
Weighted-average grant-date fair value per share	\$ 20.71	\$ 14.24	\$ 11.60
Average expected life in years	0.5	0.5	0.5
Weighted-average expected volatility	41 %	45 %	45 %
Weighted-average risk-free interest rate	0.1 %	0.8 %	2.2 %
Expected dividend yield	0.3 %	0.0 %	0.0 %

Under the ESPP, employees purchased 3 million shares of common stock for \$140 million in 2021 and 3 million shares for \$118 million in 2020.



## Stock Options

As of September 2, 2021, stock options of 4 million shares were outstanding, which are generally exercisable in increments of either one-fourth or one-third per year beginning one year from the date of grant. Stock options expire 8 years from the date of grant. We did not grant any stock options in 2021 or 2020 and options granted in 2019 were not material. Stock options of 3 million shares were exercised in 2021. The total intrinsic value for options exercised was \$143 million, \$130 million, and \$108 million in 2021, 2020, and 2019, respectively.

## Stock-based Compensation Expense

For the year ended	2021	2020	2019
Stock-based compensation expense by caption			
Cost of goods sold	\$ 186	\$ 139	\$ 102
Research and development	110	86	68
Selling, general, and administrative	99	103	73
	<u>\$ 395</u>	<u>\$ 328</u>	<u>\$ 243</u>
Stock-based compensation expense by type of award			
Restricted stock awards	\$ 333	\$ 272	\$ 178
ESPP	52	39	32
Stock options	10	17	33
	<u>\$ 395</u>	<u>\$ 328</u>	<u>\$ 243</u>

Income tax benefits related to the tax deductions for share-based awards are recognized only upon the settlement of the related share-based awards. Income tax benefits for share-based awards were \$83 million, \$72 million, and \$66 million for 2021, 2020, and 2019, respectively. Stock-based compensation expense of \$30 million and \$42 million was capitalized and remained in inventory as of September 2, 2021 and September 3, 2020, respectively. As of September 2, 2021, \$691 million of total unrecognized compensation costs for unvested awards, before the effect of any future forfeitures, was expected to be recognized through the fourth quarter of 2025, resulting in a weighted-average period of 1.2 years.

## Employee Benefit Plans

We have employee retirement plans at our U.S. and international sites. Details of significant plans are as follows:

### Employee Savings Plan for U.S. Employees

We have a 401(k) retirement plan under which U.S. employees may contribute up to 75% of their eligible pay, subject to Internal Revenue Service annual contribution limits, to various savings alternatives, none of which include direct investment in our stock. We match in cash eligible contributions from employees up to 5% of the employee's annual eligible earnings. Contribution expense for the 401(k) plan was \$77 million, \$66 million, and \$67 million in 2021, 2020, and 2019, respectively.

### Retirement Plans

We have pension plans available to employees at various foreign sites. As of September 2, 2021, the projected benefit obligations of our plans were \$222 million and plan assets were \$256 million. As of September 3, 2020, the projected benefit obligations of our plans were \$202 million and plan assets were \$222 million. Pension expense was not material for 2021, 2020, or 2019.

## Revenue and Customer Contract Liabilities

### Revenue by Technology

Revenue by technology is presented in the table below:

For the year ended	2021	2020	2019
DRAM	\$ 20,039	\$ 14,510	\$ 16,841
NAND	7,007	6,131	5,355
Other (primarily 3D XPoint memory and NOR)	659	794	1,210
	<u>\$ 27,705</u>	<u>\$ 21,435</u>	<u>\$ 23,406</u>

Beginning in 2020, revenues for MCPs and SSDs, which contain both DRAM and NAND, are disaggregated into DRAM and NAND based on the relative values of each component. The amounts for 2019 in the table above have been conformed to the current period presentation.

See "Segment and Other Information" for disclosure of disaggregated revenue by market segment.

### Customer Contract Liabilities

Our contract liabilities from customer advances are for advance payments received from customers to secure product in future periods. Other contract liabilities consist of amounts received in advance of satisfying performance obligations. These balances are reported within other current liabilities and other noncurrent liabilities. Revenue recognized during 2021 from the ending balance of 2020 included \$64 million from meeting performance obligations of other contract liabilities and shipments against customer advances. The following table presents contract liabilities:

As of	2021	2020
Contract liabilities from customer advances	\$ 74	\$ 40
Other contract liabilities	—	25
	<u>\$ 74</u>	<u>\$ 65</u>

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Substantially all contracts with our customers are short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. From time to time, we have contracts with initial terms that include performance obligations that extend beyond one year. As of September 2, 2021, our future performance obligations were \$117 million, substantially all of which are expected to be recognized as revenue within one year.

As of September 2, 2021 and September 3, 2020, other current liabilities included \$846 million and \$466 million for estimates of consideration payable to customers, respectively, including estimates for pricing adjustments and returns.

## Restructure and Asset Impairments

For the year ended	2021	2020	2019
Restructure and asset impairments	\$ 488	\$ 60	\$ (29)

Restructure and asset impairments for 2021 are primarily due to the planned sale of our Lehi, Utah facility. (See "Lehi, Utah Fab and 3D XPoint.") Restructure and asset impairments for 2020 primarily related to asset impairments and employee relocation and severance costs related to right-sizing our Lehi, Utah facility. In 2019, we finalized the sale of our 200mm fabrication facility in Singapore and recognized restructure gains of \$128 million. Other restructure and asset impairments for 2019 primarily related to our continued emphasis to centralize certain key functions.

## Other Operating (Income) Expense, Net

For the year ended	2021	2020	2019
Patent license charges	\$ 128	\$ —	\$ —
(Gain) loss on disposition of property, plant, and equipment	(24)	(3)	43
Other	(9)	11	35
	<u>\$ 95</u>	<u>\$ 8</u>	<u>\$ 78</u>

## Other Non-Operating Income (Expense), Net

For the year ended	2021	2020	2019
Gain (loss) on investments	\$ 82	\$ 22	\$ (4)
Gain (loss) on debt prepayments, repurchases, and conversions	(1)	40	(396)
Other	—	(2)	(5)
	<u>\$ 81</u>	<u>\$ 60</u>	<u>\$ (405)</u>

## Income Taxes

Our income tax (provision) benefit consisted of the following:

For the year ended	2021	2020	2019
Income (loss) before income taxes, net income (loss) attributable to noncontrolling interests, and equity in net income (loss) of equity method investees			
U.S.	\$ (211)	\$ 308	\$ (67)
Foreign	6,429	2,675	7,115
	<u>\$ 6,218</u>	<u>\$ 2,983</u>	<u>\$ 7,048</u>
Income tax (provision) benefit			
Current			
U.S. federal	\$ (42)	\$ (20)	\$ (36)
State	(1)	(2)	(2)
Foreign	(370)	(148)	(319)
	<u>(413)</u>	<u>(170)</u>	<u>(357)</u>
Deferred			
U.S. federal	(9)	39	(146)
State	28	23	91
Foreign	—	(172)	(281)
	<u>19</u>	<u>(110)</u>	<u>(336)</u>
Income tax (provision) benefit	<u>\$ (394)</u>	<u>\$ (280)</u>	<u>\$ (693)</u>

The table below reconciles our tax (provision) benefit based on the U.S. federal statutory rate to our effective rate:

For the year ended	2021		2020		2019	
U.S. federal income tax (provision) benefit at statutory rate	\$ (1,306)	21.0 %	\$ (626)	21.0 %	\$ (1,480)	21.0 %
Change in unrecognized tax benefits	(238)	3.8 %	(33)	1.1 %	(59)	0.8 %
U.S. tax on foreign operations	(226)	3.6 %	(14)	0.5 %	(327)	4.6 %
Foreign tax rate differential	951	(15.3)%	253	(8.5)%	993	(14.1)%
Debt premium deductions	130	(2.1)%	—	— %	—	— %
Research and development tax credits	123	(2.0)%	62	(2.1)%	92	(1.3)%
Change in valuation allowance	54	(0.9)%	(20)	0.7 %	(40)	0.6 %
State taxes, net of federal benefit	59	(0.9)%	23	(0.8)%	102	(1.4)%
Foreign derived intangible income deduction	18	(0.3)%	67	(2.2)%	—	— %
Other	41	(0.6)%	8	(0.3)%	26	(0.4)%
Income tax (provision) benefit	<u>\$ (394)</u>	<u>6.3 %</u>	<u>\$ (280)</u>	<u>9.4 %</u>	<u>\$ (693)</u>	<u>9.8 %</u>

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. The effect of tax incentive arrangements reduced our tax provision by \$758 million (benefiting our diluted earnings per share by \$0.66) for 2021, by \$215 million (\$0.19 per diluted share) for 2020, and by \$756 million (\$0.66 per diluted share) for 2019.

As of September 2, 2021, certain non-U.S. subsidiaries had cumulative undistributed earnings of \$3.53 billion that were deemed to be indefinitely reinvested. A provision has not been recognized to the extent that distributions from such subsidiaries are subject to additional foreign withholding or state income tax. Determination of the amount of unrecognized deferred tax liabilities related to investments in these foreign subsidiaries is not practicable.

Pursuant to SEC Staff Accounting Bulletin No. 118, measurement period adjustments in 2019 related to the Tax Cuts and Jobs Act included \$47 million of benefit for the repatriation tax, net of adjustments related to uncertain tax positions. We recognize the foreign minimum tax in the period the tax is incurred.

Deferred income taxes reflect the net tax effects of temporary differences between the bases of assets and liabilities for financial reporting and income tax purposes as well as carryforwards. Deferred tax assets and liabilities consist of the following:

As of	2021	2020
<b>Deferred tax assets</b>		
Net operating loss and tax credit carryforwards	\$ 783	\$ 912
Accrued salaries, wages, and benefits	206	176
Operating lease liabilities	109	114
Property, plant, and equipment	37	—
Other	115	91
Gross deferred tax assets	1,250	1,293
Less valuation allowance	(233)	(294)
Deferred tax assets, net of valuation allowance	1,017	999
<b>Deferred tax liabilities</b>		
Right-of-use assets	(90)	(95)
Product and process technology	(12)	(57)
Property, plant, and equipment	—	(50)
Other	(143)	(99)
Deferred tax liabilities	(245)	(301)
Net deferred tax assets	\$ 772	\$ 698
<b>Reported as</b>		
Deferred tax assets	\$ 782	\$ 707
Deferred tax liabilities (included in other noncurrent liabilities)	(10)	(9)
Net deferred tax assets	\$ 772	\$ 698

We assess positive and negative evidence for each jurisdiction to determine whether it is more likely than not that existing deferred tax assets will be realized. As of September 2, 2021, and September 3, 2020, we had a valuation allowance of \$233 million and \$294 million, respectively, against our net deferred tax assets, primarily related to carryforwards in Malaysia and Japan. Changes in 2021 in the valuation allowance were due to loss expirations during the year, offset by adjustments based on management's assessment of tax credits, allowances and net operating losses that are more likely than not to be realized.

As of September 2, 2021, our net operating loss carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Expiration	State	Japan	Malaysia	Singapore	Other	Total
2022 - 2026	\$ 49	\$ 617	\$ —	\$ —	\$ 1	\$ 667
2027 - 2031	537	—	—	—	—	537
2032 - 2036	355	—	—	—	—	355
2037 - 2041	61	—	—	—	—	61
Indefinite	1	—	606	477	7	1,091
	\$ 1,003	\$ 617	\$ 606	\$ 477	\$ 8	\$ 2,711

As of September 2, 2021, our federal and state tax credit carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Tax Credit Expiration	U.S. Federal	State	Total
2022 - 2026	\$ —	\$ 45	\$ 45
2027 - 2031	—	84	84
2032 - 2036	32	132	164
2037 - 2041	364	5	369
Indefinite	—	104	104
	<u>\$ 396</u>	<u>\$ 370</u>	<u>\$ 766</u>

Below is a reconciliation of the beginning and ending amount of our unrecognized tax benefits:

For the year ended	2021	2020	2019
Beginning unrecognized tax benefits	\$ 411	\$ 383	\$ 261
Increases related to tax positions from prior years	2	14	124
Increases related to tax positions taken in current year	260	27	44
Decreases related to tax positions from prior years	(13)	(13)	(46)
Ending unrecognized tax benefits	<u>\$ 660</u>	<u>\$ 411</u>	<u>\$ 383</u>

As of September 2, 2021, gross unrecognized tax benefits were \$660 million, substantially all of which would affect our effective tax rate in the future, if recognized. Increases to unrecognized tax benefits were primarily due to tax return positions taken during 2021. Amounts accrued for interest and penalties related to uncertain tax positions were not significant for any period presented. The resolution of tax audits or expiration of statute of limitations could also reduce our unrecognized tax benefits. Although the timing of final resolution is uncertain, the estimated potential reduction in our unrecognized tax benefits in the next 12 months would not be significant.

We and our subsidiaries file income tax returns with the U.S. federal government, various U.S. states, and various foreign jurisdictions throughout the world. We regularly engage in discussions and negotiations with tax authorities regarding tax matters, including transfer pricing, and we continue to defend any and all such claims presented. Our U.S. federal and state tax returns remain open to examination for 2017 through 2021. We are currently under audit by the Internal Revenue Service for our 2018 and 2019 tax years. In addition, tax returns that remain open to examination in Singapore, Taiwan and Japan range from the years 2015 to 2021. We believe that adequate amounts of taxes and related interest and penalties have been provided, and any adjustments as a result of examinations are not expected to materially adversely affect our business, results of operations, or financial condition.

## Earnings Per Share

For the year ended	2021	2020	2019
Net income attributable to Micron – Basic	\$ 5,861	\$ 2,687	\$ 6,313
Assumed conversion of debt	—	(4)	(12)
Net income attributable to Micron – Diluted	<u>\$ 5,861</u>	<u>\$ 2,683</u>	<u>\$ 6,301</u>
Weighted-average common shares outstanding – Basic	1,120	1,110	1,114
Dilutive effect of equity plans and convertible notes	21	21	29
Weighted-average common shares outstanding – Diluted	<u>1,141</u>	<u>1,131</u>	<u>1,143</u>
Earnings per share			
Basic	\$ 5.23	\$ 2.42	\$ 5.67
Diluted	5.14	2.37	5.51

Antidilutive potential common shares excluded from the computation of diluted earnings per share, that could dilute basic earnings per share in the future, were as follows at the end of the periods shown:

For the year ended	2021	2020	2019
Equity plans	2	5	8

## Segment and Other Information

Segment information reported herein is consistent with how it is reviewed and evaluated by our chief operating decision maker. We have the following four business units, which are our reportable segments:

**Compute and Networking Business Unit (“CNBU”):** Includes memory products sold into client, cloud server, enterprise, graphics, and networking markets.

**Mobile Business Unit (“MBU”):** Includes memory and storage products sold into smartphone and other mobile-device markets.

**Storage Business Unit (“SBU”):** Includes SSDs and component-level solutions sold into enterprise and cloud, client, and consumer storage markets, and other discrete storage products sold in component and wafer form.

**Embedded Business Unit (“EBU”):** Includes memory and storage products sold into automotive, industrial, and consumer markets.

Certain operating expenses directly associated with the activities of a specific segment are charged to that segment. Other indirect operating income and expenses are generally allocated to segments based on their respective percentage of cost of goods sold or forecasted wafer production. We do not identify or report internally our assets (other than goodwill) or capital expenditures by segment, nor do we allocate gains and losses from equity method investments, interest, other non-operating income or expense items, or taxes to segments. As of September 2, 2021 and September 3, 2020, CNBU, MBU, SBU, and EBU had goodwill of \$832 million, \$198 million, \$101 million, and \$97 million, respectively.

For the year ended	2021	2020	2019
<b>Revenue</b>			
CNBU	\$ 12,280	\$ 9,184	\$ 9,968
MBU	7,203	5,702	6,403
SBU	3,973	3,765	3,826
EBU	4,209	2,759	3,137
All Other	40	25	72
	<u>\$ 27,705</u>	<u>\$ 21,435</u>	<u>\$ 23,406</u>
<b>Operating income (loss)</b>			
CNBU	\$ 4,295	\$ 2,010	\$ 4,645
MBU	2,173	1,074	2,606
SBU	173	36	(386)
EBU	1,006	301	923
All Other	20	(2)	13
	<u>7,667</u>	<u>3,419</u>	<u>7,801</u>
<b>Unallocated</b>			
Stock-based compensation	(395)	(328)	(243)
Inventory accounting policy change to FIFO	(133)	—	—
Change in inventory cost absorption	(160)	—	—
3D XPoint inventory write-down	(49)	—	—
Restructure and asset impairments	(488)	(60)	32
Patent license charges	(128)	—	—
Employee severance	—	—	(116)
Other	(31)	(28)	(98)
	<u>(1,384)</u>	<u>(416)</u>	<u>(425)</u>
Operating income	<u>\$ 6,283</u>	<u>\$ 3,003</u>	<u>\$ 7,376</u>

Depreciation and amortization expense included in operating income was as follows:

For the year ended	2021	2020	2019
CNBU	\$ 2,497	\$ 2,318	\$ 1,833
MBU	1,101	1,436	1,235
SBU	1,028	1,115	1,555
EBU	1,553	741	748
All Other	8	12	27
Unallocated	27	28	26
	<u>\$ 6,214</u>	<u>\$ 5,650</u>	<u>\$ 5,424</u>



## Certain Concentrations

Revenue by market segment as an approximate percent of total revenue is presented in the table below:

For the year ended	2021	2020	2019
Mobile	25 %	25 %	25 %
Client and graphics	20 %	20 %	20 %
Enterprise and cloud server	20 %	20 %	20 %
SSDs and other storage	15 %	20 %	15 %
Automotive, industrial, and consumer	15 %	15 %	15 %

Revenue from WPG Holdings Limited was 13% of total revenue in 2021. Revenue from Kingston Technology Company, Inc. was 11% of total revenue for 2020 and 2019. Revenue from Huawei Technologies Co. Ltd. was 12% of total revenue for 2019. Our sales to WPG were included in our MBU, CNBU, EBU, and SBU segments; our sales to Kingston were included in our CNBU, MBU, and SBU segments; and our sales to Huawei were included in our MBU, CNBU, SBU, and EBU segments.

We generally have multiple sources of supply for our raw materials and production equipment; however, only a limited number of suppliers are capable of delivering certain raw materials and production equipment that meet our standards and, in some cases, materials or production equipment are provided by a single supplier.

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash, money market accounts, certificates of deposit, fixed-rate debt securities, trade receivables, share repurchase, and derivative contracts. We invest through high-credit-quality financial institutions and, by policy, generally limit the concentration of credit exposure by restricting investments with any single obligor and monitoring credit risk of bank counterparties on an ongoing basis. A concentration of credit risk may exist with respect to receivables of certain customers. We perform ongoing credit evaluations of customers worldwide and generally do not require collateral from our customers. Historically, we have not experienced material losses on receivables. A concentration of risk may also exist with respect to our foreign currency hedges as the number of counterparties to our hedges is limited and the notional amounts are relatively large. We seek to mitigate such risk by limiting our counterparties to major financial institutions and through entering into master netting arrangements.

## Geographic Information

Revenue based on the geographic location of our customers' headquarters was as follows:

For the year ended	2021	2020	2019
United States	\$ 12,155	\$ 10,381	\$ 12,451
Taiwan	6,606	3,657	2,703
Mainland China (excluding Hong Kong)	2,456	2,337	3,595
Hong Kong	2,582	1,792	1,614
Japan	1,652	1,387	958
Other Asia Pacific	1,420	1,157	1,032
Other	834	724	1,053
	<u>\$ 27,705</u>	<u>\$ 21,435</u>	<u>\$ 23,406</u>

Long-lived assets by geographic area consisted of property, plant, and equipment and right-of-use assets and were as follows:

As of	2021	2020
Taiwan	\$ 11,457	\$ 10,516
Singapore	9,411	8,161
Japan	7,222	6,478
United States <sup>(1)</sup>	5,205	5,434
Malaysia	757	385
China	436	478
Other	175	163
	\$ 34,663	\$ 31,615

<sup>(1)</sup> Included \$899 million (net of impairment) as of September 2, 2021 of property, plant, and equipment for our Lehi facility that was classified as held for sale and presented in other current assets.

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Micron Technology, Inc.

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Micron Technology, Inc. and its subsidiaries (the "Company") as of September 2, 2021 and September 3, 2020, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended September 2, 2021, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended September 2, 2021 appearing under Item 15 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of September 2, 2021, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 2, 2021 and September 3, 2020, and the results of its operations and its cash flows for each of the three years in the period ended September 2, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 2, 2021, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the COSO.

***Changes in Accounting Principle***

As discussed in the Significant Accounting Policies and Inventories notes to the consolidated financial statements, the Company changed the manner in which it accounts for inventory costing from the average cost inventory accounting method to the first-in, first-out inventory accounting method and the manner in which it classifies spare parts for equipment from raw materials inventories to other current assets in 2021, and the manner in which it accounts for leases in 2020.

***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

***Critical Audit Matters***

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

***Valuation of Inventories (Finished goods and Work in process)***

As described in the Significant Accounting Policies and Inventories notes to the consolidated financial statements, as of September 2, 2021, the Company had a net inventory balance for finished goods and work in process inventory totaling approximately \$4 billion. As disclosed by management, determining the net realizable value of the Company's net inventories involves significant judgments, including projecting future average selling prices and future sales volumes.

The principal considerations for our determination that performing procedures relating to the valuation of finished goods and work in process inventories is a critical audit matter are the significant judgment by management in determining the net realizable value of inventories, which in turn led to significant auditor judgment, subjectivity and effort in performing procedures over the reasonableness of the significant assumptions related to future average selling prices and future sales volumes, used to estimate the net realizable value of finished goods and work in process inventories.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the net realizable value of finished goods and work in process inventories, significant assumptions, and data used to value the inventories. These procedures also included, among others, testing management's process for developing the net realizable value estimate of finished goods and work in process inventories; evaluating the appropriateness of management's estimated net realizable value methodology; testing the completeness, accuracy, and relevance of underlying data used in the estimate of net realizable value of finished goods and work in process inventories; and evaluating the reasonableness of management's assumptions related to future average selling prices and future sales volumes. Evaluating management's assumptions related to future average selling prices and future sales volumes involved evaluating whether the assumptions used by management were reasonable considering (i) current and past results, including recent sales, (ii) the consistency with external market, industry data and current contract prices, (iii) a comparison of the prior year estimates to actual results in the current year, and (iv) whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
October 8, 2021

We have served as the Company's auditor since 1984.

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## Micron Technology, Inc. Consolidated Statements of Operations

(In millions, except per share amounts)

For the year ended	September 1, 2022	September 2, 2021	September 3, 2020
Revenue	\$ 30,758	\$ 27,705	\$ 21,435
Cost of goods sold	16,860	17,282	14,883
Gross margin	13,898	10,423	6,552
Research and development	3,116	2,663	2,600
Selling, general, and administrative	1,066	894	881
Restructure and asset impairments	48	488	60
Other operating (income) expense, net	(34)	95	8
Operating income	9,702	6,283	3,003
Interest income	96	37	114
Interest expense	(189)	(183)	(194)
Other non-operating income (expense), net	(38)	81	60
	9,571	6,218	2,983
Income tax (provision) benefit	(888)	(394)	(280)
Equity in net income (loss) of equity method investees	4	37	7
Net income	8,687	5,861	2,710
Net income attributable to noncontrolling interests	—	—	(23)
Net income attributable to Micron	\$ 8,687	\$ 5,861	\$ 2,687
Earnings per share			
Basic	\$ 7.81	\$ 5.23	\$ 2.42
Diluted	7.75	5.14	2.37
Number of shares used in per share calculations			
Basic	1,112	1,120	1,110
Diluted	1,122	1,141	1,131

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Comprehensive Income

(In millions)

For the year ended	September 1, 2022	September 2, 2021	September 3, 2020
Net income	\$ 8,687	\$ 5,861	\$ 2,710
Other comprehensive income (loss), net of tax			
Gains (losses) on derivative instruments	(516)	(67)	46
Gains (losses) on investments	(48)	(7)	1
Foreign currency translation adjustments	(1)	2	—
Pension liability adjustments	3	3	15
Other comprehensive income (loss)	(562)	(69)	62
Total comprehensive income	8,125	5,792	2,772
Comprehensive income attributable to noncontrolling interests	—	—	(23)
Comprehensive income attributable to Micron	\$ 8,125	\$ 5,792	\$ 2,749

*See accompanying notes to consolidated financial statements.*



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## Micron Technology, Inc. Consolidated Balance Sheets

(In millions, except par value amounts)

As of	September 1, 2022	September 2, 2021
<b>Assets</b>		
Cash and equivalents	\$ 8,262	\$ 7,763
Short-term investments	1,069	870
Receivables	5,130	5,311
Inventories	6,663	4,487
Assets held for sale	13	974
Other current assets	644	502
Total current assets	21,781	19,907
Long-term marketable investments	1,647	1,765
Property, plant, and equipment	38,549	33,213
Operating lease right-of-use assets	678	551
Intangible assets	421	349
Deferred tax assets	702	782
Goodwill	1,228	1,228
Other noncurrent assets	1,277	1,054
Total assets	<u>\$ 66,283</u>	<u>\$ 58,849</u>
<b>Liabilities and equity</b>		
Accounts payable and accrued expenses	\$ 6,090	\$ 5,325
Current debt	103	155
Other current liabilities	1,346	944
Total current liabilities	7,539	6,424
Long-term debt	6,803	6,621
Noncurrent operating lease liabilities	610	504
Noncurrent unearned government incentives	589	808
Other noncurrent liabilities	835	559
Total liabilities	16,376	14,916
<b>Commitments and contingencies</b>		
<b>Shareholders' equity</b>		
Common stock, \$0.10 par value, 3,000 shares authorized, 1,226 shares issued and 1,094 outstanding (1,216 shares issued and 1,119 outstanding as of September 2, 2021)	123	122
Additional capital	10,197	9,453
Retained earnings	47,274	39,051
Treasury stock, 132 shares held (97 shares as of September 2, 2021)	(7,127)	(4,695)
Accumulated other comprehensive income (loss)	(560)	2
Total equity	49,907	43,933
Total liabilities and equity	<u>\$ 66,283</u>	<u>\$ 58,849</u>

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Changes in Equity

(In millions, except per share amounts)

	Micron Shareholders								
	Common Stock			Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Micron Shareholders' Equity	Noncontrolling Interests in Subsidiaries	Total Equity
	Number of Shares	Amount	Additional Capital						
<b>Balance at August 29, 2019</b>	1,182	\$ 118	\$ 8,214	\$ 30,761	\$ (3,221)	\$ 9	\$ 35,881	\$ 889	\$36,770
Net income	—	—	—	2,687	—	—	2,687	15	2,702
Other comprehensive income (loss), net	—	—	—	—	—	62	62	—	62
Stock issued under stock plans	14	1	224	—	—	—	225	—	225
Stock-based compensation expense	—	—	328	—	—	—	328	—	328
Repurchase of stock - repurchase program	—	—	—	—	(176)	—	(176)	—	(176)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(11)	(64)	—	—	(75)	—	(75)
Settlement of capped calls	—	—	98	—	(98)	—	—	—	—
Acquisitions of noncontrolling interest	—	—	120	—	—	—	120	(904)	(784)
Cash settlement of convertible notes	—	—	(56)	—	—	—	(56)	—	(56)
<b>Balance at September 3, 2020</b>	1,194	\$ 119	\$ 8,917	\$ 33,384	\$ (3,495)	\$ 71	\$ 38,996	\$ —	\$38,996
Net income	—	—	—	5,861	—	—	5,861	—	5,861
Other comprehensive income (loss), net	—	—	—	—	—	(69)	(69)	—	(69)
Stock issued under stock plans	13	2	223	—	—	—	225	—	225
Stock-based compensation expense	—	—	378	—	—	—	378	—	378
Repurchase of stock - repurchase program	—	—	—	—	(1,200)	—	(1,200)	—	(1,200)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(12)	(82)	—	—	(94)	—	(94)
Stock issued for convertible notes	11	1	(1)	—	—	—	—	—	—
Cash settlement of convertible notes	—	—	(52)	—	—	—	(52)	—	(52)
Dividends and dividend equivalents declared (\$0.10 per share)	—	—	—	(112)	—	—	(112)	—	(112)
<b>Balance at September 2, 2021</b>	1,216	\$ 122	\$ 9,453	\$ 39,051	\$ (4,695)	\$ 2	\$ 43,933	\$ —	\$43,933
Net income	—	—	—	8,687	—	—	8,687	—	8,687
Other comprehensive income (loss), net	—	—	—	—	—	(562)	(562)	—	(562)
Stock issued under stock plans	12	1	244	—	—	—	245	—	245
Stock-based compensation expense	—	—	514	—	—	—	514	—	514
Repurchase of stock - repurchase program	—	—	—	—	(2,432)	—	(2,432)	—	(2,432)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(14)	(112)	—	—	(126)	—	(126)
Dividends and dividend equivalents declared (\$0.315 per share)	—	—	—	(352)	—	—	(352)	—	(352)
<b>Balance at September 1, 2022</b>	1,226	\$ 123	\$ 10,197	\$ 47,274	\$ (7,127)	\$ (560)	\$ 49,907	\$ —	\$49,907

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Cash Flows

(In millions)

For the year ended	September 1, 2022	September 2, 2021	September 3, 2020
<b>Cash flows from operating activities</b>			
Net income	\$ 8,687	\$ 5,861	\$ 2,710
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation expense and amortization of intangible assets	7,116	6,214	5,650
Stock-based compensation	514	378	328
(Gain) loss on debt repurchases and conversions	83	1	(40)
Restructure and asset impairments	44	454	40
Change in operating assets and liabilities:			
Receivables	190	(1,446)	(723)
Inventories	(2,179)	866	(435)
Accounts payable and accrued expenses	744	210	725
Other	(18)	(70)	51
Net cash provided by operating activities	15,181	12,468	8,306
<b>Cash flows from investing activities</b>			
Expenditures for property, plant, and equipment	(12,067)	(10,030)	(8,223)
Purchases of available-for-sale securities	(1,770)	(3,163)	(1,857)
Proceeds from maturities of available-for-sale securities	1,321	1,250	814
Proceeds from sale of Lehi, Utah fab	888	—	—
Proceeds from sales of available-for-sale securities	294	856	1,458
Proceeds from government incentives	115	495	262
Other	(366)	3	(43)
Net cash provided by (used for) investing activities	(11,585)	(10,589)	(7,589)
<b>Cash flows from financing activities</b>			
Repurchases of common stock - repurchase program	(2,432)	(1,200)	(176)
Repayments of debt	(2,032)	(1,520)	(4,366)
Payments of dividends to shareholders	(461)	—	—
Payments on equipment purchase contracts	(141)	(295)	(63)
Repurchases of common stock - withholdings on employee equity awards	(125)	(94)	(75)
Acquisition of noncontrolling interest in IMFT	—	—	(744)
Proceeds from issuance of debt	2,000	1,188	5,000
Other	211	140	107
Net cash provided by (used for) financing activities	(2,980)	(1,781)	(317)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash			
	(106)	41	11
Net increase (decrease) in cash, cash equivalents, and restricted cash	510	139	411
Cash, cash equivalents, and restricted cash at beginning of period	7,829	7,690	7,279
Cash, cash equivalents, and restricted cash at end of period	\$ 8,339	\$ 7,829	\$ 7,690
<b>Supplemental disclosures</b>			
Income taxes paid, net	\$ (493)	\$ (361)	\$ (167)
Interest paid, net of amounts capitalized	(154)	(171)	(165)
Noncash equipment acquisitions on contracts payable	157	289	171

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All tabular amounts in millions, except per share amounts)

## Significant Accounting Policies

### Basis of Presentation

We are an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life *for all*. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND, and NOR memory and storage products through our Micron® and Crucial® brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience.

The accompanying consolidated financial statements include the accounts of Micron Technology, Inc. and our consolidated subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America. Intercompany balances and transactions have been eliminated in consolidation. Certain reclassifications have been made to prior period amounts to conform to current period presentation. See “Inventories” below for changes to our significant accounting policies, and the “Inventories” note for additional information.

Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2022 and 2021 each contained 52 weeks and fiscal 2020 contained 53 weeks. Our fourth quarter of fiscal 2020 contained 14 weeks and all other fiscal quarters in the years presented contained 13 weeks. All period references are to our fiscal periods unless otherwise indicated.

### Derivative and Hedging Instruments

We use derivative instruments to manage our exposure to changes in currency exchange rates from (1) our monetary assets and liabilities denominated in currencies other than the U.S. dollar and (2) forecasted cash flows for certain capital expenditures and manufacturing costs. We also use derivative instruments to manage our exposure to changes in commodity prices for manufacturing supplies and to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Derivative instruments are measured at their fair values and recognized as either assets or liabilities.

The accounting for changes in the fair value of derivative instruments is based on the intended use of the derivative and the resulting designation. For derivative instruments that are not designated for hedge accounting, gains or losses from changes in fair values are recognized in other non-operating income (expense). For derivative instruments designated as cash flow hedges, gains or losses are included as a component of accumulated other comprehensive income and reclassified into earnings in the same line items and in the same periods in which the underlying transactions affect earnings. For derivative instruments designated as cash flow hedges, time value is excluded from the assessment of effectiveness and the gains and losses attributable to time value are recognized in earnings. For derivative instruments designated as fair value hedges, changes in the fair values of the derivative instruments and the offsetting changes in the fair values of the underlying hedged items are both recognized in earnings.

We enter into master netting arrangements with our counterparties to mitigate credit risk in derivative hedge transactions. These master netting arrangements allow us and our counterparties to net settle amounts owed to each other. Derivative assets and liabilities that can be net settled with each counterparty have been presented in our consolidated balance sheet on a net basis.

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### Financial Instruments

Cash equivalents include highly liquid short-term investments with original maturities to us of three months or less that are readily convertible to known amounts of cash. Other investments with remaining maturities of less than one year are included in short-term investments. Investments with remaining maturities greater than one year are included in long-term marketable investments. The carrying value of investment securities sold is determined using the specific identification method.

### Functional Currency

The U.S. dollar is the functional currency for us and all of our consolidated subsidiaries.

### Goodwill

We perform an annual impairment assessment for goodwill in our fourth quarter each year.

### Government Incentives

We receive incentives from governmental entities related to expenses, assets, and other activities. Our government incentives may require that we meet or maintain specified spending levels and other operational metrics and may be subject to reimbursement if such conditions are not met or maintained. Government incentives are recorded in the financial statements in accordance with their purpose: as a reduction of expenses, a reduction of asset costs, or other income. Incentives related to specific operating activities are offset against the related expense in the period the expense is incurred. Incentives related to the acquisition or construction of fixed assets are recognized as a reduction in the carrying amounts of the related assets and reduce depreciation expense over the useful lives of the assets. Other incentives are recognized as other operating income. Government incentives received prior to being earned are recognized in current or noncurrent deferred income or restricted cash, whereas government incentives earned prior to being received are recognized in current or noncurrent receivables. Cash received from government incentives related to operating expenses is included as an operating activity in the statement of cash flows, whereas cash received from incentives related to the acquisition of property, plant, and equipment is included as an investing activity.

### Inventories

Effective as of the beginning of the second quarter of 2021, we changed the method of inventory costing from average cost to FIFO. The difference between average cost and FIFO was not material to any previously reported financial statements. Therefore, we have recognized the cumulative effect of the change as a reduction of inventories and a charge to cost of goods sold of \$133 million as of the beginning of the second quarter of 2021.

Inventories are stated at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. When net realizable value (which requires projecting future average selling prices, sales volumes, and costs to complete products in work in process inventories) is below cost, we record a charge to cost of goods sold to write down inventories to their estimated net realizable value in advance of when inventories are actually sold. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group. We remove amounts from inventory and charge such amounts to cost of goods sold on a FIFO basis.

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## Leases

We determine if an arrangement is a lease, or contains a lease, at the inception of the arrangement and evaluate whether the lease is an operating lease or a finance lease at the commencement date. We recognize right-of-use assets and lease liabilities for operating and finance leases with terms greater than 12 months. Right-of-use assets represent our right to use an asset for the lease term, while lease liabilities represent our obligation to make lease payments. We do not separate lease and non-lease components for real-estate and gas plant leases. Sublease income is included within lease expense.

## Product and Process Technology

Costs incurred to (1) acquire product and process technology, (2) patent technology, and (3) maintain patent technology, are capitalized and amortized on a straight-line basis over periods ranging up to 12.5 years. We capitalize a portion of costs incurred to patent technology based on historical data of patents issued as a percent of patents we file. Product and process technology costs are amortized over the shorter of (1) the estimated useful life of the technology, (2) the patent term, or (3) the term of the technology agreement. Fully-amortized assets are removed from product and process technology and accumulated amortization.

## Product Warranty

We generally provide a limited warranty that our products are in compliance with applicable specifications existing at the time of delivery. Under our standard terms and conditions of sale, liability for certain failures of product during a stated warranty period is usually limited to repair or replacement of defective items or return of, or a credit with respect to, amounts paid for such items. Under certain circumstances, we provide more extensive limited warranty coverage than that provided under our standard terms and conditions. Our warranty obligations are not material.

## Property, Plant, and Equipment

Property, plant, and equipment is stated at cost and depreciated using the straight-line method over estimated useful lives of generally 10 to 30 years for buildings, 5 to 7 years for equipment, and 3 to 5 years for software. Assets held for sale are carried at the lower of estimated fair value or carrying value and are included in current assets. When property, plant, or equipment is retired or otherwise disposed, the net book value is removed and we recognize any gain or loss in results of operations.

We capitalize interest on borrowings during the period of time we carry out the activities necessary to bring assets to the condition of their intended use and location. Capitalized interest becomes part of the cost of assets.

## Research and Development

Costs related to the conceptual formulation and design of products and processes are charged to R&D expense as incurred. Development of a product is deemed complete when it is qualified through reviews and tests for performance and reliability. Subsequent to product qualification, product costs are included in cost of goods sold. Amounts from cost-sharing arrangements are reflected as a reduction of R&D expense.

## Revenue Recognition

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.

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### Stock-based Compensation

Stock-based compensation is measured at the grant date, based on the fair value of the award, and recognized as expense under the straight-line attribution method over the requisite service period. We account for forfeitures as they occur. We issue new shares upon the exercise of stock options, conversion of share units, or issuance of shares under our ESPP.

### Treasury Stock

Treasury stock is carried at cost. When we retire our treasury stock, any excess of the repurchase price paid over par value is allocated between additional capital and retained earnings.

### Use of Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. Actual results could differ from estimates.

## Lehi, Utah Fab and 3D XPoint

In the second quarter of 2021, we updated our portfolio strategy to further strengthen our focus on memory and storage innovations for the data center market. In connection therewith, we determined that there was insufficient market validation to justify the ongoing investments required to commercialize 3D XPoint at scale. Accordingly, we ceased development of 3D XPoint technology and engaged in discussions with potential buyers for the sale of our facility located in Lehi, Utah that was dedicated to 3D XPoint production. As a result, we classified the property, plant, and equipment as held for sale as of the second quarter of 2021 and ceased depreciating the assets. On June 30, 2021, we announced a definitive agreement to sell our Lehi facility to TI and closed the sale on October 22, 2021.

In the first quarter of 2022, we received \$893 million from TI for the sale of the Lehi facility and disposed of \$918 million of net assets, consisting primarily of property, plant, and equipment of \$921 million; \$55 million of other assets, consisting primarily of a receivable for reimbursement of property taxes, equipment spare parts, and raw materials; and \$58 million of liabilities, consisting primarily of a finance lease obligation. As a result of the disposition of the Lehi facility and other related adjustments, we recognized a loss of \$23 million included in restructure and asset impairments in the first quarter of 2022.

In 2021, we recognized a charge of \$435 million included in restructure and asset impairments in connection with the definitive agreement with TI (and a tax benefit of \$104 million included in income tax (provision) benefit) to write down the assets held for sale to the expected consideration, net of estimated selling costs. The impairment charge was based on Level 3 inputs including expected consideration and the composition of assets included in the sale, which were derived from the agreement with TI. We also recognized a charge of \$49 million to cost of goods sold in 2021 to write down 3D XPoint inventory due to our decision to cease further development of this technology. Our 3D XPoint technology development and Lehi facility operations were primarily included in our CNBU segment results.

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As of September 2, 2021, the significant balances of assets held for sale in connection with our Lehi facility were as follows:

As of	September 2, 2021
Property, plant, and equipment	\$ 1,334
Other current assets	50
Impairment	(435)
Lehi assets held for sale	<u>\$ 949</u>

As of September 2, 2021, we also had a \$50 million finance lease obligation included in the current portion of long-term debt and \$11 million of other liabilities that were subsequently transferred with the sale. As of September 2, 2021, the carrying value of the Lehi assets held for sale approximated the expected cash consideration, net of estimated selling expenses.

## Variable Interest Entities

We have interests in entities that are variable interest entities (“VIEs”). If we are the primary beneficiary of a VIE, we are required to consolidate it. To determine if we are the primary beneficiary, we evaluate whether we have the power to direct the activities that most significantly impact the VIE’s economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. Our evaluation includes identification of significant activities and an assessment of our ability to direct those activities based on governance provisions and arrangements to provide or receive product and process technology, product supply, operations services, equity funding, financing, and other applicable agreements and circumstances. Our assessments of whether we are the primary beneficiary of our VIEs require significant assumptions and judgments.

Through the first quarter of 2020, IMFT, which operated a facility in Lehi, Utah, was a VIE because all of its costs were passed to us and its other member, Intel, through product purchase agreements and because IMFT was dependent upon us or Intel for additional cash requirements. The primary activities of IMFT were driven by the constant introduction of product and process technology. Because we performed a significant majority of the technology development, we had the power to direct its key activities. We consolidated IMFT due to this power and our obligation to absorb losses and the right to receive benefits from IMFT that could have been potentially significant to it.

In the first quarter of 2020, we paid \$1.25 billion to acquire Intel’s noncontrolling interest in IMFT and settle IMFT’s debt obligations to Intel, at which time IMFT became a wholly-owned subsidiary. In connection therewith, we recognized a \$160 million adjustment to equity for the difference between the \$744 million of cash consideration allocated to Intel’s noncontrolling interest and its \$904 million carrying value.

IMFT manufactured semiconductor products exclusively for its members under a long-term supply agreement at prices approximating cost. In 2020, IMFT manufactured 3D XPoint memory and its sales to Intel were \$158 million through the date of our purchase of Intel’s noncontrolling interest.



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## Cash and Investments

All of our marketable debt investments were classified as available-for-sale as of the dates noted below. Cash and equivalents and the fair values of our available-for-sale investments, which approximated amortized costs, were as follows:

As of	2022				2021			
	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value
Cash	\$ 6,055	\$ —	\$ —	\$ 6,055	\$ 5,796	\$ —	\$ —	\$ 5,796
Level 1 <sup>(2)</sup>								
Money market funds	1,196	—	—	1,196	38	—	—	38
Level 2 <sup>(3)</sup>								
Certificates of deposits	976	50	—	1,026	1,907	69	—	1,976
Corporate bonds	—	759	995	1,754	9	429	1,134	1,572
Asset-backed securities	—	20	608	628	8	95	509	612
Government securities	2	155	44	201	1	190	122	313
Commercial paper	33	85	—	118	4	87	—	91
	8,262	\$ 1,069	\$ 1,647	\$ 10,978	7,763	\$ 870	\$ 1,765	\$ 10,398
Restricted cash <sup>(4)</sup>	77				66			
Cash, cash equivalents, and restricted cash	<u>\$ 8,339</u>				<u>\$ 7,829</u>			

<sup>(1)</sup> The maturities of long-term marketable securities primarily range from one to four years.

<sup>(2)</sup> The fair value of Level 1 securities is measured based on quoted prices in active markets for identical assets.

<sup>(3)</sup> The fair value of Level 2 securities is measured using information obtained from pricing services, which obtain quoted market prices for similar instruments, non-binding market consensus prices that are corroborated by observable market data, or various other methodologies, to determine the appropriate value at the measurement date. We perform supplemental analysis to validate information obtained from these pricing services. No adjustments were made to the fair values indicated by such pricing information as of September 1, 2022 or September 2, 2021.

<sup>(4)</sup> Restricted cash is included in other current assets and other noncurrent assets and primarily relates to certain government incentives received prior to being earned and for which restrictions lapse upon achieving certain performance conditions.

Gross realized gains and losses from sales of available-for-sale securities were not significant for any period presented.

### Non-marketable Equity Investments

In addition to the amounts included in the table above, we had \$222 million and \$153 million of non-marketable equity investments without a readily determinable fair value that were included in other noncurrent assets as of September 1, 2022 and September 2, 2021, respectively. We recognized net gains in other non-operating income on these non-marketable investments of \$36 million and \$70 million for 2022 and 2021, respectively. These gains primarily resulted from adjustments of these investments to the value indicated by transactions in the same or similar investments.

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## Receivables

As of	2022	2021
Trade receivables	\$ 4,765	\$ 4,920
Income and other taxes	251	264
Other	114	127
	<u>\$ 5,130</u>	<u>\$ 5,311</u>

## Inventories

As of	2022	2021
Finished goods	\$ 1,028	\$ 513
Work in process	4,830	3,469
Raw materials and supplies	805	505
	<u>\$ 6,663</u>	<u>\$ 4,487</u>

Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to FIFO. This change in accounting principle is preferable because in an environment with continuously changing production costs FIFO more closely matches the actual cost of goods sold with the revenues from sales of those specific units, better represents the actual cost of inventories remaining on hand at any period-end, and improves comparability with our semiconductor industry peers. The change to FIFO was not material to any prior periods, nor was the cumulative effect of \$133 million material to the second quarter of 2021. As such, prior periods were not retrospectively adjusted, and the cumulative effect was reported as an increase to cost of goods sold for the second quarter of 2021 of \$133 million, with an offsetting reduction to beginning inventories. This charge resulted in a corresponding reduction to operating income, a \$128 million reduction to net income, and an \$0.11 reduction to diluted earnings per share for both the second quarter and the year ended 2021.

## Property, Plant, and Equipment

As of	2022	2021
Land	\$ 280	\$ 280
Buildings	16,676	14,776
Equipment <sup>(1)</sup>	61,354	51,902
Construction in progress <sup>(2)</sup>	1,897	1,517
Software	1,124	987
	<u>81,331</u>	<u>69,462</u>
Accumulated depreciation	(42,782)	(36,249)
	<u>\$ 38,549</u>	<u>\$ 33,213</u>

<sup>(1)</sup> Includes costs related to equipment not placed into service of \$3.35 billion as of September 1, 2022 and \$1.99 billion as of September 2, 2021.

<sup>(2)</sup> Includes building-related construction, tool installation, and software costs for assets not placed into service.

Depreciation expense was \$7.03 billion, \$6.13 billion, and \$5.57 billion for 2022, 2021, and 2020, respectively. Interest capitalized as part of the cost of property, plant, and equipment was \$77 million, \$66 million, and \$77 million for 2022, 2021, and 2020, respectively.

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## Intangible Assets and Goodwill

As of	2022		2021	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Product and process technology	\$ 742	\$ (321)	\$ 633	\$ (284)
Goodwill	1,228		1,228	

In 2022, 2021, and 2020, we capitalized \$158 million, \$106 million, and \$73 million, respectively, for product and process technology with weighted-average useful lives of 9 years, 9 years, and 10 years, respectively. Amortization expense was \$85 million, \$82 million, and \$78 million for 2022, 2021, and 2020, respectively. Expected amortization expense is \$83 million for 2023, \$72 million for 2024, \$52 million for 2025, \$43 million for 2026, and \$37 million for 2027.

## Leases

We have finance and operating leases through which we obtain the right to use facilities, land, and equipment that support our business operations. Our finance leases consist primarily of gas or other supply agreements that are deemed to contain embedded leases. Our operating leases consist primarily of offices, laboratories, other facilities, and land. Certain of our operating leases include one or more options to extend the lease term for periods from one year to 10 years for real estate and one year to 30 years for land.

Certain supply or service agreements require us to exercise significant judgment to determine whether the agreement contains a lease. Our assessment includes determining whether we or the supplier control the assets used to fulfill the agreements by identifying whether we or the supplier have the right to change the type, quantity, timing, or location of the output of the assets. Our gas supply arrangements generally are deemed to contain a lease because we have the right to substantially all of the output of the assets used to produce the supply and we have the right to change the quantity and timing of the output of those assets. In determining the lease term, we assess whether we are reasonably certain to exercise any options to renew or terminate a lease or to purchase the right-of-use asset. Measuring the present value of the initial lease liability requires judgment to determine the discount rate, which we base on interest rates for borrowings with similar terms and collateral issued by entities with credit ratings similar to ours.

The components of lease cost are presented below:

For the year ended	2022	2021	2020
Finance lease cost			
Amortization of right-of-use asset	\$ 99	\$ 69	\$ 140
Interest on lease liability	24	20	22
Operating lease cost <sup>(1)</sup>	125	108	102
	<u>\$ 248</u>	<u>\$ 197</u>	<u>\$ 264</u>

<sup>(1)</sup> Operating lease cost includes short-term and variable lease expenses, which were not material for the periods presented.

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Supplemental cash flow information related to leases was as follows:

For the year ended	2022	2021	2020
Cash flows used for operating activities			
Finance leases	\$ 23	\$ 21	\$ 24
Operating leases <sup>(1)</sup>	110	106	39
Cash flows used for financing activities – Finance leases	103	85	248
Noncash acquisitions of right-of-use assets			
Finance leases	309	395	107
Operating leases	197	27	11

<sup>(1)</sup> Includes \$48 million of reimbursements received for tenant improvements for 2020.

Supplemental balance sheet information related to leases was as follows:

As of	2022	2021
Finance lease right-of-use assets (included in property, plant, and equipment and assets held for sale)	\$ 904	\$ 766
Current operating lease liabilities (included in accounts payable and accrued expenses)	60	55
Weighted-average remaining lease term (in years)		
Finance leases	12	11
Operating leases	12	12
Weighted-average discount rate		
Finance leases	2.65 %	3.14 %
Operating leases	2.90 %	2.63 %

As of September 1, 2022, maturities of lease liabilities were as follows:

For the year ending	Finance Leases	Operating Leases
2023	\$ 123	\$ 66
2024	100	80
2025	87	70
2026	87	67
2027	86	64
2028 and thereafter	534	463
Less imputed interest	(131)	(140)
	<u>\$ 886</u>	<u>\$ 670</u>

The table above excludes obligations for leases that have been executed but have not yet commenced. As of September 1, 2022, excluded obligations consisted of \$212 million of finance lease obligations over a weighted-average period of 14 years for gas supply arrangements deemed to contain embedded leases. We will recognize right-of-use assets and associated lease liabilities at the time such assets become available for our use.

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## Accounts Payable and Accrued Expenses

As of	2022	2021
Accounts payable	\$ 2,142	\$ 1,744
Property, plant, and equipment	2,170	1,887
Salaries, wages, and benefits	877	984
Income and other taxes	420	364
Other	481	346
	<u>\$ 6,090</u>	<u>\$ 5,325</u>

## Debt

As of	2022						2021			
	Stated Rate	Effective Rate	Principal	Net Carrying Amount			Principal	Current	Net Carrying Amount	
				Current	Long-Term	Total			Long-Term	Total
2024 Term Loan A	3.700 %	3.74 %	\$ 1,188	\$ —	\$ 1,187	\$ 1,187	\$ 1,188	\$ —	\$ 1,186	\$ 1,186
2026 Notes	4.975 %	5.07 %	500	—	498	498	500	—	498	498
2027 Notes <sup>(1)</sup>	4.185 %	4.27 %	900	—	806	806	900	—	901	901
2029 Notes	5.327 %	5.40 %	700	—	697	697	700	—	696	696
2030 Notes	4.663 %	4.73 %	850	—	846	846	850	—	846	846
2032 Green Bonds	2.703 %	2.77 %	1,000	—	994	994	—	—	—	—
2041 Notes	3.366 %	3.41 %	500	—	496	496	—	—	—	—
2051 Notes	3.477 %	3.52 %	500	—	496	496	—	—	—	—
Finance lease obligations	N/A	2.65 %	886	103	783	886	804	155	649	804
2023 Notes	N/A	N/A	—	—	—	—	1,250	—	1,247	1,247
2024 Notes	N/A	N/A	—	—	—	—	600	—	598	598
			<u>\$ 7,024</u>	<u>\$ 103</u>	<u>\$ 6,803</u>	<u>\$ 6,906</u>	<u>\$ 6,792</u>	<u>\$ 155</u>	<u>\$ 6,621</u>	<u>\$ 6,776</u>

<sup>(1)</sup> In 2021, we entered into fixed-to-floating interest rate swaps on the 2027 Notes with an aggregate \$900 million notional amount equal to the principal amount of the 2027 Notes. The resulting variable interest paid is at a rate equal to SOFR plus approximately 3.33%. The fixed-to-floating interest rate swaps are accounted for as fair value hedges, as a result, the carrying values of our 2027 Notes reflect adjustments in fair value.

As of September 1, 2022, all of our debt, other than our finance leases, are unsecured obligations that rank equally in right of payment with all of our other existing and future unsecured indebtedness and are effectively subordinated to all future secured indebtedness, to the extent of the value of the assets securing such indebtedness. As of September 1, 2022, Micron had unsecured debt with a carrying value of \$6.02 billion that was structurally subordinated to all liabilities of its subsidiaries, including trade payables. The terms of our indebtedness generally contain cross payment default and cross acceleration provisions. Micron's guarantees of certain liabilities of its subsidiaries are unsecured obligations ranking equally in right of payment with all of Micron's other existing and future unsecured indebtedness.

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### Senior Unsecured Notes

On November 1, 2021, we issued \$2.00 billion aggregate principal amount of unsecured 2032 Green Bonds, 2041 Notes, and 2051 Notes in a public offering. Issuance costs for these notes were \$14 million. Over time, we plan to allocate an amount equal to the net proceeds of the 2032 Green Bonds to fund eligible sustainability-focused projects involving renewable energy, green buildings, energy efficiency, water management, waste abatement, and a circular economy.

We may redeem our 2026 Notes, 2027 Notes, 2029 Notes, 2030 Notes, 2032 Green Bonds, 2041 Notes, and 2051 Notes (the "Senior Unsecured Notes"), in whole or in part, at our option prior to their respective maturity date at a redemption price equal to the greater of (i) 100% of the principal amount of the notes to be redeemed and (ii) the present value of the remaining scheduled payments of principal, in each case plus accrued interest. We may also redeem any series of our Senior Unsecured Notes, in whole or in part, at a price equal to par between two and six months prior to maturity in accordance with the respective terms of such series.

Each series of Senior Unsecured Notes contains covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries (which are generally domestic subsidiaries in which we own at least 80% of the voting stock and which own principal property, as defined in the indenture governing such notes) to (1) create or incur certain liens; (2) enter into certain sale and lease-back transactions; and (3) consolidate with or merge with or into, or convey, transfer, or lease all or substantially all of our properties and assets, to another entity. These covenants are subject to a number of limitations and exceptions. Additionally, if a change of control triggering event occurs, as defined in the indentures governing our senior unsecured notes, we will be required to offer to purchase such notes at 101% of the outstanding aggregate principal amount plus accrued interest up to the purchase date.

### Revolving Credit Facility

In 2021, we terminated our existing undrawn credit facility and entered into a new five-year unsecured Revolving Credit Facility. Under the Revolving Credit Facility, we can draw up to \$2.50 billion which would generally bear interest at a rate equal to LIBOR plus 1.00% to 1.75%, depending on our corporate credit ratings. The credit facility agreement provides for a transition to SOFR or other alternate benchmark rate upon the retirement of LIBOR in 2023. Any amounts outstanding under the Revolving Credit Facility would mature in May 2026 and amounts borrowed may be prepaid without penalty. As of September 1, 2022, no amounts were outstanding under the Revolving Credit Facility and \$2.50 billion was available to us.

Under the terms of the Revolving Credit Facility, we must maintain a leverage ratio, calculated as of the last day of each fiscal quarter, of total indebtedness to adjusted EBITDA not to exceed 3.25 to 1.00. The Revolving Credit Facility contains other covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries to (1) create or incur certain liens and enter into sale and lease-back transactions, (2) create, assume, incur, or guarantee certain additional secured indebtedness and unsecured indebtedness of our restricted subsidiaries, and (3) consolidate with or merge with or into, or convey, transfer, lease, or otherwise dispose of all or substantially all of our assets, to another entity. These covenants are subject to a number of limitations, exceptions, and qualifications.

### 2024 Term Loans

In 2021, we drew \$1.19 billion under an unsecured 2024 Term Loan A and used the proceeds to repay the \$1.19 billion Extinguished 2024 Term Loan A. The 2024 Term Loan A bears interest at a rate equal to LIBOR plus 0.625% to 1.375% based on our current corporate credit ratings. The term loan agreement provides for a transition to SOFR or other alternate benchmark rate upon the retirement of LIBOR in 2023. The principal amount is due October 2024 and may be prepaid without penalty. The 2024 Term Loan A contains the same leverage ratio and substantially the same other covenants as the Revolving Credit Facility.

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### Debt Activity

The table below presents the effects of issuances and prepayments of debt in 2022:

	Increase (Decrease) in Principal	Increase (Decrease) in Carrying Value	Increase (Decrease) in Cash	Gain (Loss)
<b>Issuances</b>				
2032 Green Bonds	\$ 1,000	\$ 994	\$ 994	\$ —
2041 Notes	500	496	496	—
2051 Notes	500	496	496	—
<b>Prepayments</b>				
2023 Notes	(1,250)	(1,247)	(1,281)	(34)
2024 Notes	(600)	(598)	(647)	(49)
	<u>\$ 150</u>	<u>\$ 141</u>	<u>\$ 58</u>	<u>\$ (83)</u>

In 2021, substantially all holders of our 2032D Notes converted their notes. We settled these conversions and all remaining 2032D Notes with \$185 million in cash and 11.1 million shares of our stock, which approximated the carrying value of debt and equity for those notes.

In 2020, we recognized aggregate non-operating gains of \$40 million in connection with debt prepayments and conversions of \$3.77 billion of principal amount of notes (carrying value of \$3.90 billion) for an aggregate of \$3.92 billion in cash.

### Maturities of Notes Payable

As of September 1, 2022, maturities of notes payable by fiscal year were as follows:

2023	\$ —
2024	—
2025	1,188
2026	500
2027	900
2028 and thereafter	3,550
Unamortized discounts	(27)
Hedge accounting fair value adjustment	(91)
	<u>\$ 6,020</u>

### Commitments

As of September 1, 2022, we had commitments of approximately \$7.1 billion for purchase obligations, of which approximately \$5.4 billion will be due within one year. Purchase obligations include payments for the acquisition of property, plant, and equipment, and other goods or services of either a fixed or minimum quantity and exclude any payments for leases that have been executed but have not yet commenced.

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## Contingencies

We are currently a party to legal actions other than those described below arising from the normal course of business, none of which are expected to have a material adverse effect on our business, results of operations, or financial condition.

### Patent Matters

As is typical in the semiconductor and other high-tech industries, from time to time, others have asserted, and may in the future assert, that our products or manufacturing processes infringe upon their intellectual property rights.

On December 15, 2014, Innovative Memory Solutions, Inc. filed a patent infringement action against Micron in the U.S. District Court for the District of Delaware. The complaint alleges that a variety of our NAND products infringe eight U.S. patents and seeks damages, attorneys' fees, and costs. Subsequently, six patents were invalidated or withdrawn, leaving two asserted patents in the District Court.

On March 19, 2018, Micron Semiconductor (Xi'an) Co., Ltd. ("MXA") was served with a patent infringement complaint filed by Fujian Jinhua Integrated Circuit Co., Ltd. ("Jinhua") in the Fuzhou Intermediate People's Court in Fujian Province, China (the "Fuzhou Court"). On April 3, 2018, Micron Semiconductor (Shanghai) Co. Ltd. ("MSS") was served with the same complaint. The complaint alleges that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred.

On March 21, 2018, MXA was served with a patent infringement complaint filed by United Microelectronics Corporation ("UMC") in the Fuzhou Court. On April 3, 2018, MSS was served with the same complaint. The complaint alleges that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaints against MXA and MSS.

On April 3, 2018, MSS was served with another patent infringement complaint filed by Jinhua and an additional complaint filed by UMC in the Fuzhou Court. The additional complaints allege that MSS infringes two Chinese patents by manufacturing and selling certain Crucial MX300 SSDs. The complaint filed by UMC seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. The complaint filed by Jinhua seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaint against MSS.

On July 5, 2018, MXA and MSS were notified that the Fuzhou Court granted a preliminary injunction against those entities that enjoins them from manufacturing, selling, or importing certain Crucial and Ballistix-branded DRAM modules and solid-state drives in China. We are complying with the ruling and have requested the Fuzhou Court to reconsider or stay its decision.

On May 4, 2020, Flash-Control, LLC filed a patent infringement action against Micron in the U.S. District Court for the Western District of Texas. The complaint alleges that four U.S. patents are infringed by unspecified DDR4 SDRAM, NVRDIMM, NVDIMM, 3D XPoint, and/or SSD products that incorporate memory controllers and flash memory. The complaint seeks damages, attorneys' fees, and costs. On July 21, 2020, in a separate matter, the District Court ruled that two of the four asserted patents are invalid, and on July 14, 2021, the U.S. Court of Appeals for the Federal Circuit affirmed the ruling of invalidity.



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On April 28, 2021, Netlist, Inc. (“Netlist”) filed two patent infringement actions against Micron, Micron Semiconductor Products, Inc. (“MSP”) and Micron Technology Texas, LLC (“MTEC”) in the U.S. District Court for the Western District of Texas. The first complaint alleges that one U.S. patent is infringed by certain of our non-volatile dual in-line memory modules. The second complaint alleges that three U.S. patents are infringed by certain of our load-reduced dual in-line memory modules (“LRDIMMs”). Each complaint seeks injunctive relief, damages, attorneys’ fees, and costs. On March 31, 2022, Netlist filed a patent infringement complaint against Micron and Micron Semiconductor Germany, GmbH in Dusseldorf Regional Court alleging that two German patents are infringed by certain of our LRDIMMs. The complaint seeks damages and costs. On June 24, 2022, Netlist amended its complaint to also seek injunctive relief. On June 10, 2022, Netlist filed a patent infringement complaint against Micron, MSP, and MTEC in the U.S. District Court for the Eastern District of Texas (“E.D. Tex.”) alleging that six U.S. patents are infringed by certain of our memory modules and HBM products. The complaint seeks injunctive relief, damages, and attorneys’ fees. On August 1, 2022, Netlist filed a second patent infringement complaint against Micron, MSP, and MTEC in E.D. Tex. alleging that one U.S. patent is infringed by certain of our LRDIMMs. On August 15, 2022, Netlist amended the second complaint to assert that two additional U.S. patents are infringed by certain of our LRDIMMs. The second complaint in E.D. Tex. seeks injunctive relief, damages, and attorneys’ fees.

On May 10, 2021, Vervain, LLC filed a patent infringement action against Micron, MSP, and MTEC in the U.S. District Court for the Western District of Texas. The complaint alleges that four U.S. patents are infringed by certain SSD products. The complaint seeks injunctive relief, damages, attorneys’ fees, and costs.

On April 27, 2022, Bell Semiconductor, LLC (“Bell”) filed a patent infringement action against Micron in the U.S. District Court for the District of Idaho. The complaint alleges that one U.S. patent is infringed by a certain SSD controller. On April 28, 2022, Bell filed a complaint with the U.S. International Trade Commission (“ITC”) alleging violations of Section 337 of the Tariff Act of 1930 based on alleged importation of articles and components that infringe the same U.S. patent that Bell asserts in the complaint it filed in the District of Idaho. At Bell’s request, the ITC investigation was terminated on August 30, 2022. On August 26, 2022, Bell filed a second patent infringement complaint in the District of Idaho alleging that two U.S. patents are infringed by a certain SSD controller. On September 30, 2022, Bell filed a complaint against Micron in the U.S. District Court for the District of Delaware alleging that six U.S. patents are infringed by certain SSD, GDDR5, GDDR6, GDDR6X, and DDR3 SDRAM products. On October 5, 2022, Bell filed a third complaint against Micron in the District of Idaho alleging that one U.S. patent is infringed by Micron’s process for designing a NAND flash device included in certain Micron SSD products. Each of Bell’s complaints in the District Courts seeks damages, injunctive relief, attorneys’ fees, and costs. On October 6, 2022, Bell filed a complaint with the ITC alleging violations of Section 337 of the Tariff Act of 1930 based on alleged importation of certain SSDs that infringe two U.S. patents also asserted by Bell in two of the lawsuits pending in the District of Idaho. The complaint requests institution of an investigation and, after the investigation, issuance of a limited exclusion order and cease and desist orders prohibiting Micron from importing, selling, offering for sale, or marketing the accused products in the United States.

On August 16, 2022, Sonrai Memory Ltd. filed a patent infringement action against Micron in the U.S. District Court for the Western District of Texas. The complaint alleges that two U.S. patents are infringed by certain SSD and NAND flash products. The complaint seeks damages, attorneys’ fees, and costs.

Among other things, the above lawsuits pertain to substantially all of our DRAM, NAND, and other memory and storage products we manufacture, which account for substantially all of our revenue.

### Qimonda

On January 20, 2011, Dr. Michael Jaffé, administrator for Qimonda’s insolvency proceedings, filed suit against Micron and Micron Semiconductor B.V. (“Micron B.V.”), in the District Court of Munich, Civil Chamber. The complaint seeks to void, under Section 133 of the German Insolvency Act, a share purchase agreement between Micron B.V. and Qimonda signed in fall 2008, pursuant to which Micron B.V. purchased substantially all of Qimonda’s shares of Inotera (the “Inotera Shares”), representing approximately 18% of Inotera’s outstanding shares at that time, and seeks an order requiring us to re-transfer those shares to the Qimonda estate. The complaint also seeks, among other things, to recover damages for the alleged value of the joint venture relationship with Inotera and to terminate, under Sections 103 or 133 of the German Insolvency Code, a patent cross-license between us and Qimonda entered into at the same time as the share purchase agreement.

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Following a series of hearings with pleadings, arguments, and witnesses on behalf of the Qimonda estate, on March 13, 2014, the court issued judgments: (1) ordering Micron B.V. to pay approximately \$1 million in respect of certain Inotera Shares sold in connection with the original share purchase; (2) ordering Micron B.V. to disclose certain information with respect to any Inotera Shares sold by it to third parties; (3) ordering Micron B.V. to disclose the benefits derived by it from ownership of the Inotera Shares, including in particular, any profits distributed on the Inotera Shares and all other benefits; (4) denying Qimonda's claims against Micron for any damages relating to the joint venture relationship with Inotera; and (5) determining that Qimonda's obligations under the patent cross-license agreement are canceled. In addition, the court issued interlocutory judgments ordering, among other things: (1) that Micron B.V. transfer to the Qimonda estate the Inotera Shares still owned by Micron B.V. and pay to the Qimonda estate compensation in an amount to be specified for any Inotera Shares sold to third parties; and (2) that Micron B.V. pay the Qimonda estate as compensation an amount to be specified for benefits derived by Micron B.V. from ownership of the Inotera Shares. The interlocutory judgments had no immediate, enforceable effect and Micron, accordingly, has been able to continue to operate with full control of the Inotera Shares subject to further developments in the case. Micron and Micron B.V. appealed the judgments to the German Appeals Court, which thereafter appointed an independent expert to perform an evaluation of Dr. Jaffé's claims that the amount Micron paid for Qimonda was less than fair market value. On March 31, 2020, the expert presented an opinion to the Appeals Court concluding that the amount paid by Micron was within an acceptable range of fair value. On October 5, 2022, the Appeals Court ruled that the relevant issue to be addressed is whether Qimonda's creditors were prejudiced such that the original transaction should be voided. A hearing of the Appeals Court has been scheduled for December 2022.

### Antitrust Matters

On April 27, 2018, a complaint was filed against Micron and other DRAM suppliers in the U.S. District Court for the Northern District of California. Subsequently, two substantially identical cases were filed in the same court. The lawsuits purported to be on behalf of a nationwide class of indirect purchasers of DRAM products. On October 28, 2019, the plaintiffs filed a consolidated, amended complaint that purported to be on behalf of a nationwide class of indirect purchasers of DRAM products. The amended complaint asserted claims based on alleged price-fixing of DRAM products under federal and state law during the period from June 1, 2016 to at least February 1, 2018, and sought treble monetary damages, costs, interest, attorneys' fees, and other injunctive and equitable relief. On December 21, 2020, the District Court dismissed the plaintiffs' claims and entered judgment against them. The plaintiffs appealed to the U.S. Court of Appeals for the Ninth Circuit. On March 7, 2022, the Court of Appeals affirmed the District Court's ruling dismissing plaintiffs' claims, and subsequently denied the plaintiffs' request for rehearing. The plaintiffs did not further appeal the ruling of the Court of Appeals.

On June 26, 2018, a complaint was filed against Micron and other DRAM suppliers in the U.S. District Court for the Northern District of California. Subsequently, four substantially identical cases were filed in the same court. On October 28, 2019, the plaintiffs filed a consolidated, amended complaint. The consolidated complaint purported to be on behalf of a nationwide class of direct purchasers of DRAM products. The consolidated complaint asserted claims based on alleged price-fixing of DRAM products under federal and state law during the period from June 1, 2016 through at least February 1, 2018, and sought treble monetary damages, costs, interest, attorneys' fees, and other injunctive and equitable relief. On January 11, 2021, the plaintiffs filed a further amended complaint asserting substantially the same claims and seeking the same relief. On September 3, 2021, the District Court granted Micron's motion to dismiss the further amended complaint with prejudice. On October 1, 2021, the plaintiffs filed a notice of appeal to the U.S. Court of Appeals for the Ninth Circuit. On June 29, 2022, the Court of Appeals granted a joint motion to dismiss the plaintiffs' appeal.

Additionally, six cases have been filed in the following Canadian courts on the dates indicated: Superior Court of Quebec (April 30, 2018 and May 3, 2018), the Federal Court of Canada (May 2, 2018), the Ontario Superior Court of Justice (May 15, 2018), and the Supreme Court of British Columbia (May 10, 2018). The plaintiffs in these cases are individuals seeking certification of class actions on behalf of direct and indirect purchasers of DRAM in Canada (or regions of Canada) between June 1, 2016 and February 1, 2018. The substantive allegations in these cases are similar to those asserted in the cases filed in the United States.

On May 15, 2018, the Chinese State Administration for Market Regulation ("SAMR") notified Micron that it was investigating potential collusion and other anticompetitive conduct by DRAM suppliers in China. On May 31, 2018, SAMR made unannounced visits to our sales offices in Beijing, Shanghai, and Shenzhen to seek certain information as part of its investigation. We are cooperating with SAMR in its investigation.

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### Securities Matters

On March 5, 2019, a derivative complaint was filed by a shareholder against certain current and former officers and directors of Micron, allegedly on behalf of and for the benefit of Micron, in the U.S. District Court for the District of Delaware alleging securities fraud, breaches of fiduciary duties, and other violations of law involving misrepresentations about purported anticompetitive behavior in the DRAM industry. The complaint seeks damages, fees, interest, costs, and other appropriate relief.

On February 9, 2021, a derivative complaint was filed by a shareholder against Sanjay Mehrotra and other current and former directors of Micron, allegedly on behalf of and for the benefit of Micron, in the U.S. District Court for the District of Delaware alleging violations of securities laws, breaches of fiduciary duties, and other violations of law involving allegedly false and misleading statements about Micron's commitment to diversity and progress in diversifying its workforce, executive leadership, and Board of Directors. The complaint seeks damages, fees, interest, costs, and an order requiring Micron to take various actions to allegedly improve its corporate governance and internal procedures.

### Other Matters

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify another party. It is not possible to predict the maximum potential amount of future payments under these types of agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, our payments under these types of agreements have not had a material adverse effect on our business, results of operations, or financial condition.

### Contingency Assessment

We are unable to predict the outcome of any of the matters noted above and cannot make a reasonable estimate of the potential loss or range of possible losses. A determination that our products or manufacturing processes infringe the intellectual property rights of others or entering into a license agreement covering such intellectual property could result in significant liability and/or require us to make material changes to our products and/or manufacturing processes. Any of the foregoing, as well as the resolution of any other legal matter noted above, could have a material adverse effect on our business, results of operations, or financial condition.

## Equity

**Common Stock Repurchases:** Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. We repurchased 35.4 million shares of our common stock for \$2.43 billion in 2022 and 15.6 million shares for \$1.20 billion in 2021. Through September 1, 2022, we had repurchased an aggregate of \$6.47 billion under the authorization. Amounts repurchased are included in treasury stock.

**Dividends:** On September 29, 2022, we announced that our Board of Directors had declared a quarterly dividend of \$0.115 per share, payable in cash on October 26, 2022, to shareholders of record as of the close of business on October 11, 2022.

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**Accumulated Other Comprehensive Income (Loss):** Changes in accumulated other comprehensive income (loss) by component for the year ended September 1, 2022 were as follows:

	Gains (Losses) on Derivative Instruments	Unrealized Gains (Losses) on Investments	Pension Liability Adjustments	Cumulative Foreign Currency Translation Adjustment	Total
<b>As of September 2, 2021</b>	\$ (22)	\$ 1	\$ 22	\$ 1	\$ 2
Other comprehensive income before reclassifications	(720)	(63)	6	(1)	(778)
Amount reclassified out of accumulated other comprehensive income	53	1	(2)	—	52
Tax effects	151	14	(1)	—	164
Other comprehensive income (loss)	(516)	(48)	3	(1)	(562)
<b>As of September 1, 2022</b>	\$ (538)	\$ (47)	\$ 25	\$ —	\$ (560)

## Fair Value Measurements

The estimated fair values and carrying values of our outstanding debt instruments were as follows:

As of	2022		2021	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Notes	\$ 5,472	\$ 6,020	\$ 6,584	\$ 5,973

The fair values of our debt instruments were estimated based on Level 2 inputs, including the trading price of our notes when available, discounted cash flows, and interest rates based on similar debt issued by parties with credit ratings similar to ours.

Assets classified as held for sale are carried at the lower of estimated fair value or carrying value. Significant judgments and assumptions are required to estimate their fair values. Actual selling prices could vary significantly from our estimated fair value and we could recognize additional losses in the event that the sales prices of assets classified as held for sale are lower than their carrying values.

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## Derivative Instruments

	Notional or Contractual Amount	Fair Value of	
		Assets <sup>(1)</sup>	Liabilities <sup>(2)</sup>
<b>As of September 1, 2022</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 5,427	\$ —	\$ (330)
Cash flow commodity hedges	97	1	(6)
Fair value interest rate hedges	900	—	(91)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	2,821	7	(13)
		<u>\$ 8</u>	<u>\$ (440)</u>
<b>As of September 2, 2021</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 3,601	\$ 10	\$ (66)
Cash flow commodity hedges	45	2	—
Fair value interest rate hedges	900	5	—
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	996	3	(2)
		<u>\$ 20</u>	<u>\$ (68)</u>

<sup>(1)</sup> Included in receivables and other noncurrent assets.

<sup>(2)</sup> Included in accounts payable and accrued expenses and other noncurrent liabilities.

### Derivative Instruments with Hedge Accounting Designation

**Cash Flow Hedges:** We utilize forward and swap contracts that generally mature within two years designated as cash flow hedges to minimize our exposure to changes in currency exchange rates or commodity prices for certain capital expenditures and manufacturing costs. Forward and swap contracts are measured at fair value based on market-based observable inputs including market spot and forward rates, interest rates, and credit-risk spreads (Level 2). We do not use derivative instruments for speculative purposes. We recognized losses from cash flow hedges of \$735 million and \$52 million for 2022 and 2021, respectively, and gains of \$51 million for 2020, in accumulated other comprehensive income. We reclassified \$53 million of losses and \$41 million of gains in 2022 and 2021, respectively, from accumulated other comprehensive income to earnings, primarily to cost of goods sold. The reclassifications were not significant in 2020. As of September 1, 2022, we expect to reclassify \$263 million of pre-tax losses related to cash flow hedges from accumulated other comprehensive income into earnings in the next 12 months.

**Fair Value Hedges:** We utilize fixed-to-floating interest rate swaps designated as fair value hedges to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Interest rate swaps are measured at fair value based on market-based observable inputs including interest rates and credit-risk spreads (Level 2). The changes in the fair values of derivatives designated as fair value hedges and the offsetting changes in the underlying fair values of the hedged items are both recognized in earnings. When a derivative is no longer designated as a fair value hedge for any reason, including termination and maturity, the remaining unamortized difference between the carrying value of the hedged item at that time and the face value of the hedged item is amortized to earnings over the remaining life of the hedged item, or immediately if the hedged item has matured or been extinguished. We recognized interest expense of \$96 million for changes in the fair value of our interest rate swaps in 2022. We also recognized offsetting interest expense of the same amounts related to the changes in the fair value of the hedged portion of the underlying debt for these periods. The amounts recognized for 2021 were not significant.

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### Derivative Instruments without Hedge Accounting Designation

**Currency Derivatives:** We generally utilize a rolling hedge strategy with currency forward contracts that mature within three months to hedge our exposures of monetary assets and liabilities from changes in currency exchange rates. At the end of each reporting period, monetary assets and liabilities denominated in currencies other than the U.S. dollar are remeasured into U.S. dollars and the associated outstanding forward contracts are marked to market. Currency forward contracts are valued at fair values based on the middle of bid and ask prices of dealers or exchange quotations (Level 2). Realized and unrealized gains and losses on derivative instruments without hedge accounting designation as well as the changes in the underlying monetary assets and liabilities from changes in currency exchange rates are included in other non-operating income (expense), net. The amounts recognized for derivative instruments without hedge accounting designation were not significant for the periods presented.

### Derivative Counterparty Credit Risk and Master Netting Arrangements

Our derivative instruments expose us to credit risk to the extent counterparties may be unable to meet the terms of the contracts. Our maximum exposure to loss due to credit risk if counterparties fail completely to perform according to the terms of the contracts would generally equal the fair value of assets for these contracts as listed in the tables above. We seek to mitigate such risk by limiting our counterparties to major financial institutions and by spreading risk across multiple financial institutions. As of September 1, 2022 and September 2, 2021, amounts netted under our master netting arrangements were not significant.

## Equity Plans

As of September 1, 2022, 90 million shares of our common stock were available for future awards under our equity plans, including 18 million shares approved for issuance under our employee stock purchase plan ("ESPP").

### Restricted Stock and Restricted Stock Units ("Restricted Stock Awards")

As of September 1, 2022, there were 23 million shares of Restricted Stock Awards outstanding, 20 million of which contained only service conditions. For service-based Restricted Stock Awards granted through October 2021, restrictions generally lapse in one-fourth or one-third increments during each year of employment after the grant date. For service-based Restricted Stock Awards granted beginning in November 2021, restrictions generally lapse on 25% of the units granted after the first year and on 6.25% each quarter thereafter over the remaining three years of employment. Restrictions generally lapse on Restricted Stock with performance or market conditions as conditions are met over a 3-year period. At the end of the performance period, the number of actual shares to be awarded will vary between 0% and 200% of target amounts, depending upon the achievement level. In 2022, our Board of Directors approved dividend equivalent rights for unvested restricted stock units awarded on or after October 13, 2021.

Restricted Stock Awards activity for 2022 is summarized as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding as of September 2, 2021	20	\$ 49.39
Granted	13	70.81
Restrictions lapsed	(7)	47.36
Canceled	(3)	57.00
Outstanding as of September 1, 2022	23	60.93

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For the year ended	2022	2021	2020
Restricted stock award shares granted	13	11	8
Weighted-average grant-date fair value per share	\$ 70.81	\$ 53.58	\$ 46.44
Aggregate vesting-date fair value of shares vested	\$ 498	\$ 385	\$ 294

### Employee Stock Purchase Plan (“ESPP”)

Our ESPP is offered to substantially all employees and permitted eligible employees to purchase shares of our common stock through payroll deductions of up to 10% of their eligible compensation, subject to certain limitations prior to August 2021. Beginning in August 2021, employees are permitted to deduct up to 15% of their eligible compensation to purchase shares under the ESPP. The purchase price of the shares under the ESPP equals 85% of the lower of the fair market value of our common stock on either the first or last day of each six-month offering period. Compensation expense is calculated as of the beginning of the offering period as the fair value of the employees' purchase rights utilizing the Black-Scholes option valuation model and is recognized over the offering period. Grant-date fair value and assumptions used in the Black-Scholes option valuation model were as follows:

For the year ended	2022	2021	2020
Weighted-average grant-date fair value per share	\$ 18.87	\$ 20.71	\$ 14.24
Average expected life in years	0.5	0.5	0.5
Weighted-average expected volatility (based on implied volatility)	43 %	41 %	45 %
Weighted-average risk-free interest rate	2.0 %	0.1 %	0.8 %
Expected dividend yield	0.6 %	0.3 %	0.0 %

Under the ESPP, employees purchased 4 million shares of common stock for \$215 million in 2022, 3 million shares for \$140 million in 2021, and 3 million shares for \$118 million in 2020.

### Stock Options

As of September 1, 2022, stock options of 3 million shares were outstanding, all of which were fully exercisable. Stock options expire 8 years from the date of grant. We did not grant any stock options in 2022, 2021, or 2020. Stock options of 1 million shares were exercised in 2022. The total intrinsic value for options exercised was \$54 million, \$143 million, and \$130 million in 2022, 2021, and 2020, respectively.

### Stock-based Compensation Expense

For the year ended	2022	2021	2020
Stock-based compensation expense by caption			
Cost of goods sold	\$ 193	\$ 186	\$ 139
Research and development	175	110	86
Selling, general, and administrative	133	99	103
Restructure	(5)	—	—
	\$ 496	\$ 395	\$ 328
Stock-based compensation expense by type of award			
Restricted stock awards	\$ 429	\$ 333	\$ 272
ESPP	66	52	39
Stock options	1	10	17
	\$ 496	\$ 395	\$ 328

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Income tax benefits related to the tax deductions for share-based awards are recognized only upon the settlement of the related share-based awards. Income tax benefits for share-based awards were \$77 million, \$83 million, and \$72 million for 2022, 2021, and 2020, respectively. Stock-based compensation expense of \$48 million and \$30 million was capitalized and remained in inventory as of September 1, 2022 and September 2, 2021, respectively. As of September 1, 2022, \$1.02 billion of total unrecognized compensation costs for unvested awards, before the effect of any future forfeitures, was expected to be recognized through the fourth quarter of 2026, resulting in a weighted-average period of 1.3 years.

## Employee Benefit Plans

We have employee retirement plans at our U.S. and international sites. Details of significant plans are as follows:

### Employee Savings Plan for U.S. Employees

We have a 401(k) retirement plan under which U.S. employees may contribute up to 75% of their eligible pay, subject to Internal Revenue Service annual contribution limits, to various savings alternatives, none of which include direct investment in our stock. We match in cash eligible contributions from employees up to 5% of the employee's annual eligible earnings. Contribution expense for the 401(k) plan was \$66 million, \$77 million, and \$66 million in 2022, 2021, and 2020, respectively.

### Retirement Plans

We have pension plans available to employees at various foreign sites. As of September 1, 2022, the projected benefit obligations of our plans were \$186 million and plan assets were \$221 million. As of September 2, 2021, the projected benefit obligations of our plans were \$222 million and plan assets were \$256 million. Pension expense was not material for 2022, 2021, or 2020.

## Revenue

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Substantially all contracts with our customers are short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. From time to time, we have contracts with initial terms that include performance obligations that extend beyond one year. As of September 1, 2022, our future performance obligations beyond one year were not significant.

As of September 1, 2022 and September 2, 2021, other current liabilities included \$1.26 billion and \$846 million for estimates of consideration payable to customers, respectively, including estimates for pricing adjustments and returns.

### Revenue by Technology

For the year ended	2022	2021	2020
DRAM	\$ 22,386	\$ 20,039	\$ 14,510
NAND	7,811	7,007	6,131
Other (primarily 3D XPoint memory and NOR)	561	659	794
	<u>\$ 30,758</u>	<u>\$ 27,705</u>	<u>\$ 21,435</u>

See "Segment and Other Information" for disclosure of disaggregated revenue by market segment.



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## Restructure and Asset Impairments

For the year ended	2022	2021	2020
Restructure and asset impairments	\$ 48	\$ 488	\$ 60

Restructure and asset impairments for 2022 and 2021 are primarily related to the sale of our Lehi, Utah facility. See "Lehi, Utah Fab and 3D XPoint." Restructure and asset impairments for 2020 primarily related to asset impairments and employee relocation and severance costs related to right-sizing our Lehi, Utah facility.

## Other Operating (Income) Expense, Net

For the year ended	2022	2021	2020
Patent license charges	\$ —	\$ 128	\$ —
(Gain) loss on disposition of property, plant, and equipment	(41)	(24)	(3)
Other	7	(9)	11
	<u>\$ (34)</u>	<u>\$ 95</u>	<u>\$ 8</u>

## Other Non-Operating Income (Expense), Net

For the year ended	2022	2021	2020
Gain (loss) on investments	\$ 26	\$ 82	\$ 22
Gain (loss) on debt prepayments, repurchases, and conversions	(83)	(1)	40
Other	19	—	(2)
	<u>\$ (38)</u>	<u>\$ 81</u>	<u>\$ 60</u>

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## Income Taxes

Our income tax (provision) benefit consisted of the following:

For the year ended	2022	2021	2020
Income (loss) before income taxes, net income (loss) attributable to noncontrolling interests, and equity in net income (loss) of equity method investees			
U.S.	\$ 112	\$ (211)	\$ 308
Foreign	9,459	6,429	2,675
	<u>\$ 9,571</u>	<u>\$ 6,218</u>	<u>\$ 2,983</u>
Income tax (provision) benefit			
Current			
U.S. federal	\$ (65)	\$ (42)	\$ (20)
State	(1)	(1)	(2)
Foreign	(528)	(370)	(148)
	<u>(594)</u>	<u>(413)</u>	<u>(170)</u>
Deferred			
U.S. federal	(166)	(9)	39
State	(225)	28	23
Foreign	97	—	(172)
	<u>(294)</u>	<u>19</u>	<u>(110)</u>
Income tax (provision) benefit	<u>\$ (888)</u>	<u>\$ (394)</u>	<u>\$ (280)</u>

The table below reconciles our tax (provision) benefit based on the U.S. federal statutory rate to our effective rate:

For the year ended	2022		2021		2020	
U.S. federal income tax (provision) benefit at statutory rate	\$ (2,010)	21.0 %	\$ (1,306)	21.0 %	\$ (626)	21.0 %
U.S. tax on foreign operations	(322)	3.4 %	(226)	3.6 %	(14)	0.5 %
Change in valuation allowance	(241)	2.5 %	54	(0.9)%	(20)	0.7 %
Change in unrecognized tax benefits	(67)	0.7 %	(238)	3.8 %	(33)	1.1 %
Foreign tax rate differential	1,601	(16.7)%	951	(15.3)%	253	(8.5)%
Research and development tax credits	66	(0.7)%	123	(2.0)%	62	(2.1)%
Foreign derived intangible income deduction	41	(0.4)%	18	(0.3)%	67	(2.2)%
State taxes, net of federal benefit	—	— %	59	(0.9)%	23	(0.8)%
Debt premium deductions	—	— %	130	(2.1)%	—	— %
Other	44	(0.5)%	41	(0.6)%	8	(0.3)%
Income tax (provision) benefit	<u>\$ (888)</u>	<u>9.3 %</u>	<u>\$ (394)</u>	<u>6.3 %</u>	<u>\$ (280)</u>	<u>9.4 %</u>

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. The effect of tax incentive arrangements reduced our tax provision by \$1.12 billion (benefiting our diluted earnings per share by \$1.00) for 2022, by \$758 million (\$0.66 per diluted share) for 2021, and by \$215 million (\$0.19 per diluted share) for 2020.

As of September 1, 2022, certain non-U.S. subsidiaries had cumulative undistributed earnings of \$4.38 billion that were deemed to be indefinitely reinvested. A provision has not been recognized to the extent that distributions from such subsidiaries are subject to additional foreign withholding or state income tax. Determination of the amount of unrecognized deferred tax liabilities related to investments in these foreign subsidiaries is not practicable.

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Deferred income taxes reflect the net tax effects of temporary differences between the bases of assets and liabilities for financial reporting and income tax purposes as well as carryforwards. Deferred tax assets and liabilities consist of the following:

As of	2022	2021
<b>Deferred tax assets</b>		
Net operating loss and tax credit carryforwards	\$ 796	\$ 783
Accrued salaries, wages, and benefits	157	206
Operating lease liabilities	138	109
Inventories	77	—
Property, plant, and equipment	44	37
Other	142	115
Gross deferred tax assets	1,354	1,250
Less valuation allowance	(471)	(233)
Deferred tax assets, net of valuation allowance	883	1,017
<b>Deferred tax liabilities</b>		
Right-of-use assets	(126)	(90)
Product and process technology	—	(12)
Other	(68)	(143)
Deferred tax liabilities	(194)	(245)
Net deferred tax assets	\$ 689	\$ 772
<b>Reported as</b>		
Deferred tax assets	\$ 702	\$ 782
Deferred tax liabilities (included in other noncurrent liabilities)	(13)	(10)
Net deferred tax assets	\$ 689	\$ 772

We assess positive and negative evidence for each jurisdiction to determine whether it is more likely than not that existing deferred tax assets will be realized. As of September 1, 2022, and September 2, 2021, we had a valuation allowance of \$471 million and \$233 million, respectively, against our net deferred tax assets, primarily related to carryforwards in U.S. states and Malaysia. Changes in 2022 in the valuation allowance were due to adjustments based on management's assessment of the realizability of tax credits, allowances and net operating losses based on a level that is more likely than not to be realized.

On March 16, 2022, the Idaho governor signed a new law that changed the way corporations calculate Idaho taxable income. This new law is expected to reduce our Idaho taxable income, and consequently, we do not expect to utilize our tax credits in Idaho for the foreseeable future. As a result, we recorded a valuation allowance against our Idaho deferred tax assets and an increase to tax expense of \$189 million in 2022.

As of September 1, 2022, our net operating loss carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Expiration	State	Japan	Malaysia	Other	Total
2023 - 2027	\$ 44	\$ 418	\$ —	\$ 12	\$ 474
2028 - 2032	377	234	—	—	611
2033 - 2037	249	—	—	—	249
2038 - 2042	197	—	—	—	197
Indefinite	6	—	851	4	861
	\$ 873	\$ 652	\$ 851	\$ 16	\$ 2,392

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As of September 1, 2022, our federal and state tax credit carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Tax Credit Expiration	U.S. Federal	State	Total
2023 - 2027	\$ —	\$ 46	\$ 46
2028 - 2032	—	103	103
2033 - 2037	—	128	128
2038 - 2042	278	5	283
Indefinite	—	115	115
	<u>\$ 278</u>	<u>\$ 397</u>	<u>\$ 675</u>

Below is a reconciliation of the beginning and ending amount of our unrecognized tax benefits:

For the year ended	2022	2021	2020
Beginning unrecognized tax benefits	\$ 660	\$ 411	\$ 383
Increases related to tax positions from prior years	14	2	14
Increases related to tax positions taken in current year	80	260	27
Decreases related to tax positions from prior years	(23)	(13)	(13)
Ending unrecognized tax benefits	<u>\$ 731</u>	<u>\$ 660</u>	<u>\$ 411</u>

As of September 1, 2022, gross unrecognized tax benefits were \$731 million, which would have an impact of approximately \$564 million on our effective tax rate in the future, if recognized. Amounts accrued for interest and penalties related to uncertain tax positions were not significant for any period presented. The resolution of tax audits or expiration of statute of limitations could also reduce our unrecognized tax benefits. Although the timing of final resolution is uncertain, the estimated potential reduction in our unrecognized tax benefits in the next 12 months would not be significant.

We and our subsidiaries file income tax returns with the U.S. federal government, various U.S. states, and various foreign jurisdictions throughout the world. We regularly engage in discussions and negotiations with tax authorities regarding tax matters, including transfer pricing, and we continue to defend any and all such claims presented. Our U.S. federal and state tax returns remain open to examination for 2018 through 2022. We are currently under audit by the Internal Revenue Service for our 2018 and 2019 tax years. In addition, tax returns that remain open to examination in Singapore, Taiwan and Japan range from the years 2016 to 2022. We believe that adequate amounts of taxes and related interest and penalties have been provided, and any adjustments as a result of examinations are not expected to materially adversely affect our business, results of operations, or financial condition.

## Earnings Per Share

For the year ended	2022	2021	2020
Net income attributable to Micron – Basic	\$ 8,687	\$ 5,861	\$ 2,687
Assumed conversion of debt	—	—	(4)
Net income attributable to Micron – Diluted	<u>\$ 8,687</u>	<u>\$ 5,861</u>	<u>\$ 2,683</u>
Weighted-average common shares outstanding – Basic	1,112	1,120	1,110
Dilutive effect of equity plans and convertible notes	10	21	21
Weighted-average common shares outstanding – Diluted	<u>1,122</u>	<u>1,141</u>	<u>1,131</u>
Earnings per share			
Basic	\$ 7.81	\$ 5.23	\$ 2.42
Diluted	7.75	5.14	2.37

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Antidilutive potential common shares excluded from the computation of diluted earnings per share, that could dilute basic earnings per share in the future, were as follows at the end of the periods shown:

For the year ended	2022	2021	2020
Equity plans	5	2	5

## Segment and Other Information

Segment information reported herein is consistent with how it is reviewed and evaluated by our chief operating decision maker. We have the following four business units, which are our reportable segments:

**Compute and Networking Business Unit (“CNBU”):** Includes memory products sold into client, cloud server, enterprise, graphics, and networking markets.

**Mobile Business Unit (“MBU”):** Includes memory and storage products sold into smartphone and other mobile-device markets.

**Embedded Business Unit (“EBU”):** Includes memory and storage products sold into automotive, industrial, and consumer markets.

**Storage Business Unit (“SBU”):** Includes SSDs and component-level solutions sold into enterprise and cloud, client, and consumer storage markets, and other discrete storage products sold in component and wafer form.

Certain operating expenses directly associated with the activities of a specific segment are charged to that segment. Other indirect operating income and expenses are generally allocated to segments based on their respective percentage of cost of goods sold or forecasted wafer production. We do not identify or report internally our assets (other than goodwill) or capital expenditures by segment, nor do we allocate gains and losses from equity method investments, interest, other non-operating income or expense items, or taxes to segments. As of September 1, 2022 and September 2, 2021, CNBU, MBU, SBU, and EBU had goodwill of \$832 million, \$198 million, \$101 million, and \$97 million, respectively.

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For the year ended	2022	2021	2020
<b>Revenue</b>			
CNBU	\$ 13,693	\$ 12,280	\$ 9,184
MBU	7,260	7,203	5,702
EBU	5,235	4,209	2,759
SBU	4,553	3,973	3,765
All Other	17	40	25
	<u>\$ 30,758</u>	<u>\$ 27,705</u>	<u>\$ 21,435</u>
<b>Operating income (loss)</b>			
CNBU	\$ 5,844	\$ 4,295	\$ 2,010
MBU	2,160	2,173	1,074
EBU	1,752	1,006	301
SBU	513	173	36
All Other	12	20	(2)
	<u>10,281</u>	<u>7,667</u>	<u>3,419</u>
<b>Unallocated</b>			
Stock-based compensation	(501)	(395)	(328)
Inventory accounting policy change to FIFO	—	(133)	—
Change in inventory cost absorption	—	(160)	—
3D XPoint inventory write-down	—	(49)	—
Restructure and asset impairments	(48)	(488)	(60)
Patent license charges	—	(128)	—
Other	(30)	(31)	(28)
	<u>(579)</u>	<u>(1,384)</u>	<u>(416)</u>
Operating income	<u>\$ 9,702</u>	<u>\$ 6,283</u>	<u>\$ 3,003</u>
Depreciation and amortization expense included in operating income was as follows:			
For the year ended	2022	2021	2020
CNBU	\$ 2,766	\$ 2,497	\$ 2,318
MBU	1,725	1,553	1,436
EBU	1,280	1,028	741
SBU	1,323	1,101	1,115
All Other	2	8	12
Unallocated	20	27	28
	<u>\$ 7,116</u>	<u>\$ 6,214</u>	<u>\$ 5,650</u>

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## Certain Concentrations

Revenue by market segment as an approximate percent of total revenue is presented in the table below:

For the year ended	2022	2021	2020
Mobile	25 %	25 %	25 %
Client and graphics	20 %	20 %	20 %
Enterprise and cloud server	20 %	20 %	20 %
SSDs and other storage	15 %	15 %	20 %
Automotive, industrial, and consumer	15 %	15 %	15 %

Revenue from Kingston Technology Company, Inc. was 12% and 11% of total revenue for 2022 and 2020, respectively. Revenue from WPG Holdings Limited was 11% and 13% of total revenue in 2022 and 2021, respectively. Sales to Kingston were primarily included in our CNBU and SBU segments; and sales to WPG were primarily included in our MBU, CNBU, and EBU segments.

We generally have multiple sources of supply for our raw materials and production equipment; however, only a limited number of suppliers are capable of delivering certain raw materials and production equipment that meet our standards and, in some cases, materials or production equipment are provided by a single supplier.

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash, money market accounts, certificates of deposit, fixed-rate debt securities, trade receivables, share repurchase, and derivative contracts. We invest through high-credit-quality financial institutions and, by policy, generally limit the concentration of credit exposure by restricting investments with any single obligor and monitoring credit risk of bank counterparties on an ongoing basis. A concentration of credit risk may exist with respect to receivables of certain customers. We perform ongoing credit evaluations of customers worldwide and generally do not require collateral from our customers. Historically, we have not experienced material losses on receivables. A concentration of risk may also exist with respect to our foreign currency hedges as the number of counterparties to our hedges is limited and the notional amounts are relatively large. We seek to mitigate such risk by limiting our counterparties to major financial institutions and through entering into master netting arrangements.

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## Geographic Information

Revenue based on the geographic location of our customers' headquarters was as follows:

For the year ended	2022	2021	2020
United States	\$ 16,026	\$ 12,155	\$ 10,381
Taiwan	6,185	6,606	3,657
Mainland China (excluding Hong Kong)	3,311	2,456	2,337
Japan	1,696	1,652	1,387
Hong Kong	1,665	2,582	1,792
Other Asia Pacific	1,223	1,420	1,157
Other	652	834	724
	<u>\$ 30,758</u>	<u>\$ 27,705</u>	<u>\$ 21,435</u>

Long-lived assets by geographic area consisted of property, plant, and equipment and right-of-use assets and were as follows:

As of	2022	2021
Taiwan	\$ 13,143	\$ 11,457
Singapore	12,045	9,411
Japan	7,113	7,222
United States <sup>(1)</sup>	5,155	5,205
Malaysia	994	757
China	440	436
Other	337	175
	<u>\$ 39,227</u>	<u>\$ 34,663</u>

<sup>(1)</sup> Included \$899 million (net of impairment) as of September 2, 2021 of property, plant, and equipment for our Lehi facility that was classified as held for sale and presented in other current assets.



**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Micron Technology, Inc.

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Micron Technology, Inc. and its subsidiaries (the "Company") as of September 1, 2022 and September 2, 2021, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended September 1, 2022, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended September 1, 2022 appearing under Item 15 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of September 1, 2022, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 1, 2022 and September 2, 2021, and the results of its operations and its cash flows for each of the three years in the period ended September 1, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 1, 2022, based on criteria established in *Internal Control – Integrated Framework* (2013) issued by the COSO.

***Change in Accounting Principle***

As discussed in the Significant Accounting Policies and Inventories notes to the consolidated financial statements, the Company changed the manner in which it accounts for inventory costing from the average cost inventory accounting method to the first-in, first-out inventory accounting method in 2021.

***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

***Critical Audit Matters***

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

***Valuation of Inventories (Finished goods and Work in process)***

As described in the Significant Accounting Policies and Inventories notes to the consolidated financial statements, as of September 1, 2022, the Company had a net inventory balance for finished goods and work in process inventory totaling approximately \$5.9 billion. As disclosed by management, determining the net realizable value of the Company's net inventories involves significant judgments, including projecting future average selling prices and future sales volumes.

The principal considerations for our determination that performing procedures relating to the valuation of finished goods and work in process inventories is a critical audit matter are the significant judgment by management in determining the net realizable value of inventories, which in turn led to significant auditor judgment, subjectivity and effort in performing procedures over the reasonableness of the significant assumptions related to future average selling prices and future sales volumes, used to estimate the net realizable value of finished goods and work in process inventories.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the net realizable value of finished goods and work in process inventories, significant assumptions, and data used to value the inventories. These procedures also included, among others, testing management's process for developing the net realizable value estimate of finished goods and work in process inventories; evaluating the appropriateness of management's estimated net realizable value methodology; testing the completeness, accuracy, and relevance of underlying data used in the estimate of net realizable value of finished goods and work in process inventories; and evaluating the reasonableness of management's assumptions related to future average selling prices and future sales volumes. Evaluating management's assumptions related to future average selling prices and future sales volumes involved evaluating whether the assumptions used by management were reasonable considering (i) current and past results, including recent sales, (ii) the consistency with external market, industry data and current contract prices, (iii) a comparison of the prior year estimates to actual results in the current year, and (iv) whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
October 7, 2022

We have served as the Company's auditor since 1984.

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## Micron Technology, Inc. Consolidated Statements of Operations

(In millions, except per share amounts)

For the year ended	August 31, 2023	September 1, 2022	September 2, 2021
Revenue	\$ 15,540	\$ 30,758	\$ 27,705
Cost of goods sold	16,956	16,860	17,282
Gross margin	(1,416)	13,898	10,423
Research and development	3,114	3,116	2,663
Selling, general, and administrative	920	1,066	894
Restructure and asset impairments	171	48	488
Other operating (income) expense, net	124	(34)	95
Operating income (loss)	(5,745)	9,702	6,283
Interest income	468	96	37
Interest expense	(388)	(189)	(183)
Other non-operating income (expense), net	7	(38)	81
	(5,658)	9,571	6,218
Income tax (provision) benefit	(177)	(888)	(394)
Equity in net income (loss) of equity method investees	2	4	37
Net income (loss)	\$ (5,833)	\$ 8,687	\$ 5,861
Earnings (loss) per share			
Basic	\$ (5.34)	\$ 7.81	\$ 5.23
Diluted	(5.34)	7.75	5.14
Number of shares used in per share calculations			
Basic	1,093	1,112	1,120
Diluted	1,093	1,122	1,141

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc.

### Consolidated Statements of Comprehensive Income (Loss)

(In millions)

For the year ended	August 31, 2023	September 1, 2022	September 2, 2021
Net income (loss)	\$ (5,833)	\$ 8,687	\$ 5,861
Other comprehensive income (loss), net of tax			
Gains (losses) on derivative instruments	234	(516)	(67)
Pension liability adjustments	11	3	3
Unrealized gains (losses) on investments	6	(48)	(7)
Foreign currency translation adjustments	(3)	(1)	2
Other comprehensive income (loss)	248	(562)	(69)
<b>Total comprehensive income (loss)</b>	<b>\$ (5,585)</b>	<b>\$ 8,125</b>	<b>\$ 5,792</b>

See accompanying notes to consolidated financial statements.



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## Micron Technology, Inc. Consolidated Balance Sheets

(In millions, except par value amounts)

As of	August 31, 2023	September 1, 2022
<b>Assets</b>		
Cash and equivalents	\$ 8,577	\$ 8,262
Short-term investments	1,017	1,069
Receivables	2,443	5,130
Inventories	8,387	6,663
Other current assets	820	657
Total current assets	21,244	21,781
Long-term marketable investments	844	1,647
Property, plant, and equipment	37,928	38,549
Operating lease right-of-use assets	666	678
Intangible assets	404	421
Deferred tax assets	756	702
Goodwill	1,150	1,228
Other noncurrent assets	1,262	1,277
Total assets	\$ 64,254	\$ 66,283
<b>Liabilities and equity</b>		
Accounts payable and accrued expenses	\$ 3,958	\$ 6,090
Current debt	278	103
Other current liabilities	529	1,346
Total current liabilities	4,765	7,539
Long-term debt	13,052	6,803
Noncurrent operating lease liabilities	603	610
Noncurrent unearned government incentives	727	589
Other noncurrent liabilities	987	835
Total liabilities	20,134	16,376
Commitments and contingencies		
Shareholders' equity		
Common stock, \$0.10 par value, 3,000 shares authorized, 1,239 shares issued and 1,098 outstanding (1,226 shares issued and 1,094 outstanding as of September 1, 2022)	124	123
Additional capital	11,036	10,197
Retained earnings	40,824	47,274
Treasury stock, 141 shares held (132 shares as of September 1, 2022)	(7,552)	(7,127)
Accumulated other comprehensive income (loss)	(312)	(560)
Total equity	44,120	49,907
Total liabilities and equity	\$ 64,254	\$ 66,283

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Changes in Equity

(In millions, except per share amounts)

	Common Stock				Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Number of Shares	Amount	Additional Capital	Retained Earnings			
<b>Balance at September 3, 2020</b>	1,194	\$ 119	\$ 8,917	\$ 33,384	\$ (3,495)	\$ 71	\$ 38,996
Net income (loss)	—	—	—	5,861	—	—	5,861
Other comprehensive income (loss), net	—	—	—	—	—	(69)	(69)
Stock issued under stock plans	13	2	223	—	—	—	225
Stock-based compensation expense	—	—	378	—	—	—	378
Repurchase of stock - repurchase program	—	—	—	—	(1,200)	—	(1,200)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(12)	(82)	—	—	(94)
Stock issued for convertible notes	11	1	(1)	—	—	—	—
Cash settlement of convertible notes	—	—	(52)	—	—	—	(52)
Dividends and dividend equivalents declared (\$0.10 per share)	—	—	—	(112)	—	—	(112)
<b>Balance at September 2, 2021</b>	1,216	\$ 122	\$ 9,453	\$ 39,051	\$ (4,695)	\$ 2	\$ 43,933
Net income (loss)	—	—	—	8,687	—	—	8,687
Other comprehensive income (loss), net	—	—	—	—	—	(562)	(562)
Stock issued under stock plans	12	1	244	—	—	—	245
Stock-based compensation expense	—	—	514	—	—	—	514
Repurchase of stock - repurchase program	—	—	—	—	(2,432)	—	(2,432)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(14)	(112)	—	—	(126)
Dividends and dividend equivalents declared (\$0.315 per share)	—	—	—	(352)	—	—	(352)
<b>Balance at September 1, 2022</b>	1,226	\$ 123	\$ 10,197	\$ 47,274	\$ (7,127)	\$ (560)	\$ 49,907
Net income (loss)	—	—	—	(5,833)	—	—	(5,833)
Other comprehensive income (loss), net	—	—	—	—	—	248	248
Stock issued under stock plans	15	1	262	—	—	—	263
Stock-based compensation expense	—	—	596	—	—	—	596
Repurchase of stock - repurchase program	—	—	—	—	(425)	—	(425)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(19)	(108)	—	—	(127)
Dividends and dividend equivalents declared (\$0.460 per share)	—	—	—	(509)	—	—	(509)
<b>Balance at August 31, 2023</b>	1,239	\$ 124	\$ 11,036	\$ 40,824	\$ (7,552)	\$ (312)	\$ 44,120

See accompanying notes to consolidated financial statements.



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## Micron Technology, Inc. Consolidated Statements of Cash Flows

(In millions)

For the year ended	August 31, 2023	September 1, 2022	September 2, 2021
<b>Cash flows from operating activities</b>			
Net income (loss)	\$ (5,833)	\$ 8,687	\$ 5,861
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation expense and amortization of intangible assets	7,756	7,116	6,214
Provision to write down inventories to net realizable value	1,831	—	—
Stock-based compensation	596	514	378
Goodwill impairment	101	—	—
Restructure and asset impairments	11	44	454
Loss on debt repurchases and conversions	—	83	1
Change in operating assets and liabilities:			
Receivables	2,763	190	(1,446)
Inventories	(3,555)	(2,179)	866
Accounts payable and accrued expenses	(2,104)	744	210
Other	(7)	(18)	(70)
Net cash provided by operating activities	1,559	15,181	12,468
<b>Cash flows from investing activities</b>			
Expenditures for property, plant, and equipment	(7,676)	(12,067)	(10,030)
Purchases of available-for-sale securities	(723)	(1,770)	(3,163)
Proceeds from maturities of available-for-sale securities	1,566	1,321	1,250
Proceeds from government incentives	710	115	495
Proceeds from sales of available-for-sale securities	25	294	856
Proceeds from sale of Lehi, Utah fab	—	888	—
Other	(93)	(366)	3
Net cash provided by (used for) investing activities	(6,191)	(11,585)	(10,589)
<b>Cash flows from financing activities</b>			
Proceeds from issuance of debt	6,716	2,000	1,188
Repayments of debt	(761)	(2,032)	(1,520)
Payments of dividends to shareholders	(504)	(461)	—
Repurchases of common stock - repurchase program	(425)	(2,432)	(1,200)
Payments on equipment purchase contracts	(138)	(141)	(295)
Other	95	86	46
Net cash provided by (used for) financing activities	4,983	(2,980)	(1,781)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash			
	(34)	(106)	41
Net increase (decrease) in cash, cash equivalents, and restricted cash	317	510	139
Cash, cash equivalents, and restricted cash at beginning of period	8,339	7,829	7,690
Cash, cash equivalents, and restricted cash at end of period	\$ 8,656	\$ 8,339	\$ 7,829
<b>Supplemental disclosures</b>			
Income taxes paid, net	\$ (532)	\$ (493)	\$ (361)
Interest paid, net of amounts capitalized	(323)	(154)	(171)
Noncash equipment acquisitions on contracts payable	165	157	289

*See accompanying notes to consolidated financial statements.*

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## Micron Technology, Inc.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All tabular amounts in millions, except per share amounts)

## Significant Accounting Policies

### Basis of Presentation

We are an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life for all. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND, and NOR memory and storage products through our Micron® and Crucial® brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience.

The accompanying consolidated financial statements include the accounts of Micron Technology, Inc. and our consolidated subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America. Intercompany balances and transactions have been eliminated in consolidation. Certain reclassifications have been made to prior period amounts to conform to current period presentation. See "Inventories" below for changes to our significant accounting policies, and the "Inventories" note for additional information.

Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2023, 2022, and 2021 each contained 52 weeks. All period references are to our fiscal periods unless otherwise indicated.

### Derivative and Hedging Instruments

We use derivative instruments to manage our exposure to changes in currency exchange rates from (1) our monetary assets and liabilities denominated in currencies other than the U.S. dollar and (2) forecasted cash flows for certain capital expenditures and manufacturing costs. We also use derivative instruments to manage our exposure to changes in commodity prices for manufacturing supplies and to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Derivative instruments are measured at their fair values and recognized as either assets or liabilities.

The accounting for changes in the fair value of derivative instruments is based on the intended use of the derivative and the resulting designation. For derivative instruments that are not designated for hedge accounting, gains or losses from changes in fair values are recognized in other non-operating income (expense) and cash flows are classified as investing activities in the statement of cash flows. For derivative instruments designated as cash flow hedges, gains or losses are included as a component of accumulated other comprehensive income and reclassified into earnings in the same line items and in the same periods in which the underlying transactions affect earnings. For derivative instruments designated as cash flow hedges, time value is excluded from the assessment of effectiveness and the gains and losses attributable to time value are recognized in earnings through an amortization approach. For derivative instruments designated as fair value hedges, changes in the fair values of the derivative instruments and the offsetting changes in the fair values of the underlying hedged items are both recognized in earnings. Cash flows from derivative instruments designated as cash flow hedges or fair value hedges are classified in the same category as the items being hedged.

We enter into master netting arrangements with our counterparties to mitigate credit risk in derivative hedge transactions. These master netting arrangements allow us and our counterparties to net settle amounts owed to each other. Derivative assets and liabilities that can be net settled with each counterparty have been presented in our consolidated balance sheet on a net basis.

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### Financial Instruments

Cash equivalents include highly liquid short-term investments with original maturities to us of three months or less that are readily convertible to known amounts of cash. Other investments with remaining maturities of less than one year are included in short-term investments. Investments with remaining maturities greater than one year are included in long-term marketable investments. The carrying value of investment securities sold is determined using the specific identification method.

### Functional Currency

The U.S. dollar is the functional currency for us and all of our consolidated subsidiaries.

### Goodwill

We perform an annual impairment assessment for goodwill in our fourth quarter each year.

### Government Incentives

We receive incentives from governmental entities related to capital expenditures, expenses, and other activities. Our government incentives may require that we meet or maintain specified spending levels and other operational metrics and may be subject to reimbursement if such conditions are not met or maintained. Government incentives are recorded in the financial statements in accordance with their purpose: as a reduction of asset costs or a reduction of expenses. Incentives related to the acquisition or construction of fixed assets are recognized as a reduction in the carrying amounts of the related assets and reduce depreciation expense over the useful lives of the assets. Incentives related to specific operating activities are offset against the related expense in the period the expense is incurred. Government incentives received prior to being earned are recognized in current or noncurrent deferred income or restricted cash, whereas government incentives earned prior to being received are recognized in current or noncurrent receivables. Cash received from government incentives related to operating expenses is included as an operating activity in the statement of cash flows, whereas cash received from incentives related to the acquisition of property, plant, and equipment is included as an investing activity.

### Inventories

Effective as of the beginning of the second quarter of 2021, we changed the method of inventory costing from average cost to FIFO. The difference between average cost and FIFO was not material to any previously reported financial statements. Therefore, we have recognized the cumulative effect of the change as a reduction of inventories and a charge to cost of goods sold of \$133 million as of the beginning of the second quarter of 2021.

Inventories are stated at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. Determining net realizable value of finished goods and work in process inventories requires projecting future average selling prices, sales volumes, and costs per part. When net realizable value is below cost, we record a charge to cost of goods sold to write down inventories to their estimated net realizable value in advance of when inventories are actually sold. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group.

### Leases

We determine if an arrangement is a lease, or contains a lease, at the inception of the arrangement and evaluate whether the lease is an operating lease or a finance lease at the commencement date. We recognize right-of-use assets and lease liabilities for operating and finance leases with terms greater than 12 months. Right-of-use assets represent our right to use an asset for the lease term, while lease liabilities represent our obligation to make lease payments. We do not separate lease and non-lease components for real-estate and gas plant leases. Sublease income is included within lease expense.

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### Product and Process Technology

Costs incurred to (1) acquire product and process technology, (2) patent technology, and (3) maintain patent technology, are capitalized and amortized on a straight-line basis over periods ranging up to 12.5 years. We capitalize a portion of costs incurred to patent technology based on historical data of patents issued as a percent of patents we file. Product and process technology costs are amortized over the shorter of (1) the estimated useful life of the technology, (2) the patent term, or (3) the term of the technology agreement. Fully-amortized assets are removed from product and process technology and accumulated amortization.

### Product Warranty

We generally provide a limited warranty that our products are in compliance with applicable specifications existing at the time of delivery. Under our standard terms and conditions of sale, liability for certain failures of product during a stated warranty period is usually limited to repair or replacement of defective items or return of, or a credit with respect to, amounts paid for such items. Under certain circumstances, we provide more extensive limited warranty coverage than that provided under our standard terms and conditions. Our warranty obligations are not material.

### Property, Plant, and Equipment

Property, plant, and equipment is stated at cost and depreciated using the straight-line method over estimated useful lives of generally 10 to 30 years for buildings, 7 years for production equipment, up to 7 years for other equipment, and 3 to 5 years for software. Assets held for sale are carried at the lower of estimated fair value or carrying value and are included in current assets. When property, plant, or equipment is retired or otherwise disposed, the net book value is removed and we recognize any gain or loss in results of operations.

We capitalize interest on borrowings during the period of time we carry out the activities necessary to bring assets to the condition of their intended use and location. Capitalized interest becomes part of the cost of assets.

### Research and Development

Costs related to the conceptual formulation and design of products and processes are charged to R&D expense as incurred. Development of a product is deemed complete when it is qualified through reviews and tests for performance and reliability. Subsequent to product qualification, product costs are included in cost of goods sold. Amounts from cost-sharing arrangements are reflected as a reduction of R&D expense.

### Revenue Recognition

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.

### Stock-based Compensation

Stock-based compensation is measured at the grant date, based on the fair value of the award, and recognized as expense under the straight-line attribution method over the requisite service period. We account for forfeitures as they occur. We issue new shares upon the exercise of stock options, conversion of share units, or issuance of shares under our ESPP.

### Treasury Stock

Treasury stock is carried at cost. When we retire our treasury stock, any excess of the repurchase price paid over par value is allocated between additional capital and retained earnings.

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### Use of Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. Actual results could differ from estimates.

## Lehi, Utah Fab and 3D XPoint

In 2021, we updated our portfolio strategy to further strengthen our focus on memory and storage innovations for the data center market. In connection therewith, we determined that there was insufficient market validation to justify the ongoing investments required to commercialize 3D XPoint at scale. Accordingly, we ceased development of 3D XPoint technology and engaged in discussions for the sale of our facility located in Lehi, Utah that was dedicated to 3D XPoint production. As a result, we classified the property, plant, and equipment as held for sale in 2021, ceased depreciating the assets, and recognized a \$435 million restructure and asset impairment charge and a \$104 million tax benefit.

We closed the sale of our Lehi facility to TI in 2022 for \$893 million and disposed of \$918 million of net assets, consisting primarily of property, plant, and equipment, resulting in a \$23 million loss, net of selling expenses and other adjustments.

## Variable Interest Entities

A number of special purpose entities (the "Lease SPEs") were created by a third-party to facilitate equipment lease financing transactions between us and financial institutions that fund the lease financing transactions ("Financing Entities"). Neither we nor the Financing Entities have an equity interest in the Lease SPEs. The Lease SPEs are variable interest entities because their equity is not sufficient to permit them to finance their activities without additional support from the Financing Entities and because the third-party equity holder lacks characteristics of a controlling financial interest. By design, the arrangements with the Lease SPEs are merely financing vehicles and we do not bear any significant risks from variable interests with the Lease SPEs. We have determined that we do not have the power to direct the activities of the Lease SPEs that most significantly impact their economic performance and we do not consolidate the Lease SPEs.

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## Cash and Investments

All of our short-term investments and long-term marketable investments were classified as available-for-sale as of the dates noted below. Cash and equivalents and the fair values of our available-for-sale investments, which approximated amortized costs, were as follows:

	As of August 31, 2023				As of September 1, 2022			
	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value
Cash	\$ 5,771	\$ —	\$ —	\$ 5,771	\$ 6,055	\$ —	\$ —	\$ 6,055
Level 1 <sup>(2)</sup>								
Money market funds	1,629	—	—	1,629	1,196	—	—	1,196
Level 2 <sup>(3)</sup>								
Certificates of deposit	1,172	25	—	1,197	976	50	—	1,026
Corporate bonds	—	737	437	1,174	—	759	995	1,754
Asset-backed securities	—	15	387	402	—	20	608	628
Government securities	5	131	20	156	2	155	44	201
Commercial paper	—	109	—	109	33	85	—	118
	8,577	\$ 1,017	\$ 844	\$ 10,438	8,262	\$ 1,069	\$ 1,647	\$ 10,978
Restricted cash <sup>(4)</sup>	79				77			
Cash, cash equivalents, and restricted cash	\$ 8,656				\$ 8,339			

<sup>(1)</sup> The maturities of long-term marketable investments primarily range from one to five years, except for asset-backed securities which are not due at a single maturity date.

<sup>(2)</sup> The fair value of Level 1 securities is measured based on quoted prices in active markets for identical assets.

<sup>(3)</sup> The fair value of Level 2 securities is measured using information obtained from pricing services, which obtain quoted market prices for similar instruments, non-binding market consensus prices that are corroborated by observable market data, or various other methodologies, to determine the appropriate value at the measurement date. We perform supplemental analysis to validate information obtained from these pricing services. No adjustments were made to the fair values indicated by such pricing information as of August 31, 2023 or September 1, 2022.

<sup>(4)</sup> Restricted cash is included in other current assets and other noncurrent assets and primarily relates to certain government incentives received prior to being earned and for which restrictions lapse upon achieving certain performance conditions or which will be returned if performance conditions are not met.

Gross realized gains and losses from sales of available-for-sale securities were not significant for any period presented.

### Non-marketable Equity Investments

In addition to the amounts included in the table above, we had \$218 million and \$222 million of non-marketable equity investments without a readily determinable fair value that were included in other noncurrent assets as of August 31, 2023 and September 1, 2022, respectively. For non-marketable investments, we recognized in other non-operating income (expense) a net loss of \$7 million for 2023 and net gains of \$36 million for 2022 and \$70 million for 2021. Our non-marketable equity investments are recorded at fair value on a non-recurring basis and classified as Level 3.

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## Receivables

As of	August 31, 2023	September 1, 2022
Trade receivables	\$ 2,048	\$ 4,765
Income and other taxes	194	251
Other	201	114
	<u>\$ 2,443</u>	<u>\$ 5,130</u>

## Inventories

As of	August 31, 2023	September 1, 2022
Finished goods	\$ 1,616	\$ 1,028
Work in process	6,111	4,830
Raw materials and supplies	660	805
	<u>\$ 8,387</u>	<u>\$ 6,663</u>

In 2023, we recorded charges of \$1.83 billion to cost of goods sold to write down the carrying value of work in process and finished goods inventories to their estimated net realizable value.

Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to FIFO. This change in accounting principle is preferable because in an environment with continuously changing production costs FIFO more closely matches the actual cost of goods sold with the revenues from sales of those specific units, better represents the actual cost of inventories remaining on hand at any period-end, and improves comparability with our semiconductor industry peers. The change to FIFO was not material to any prior periods, nor was the cumulative effect of \$133 million material to the second quarter of 2021. As such, prior periods were not retrospectively adjusted, and the cumulative effect was reported as an increase to cost of goods sold for the second quarter of 2021 of \$133 million, with an offsetting reduction to beginning inventories. This charge resulted in a corresponding reduction to operating income (loss), a \$128 million reduction to net income (loss), and an \$0.11 reduction to diluted earnings per share for both the second quarter and the year ended 2021.

## Property, Plant, and Equipment

As of	August 31, 2023	September 1, 2022
Land	\$ 283	\$ 280
Buildings	17,967	16,676
Equipment <sup>(1)</sup>	65,555	61,354
Construction in progress <sup>(2)</sup>	2,464	1,897
Software	1,316	1,124
	87,585	81,331
Accumulated depreciation	(49,657)	(42,782)
	<u>\$ 37,928</u>	<u>\$ 38,549</u>

<sup>(1)</sup> Includes costs related to equipment not placed into service of \$2.91 billion as of August 31, 2023 and \$3.35 billion as of September 1, 2022.

<sup>(2)</sup> Includes building-related construction, tool installation, and software costs for assets not placed into service.

Depreciation expense was \$7.67 billion, \$7.03 billion, and \$6.13 billion for 2023, 2022, and 2021, respectively. Interest capitalized as part of the cost of property, plant, and equipment was \$208 million, \$77 million, and \$66 million for 2023, 2022, and 2021, respectively.

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## Intangible Assets

	As of August 31, 2023			As of September 1, 2022		
	Gross Amount	Accumulated Amortization	Net Carrying Amount	Gross Amount	Accumulated Amortization	Net Carrying Amount
Product and process technology	\$ 613	\$ (209)	\$ 404	\$ 742	\$ (321)	\$ 421

In 2023, 2022, and 2021, we capitalized \$87 million, \$158 million, and \$106 million, respectively, for product and process technology with weighted-average useful lives of 9 years. Amortization expense was \$86 million, \$85 million, and \$82 million for 2023, 2022, and 2021, respectively. Expected amortization expense is \$75 million for 2024, \$51 million for 2025, \$47 million for 2026, \$43 million for 2027, and \$42 million for 2028.

## Goodwill

As of	August 31, 2023	September 1, 2022
Goodwill	\$ 1,150	\$ 1,228

In the fourth quarter of 2023, we recognized a charge of \$101 million included in other operating income (loss) to impair all of the goodwill assigned to our SBU reporting unit based on a quantitative assessment for impairment. We evaluated the fair value of our reporting units for the assessment based on an income approach, which uses a discounted cash flow methodology. The impairment of SBU goodwill reflects lower forecasted cash flows for SBU as a result of adverse conditions in the storage industry environment due to weak demand in many end markets combined with global and macroeconomic challenges and lower demand resulting from customer actions to reduce elevated inventory levels. These conditions led to significant reductions in SBU's average selling prices and bit shipments, driving declines in revenue and cash flows. The quantitative assessment for impairment indicated that the fair value for all of our other reporting units substantially exceeded their carrying value.

As of August 31, 2023, CNBU, MBU, and EBU had goodwill of \$855 million, \$198 million, and \$97 million, respectively. As of September 1, 2022, CNBU, MBU, SBU, and EBU had goodwill of \$832 million, \$198 million, \$101 million, and \$97 million, respectively. The Company added \$23 million of goodwill to CNBU from an acquisition in the third quarter of 2023.

## Leases

We have finance and operating leases through which we obtain the right to use facilities, land, and equipment that support our business operations. Our finance leases consist primarily of (i) gas and other supply agreements that are deemed to contain embedded leases and (ii) equipment leases. Our operating leases consist primarily of offices, laboratories, other facilities, and land. Certain of our operating leases include one or more options to extend the lease term for periods from one year to 10 years for real estate and one year to 99 years for land.

Certain supply or service agreements require us to exercise significant judgment to determine whether the agreement contains a lease. Our assessment includes determining whether we or the supplier control the assets used to fulfill the agreements by identifying whether we or the supplier have the right to change the type, quantity, timing, or location of the output of the assets. Our gas supply arrangements generally are deemed to contain a lease because we have the right to substantially all of the output of the assets used to produce the supply and we have the right to change the quantity and timing of the output of those assets. In determining the lease term, we assess whether we are reasonably certain to exercise any options to renew or terminate a lease or to purchase the right-of-use asset. Measuring the present value of the initial lease liability requires judgment to determine the discount rate, which we base on interest rates for borrowings with similar terms and collateral issued by entities with credit ratings similar to ours.



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The components of lease cost are presented below:

For the year ended	2023	2022	2021
Finance lease cost			
Amortization of right-of-use asset	\$ 105	\$ 99	\$ 69
Interest on lease liability	24	24	20
Operating lease cost <sup>(1)</sup>	137	125	108
	<u>\$ 266</u>	<u>\$ 248</u>	<u>\$ 197</u>

<sup>(1)</sup> Operating lease cost includes short-term and variable lease expenses, which were not material for the periods presented.

Supplemental cash flow information related to leases was as follows:

For the year ended	2023	2022	2021
Cash flows used for operating activities			
Finance leases	\$ 24	\$ 23	\$ 21
Operating leases	139	110	106
Cash flows used for financing activities – Finance leases	109	103	85
Noncash acquisitions of right-of-use assets			
Finance leases	508	309	395
Operating leases	57	197	27

Supplemental balance sheet information related to leases was as follows:

As of	August 31, 2023	September 1, 2022
Finance lease right-of-use assets (included in property, plant, and equipment)	\$ 1,311	\$ 904
Current operating lease liabilities (included in accounts payable and accrued expenses)	66	60
Weighted-average remaining lease term (in years)		
Finance leases	9	12
Operating leases	11	12
Weighted-average discount rate		
Finance leases	3.86 %	2.65 %
Operating leases	3.21 %	2.90 %

As of August 31, 2023, maturities of lease liabilities by fiscal year were as follows:

For the year ending	Finance Leases	Operating Leases
2024	\$ 219	\$ 62
2025	200	77
2026	190	76
2027	185	76
2028	178	74
2029 and thereafter	506	453
Less imputed interest	(197)	(149)
	<u>\$ 1,281</u>	<u>\$ 669</u>

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The table above excludes obligations for leases that have been executed but have not yet commenced. As of August 31, 2023, excluded obligations consisted of \$170 million of finance lease obligations over a weighted-average period of 12 years for gas supply arrangements deemed to contain embedded leases and equipment leases. We will recognize right-of-use assets and associated lease liabilities at the time such assets become available for our use.

## Accounts Payable and Accrued Expenses

As of	August 31, 2023	September 1, 2022
Accounts payable	\$ 1,725	\$ 2,142
Property, plant, and equipment	1,419	2,170
Salaries, wages, and benefits	367	877
Income and other taxes	67	420
Other	380	481
	<u>\$ 3,958</u>	<u>\$ 6,090</u>

## Debt

	As of August 31, 2023						As of September 1, 2022			
	Stated Rate	Effective Rate	Net Carrying Amount				Net Carrying Amount			
			Principal	Current	Long- Term	Total	Principal	Current	Long- Term	Total
2024 Term Loan A	6.146 %	6.18 %	\$ 588	\$ —	\$ 587	\$ 587	\$ 1,188	\$ —	\$ 1,187	\$ 1,187
2025 Term Loan A	6.681 %	6.82 %	1,052	—	1,050	1,050	—	—	—	—
2026 Term Loan A	6.806 %	6.94 %	971	49	921	970	—	—	—	—
2027 Term Loan A	6.931 %	7.07 %	1,123	57	1,063	1,120	—	—	—	—
2026 Notes	4.975 %	5.07 %	500	—	499	499	500	—	498	498
2027 Notes <sup>(1)</sup>	4.185 %	4.27 %	900	—	798	798	900	—	806	806
2028 Notes	5.375 %	5.52 %	600	—	596	596	—	—	—	—
2029 A Notes	5.327 %	5.40 %	700	—	697	697	700	—	697	697
2029 B Notes	6.750 %	6.54 %	1,250	—	1,263	1,263	—	—	—	—
2030 Notes	4.663 %	4.73 %	850	—	846	846	850	—	846	846
2032 Green Bonds	2.703 %	2.77 %	1,000	—	995	995	1,000	—	994	994
2033 A Notes	5.875 %	5.96 %	750	—	745	745	—	—	—	—
2033 B Notes	5.875 %	6.01 %	900	—	890	890	—	—	—	—
2041 Notes	3.366 %	3.41 %	500	—	497	497	500	—	496	496
2051 Notes	3.477 %	3.52 %	500	—	496	496	500	—	496	496
Finance lease obligations	N/A	3.86 %	1,281	172	1,109	1,281	886	103	783	886
			<u>\$ 13,465</u>	<u>\$ 278</u>	<u>\$ 13,052</u>	<u>\$ 13,330</u>	<u>\$ 7,024</u>	<u>\$ 103</u>	<u>\$ 6,803</u>	<u>\$ 6,906</u>

<sup>(1)</sup> In 2021, we entered into fixed-to-floating interest rate swaps on the 2027 Notes with an aggregate \$900 million notional amount equal to the principal amount of the 2027 Notes. The resulting variable interest paid is at a rate equal to SOFR plus approximately 3.33%. The fixed-to-floating interest rate swaps are accounted for as fair value hedges, and as a result, the carrying values of our 2027 Notes reflect adjustments in fair value.



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As of August 31, 2023, all of our debt, other than finance lease obligations, were unsecured obligations that rank equally in right of payment with all of our other existing and future unsecured indebtedness and were effectively subordinated to all future secured indebtedness, to the extent of the value of the assets securing such indebtedness. All our unsecured debt were obligations of our parent company, Micron, and were structurally subordinated to all liabilities of its subsidiaries, including trade payables. The terms of our indebtedness generally contain cross payment default and cross acceleration provisions. Micron's guarantees of certain liabilities of its subsidiaries are unsecured obligations ranking equally in right of payment with all of Micron's other existing and future unsecured indebtedness.

### Debt Activity

The table below presents the effects of debt financing and prepayment activities in 2023:

	Transaction Date	Increase (Decrease) in Principal	Increase (Decrease) in Carrying Value	Increase (Decrease) in Cash
<b>Issuances</b>				
2029 B Notes	October 31, 2022	\$ 750	\$ 744	\$ 744
2025 Term Loan A	November 3, 2022	927	925	925
2026 Term Loan A	November 3, 2022	746	745	745
2027 Term Loan A	November 3, 2022	927	924	924
2025 Term Loan A	January 5, 2023	125	125	125
2026 Term Loan A	January 5, 2023	250	249	249
2027 Term Loan A	January 5, 2023	225	225	225
2029 B Notes	February 9, 2023	500	520	520
2033 A Notes	February 9, 2023	750	745	745
2028 Notes	April 11, 2023	600	596	596
2033 B Notes	April 11, 2023	900	890	890
<b>Prepayments</b>				
2024 Term Loan A	April 13, 2023	(600)	(600)	(600)
		<u>\$ 6,100</u>	<u>\$ 6,088</u>	<u>\$ 6,088</u>

In 2022, we issued \$2.00 billion of senior unsecured notes and received cash of \$1.99 billion. The approximate \$1.00 billion of net proceeds from the issuance of the 2032 Green Bonds are being used to fund eligible sustainability-focused projects. The remaining proceeds, along with cash on hand, were used to repay \$1.85 billion of principal amount of notes (carrying value of \$1.85 billion) for \$1.93 billion in cash. We recognized losses of \$83 million in connection with these repayments.

In 2021, substantially all holders of our 2032D Notes converted their notes. We settled these conversions and all remaining 2032D Notes with \$185 million in cash and 11.1 million shares of our stock, which approximated the carrying value of debt and equity for those notes.

### Senior Unsecured Notes

We may redeem our 2026 Notes, 2027 Notes, 2028 Notes, 2029 A Notes, 2029 B Notes, 2030 Notes, 2032 Green Bonds, 2033 A Notes, 2033 B Notes, 2041 Notes, and 2051 Notes (the "Senior Unsecured Notes"), in whole or in part, at our option prior to their respective maturity dates at a redemption price equal to the greater of (i) 100% of the principal amount of the notes to be redeemed and (ii) the present value of the remaining scheduled payments of principal and interest, in each case plus accrued interest. We may also redeem any series of our Senior Unsecured Notes, in whole or in part, at a price equal to par between one and six months prior to maturity in accordance with the respective terms of such series.

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Each series of Senior Unsecured Notes contains covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries (which are generally domestic subsidiaries in which we own at least 80% of the voting stock and which own principal property, as defined in the indenture governing such series) to (1) create or incur certain liens; (2) enter into certain sale and lease-back transactions; and (3) consolidate with or merge with or into, or convey, transfer, or lease all or substantially all of our properties and assets, to another entity. These covenants are subject to a number of limitations and exceptions. Additionally, if a change of control triggering event, as defined in the indentures governing our Senior Unsecured Notes, occurs with respect to a series of Senior Unsecured Notes, we will be required to offer to purchase such Senior Unsecured Notes at 101% of the outstanding aggregate principal amount plus accrued interest up to the purchase date.

**2032 Green Bonds:** We plan to allocate an amount equal to the approximate \$1.00 billion of net proceeds of our unsecured 2032 Green Bonds by November 1, 2023, to fund eligible sustainability-focused projects involving renewable energy, green buildings, energy efficiency, water management, waste abatement, and a circular economy.

### Multi-Tranche Term Loan A

In 2023, we entered into a term loan agreement consisting of three tranches (the "Multi-Tranche Term Loan Agreement") and borrowed \$3.20 billion in aggregate principal amount. The tranches mature on November 3, 2025 ("2025 Term Loan A"); November 3, 2026 ("2026 Term Loan A"); and November 3, 2027 ("2027 Term Loan A").

The 2026 Term Loan A and 2027 Term Loan A each require equal quarterly installment payments in an amount equal to 1.25% of the original principal amount. The 2025 Term Loan A does not require quarterly installment payments. Borrowings under the Multi-Tranche Term Loan Agreement will generally bear interest at adjusted term SOFR plus an applicable interest rate margin ranging from 1.00% to 2.00%, varying by tranche and depending on our corporate credit ratings. Adjusted term SOFR for the Multi-Tranche Term Loan Agreement is the SOFR benchmark plus 0.10%.

The Multi-Tranche Term Loan Agreement requires us to maintain, on a consolidated basis, a leverage ratio of total indebtedness to adjusted EBITDA, as defined in the Multi-Tranche Term Loan Agreement and calculated as of the last day of each fiscal quarter, not to exceed 3.25 to 1.00. On March 27, 2023, we amended the Multi-Tranche Term Loan Agreement to provide that in lieu of the foregoing leverage ratio, during the fourth quarter of 2023 and each quarter of 2024, we will be required to maintain, on a consolidated basis, a net leverage ratio of total net indebtedness to adjusted EBITDA, as defined in the Multi-Tranche Term Loan Agreement and calculated as of the last day of each fiscal quarter, not to exceed 3.25 to 1.00. Alternatively, for up to three of such five quarters, we may elect to comply with a requirement of minimum liquidity, as defined in the Multi-Tranche Term Loan Agreement, of not less than \$5.0 billion. In the fourth quarter of 2023, we complied with the net leverage ratio. Each of the leverage ratio and net leverage ratio maximums, as applicable, is subject to a temporary four quarter increase in such ratio to 3.75 to 1.00 following certain material acquisitions.

The Multi-Tranche Term Loan Agreement contains other covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries to (1) create or incur certain liens and enter into sale and lease-back transactions, (2) create, assume, incur, or guarantee certain additional secured indebtedness and unsecured indebtedness of our restricted subsidiaries, and (3) consolidate with or merge with or into, or convey, transfer, lease, or otherwise dispose of all or substantially all of our assets, to another entity. These covenants are subject to a number of limitations, exceptions, and qualifications. Our obligations under the Multi-Tranche Term Loan Agreement are unsecured.

### 2024 Term Loan A

On April 13, 2023, we used a portion of the proceeds from our April 2023 issuance of senior unsecured notes to prepay \$600 million principal amount of our 2024 Term Loan A.

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On June 7, 2023, the 2024 Term Loan A agreement was amended, pursuant to its transition provisions, to replace LIBOR-based benchmark rates with SOFR-based benchmark rates effective July 1, 2023. Subsequent to this amendment, borrowings under the 2024 Term Loan Agreement generally bear interest at adjusted term SOFR plus an applicable interest rate margin ranging from 0.625% to 1.375% depending on our corporate credit ratings. Adjusted term SOFR for the 2024 Term Loan A is the SOFR benchmark plus a credit spread adjustment ranging from approximately 0.11% to 0.43% depending on the applicable interest period selected. Prior to July 1, 2023, the 2024 Term Loan A bore interest at a rate equal to LIBOR plus 0.625% to 1.375% based on our corporate credit ratings.

The 2024 Term Loan A agreement contains the same leverage ratio, as amended, and substantially the same other covenants as the Multi-Tranche Term Loan Agreement. Our obligations under the 2024 Term Loan A agreement are unsecured.

### Revolving Credit Facility

As of August 31, 2023, no amounts were outstanding under the Revolving Credit Facility and \$2.50 billion was available to us. Under the Revolving Credit Facility, borrowings would generally bear interest at a rate equal to adjusted term SOFR plus 1.00% to 1.75%, depending on our corporate credit ratings. Adjusted term SOFR for the Revolving Credit Facility agreement is the SOFR benchmark plus a credit spread adjustment ranging from approximately 0.11% to 0.43% depending on the applicable interest period selected. Any amounts outstanding under the Revolving Credit Facility would mature in May 2026 and amounts borrowed may be prepaid without penalty.

The Revolving Credit Facility contains the same leverage ratio, as amended, and substantially the same other covenants as the Multi-Tranche Term Loan Agreement.

### Maturities of Notes Payable

As of August 31, 2023, maturities of notes payable by fiscal year were as follows:

2024	\$	107
2025		695
2026		1,659
2027		1,780
2028		1,493
2029 and thereafter		6,450
Unamortized issuance costs, discounts, and premium, net		(35)
Hedge accounting fair value adjustment		(100)
	\$	<u>12,049</u>

## Commitments

As of August 31, 2023, we had noncancelable commitments with remaining contractual terms in excess of one year of approximately \$6.7 billion for purchase obligations, of which approximately \$1.2 billion will be due in 2024, \$1.4 billion due in 2025, \$1.0 billion due in 2026, \$1.0 billion due in 2027, \$700 million due in 2028, and \$1.4 billion due in 2029 and thereafter. Purchase obligations primarily include payments for goods or services with either a fixed or minimum quantity and price, which includes payments for the acquisition of property, plant, and equipment. Payments for leases that have been executed but have not yet commenced are excluded.

In 2023, we entered into an 18-year power purchase agreement in Singapore to purchase up to 450 megawatts of power at predominantly variable prices. This contract is expected to supply the majority of our power consumption needs in Singapore with more favorable pricing than our previous supply arrangements.

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## Contingencies

We are currently a party to legal actions other than those described below arising from the normal course of business, none of which are expected to have a material adverse effect on our business, results of operations, or financial condition.

### Patent Matters

As is typical in the semiconductor and other high-tech industries, from time to time, others have asserted, and may in the future assert, that our products or manufacturing processes infringe upon their intellectual property rights.

On March 19, 2018, Micron Semiconductor (Xi'an) Co., Ltd. ("MXA") was served with a patent infringement complaint filed by Fujian Jinhua Integrated Circuit Co., Ltd. ("Jinhua") in the Fuzhou Intermediate People's Court in Fujian Province, China (the "Fuzhou Court"). On April 3, 2018, Micron Semiconductor (Shanghai) Co., Ltd. ("MSS") was served with the same complaint. The complaint alleges that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred.

On March 21, 2018, MXA was served with a patent infringement complaint filed by United Microelectronics Corporation ("UMC") in the Fuzhou Court. On April 3, 2018, MSS was served with the same complaint. The complaint alleges that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaints against MXA and MSS.

On April 3, 2018, MSS was served with another patent infringement complaint filed by Jinhua and an additional complaint filed by UMC in the Fuzhou Court. The additional complaints allege that MSS infringes two Chinese patents by manufacturing and selling certain Crucial MX300 SSDs. The complaint filed by UMC seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. The complaint filed by Jinhua seeks an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaint against MSS.

On July 5, 2018, MXA and MSS were notified that the Fuzhou Court granted a preliminary injunction against those entities that enjoins them from manufacturing, selling, or importing certain Crucial and Ballistix-branded DRAM modules and solid-state drives in China. We are complying with the ruling and have requested the Fuzhou Court to reconsider or stay its decision.

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On April 28, 2021, Netlist, Inc. ("Netlist") filed two patent infringement actions against Micron, Micron Semiconductor Products, Inc. ("MSP"), and Micron Technology Texas, LLC ("MTEC") in the U.S. District Court for the Western District of Texas. The first complaint alleges that one U.S. patent is infringed by certain of our non-volatile dual in-line memory modules. The second complaint alleges that three U.S. patents are infringed by certain of our load-reduced dual in-line memory modules ("LRDIMMs"). Each complaint seeks injunctive relief, damages, attorneys' fees, and costs. On March 31, 2022, Netlist filed a patent infringement complaint against Micron and Micron Semiconductor Germany, GmbH in Dusseldorf Regional Court alleging that two German patents are infringed by certain of our LRDIMMs. The complaint seeks damages, costs, and injunctive relief. On June 10, 2022, Netlist filed a patent infringement complaint against Micron, MSP, and MTEC in the U.S. District Court for the Eastern District of Texas ("E.D. Tex.") alleging that six U.S. patents are infringed by certain of our memory modules and HBM products. On August 1, 2022, Netlist filed a second patent infringement complaint against the same defendants in E.D. Tex. alleging that one U.S. patent is infringed by certain of our LRDIMMs. On August 15, 2022, Netlist amended the second complaint to assert that two additional U.S. patents are infringed by certain of our LRDIMMs. The complaints in E.D. Tex. seek injunctive relief, damages, and attorneys' fees.

On August 16, 2022, Sonrai Memory Ltd. filed a patent infringement action against Micron in the U.S. District Court for the Western District of Texas. The complaint alleges that two U.S. patents are infringed by certain SSD and NAND flash products. The complaint seeks damages, attorneys' fees, and costs.

On January 23, 2023, Besang Inc. filed a patent infringement complaint against Micron in the U.S. District Court for the Eastern District of Texas. The complaint alleges that one U.S. patent is infringed by certain of our 3D NAND and SSD products. The complaint seeks an injunction, damages, attorneys' fees, and costs.

Among other things, the above lawsuits pertain to substantially all of our DRAM, NAND, and other memory and storage products we manufacture, which account for substantially all of our revenue.

### Qimonda

On January 20, 2011, Dr. Michael Jaffé, administrator for Qimonda's insolvency proceedings, filed suit against Micron and Micron Semiconductor B.V. ("Micron B.V."), in the District Court of Munich, Civil Chamber. The complaint sought to void, under Section 133 of the German Insolvency Act, a share purchase agreement between Micron B.V. and Qimonda signed in fall 2008, pursuant to which Micron B.V. purchased substantially all of Qimonda's shares of Inotera (the "Inotera Shares"), representing approximately 18% of Inotera's outstanding shares at that time, and sought an order requiring us to re-transfer those shares to the Qimonda estate. The complaint also sought, among other things, to recover damages for the alleged value of the joint venture relationship with Inotera and to terminate, under Sections 103 or 133 of the German Insolvency Code, a patent cross-license between us and Qimonda entered into at the same time as the share purchase agreement.

Following a series of hearings with pleadings, arguments, and witnesses on behalf of the Qimonda estate, on March 13, 2014, the court issued judgments: (1) ordering Micron B.V. to pay approximately \$1 million in respect of certain Inotera Shares sold in connection with the original share purchase; (2) ordering Micron B.V. to disclose certain information with respect to any Inotera Shares sold by it to third parties; (3) ordering Micron B.V. to disclose the benefits derived by it from ownership of the Inotera Shares, including in particular, any profits distributed on the Inotera Shares and all other benefits; (4) denying Qimonda's claims against Micron for any damages relating to the joint venture relationship with Inotera; and (5) determining that Qimonda's obligations under the patent cross-license agreement are canceled. In addition, the court issued interlocutory judgments ordering, among other things: (1) that Micron B.V. transfer to the Qimonda estate the Inotera Shares still owned by Micron B.V. and pay to the Qimonda estate compensation in an amount to be specified for any Inotera Shares sold to third parties; and (2) that Micron B.V. pay the Qimonda estate as compensation an amount to be specified for benefits derived by Micron B.V. from ownership of the Inotera Shares. The interlocutory judgments had no immediate, enforceable effect and Micron, accordingly, was able to continue to operate with full control of the Inotera Shares subject to further developments in the case. Micron and Micron B.V. appealed the judgments to the German Appeals Court, which thereafter appointed an independent expert to perform an evaluation of Dr. Jaffé's claims that the amount Micron paid for Qimonda was less than fair market value. On March 31, 2020, the expert presented an opinion to the Appeals Court concluding that the amount paid by Micron was within an acceptable range of fair value. On October 5, 2022, the Appeals Court ruled that the relevant issue to be addressed is whether Qimonda's creditors were prejudiced such that the original transaction should be voided.

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On May 9, 2023, Micron and Dr. Jaffé reached an agreement to dismiss the case in exchange for a one-time payment by Micron to the Qimonda estate and a waiver of each party's claims. The agreement was formally entered by the Appeals Court in July 2023 and the case was dismissed.

### Antitrust Matters

Six cases have been filed against Micron alleging price fixing of DRAM products in the following Canadian courts on the dates indicated: Superior Court of Quebec (April 30, 2018 and May 3, 2018), the Federal Court of Canada (May 2, 2018), the Ontario Superior Court of Justice (May 15, 2018), and the Supreme Court of British Columbia (May 10, 2018). The plaintiffs in these cases are individuals seeking certification of class actions on behalf of direct and indirect purchasers of DRAM in Canada (or regions of Canada) between June 1, 2016 and February 1, 2018.

On May 15, 2018, the Chinese State Administration for Market Regulation ("SAMR") notified Micron that it was investigating potential collusion and other anticompetitive conduct by DRAM suppliers in China. On May 31, 2018, SAMR made unannounced visits to our sales offices in Beijing, Shanghai, and Shenzhen to seek certain information as part of its investigation. We are cooperating with SAMR in its investigation.

### Securities Matters

On February 9, 2021, a derivative complaint was filed by a shareholder against Sanjay Mehrotra and other current and former directors of Micron, allegedly on behalf of and for the benefit of Micron, in the U.S. District Court for the District of Delaware alleging violations of securities laws, breaches of fiduciary duties, and other violations of law involving allegedly false and misleading statements about Micron's commitment to diversity and progress in diversifying its workforce, executive leadership, and Board of Directors. The complaint seeks damages, fees, interest, costs, and an order requiring Micron to take various actions to allegedly improve its corporate governance and internal procedures.

### Other Matters

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify another party. It is not possible to predict the maximum potential amount of future payments under these types of agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, our payments under these types of agreements have not had a material adverse effect on our business, results of operations, or financial condition.

### Contingency Assessment

We are unable to predict the outcome of any of the matters noted above and cannot make a reasonable estimate of the potential loss or range of possible losses. A determination that our products or manufacturing processes infringe the intellectual property rights of others or entering into a license agreement covering such intellectual property could result in significant liability and/or require us to make material changes to our products and/or manufacturing processes. Any of the foregoing, as well as the resolution of any other legal matter noted above, could have a material adverse effect on our business, results of operations, or financial condition.

## Equity

### Common Stock Repurchases

Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. We repurchased 8.6 million shares of our common stock for \$425 million in 2023 and 35.4 million shares for \$2.43 billion in 2022. Through August 31, 2023, we had repurchased an aggregate of \$6.89 billion under the authorization. Amounts repurchased are included in treasury stock.



[Table of Contents](#)**Dividends**

In each quarter of 2023, we declared and paid dividends of \$126 million (\$0.115 per share). On September 27, 2023, our Board of Directors declared a quarterly dividend of \$0.115 per share, payable in cash on October 25, 2023, to shareholders of record as of the close of business on October 10, 2023.

**Accumulated Other Comprehensive Income (Loss)**

Changes in accumulated other comprehensive income (loss) by component for the year ended August 31, 2023 were as follows:

	Gains (Losses) on Derivative Instruments	Unrealized Gains (Losses) on Investments	Pension Liability Adjustments	Cumulative Foreign Currency Translation Adjustment	Total
<b>As of September 1, 2022</b>	\$ (538)	\$ (47)	\$ 25	\$ —	\$ (560)
Other comprehensive income (loss) before reclassifications	19	18	17	(3)	51
Amount reclassified out of accumulated other comprehensive income (loss)	261	1	(2)	—	260
Tax effects	(46)	(13)	(4)	—	(63)
Other comprehensive income (loss)	234	6	11	(3)	248
<b>As of August 31, 2023</b>	\$ (304)	\$ (41)	\$ 36	\$ (3)	\$ (312)

**Fair Value Measurements**

The estimated fair values and carrying values of our outstanding debt instruments were as follows:

	As of August 31, 2023		As of September 1, 2022	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Notes	\$ 11,549	\$ 12,049	\$ 5,472	\$ 6,020

The fair values of our debt instruments were estimated based on Level 2 inputs, including the trading price of our notes when available, discounted cash flows, and interest rates based on similar debt issued by parties with credit ratings similar to ours.

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## Derivative Instruments

	Notional or Contractual Amount	Fair Value of	
		Assets <sup>(1)</sup>	Liabilities <sup>(2)</sup>
<b>As of August 31, 2023</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 3,873	\$ 16	\$ (180)
Cash flow commodity hedges	331	45	—
Fair value interest rate hedges	900	—	(100)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	1,839	2	(17)
		\$ 63	\$ (297)
<b>As of September 1, 2022</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 5,427	\$ —	\$ (330)
Cash flow commodity hedges	97	1	(6)
Fair value interest rate hedges	900	—	(91)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	2,821	7	(13)
		\$ 8	\$ (440)

<sup>(1)</sup> Included in receivables and other noncurrent assets.

<sup>(2)</sup> Included in accounts payable and accrued expenses and other noncurrent liabilities.

### Derivative Instruments with Hedge Accounting Designation

**Cash Flow Hedges:** We utilize forward and swap contracts that generally mature within two years designated as cash flow hedges to minimize our exposure to changes in currency exchange rates or commodity prices for certain capital expenditures and manufacturing costs. Forward and swap contracts are measured at fair value based on market-based observable inputs including market spot and forward rates, interest rates, and credit-risk spreads (Level 2). We recognized gains from cash flow hedges of \$30 million for 2023, and losses of \$735 million and \$52 million for 2022 and 2021, respectively, in accumulated other comprehensive income (loss). We recognized losses related to amounts excluded from hedge effectiveness testing on our cash flow hedges of \$101 million in 2023 in cost of goods sold through an amortization approach. The amounts recognized in 2022 and 2021 were not significant. We reclassified losses of \$261 million and \$53 million in 2023 and 2022, respectively, and gains of \$41 million in 2021, from accumulated other comprehensive income (loss) to earnings, primarily to cost of goods sold. As of August 31, 2023, we expect to reclassify \$177 million of pre-tax losses related to cash flow hedges from accumulated other comprehensive income (loss) into earnings in the next 12 months.

**Fair Value Hedges:** We utilize fixed-to-floating interest rate swaps designated as fair value hedges to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Interest rate swaps are measured at fair value based on market-based observable inputs including interest rates and credit-risk spreads (Level 2). The changes in the fair values of derivatives designated as fair value hedges and the offsetting changes in the underlying fair values of the hedged items are both recognized in earnings. When a derivative is no longer designated as a fair value hedge for any reason, including termination and maturity, the remaining unamortized difference between the carrying value of the hedged item at that time and the face value of the hedged item is amortized to earnings over the remaining life of the hedged item, or immediately if the hedged item has matured or been extinguished. We recognized interest expense of \$96 million for changes in the fair value of our interest rate swaps in 2022 and the impact to interest expense was not significant for 2023 or 2021. We also recognized offsetting reductions in interest expense of the same amounts related to the changes in the fair value of the hedged portion of the underlying debt for these periods.



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### Derivative Instruments without Hedge Accounting Designation

**Currency Derivatives:** We generally utilize a rolling hedge strategy with currency forward contracts that mature within three months to hedge our exposures of monetary assets and liabilities from changes in currency exchange rates. At the end of each reporting period, monetary assets and liabilities denominated in currencies other than the U.S. dollar are remeasured into U.S. dollars and the associated outstanding forward contracts are marked to market. Currency forward contracts are valued at fair values based on the middle of bid and ask prices of dealers or exchange quotations (Level 2). Realized and unrealized gains and losses on derivative instruments without hedge accounting designation as well as the changes in the underlying monetary assets and liabilities from changes in currency exchange rates are included in other non-operating income (expense), net. The amounts recognized for derivative instruments without hedge accounting designation were not significant for the periods presented. We do not use derivative instruments for speculative purposes.

### Derivative Counterparty Credit Risk and Master Netting Arrangements

Our derivative instruments expose us to credit risk to the extent counterparties may be unable to meet the terms of the contracts. Our maximum exposure to loss due to credit risk if counterparties fail completely to perform according to the terms of the contracts would generally equal the fair value of assets for these contracts as listed in the tables above. We seek to mitigate such risk by limiting our counterparties to major financial institutions and by spreading risk across multiple financial institutions. As of August 31, 2023 and September 1, 2022, amounts netted under our master netting arrangements were not significant.

## Equity Plans

As of August 31, 2023, 95 million shares of our common stock were available for future awards under our equity plans, including 14 million shares approved for issuance under our employee stock purchase plan ("ESPP").

### Restricted Stock and Restricted Stock Units ("Restricted Stock Awards")

As of August 31, 2023, there were 29 million shares of Restricted Stock Awards outstanding, 26 million of which contained only service conditions. For service-based Restricted Stock Awards granted through October 2021, restrictions generally lapse in one-fourth or one-third increments during each year of employment after the grant date. For service-based Restricted Stock Awards granted beginning in November 2021, restrictions generally lapse on 25% or 33% of the units granted after the first year and on 6.25% or 8.33% each quarter thereafter over the remaining three or two years of employment. Restrictions generally lapse on Restricted Stock with performance or market conditions as conditions are met over a 3-year period. At the end of the performance period, the number of actual shares to be awarded will vary between 0% and 200% of target amounts, depending upon the achievement level. In 2022, our Board of Directors approved dividend equivalent rights for unvested restricted stock units awarded on or after October 13, 2021.

Restricted Stock Awards activity for 2023 is summarized as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding as of September 1, 2022	23	\$ 60.93
Granted	17	55.99
Restrictions lapsed	(9)	58.23
Canceled	(2)	58.00
Outstanding as of August 31, 2023	29	59.11

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For the year ended	2023	2022	2021
Restricted stock award shares granted	17	13	11
Weighted-average grant-date fair value per share	\$ 55.99	\$ 70.81	\$ 53.58
Aggregate vesting-date fair value of shares vested	\$ 514	\$ 498	\$ 385

### Employee Stock Purchase Plan (“ESPP”)

Our ESPP is offered to substantially all employees and permitted eligible employees to purchase shares of our common stock through payroll deductions of up to 10% of their eligible compensation, subject to certain limitations prior to August 2021. Beginning in August 2021, employees are permitted to deduct up to 15% of their eligible compensation to purchase shares under the ESPP. The purchase price of the shares under the ESPP equals 85% of the lower of the fair market value of our common stock on either the first or last day of each six-month offering period. Compensation expense is calculated as of the beginning of the offering period as the fair value of the employees' purchase rights utilizing the Black-Scholes option valuation model and is recognized over the offering period. Grant-date fair value and assumptions used in the Black-Scholes option valuation model were as follows:

For the year ended	2023	2022	2021
Weighted-average grant-date fair value per share	\$ 17.06	\$ 18.87	\$ 20.71
Average expected life in years	0.5	0.5	0.5
Weighted-average expected volatility (based on implied volatility)	37 %	43 %	41 %
Weighted-average risk-free interest rate	5.1 %	2.0 %	0.1 %
Expected dividend yield	0.7 %	0.6 %	0.3 %

Under the ESPP, employees purchased 5 million, 4 million, and 3 million shares of common stock in 2023, 2022, and 2021, respectively, at a per share weighted average price of \$51.93, \$58.52, and \$51.42, respectively.

### Stock Options

As of August 31, 2023, stock options of 2 million shares were outstanding, all of which were fully exercisable. Stock options expire 8 years from the date of grant. We did not grant any stock options in 2023, 2022, or 2021. Stock options of 1 million shares were exercised in 2023. The total intrinsic value for options exercised was \$30 million, \$54 million, and \$143 million in 2023, 2022, and 2021, respectively.

### Stock-based Compensation Expense

For the year ended	2023	2022	2021
Stock-based compensation expense by caption			
Research and development	\$ 226	\$ 175	\$ 110
Cost of goods sold	201	193	186
Selling, general, and administrative	137	133	99
Restructure	(7)	(5)	—
	\$ 557	\$ 496	\$ 395
Stock-based compensation expense by type of award			
Restricted stock awards	\$ 488	\$ 429	\$ 333
ESPP	69	66	52
Stock options	—	1	10
	\$ 557	\$ 496	\$ 395

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Income tax benefits related to the tax deductions for share-based awards are recognized only upon the settlement of the related share-based awards. Income tax benefits for share-based awards were \$68 million, \$77 million, and \$83 million for 2023, 2022, and 2021, respectively. Stock-based compensation expense of \$88 million and \$48 million was capitalized and remained in inventory as of August 31, 2023 and September 1, 2022, respectively. As of August 31, 2023, \$1.26 billion of total unrecognized compensation costs for unvested awards, before the effect of any future forfeitures, was expected to be recognized through the fourth quarter of 2027, resulting in a weighted-average period of 1.3 years.

## Employee Benefit Plans

We have employee retirement plans at our U.S. and international sites. Details of significant plans are as follows:

### Employee Savings Plan for U.S. Employees

We have a 401(k) retirement plan under which U.S. employees may contribute up to 75% of their eligible pay, subject to Internal Revenue Service annual contribution limits, to various savings alternatives, none of which include direct investment in our stock. We match in cash eligible contributions from employees up to 5% of the employee's annual eligible earnings. Contribution expense for the 401(k) plan was \$59 million, \$66 million, and \$77 million in 2023, 2022, and 2021, respectively.

### Retirement Plans

We have pension plans available to employees at various foreign sites. As of August 31, 2023, the projected benefit obligations of our plans were \$175 million and plan assets were \$232 million. As of September 1, 2022, the projected benefit obligations of our plans were \$186 million and plan assets were \$221 million. Pension expense was not material for 2023, 2022, or 2021.

## Government Incentives

We receive incentives from governmental entities primarily in India, Japan, Singapore, Taiwan, and the United States principally in the form of cash grants and tax credits. These incentives primarily relate to capital expenditures, have initial terms ranging from one year to 15 years, and may be subject to reimbursement if certain conditions are not met or maintained. The conditions attached to these incentives require us to incur expenditures related to the construction of new manufacturing facilities, the purchase and installation of specialized tools and equipment, R&D expenditures, and/or maintain certain levels of fixed asset investment or employee headcount during the incentive terms.

The line items on the balance sheet affected by government incentives were as follows:

As of	August 31, 2023
Receivables	\$ 105
Other noncurrent assets	179
Other current liabilities	11
Noncurrent unearned government incentives	727

As of August 31, 2023, we had aggregate commitments from various governmental entities of up to \$2 billion to be received through 2033 (in addition to the receivables and other noncurrent assets in the table above), subject to achievement of certain performance conditions. We also receive a 25% investment tax credit on qualified investments in U.S. semiconductor manufacturing under the CHIPS Act. Subsequent to August 31, 2023, we finalized an incentive arrangement under which we will receive additional grants of up to \$1.3 billion.

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Government incentives related to capital expenditures have reduced property, plant and equipment by \$1.57 billion as of August 31, 2023, of which \$584 million pertained to 2023 expenditures.

In 2023, operating income (loss) benefited by \$318 million (approximately 93% in COGS and 7% in R&D) from government incentives recognized as a reduction of expense, primarily in the form of reduced depreciation expense.

## Revenue

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Substantially all contracts with our customers are short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. From time to time, we have contracts with initial terms that include performance obligations that extend beyond one year. As of August 31, 2023, our future performance obligations beyond one year were not significant.

As of August 31, 2023 and September 1, 2022, other current liabilities included \$453 million and \$1.26 billion, respectively, for estimates of consideration payable to customers including estimates for pricing adjustments and returns.

In 2023, we received an aggregate of \$228 million from settlements of insurance claims involving a power disruption in 2022 and an operational disruption in 2017, of which \$186 million was for business interruption and recognized in revenue.

### Revenue by Technology

For the year ended	2023	2022	2021
DRAM	\$ 10,978	\$ 22,386	\$ 20,039
NAND	4,206	7,811	7,007
Other (primarily NOR)	356	561	659
	<u>\$ 15,540</u>	<u>\$ 30,758</u>	<u>\$ 27,705</u>

See "Segment and Other Information" for disclosure of disaggregated revenue by market segment.

## Restructure and Asset Impairments

For the year ended	2023	2022	2021
Employee severance	\$ 163	\$ —	\$ 3
Asset impairments and other asset-related costs	14	63	478
Other	(6)	(15)	7
	<u>\$ 171</u>	<u>\$ 48</u>	<u>\$ 488</u>

In 2023, we initiated the 2023 Restructure Plan in response to challenging industry conditions. Under the 2023 Restructure Plan, we expect our headcount reduction to approach 15% by the end of calendar 2023 through a combination of voluntary attrition and personnel reductions. In connection with the plan, we incurred restructure charges of \$171 million in 2023, primarily related to employee severance costs. The plan was substantially completed in the third quarter of 2023. As of August 31, 2023, we had paid \$167 million in 2023 in connection with the 2023 Restructure Plan and the remaining liability was \$4 million.

Restructure and asset impairments for 2022 and 2021 are primarily related to the sale of our Lehi, Utah facility. See "Lehi, Utah Fab and 3D XPoint."

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## Other Operating (Income) Expense, Net

For the year ended	2023	2022	2021
Goodwill impairment	\$ 101	\$ —	\$ —
Litigation settlement	68	—	—
Patent license charges	—	—	128
(Gain) loss on disposition of property, plant, and equipment	(54)	(41)	(24)
Other	9	7	(9)
	<u>\$ 124</u>	<u>\$ (34)</u>	<u>\$ 95</u>

## Other Non-Operating Income (Expense), Net

For the year ended	2023	2022	2021
Gain (loss) on investments	\$ (8)	\$ 26	\$ 82
Loss on debt repurchases and conversions	—	(83)	(1)
Other	15	19	—
	<u>\$ 7</u>	<u>\$ (38)</u>	<u>\$ 81</u>

## Income Taxes

Our income tax (provision) benefit consisted of the following:

For the year ended	2023	2022	2021
Income (loss) before income taxes and equity in net income (loss) of equity method investees			
U.S.	\$ 235	\$ 112	\$ (211)
Foreign	(5,893)	9,459	6,429
	<u>\$ (5,658)</u>	<u>\$ 9,571</u>	<u>\$ 6,218</u>
Income tax (provision) benefit			
Current			
U.S. federal	\$ (5)	\$ (65)	\$ (42)
State	(1)	(1)	(1)
Foreign	(178)	(528)	(370)
	<u>(184)</u>	<u>(594)</u>	<u>(413)</u>
Deferred			
U.S. federal	(84)	(166)	(9)
State	—	(225)	28
Foreign	91	97	—
	<u>7</u>	<u>(294)</u>	<u>19</u>
Income tax (provision) benefit	<u>\$ (177)</u>	<u>\$ (888)</u>	<u>\$ (394)</u>

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The table below reconciles our tax (provision) benefit based on the U.S. federal statutory rate to our effective rate:

For the year ended	2023		2022		2021	
U.S. federal income tax (provision) benefit at statutory rate	\$ 1,188	21.0 %	\$ (2,010)	21.0 %	\$ (1,306)	21.0 %
U.S. tax on foreign operations	6	0.1 %	(322)	3.4 %	(226)	3.6 %
Change in valuation allowance	(50)	(0.9)%	(241)	2.5 %	54	(0.9)%
Change in unrecognized tax benefits	(30)	(0.5)%	(67)	0.7 %	(238)	3.8 %
Foreign tax rate differential	(1,285)	(22.8)%	1,601	(16.7)%	951	(15.4)%
Research and development tax credits	43	0.8 %	66	(0.7)%	123	(2.0)%
State taxes, net of federal benefit	37	0.7 %	—	— %	59	(0.9)%
Debt premium deductions	—	— %	—	— %	130	(2.1)%
Other	(86)	(1.5)%	85	(0.9)%	59	(0.8)%
Income tax (provision) benefit	\$ (177)	(3.1)%	\$ (888)	9.3 %	\$ (394)	6.3 %

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. As a result of a loss before taxes and geographic mix of income, the benefit from tax incentive arrangements was not material for 2023. These arrangements reduced our tax provision by \$1.12 billion (benefiting our diluted earnings per share by \$1.00) for 2022 and by \$758 million (\$0.66 per diluted share) for 2021.

As of August 31, 2023, certain non-U.S. subsidiaries had cumulative undistributed earnings of \$4.28 billion that were deemed to be indefinitely reinvested. A provision has not been recognized to the extent that distributions from such subsidiaries are subject to additional foreign withholding or state income tax. Determination of the amount of unrecognized deferred tax liabilities related to investments in these foreign subsidiaries is not practicable.





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Deferred income taxes reflect the net tax effects of temporary differences between the bases of assets and liabilities for financial reporting and income tax purposes as well as carryforwards. Deferred tax assets and liabilities consist of the following:

As of	August 31, 2023	September 1, 2022
<b>Deferred tax assets</b>		
Net operating loss and tax credit carryforwards	\$ 1,112	\$ 796
Accrued salaries, wages, and benefits	39	157
Operating lease liabilities	135	138
Inventories	52	77
Property, plant, and equipment	—	44
Other	75	142
Gross deferred tax assets	1,413	1,354
Less valuation allowance	(528)	(471)
Deferred tax assets, net of valuation allowance	885	883
<b>Deferred tax liabilities</b>		
Right-of-use assets	(115)	(126)
Property, plant, and equipment	(31)	—
Other	(100)	(68)
Deferred tax liabilities	(246)	(194)
Net deferred tax assets	\$ 639	\$ 689
<b>Reported as</b>		
Deferred tax assets	\$ 756	\$ 702
Deferred tax liabilities (included in other noncurrent liabilities)	(117)	(13)
Net deferred tax assets	\$ 639	\$ 689

We assess positive and negative evidence for each jurisdiction to determine whether it is more likely than not that existing deferred tax assets will be realized. As of August 31, 2023, and September 1, 2022, we had a valuation allowance of \$528 million and \$471 million, respectively, against our net deferred tax assets, primarily related to carryforwards in U.S. states and Malaysia. Changes in 2023 in the valuation allowance were due to adjustments based on management's assessment of the realizability of tax credits, allowances and net operating losses based on a level that is more likely than not to be realized.

As of August 31, 2023, our net operating loss carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Expiration	Singapore	Malaysia	State	Japan	Other	Total
2024 - 2028	\$ —	\$ —	\$ 47	\$ 336	\$ 25	\$ 408
2029 - 2033	—	—	348	321	109	778
2034 - 2038	—	—	237	—	—	237
2039 - 2043	—	—	183	—	—	183
Indefinite	1,688	1,025	60	—	202	2,975
	\$ 1,688	\$ 1,025	\$ 875	\$ 657	\$ 336	\$ 4,581

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As of August 31, 2023, our federal and state tax credit carryforward amounts and expiration periods, as reported to tax authorities, were as follows:

Year of Tax Credit Expiration	U.S. Federal	State	Total
2024 - 2028	\$ —	\$ 51	\$ 51
2029 - 2033	—	120	120
2034 - 2038	—	137	137
2039 - 2043	306	5	311
Indefinite	—	131	131
	<u>\$ 306</u>	<u>\$ 444</u>	<u>\$ 750</u>

Below is a reconciliation of the beginning and ending amount of our unrecognized tax benefits:

For the year ended	2023	2022	2021
Beginning unrecognized tax benefits	\$ 731	\$ 660	\$ 411
Increases related to tax positions from prior years	2	14	2
Increases related to prior year tax positions taken in current year	27	—	—
Increases related to tax positions taken in current year	17	80	260
Decreases related to tax positions from prior years	(33)	(23)	(13)
Ending unrecognized tax benefits	<u>\$ 744</u>	<u>\$ 731</u>	<u>\$ 660</u>

As of August 31, 2023, gross unrecognized tax benefits were \$744 million, which would have an impact of approximately \$581 million on our effective tax rate in the future, if recognized. Amounts accrued for interest and penalties related to uncertain tax positions were not significant for any period presented. The resolution of tax audits or expiration of statute of limitations could also reduce our unrecognized tax benefits. Although the timing of final resolution is uncertain, the estimated potential reduction in our unrecognized tax benefits in the next 12 months would not be significant.

We and our subsidiaries file income tax returns with the U.S. federal government, various U.S. states, and various foreign jurisdictions throughout the world. We regularly engage in discussions and negotiations with tax authorities regarding tax matters, including transfer pricing, and we continue to defend any and all such claims presented. Our U.S. federal and state tax returns remain open to examination for 2018 through 2023. We are currently under audit by the Internal Revenue Service for our 2018 and 2019 tax years. In addition, tax returns that remain open to examination in Singapore, Taiwan and Japan range from the years 2014 to 2023. We believe that adequate amounts of taxes and related interest and penalties have been provided, and any adjustments as a result of examinations are not expected to materially adversely affect our business, results of operations, or financial condition.

## Earnings Per Share

For the year ended	2023	2022	2021
Net income (loss) – Basic and Diluted	\$ (5,833)	\$ 8,687	\$ 5,861
Weighted-average common shares outstanding – Basic	1,093	1,112	1,120
Dilutive effect of equity plans and convertible notes	—	10	21
Weighted-average common shares outstanding – Diluted	<u>1,093</u>	<u>1,122</u>	<u>1,141</u>
Earnings (loss) per share			
Basic	\$ (5.34)	\$ 7.81	\$ 5.23
Diluted	(5.34)	7.75	5.14



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Antidilutive potential common shares excluded from the computation of diluted earnings per share, that could dilute basic earnings per share in the future, were as follows at the end of the periods shown:

For the year ended	2023	2022	2021
Equity plans	33	5	2

## Segment and Other Information

Segment information reported herein is consistent with how it is reviewed and evaluated by our chief operating decision maker. We have the following four business units, which are our reportable segments:

**Compute and Networking Business Unit (“CNBU”):** Includes memory products and solutions sold into client, cloud server, enterprise, graphics, and networking markets.

**Mobile Business Unit (“MBU”):** Includes memory and storage products sold into smartphone and other mobile-device markets.

**Embedded Business Unit (“EBU”):** Includes memory and storage products and solutions sold into automotive, industrial, and consumer markets.

**Storage Business Unit (“SBU”):** Includes SSDs and component-level solutions sold into enterprise and cloud, client, and consumer storage markets.

Certain operating expenses directly associated with the activities of a specific segment are charged to that segment. Other indirect operating income and expenses are generally allocated to segments based on their respective percentage of cost of goods sold or forecasted wafer production. We do not identify or report internally our assets (other than goodwill) or capital expenditures by segment, nor do we allocate gains and losses from equity method investments, interest, other non-operating income or expense items, or taxes to segments.

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For the year ended	2023	2022	2021
<b>Revenue</b>			
CNBU	\$ 5,710	\$ 13,693	\$ 12,280
MBU	3,630	7,260	7,203
EBU	3,637	5,235	4,209
SBU	2,553	4,553	3,973
All Other	10	17	40
	<u>\$ 15,540</u>	<u>\$ 30,758</u>	<u>\$ 27,705</u>
<b>Operating income (loss)</b>			
CNBU	\$ (585)	\$ 5,844	\$ 4,295
MBU	(1,750)	2,160	2,173
EBU	382	1,752	1,006
SBU	(1,887)	513	173
All Other	8	12	20
	<u>(3,832)</u>	<u>10,281</u>	<u>7,667</u>
<b>Unallocated</b>			
Provision to write down inventories to net realizable value	(1,831)	—	—
Lower costs from sale of inventory written down in prior periods	844	—	—
Stock-based compensation	(564)	(501)	(395)
Inventory accounting policy change to FIFO	—	—	(133)
Change in inventory cost absorption	—	—	(160)
3D XPoint inventory write-down	—	—	(49)
Restructure and asset impairments	(171)	(48)	(488)
Goodwill impairment	(101)	—	—
Litigation settlement	(68)	—	—
Patent license charges	—	—	(128)
Other	(22)	(30)	(31)
	<u>(1,913)</u>	<u>(579)</u>	<u>(1,384)</u>
Operating income (loss)	<u>\$ (5,745)</u>	<u>\$ 9,702</u>	<u>\$ 6,283</u>

Depreciation and amortization expense included in operating income (loss) was as follows:

For the year ended	2023	2022	2021
CNBU	\$ 2,512	\$ 2,766	\$ 2,497
MBU	2,149	1,725	1,553
EBU	1,324	1,280	1,028
SBU	1,751	1,323	1,101
All Other	1	2	8
Unallocated	19	20	27
	<u>\$ 7,756</u>	<u>\$ 7,116</u>	<u>\$ 6,214</u>

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## Certain Concentrations

Revenue by market segment as an approximate percent of total revenue is presented in the table below:

For the year ended	2023	2022	2021
Automotive, industrial, and consumer	25 %	15 %	15 %
Mobile	25 %	25 %	25 %
Client and graphics	15 %	20 %	20 %
Enterprise and cloud server	15 %	20 %	20 %
SSDs and other storage	15 %	15 %	15 %

No customer accounted for 10% or more of total revenue in 2023. Revenue from Kingston Technology Company, Inc. was 12% of total revenue in 2022 and revenue from WPG Holdings Limited was 11% and 13% of total revenue in 2022 and 2021, respectively. Sales to Kingston were primarily included in our CNBU and SBU segments and sales to WPG were primarily included in our MBU, CNBU, and EBU segments.

We generally have multiple sources of supply for our raw materials and production equipment; however, only a limited number of suppliers are capable of delivering certain raw materials and production equipment that meet our standards and, in some cases, materials or production equipment are provided by a single supplier.

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash, money market accounts, certificates of deposit, fixed-rate debt securities, trade receivables, share repurchase, and derivative contracts. We invest through high-credit-quality financial institutions and, by policy, generally limit the concentration of credit exposure by restricting investments with any single obligor and monitoring credit risk of bank counterparties on an ongoing basis. A concentration of credit risk may exist with respect to receivables of certain customers. We perform ongoing credit evaluations of customers worldwide and generally do not require collateral from our customers. Historically, we have not experienced material losses on receivables. A concentration of risk may also exist with respect to our foreign currency hedges as the number of counterparties to our hedges is limited and the notional amounts are relatively large. We seek to mitigate such risk by limiting our counterparties to major financial institutions and through entering into master netting arrangements.

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## Geographic Information

Revenue based on the geographic location of our customers' headquarters was as follows:

For the year ended	2023	2022	2021
United States	\$ 7,805	\$ 16,026	\$ 12,155
Taiwan	2,697	6,185	6,606
Mainland China (excluding Hong Kong)	2,181	3,311	2,456
Japan	987	1,696	1,652
Other Asia Pacific	752	1,223	1,420
Europe	682	505	573
Hong Kong	340	1,665	2,582
Other	96	147	261
	<u>\$ 15,540</u>	<u>\$ 30,758</u>	<u>\$ 27,705</u>

Long-lived assets by geographic area consisted of property, plant, and equipment and operating lease right-of-use assets and were as follows:

As of	August 31, 2023	September 1, 2022
Taiwan	\$ 12,926	\$ 13,143
Singapore	11,283	12,045
Japan	7,323	7,113
United States	5,196	5,155
Malaysia	1,124	994
China	395	440
Other	347	337
	<u>\$ 38,594</u>	<u>\$ 39,227</u>



**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Micron Technology, Inc.

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of Micron Technology, Inc. and its subsidiaries (the "Company") as of August 31, 2023 and September 1, 2022, and the related consolidated statements of operations, of comprehensive income (loss), of changes in equity and of cash flows for each of the three years in the period ended August 31, 2023, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended August 31, 2023 appearing under Item 15 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of August 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of August 31, 2023 and September 1, 2022, and the results of its operations and its cash flows for each of the three years in the period ended August 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

***Change in Accounting Principle***

As discussed in the Significant Accounting Policies and Inventories notes to the consolidated financial statements, the Company changed the manner in which it accounts for inventory costing from the average cost inventory accounting method to the first-in, first-out inventory accounting method in 2021.

***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

**Definition and Limitations of Internal Control over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

**Critical Audit Matters**

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

**Net Realizable Value of Finished Goods and Work in Process Inventories**

As described in the Inventories note to the consolidated financial statements, as of August 31, 2023, the Company had net finished goods and work in process inventories totaling \$7.7 billion. As disclosed by management, determining the net realizable value of the Company's finished goods and work in process inventories involves significant judgments, including projecting future average selling prices, future sales volumes, and future cost per part. The memory and storage industry environment deteriorated sharply in the fourth quarter of 2022 and throughout 2023 due to weak demand in many end markets combined with global and macroeconomic challenges and lower demand resulting from customer actions to reduce elevated inventory levels. This led to significant reductions in average selling prices for both DRAM and NAND, resulting in declines in revenue across all of the Company's business segments and nearly all end markets. The Company recorded charges of \$1.83 billion to cost of goods sold to write down the carrying value of work in process and finished goods inventories to their estimated net realizable value.

The principal considerations for our determination that performing procedures relating to the net realizable value of finished goods and work in process inventories is a critical audit matter are (i) the significant judgment by management in determining the net realizable value of finished goods and work in process inventories and (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to future average selling prices and future cost per part.



Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's determination of the net realizable value of finished goods and work in process inventories, including controls over significant assumptions and data utilized. These procedures also included, among others (i) testing management's process for determining the net realizable value of finished goods and work in process inventories; (ii) evaluating the appropriateness of management's methodology; (iii) testing the completeness and accuracy of underlying data used in determining the net realizable value; and (iv) evaluating the reasonableness of management's significant assumptions related to future average selling prices and future cost per part. Evaluating management's assumption related to future average selling prices for certain products involved evaluating whether the assumption used by management was reasonable considering (i) current and past results, including recent sales; (ii) the consistency with external market, industry data or current contract prices; (iii) a comparison of the prior year estimates to actual results in the current fiscal year; and (iv) whether the assumption was consistent with evidence obtained in other areas of the audit. Evaluating management's assumption related to future cost per part for certain products involved evaluating whether the assumption used by management was reasonable considering (i) current and past results; (ii) a comparison of the prior year estimates to actual results in the current fiscal year; and (iii) whether the assumption was consistent with evidence obtained in other areas of the audit.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
October 6, 2023

We have served as the Company's auditor since 1984.

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**PART I. FINANCIAL INFORMATION**  
**ITEM 1. FINANCIAL STATEMENTS**

**Micron Technology, Inc.**  
**Consolidated Statements of Operations**

(In millions, except per share amounts)  
(Unaudited)

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Revenue	\$ 5,824	\$ 3,693	\$ 10,550	\$ 7,778
Cost of goods sold	4,745	4,899	9,506	8,091
Gross margin	1,079	(1,206)	1,044	(313)
Research and development	832	788	1,677	1,637
Selling, general, and administrative	280	231	543	482
Restructure and asset impairments	—	86	—	99
Other operating (income) expense, net	(224)	(8)	(239)	(19)
Operating income (loss)	191	(2,303)	(937)	(2,512)
Interest income	130	119	262	207
Interest expense	(144)	(89)	(276)	(140)
Other non-operating income (expense), net	(7)	2	(34)	(2)
	170	(2,271)	(985)	(2,447)
Income tax (provision) benefit	622	(54)	549	(62)
Equity in net income (loss) of equity method investees	1	13	(5)	2
Net income (loss)	\$ 793	\$ (2,312)	\$ (441)	\$ (2,507)
Earnings (loss) per share				
Basic	\$ 0.72	\$ (2.12)	\$ (0.40)	\$ (2.30)
Diluted	0.71	(2.12)	(0.40)	(2.30)
Number of shares used in per share calculations				
Basic	1,104	1,091	1,102	1,091
Diluted	1,114	1,091	1,102	1,091

See accompanying notes to consolidated financial statements.

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**Micron Technology, Inc.**  
**Consolidated Statements of Comprehensive Income (Loss)**

(In millions)  
(Unaudited)

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Net income (loss)	\$ 793	\$ (2,312)	\$ (441)	\$ (2,507)
Other comprehensive income (loss), net of tax				
Gains (losses) on derivative instruments	(11)	92	33	200
Pension liability adjustments	(3)	—	(1)	1
Unrealized gains (losses) on investments	9	7	16	(12)
Foreign currency translation adjustments	1	1	—	(2)
Other comprehensive income (loss)	(4)	100	48	187
Total comprehensive income (loss)	\$ 789	\$ (2,212)	\$ (393)	\$ (2,320)

See accompanying notes to consolidated financial statements.



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## Micron Technology, Inc. Consolidated Balance Sheets

(In millions, except par value amounts)  
(Unaudited)

As of	February 29, 2024	August 31, 2023
<b>Assets</b>		
Cash and equivalents	\$ 8,016	\$ 8,577
Short-term investments	990	1,017
Receivables	4,296	2,443
Inventories	8,443	8,387
Other current assets	1,690	820
<b>Total current assets</b>	<b>23,435</b>	<b>21,244</b>
Long-term marketable investments	627	844
Property, plant, and equipment	37,587	37,928
Operating lease right-of-use assets	642	666
Intangible assets	414	404
Deferred tax assets	664	756
Goodwill	1,150	1,150
Other noncurrent assets	1,199	1,262
<b>Total assets</b>	<b>\$ 65,718</b>	<b>\$ 64,254</b>
<b>Liabilities and equity</b>		
Accounts payable and accrued expenses	\$ 4,680	\$ 3,958
Current debt	344	278
Other current liabilities	1,235	529
<b>Total current liabilities</b>	<b>6,259</b>	<b>4,765</b>
Long-term debt	13,378	13,052
Noncurrent operating lease liabilities	593	603
Noncurrent unearned government incentives	662	727
Other noncurrent liabilities	956	987
<b>Total liabilities</b>	<b>21,848</b>	<b>20,134</b>
Commitments and contingencies		
Shareholders' equity		
Common stock, \$0.10 par value, 3,000 shares authorized, 1,248 shares issued and 1,107 outstanding (1,239 shares issued and 1,098 outstanding as of August 31, 2023)	125	124
Additional capital	11,564	11,036
Retained earnings	39,997	40,824
Treasury stock, 141 shares held (141 shares as of August 31, 2023)	(7,552)	(7,552)
Accumulated other comprehensive income (loss)	(264)	(312)
<b>Total equity</b>	<b>43,870</b>	<b>44,120</b>
<b>Total liabilities and equity</b>	<b>\$ 65,718</b>	<b>\$ 64,254</b>

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Changes in Equity

(In millions, except per share amounts)  
(Unaudited)

	Common Stock		Additional Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Number of Shares	Amount					
<b>Balance at August 31, 2023</b>	1,239 \$	124 \$	11,036 \$	40,824 \$	(7,552) \$	(312) \$	44,120
Net income (loss)	—	—	—	(1,234)	—	—	(1,234)
Other comprehensive income (loss), net	—	—	—	—	—	52	52
Stock issued under stock plans	8	—	9	—	—	—	9
Stock-based compensation expense	—	—	188	—	—	—	188
Repurchase of stock - withholdings on employee equity awards	(2)	—	(16)	(105)	—	—	(121)
Dividends and dividend equivalents declared (\$0.115 per share)	—	—	—	(129)	—	—	(129)
<b>Balance at November 30, 2023</b>	1,245 \$	124 \$	11,217 \$	39,356 \$	(7,552) \$	(260) \$	42,885
Net income (loss)	—	—	—	793	—	—	793
Other comprehensive income (loss), net	—	—	—	—	—	(4)	(4)
Stock issued under stock plans	3	1	136	—	—	—	137
Stock-based compensation expense	—	—	213	—	—	—	213
Repurchase of stock - withholdings on employee equity awards	—	—	(2)	(22)	—	—	(24)
Dividends and dividend equivalents declared (\$0.115 per share)	—	—	—	(130)	—	—	(130)
<b>Balance at February 29, 2024</b>	1,248 \$	125 \$	11,564 \$	39,997 \$	(7,552) \$	(264) \$	43,870

See accompanying notes to consolidated financial statements.



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## Micron Technology, Inc. Consolidated Statements of Changes in Equity

(In millions, except per share amounts)  
(Unaudited)

	Common Stock		Additional Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Number of Shares	Amount					
<b>Balance at September 1, 2022</b>	1,226	\$ 123	\$ 10,197	\$ 47,274	\$ (7,127)	\$ (560)	\$ 49,907
Net income (loss)	—	—	—	(195)	—	—	(195)
Other comprehensive income (loss), net	—	—	—	—	—	87	87
Stock issued under stock plans	8	—	7	—	—	—	7
Stock-based compensation expense	—	—	146	—	—	—	146
Repurchase of stock - repurchase program	—	—	—	—	(425)	—	(425)
Repurchase of stock - withholdings on employee equity awards	(2)	—	(15)	(80)	—	—	(95)
Dividends and dividend equivalents declared (\$0.115 per share)	—	—	—	(126)	—	—	(126)
<b>Balance at December 1, 2022</b>	1,232	\$ 123	\$ 10,335	\$ 46,873	\$ (7,552)	\$ (473)	\$ 49,306
Net income (loss)	—	—	—	(2,312)	—	—	(2,312)
Other comprehensive income (loss), net	—	—	—	—	—	100	100
Stock issued under stock plans	3	—	142	—	—	—	142
Stock-based compensation expense	—	—	157	—	—	—	157
Repurchase of stock - withholdings on employee equity awards	—	—	(1)	(7)	—	—	(8)
Dividends and dividend equivalents declared (\$0.115 per share)	—	—	—	(128)	—	—	(128)
<b>Balance at March 2, 2023</b>	1,235	\$ 123	\$ 10,633	\$ 44,426	\$ (7,552)	\$ (373)	\$ 47,257

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc. Consolidated Statements of Cash Flows

(In millions)  
(Unaudited)

Six months ended	February 29, 2024	March 2, 2023
<b>Cash flows from operating activities</b>		
Net income (loss)	\$ (441)	\$ (2,507)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation expense and amortization of intangible assets	3,839	3,863
Stock-based compensation	401	303
Provision to write-down inventories to net realizable value	—	1,430
Change in operating assets and liabilities:		
Receivables	(1,759)	2,910
Inventories	(57)	(2,896)
Other current assets	(799)	4
Accounts payable and accrued expenses	573	(1,144)
Other current liabilities	706	(638)
Other	157	(39)
Net cash provided by operating activities	2,620	1,286
<b>Cash flows from investing activities</b>		
Expenditures for property, plant, and equipment	(3,180)	(4,654)
Purchases of available-for-sale securities	(465)	(293)
Proceeds from maturities and sales of available-for-sale securities	726	773
Proceeds from government incentives	234	64
Other	(24)	(71)
Net cash provided by (used for) investing activities	(2,709)	(4,181)
<b>Cash flows from financing activities</b>		
Repayments of debt	(1,101)	(53)
Payments of dividends to shareholders	(256)	(252)
Payments on equipment purchase contracts	(82)	(76)
Repurchases of common stock - repurchase program	—	(425)
Proceeds from issuance of debt	999	5,221
Other	(18)	19
Net cash provided by (used for) financing activities	(458)	4,434
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	(8)	9
Net increase (decrease) in cash, cash equivalents, and restricted cash	(555)	1,548
Cash, cash equivalents, and restricted cash at beginning of period	8,656	8,339
Cash, cash equivalents, and restricted cash at end of period	\$ 8,101	\$ 9,887

See accompanying notes to consolidated financial statements.

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## Micron Technology, Inc.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All tabular amounts in millions, except per share amounts)  
(Unaudited)

## Significant Accounting Policies

For a discussion of our significant accounting policies, see "Part II – Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Significant Accounting Policies" of our Annual Report on Form 10-K for the year ended August 31, 2023. There have been no changes to our significant accounting policies since our Annual Report on Form 10-K for the year ended August 31, 2023.

### Basis of Presentation

The accompanying consolidated financial statements include the accounts of Micron Technology, Inc. and our consolidated subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") consistent in all material respects with those applied in our Annual Report on Form 10-K for the year ended August 31, 2023.

In the opinion of our management, the accompanying unaudited consolidated financial statements contain all necessary adjustments, consisting of a normal recurring nature, to fairly state the financial information set forth herein. Certain reclassifications have been made to prior period amounts to conform to current period presentation.

Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal years 2024 and 2023 each contain 52 weeks. All period references are to our fiscal periods unless otherwise indicated. These interim financial statements should be read in conjunction with the consolidated financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended August 31, 2023.

## Variable Interest Entities

A number of special purpose entities (the "Lease SPEs") were created by a third-party to facilitate equipment lease financing transactions between us and financial institutions that fund the lease financing transactions ("Financing Entities"). Neither we nor the Financing Entities have an equity interest in the Lease SPEs. The Lease SPEs are variable interest entities because their equity is not sufficient to permit them to finance their activities without additional support from the Financing Entities and because the third-party equity holder lacks characteristics of a controlling financial interest. By design, the arrangements with the Lease SPEs are merely financing vehicles and we do not bear any significant risks from variable interests with the Lease SPEs. We have determined that we do not have the power to direct the activities of the Lease SPEs that most significantly impact their economic performance and we do not consolidate the Lease SPEs. As of February 29, 2024, we had approximately \$370 million of financial lease liabilities and right-of-use assets under these arrangements.



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## Cash and Investments

All of our short-term investments and long-term marketable investments were classified as available-for-sale as of the dates noted below. Cash and equivalents and the fair values of our available-for-sale investments, which approximated amortized costs, were as follows:

	As of February 29, 2024				As of August 31, 2023			
	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value	Cash and Equivalents	Short-term Investments	Long-term Marketable Investments <sup>(1)</sup>	Total Fair Value
Cash	\$ 5,588	\$ —	\$ —	\$ 5,588	\$ 5,771	\$ —	\$ —	\$ 5,771
Level 1 <sup>(2)</sup>								
Money market funds	1,204	—	—	1,204	1,629	—	—	1,629
Level 2 <sup>(3)</sup>								
Certificates of deposit	1,220	11	—	1,231	1,172	25	—	1,197
Corporate bonds	—	606	286	892	—	737	437	1,174
Asset-backed securities	—	17	330	347	—	15	387	402
Commercial paper	3	183	—	186	—	109	—	109
Government securities	1	173	11	185	5	131	20	156
	8,016	\$ 990	\$ 627	\$ 9,633	8,577	\$ 1,017	\$ 844	\$ 10,438
Restricted cash <sup>(4)</sup>	85				79			
Cash, cash equivalents, and restricted cash	\$ 8,101				\$ 8,656			

<sup>(1)</sup> The maturities of long-term marketable investments primarily range from one to five years, except for asset-backed securities which are not due at a single maturity date.

<sup>(2)</sup> The fair value of Level 1 securities is measured based on quoted prices in active markets for identical assets.

<sup>(3)</sup> The fair value of Level 2 securities is measured using information obtained from pricing services, which obtain quoted market prices for similar instruments, non-binding market consensus prices that are corroborated by observable market data, or various other methodologies, to determine the appropriate value at the measurement date. We perform supplemental analysis to validate information obtained from these pricing services. No adjustments were made to the fair values indicated by such pricing information as of February 29, 2024 or August 31, 2023.

<sup>(4)</sup> Restricted cash is included in other current assets and other noncurrent assets and primarily relates to certain government incentives received prior to being earned and for which restrictions lapse upon achieving certain performance conditions or which will be returned if performance conditions are not met.

Gross realized gains and losses from sales of available-for-sale securities were not significant for any period presented.

### Non-marketable Equity Investments

In addition to the amounts included in the table above, we had \$189 million and \$218 million of non-marketable equity investments without a readily determinable fair value that were included in other noncurrent assets as of February 29, 2024 and August 31, 2023, respectively. We recognized a loss in other non-operating income (expense) on our non-marketable investments of \$31 million for the first quarter of 2024. The amounts recognized for the other periods presented were not significant. Our non-marketable equity investments are recorded at fair value on a non-recurring basis and classified as Level 3.

[Table of Contents](#)**Receivables**

As of	February 29, 2024	August 31, 2023
Trade receivables	\$ 3,648	\$ 2,048
Income and other taxes	188	194
Other	460	201
	<u>\$ 4,296</u>	<u>\$ 2,443</u>

**Inventories**

As of	February 29, 2024	August 31, 2023
Finished goods	\$ 1,132	\$ 1,616
Work in process	6,622	6,111
Raw materials and supplies	689	660
	<u>\$ 8,443</u>	<u>\$ 8,387</u>

**Property, Plant, and Equipment**

As of	February 29, 2024	August 31, 2023
Land	\$ 283	\$ 283
Buildings	18,963	17,967
Equipment <sup>(1)</sup>	67,273	65,555
Construction in progress <sup>(2)</sup>	2,636	2,464
Software	1,393	1,316
	90,548	87,585
Accumulated depreciation	(52,961)	(49,657)
	<u>\$ 37,587</u>	<u>\$ 37,928</u>

<sup>(1)</sup> Includes costs related to equipment not placed into service of \$2.27 billion as of February 29, 2024 and \$2.91 billion as of August 31, 2023.

<sup>(2)</sup> Includes building-related construction, tool installation, and software costs for assets not placed into service.

**Intangible Assets**

	As of February 29, 2024			As of August 31, 2023		
	Gross Amount	Accumulated Amortization	Net Carrying Amount	Gross Amount	Accumulated Amortization	Net Carrying Amount
Product and process technology	\$ 646	\$ (243)	\$ 403	\$ 613	\$ (209)	\$ 404
Other	11	—	11	—	—	—
	<u>\$ 657</u>	<u>\$ (243)</u>	<u>\$ 414</u>	<u>\$ 613</u>	<u>\$ (209)</u>	<u>\$ 404</u>

In the first six months of 2024 and 2023, we capitalized \$40 million and \$51 million, respectively, for product and process technology with weighted-average useful lives of 9 years and 10 years, respectively. Amortization expense was \$41 million and \$45 million for the first six months of 2024 and 2023, respectively. Expected amortization expense is \$44 million for the remainder of 2024, \$57 million for 2025, \$51 million for 2026, \$47 million for 2027, and \$45 million for 2028.

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## Leases

The components of lease cost are presented below:

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Finance lease cost				
Amortization of right-of-use asset	\$ 37	\$ 25	\$ 69	\$ 49
Interest on lease liability	24	6	30	12
Operating lease cost <sup>(1)</sup>	35	31	68	67
	\$ 96	\$ 62	\$ 167	\$ 128

<sup>(1)</sup> Operating lease cost includes short-term and variable lease expenses, which were not material for the periods presented.

Supplemental cash flow information related to leases was as follows:

	February 29, 2024	March 2, 2023
<b>Six months ended</b>		
Cash flows used for operating activities		
Finance leases	\$ 25	\$ 11
Operating leases	66	60
Cash flows used for financing activities – Finance leases	60	53
Noncash acquisitions of right-of-use assets		
Finance leases	483	225
Operating leases	12	35

Supplemental balance sheet information related to leases was as follows:

	February 29, 2024	August 31, 2023
<b>As of</b>		
Finance lease right-of-use assets (included in property, plant, and equipment)	\$ 1,725	\$ 1,311
Current operating lease liabilities (included in accounts payable and accrued expenses)	65	66
Weighted-average remaining lease term (in years)		
Finance leases	11	9
Operating leases	11	11
Weighted-average discount rate		
Finance leases	4.48 %	3.86 %
Operating leases	3.27 %	3.21 %

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As of February 29, 2024, maturities of lease liabilities by fiscal year were as follows:

For the year ending	Finance Leases	Operating Leases
Remainder of 2024	\$ 152	\$ 31
2025	299	83
2026	285	80
2027	277	77
2028	267	74
2029 and thereafter	721	452
Less imputed interest	(297)	(139)
	<u>\$ 1,704</u>	<u>\$ 658</u>

The table above excludes obligations for leases that have been executed but have not yet commenced. As of February 29, 2024, excluded obligations consisted of \$670 million of finance lease obligations over a weighted-average period of 14 years for gas supply arrangements deemed to contain embedded leases and equipment leases. We will recognize right-of-use assets and associated lease liabilities at the time such assets become available for our use.

## Accounts Payable and Accrued Expenses

As of	February 29, 2024	August 31, 2023
Accounts payable	\$ 1,913	\$ 1,725
Property, plant, and equipment	1,528	1,419
Salaries, wages, and benefits	637	367
Income and other taxes	188	67
Other	414	380
	<u>\$ 4,680</u>	<u>\$ 3,958</u>

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	As of February 29, 2024						As of August 31, 2023		
	Stated Rate	Effective Rate	Net Carrying Amount			Net Carrying Amount			
			Current	Long-Term	Total	Current	Long-Term	Total	
2025 Term Loan A	6.676 %	6.81 %	\$ —	\$ 649	\$ 649	\$ —	\$ 1,050	\$ 1,050	
2026 Term Loan A	6.801 %	6.94 %	49	896	945	49	921	970	
2027 Term Loan A	6.926 %	7.06 %	57	1,035	1,092	57	1,063	1,120	
2026 Notes	4.975 %	5.07 %	—	499	499	—	499	499	
2027 Notes <sup>(1)</sup>	4.185 %	4.27 %	—	812	812	—	798	798	
2028 Notes	5.375 %	5.52 %	—	597	597	—	596	596	
2029 A Notes	5.327 %	5.40 %	—	698	698	—	697	697	
2029 B Notes	6.750 %	6.54 %	—	1,262	1,262	—	1,263	1,263	
2030 Notes	4.663 %	4.73 %	—	847	847	—	846	846	
2031 Notes	5.300 %	5.41 %	—	993	993	—	—	—	
2032 Green Bonds	2.703 %	2.77 %	—	995	995	—	995	995	
2033 A Notes	5.875 %	5.96 %	—	745	745	—	745	745	
2033 B Notes	5.875 %	6.01 %	—	891	891	—	890	890	
2041 Notes	3.366 %	3.41 %	—	497	497	—	497	497	
2051 Notes	3.477 %	3.52 %	—	496	496	—	496	496	
2024 Term Loan A	N/A	N/A	—	—	—	—	587	587	
Finance lease obligations	N/A	4.48 %	238	1,466	1,704	172	1,109	1,281	
			\$ 344	\$ 13,378	\$ 13,722	\$ 278	\$ 13,052	\$ 13,330	

<sup>(1)</sup> In 2021, we entered into fixed-to-floating interest rate swaps on the 2027 Notes with an aggregate \$900 million notional amount equal to the principal amount of the 2027 Notes. The resulting variable interest paid is at a rate equal to SOFR plus approximately 3.33%. The fixed-to-floating interest rate swaps are accounted for as fair value hedges, and as a result, the carrying values of our 2027 Notes reflect adjustments in fair value.

**Debt Activity**

The table below presents the effects of debt financing and prepayment activities in the first six months of 2024:

	Transaction Date	Increase (Decrease) in Principal	Increase (Decrease) in Carrying Value	Increase (Decrease) in Cash
<b>Issuance</b>				
2031 Notes	January 12, 2024	\$ 1,000	\$ 993	\$ 993
<b>Prepayments</b>				
2024 Term Loan A	January 12, 2024	(588)	(587)	(588)
2025 Term Loan A	January 12, 2024	(402)	(401)	(402)
		\$ 10	\$ 5	\$ 3

**2031 Notes**

On January 12, 2024, we issued \$1.00 billion principal amount of senior unsecured 2031 Notes in a public offering. The 2031 Notes bear interest at a rate of 5.300% per year and will mature on January 15, 2031. Issuance costs and debt discount for the 2031 Notes were \$7 million.



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We may redeem the 2031 Notes, in whole or in part, at our option prior to their maturity dates at a redemption price equal to the greater of (i) 100% of the principal amount of the notes to be redeemed and (ii) the present value of the remaining scheduled payments of principal and interest, plus accrued interest in each case. We may also redeem the 2031 Notes, in whole or in part, at a price equal to par two months prior to maturity in accordance with the terms of the 2031 Notes.

The 2031 Notes contain covenants that, among other things, limit, in certain circumstances, our ability and/or the ability of our restricted subsidiaries (which are generally domestic subsidiaries in which we own at least 80% of the voting stock and which own principal property, as defined in the indenture governing the 2031 Notes) to (1) create or incur certain liens; (2) enter into certain sale and lease-back transactions; and (3) consolidate with or merge with or into, or convey, transfer, or lease all or substantially all of our properties and assets, to another entity. These covenants are subject to a number of limitations and exceptions. Additionally, if a change of control triggering event occurs, as defined in the indenture governing the 2031 Notes, we will be required to offer to purchase the 2031 Notes at 101% of the outstanding aggregate principal amount plus accrued interest up to the purchase date.

#### Revolving Credit Facility

As of February 29, 2024, no amounts were outstanding under the Revolving Credit Facility and \$2.50 billion was available to us. Under the Revolving Credit Facility, borrowings would generally bear interest at a rate equal to adjusted term SOFR plus 1.00% to 1.75%, depending on our corporate credit ratings. Adjusted term SOFR for the Revolving Credit Facility agreement is the SOFR benchmark plus a credit spread adjustment ranging from approximately 0.11% to 0.43% depending on the applicable interest period selected. Any amounts outstanding under the Revolving Credit Facility would mature in May 2026 and amounts borrowed may be prepaid without penalty.

The Revolving Credit Facility requires us to maintain, on a consolidated basis, a leverage ratio of total indebtedness to adjusted EBITDA, as defined in the Revolving Credit Facility and calculated as of the last day of each fiscal quarter, not to exceed 3.25 to 1.00. On March 27, 2023, we amended the Revolving Credit Facility to provide that in lieu of the foregoing leverage ratio, during the fourth quarter of 2023 and each quarter of 2024, we will be required to maintain, on a consolidated basis, a net leverage ratio of total net indebtedness to adjusted EBITDA, as defined in the Revolving Credit Facility and calculated as of the last day of each fiscal quarter, not to exceed 3.25 to 1.00. Alternatively, for up to three of such five quarters, we may elect to comply with a requirement of minimum liquidity, as defined in the Revolving Credit Facility, of not less than \$5.0 billion. Through the second quarter of 2024, we complied with the net leverage ratio requirement. Each of the leverage ratio and net leverage ratio maximums, as applicable, is subject to a temporary four quarter increase in such ratio to 3.75 to 1.00 following certain material acquisitions.

#### Maturities of Notes Payable

As of February 29, 2024, maturities of notes payable by fiscal year were as follows:

Remainder of 2024	\$	54
2025		107
2026		1,257
2027		1,780
2028		1,493
2029 and thereafter		7,450
Unamortized issuance costs, discounts, and premium, net		(37)
Hedge accounting fair value adjustment		(86)
	\$	<u>12,018</u>

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## Contingencies

We are currently a party to legal actions other than those described below arising from the normal course of business, none of which are expected to have a material adverse effect on our business, results of operations, or financial condition.

### Patent Matters

As is typical in the semiconductor and other high-tech industries, from time to time, others have asserted, and may in the future assert, that our products or manufacturing processes infringe upon their intellectual property rights. A description of certain claims is below.

On March 19, 2018, Micron Semiconductor (Xi'an) Co., Ltd. ("MXA") was served with a patent infringement complaint filed by Fujian Jinhua Integrated Circuit Co., Ltd. ("Jinhua") in the Fuzhou Intermediate People's Court in Fujian Province, China (the "Fuzhou Court"). On April 3, 2018, Micron Semiconductor (Shanghai) Co. Ltd. ("MSS") was served with the same complaint. The complaint alleged that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint sought an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred. On December 4, 2023, Micron and Jinhua entered a settlement agreement under which Jinhua filed an application to the Fuzhou Court to withdraw its complaints against MXA and MSS.

On March 21, 2018, MXA was served with a patent infringement complaint filed by United Microelectronics Corporation ("UMC") in the Fuzhou Court. On April 3, 2018, MSS was served with the same complaint. The complaint alleges that MXA and MSS infringed one Chinese patent by manufacturing and selling certain Crucial DDR4 DRAM modules. The complaint seeks an order requiring MXA and MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaints against MXA and MSS.

On April 3, 2018, MSS was served with another patent infringement complaint filed by Jinhua and an additional complaint filed by UMC in the Fuzhou Court. The additional complaints alleged that MSS infringed two Chinese patents by manufacturing and selling certain Crucial MX300 SSDs. The complaint filed by UMC sought an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 90 million Chinese yuan plus court fees incurred. The complaint filed by Jinhua sought an order requiring MSS to destroy inventory of the accused products and equipment for manufacturing the accused products in China; to stop manufacturing, using, selling, and offering for sale the accused products in China; and to pay damages of 98 million Chinese yuan plus court fees incurred. On November 26, 2021, pursuant to a settlement agreement between UMC and Micron, UMC filed an application to the Fuzhou Court to withdraw its complaint against MSS. On December 4, 2023, Micron and Jinhua entered a settlement agreement under which Jinhua filed an application to the Fuzhou Court to withdraw its complaint against MSS.

On July 5, 2018, MXA and MSS were notified that the Fuzhou Court granted a preliminary injunction against those entities that enjoins them from manufacturing, selling, or importing certain Crucial and Ballistix-branded DRAM modules and solid-state drives in China. On December 4, 2023, Micron and Jinhua entered a settlement agreement under which Jinhua filed an application to the Fuzhou Court to withdraw the injunction.

The Micron logo consists of the word "micron" in a lowercase, sans-serif font, followed by a small registered trademark symbol (®). The logo is positioned in the bottom right corner of the page.

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On April 28, 2021, Netlist, Inc. ("Netlist") filed two patent infringement actions against Micron, Micron Semiconductor Products, Inc. ("MSP"), and Micron Technology Texas, LLC ("MTEC") in the U.S. District Court for the Western District of Texas. The first complaint alleges that one U.S. patent is infringed by certain of our non-volatile dual in-line memory modules. The second complaint alleges that three U.S. patents are infringed by certain of our load-reduced dual in-line memory modules ("LRDIMMs"). Each complaint seeks injunctive relief, damages, attorneys' fees, and costs. On March 31, 2022, Netlist filed a patent infringement complaint against Micron and Micron Semiconductor Germany, GmbH in Dusseldorf Regional Court alleging that two German patents are infringed by certain of our LRDIMMs. The complaint seeks damages, costs, and injunctive relief. On June 10, 2022, Netlist filed a patent infringement complaint against Micron, MSP, and MTEC in the U.S. District Court for the Eastern District of Texas ("E.D. Tex.") alleging that six U.S. patents are infringed by certain of our memory modules and HBM products. On August 1, 2022, Netlist filed a second patent infringement complaint against the same defendants in E.D. Tex. alleging that one U.S. patent is infringed by certain of our LRDIMMs. On August 15, 2022, Netlist amended the second complaint to assert that two additional U.S. patents are infringed by certain of our LRDIMMs. The complaints in E.D. Tex. seek injunctive relief, damages, and attorneys' fees.

On August 16, 2022, Sonrai Memory Ltd. filed a patent infringement complaint against Micron in the U.S. District Court for the Western District of Texas. The complaint alleges that two U.S. patents are infringed by certain SSD and NAND flash products. The complaint seeks damages, attorneys' fees, and costs.

On January 23, 2023, Besang Inc. filed a patent infringement complaint against Micron in the U.S. District Court for the Eastern District of Texas. The complaint alleges that one U.S. patent is infringed by certain of our 3D NAND and SSD products. The complaint seeks an injunction, damages, attorneys' fees, and costs.

On November 9, 2023, Yangtze Memory Technologies Company, Ltd. ("YMTC") filed a patent infringement complaint against Micron and one of its subsidiaries in the U.S. District Court for the Northern District of California. The complaint alleges that eight U.S. patents are infringed by certain of our 3D NAND products. The complaint seeks an injunction, damages, attorneys' fees, and costs. On January 22, 2024, Micron Semiconductor (Shanghai) Co., Ltd. ("MSS") was served with three patent infringement complaints filed by YMTC in Beijing Intellectual Property Court and on February 27, 2024, Micron Technology, Inc. ("MTI") was served with the same complaints. The complaints assert that MTI and MSS infringed three Chinese patents owned by YMTC by importing, selling, offering for sale, and assisting others to sell certain 3D NAND products and SSDs in China. The complaint seeks an injunction, damages, attorneys' fees, and costs.

The above lawsuits pertain to substantially all of our DRAM, NAND, and other memory and storage products we manufacture, which account for substantially all of our revenue.

#### Antitrust Matters

Six cases were filed against Micron alleging price fixing of DRAM products in the following Canadian courts on the dates indicated: Superior Court of Quebec (April 30, 2018 and May 3, 2018), the Federal Court of Canada (May 2, 2018), the Ontario Superior Court of Justice (May 15, 2018), and the Supreme Court of British Columbia (May 10, 2018). The plaintiffs in these cases are individuals seeking certification of class actions on behalf of direct and indirect purchasers of DRAM in Canada (or regions of Canada) between June 1, 2016 and February 1, 2018. Certification of class action status was denied in two of the cases. All six cases are now either inactive or have been dismissed.

On May 15, 2018, the Chinese State Administration for Market Regulation ("SAMR") notified Micron that it was investigating potential collusion and other anticompetitive conduct by DRAM suppliers in China. On May 31, 2018, SAMR made unannounced visits to our sales offices in Beijing, Shanghai, and Shenzhen to seek certain information as part of its investigation. We are cooperating with SAMR in its investigation.



[Table of Contents](#)**Other Matters**

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify another party. It is not possible to predict the maximum potential amount of future payments under these types of agreements due to the conditional nature of our obligations and the unique facts and circumstances involved in each particular agreement. Historically, our payments under these types of agreements have not had a material adverse effect on our business, results of operations, or financial condition.

**Contingency Assessment**

We are unable to predict the outcome of any of the matters noted above and cannot make a reasonable estimate of the potential loss or range of possible losses. A determination that our products or manufacturing processes infringe the intellectual property rights of others or entering into a license agreement covering such intellectual property could result in significant liability and/or require us to make material changes to our products and/or manufacturing processes. Any of the foregoing, as well as the resolution of any other legal matter noted above, could have a material adverse effect on our business, results of operations, or financial condition.

**Equity****Common Stock Repurchases**

In May 2018, our Board of Directors authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. No shares were repurchased in the first six months of 2024. Through February 29, 2024, we had repurchased an aggregate of \$6.89 billion under the authorization. Amounts repurchased are included in treasury stock.

**Dividends**

We paid dividends of \$127 million (\$0.115 per share) and \$129 million (\$0.115 per share) in the second and first quarters of 2024, respectively. On March 20, 2024, our Board of Directors declared a quarterly dividend of \$0.115 per share, payable in cash on April 16, 2024, to shareholders of record as of the close of business on April 1, 2024.

**Accumulated Other Comprehensive Income (Loss)**

Changes in accumulated other comprehensive income (loss) by component for the six months ended February 29, 2024 were as follows:

	Gains (Losses) on Derivative Instruments	Unrealized Gains (Losses) on Investments	Pension Liability Adjustments	Cumulative Foreign Currency Translation Adjustment	Total
<b>As of August 31, 2023</b>	\$ (304)	\$ (41)	\$ 36	\$ (3)	\$ (312)
Other comprehensive income (loss) before reclassifications	(50)	16	—	—	(34)
Amount reclassified out of accumulated other comprehensive income (loss)	100	—	(2)	—	98
Tax effects	(17)	—	1	—	(16)
Other comprehensive income (loss)	33	16	(1)	—	48
<b>As of February 29, 2024</b>	\$ (271)	\$ (25)	\$ 35	\$ (3)	\$ (264)



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## Fair Value Measurements

The estimated fair values and carrying values of our outstanding debt instruments were as follows:

Notes	As of February 29, 2024		As of August 31, 2023	
	Fair Value	Carrying Value	Fair Value	Carrying Value
	\$ 11,733	\$ 12,018	\$ 11,549	\$ 12,049

The fair values of our debt instruments were estimated based on Level 2 inputs, including the trading price of our notes when available, discounted cash flows, and interest rates based on similar debt issued by parties with credit ratings similar to ours.

## Derivative Instruments

	Notional or Contractual Amount	Fair Value of	
		Assets <sup>(1)</sup>	Liabilities <sup>(2)</sup>
<b>As of February 29, 2024</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 4,028	\$ 8	\$(173)
Cash flow commodity hedges	393	25	(1)
Fair value interest rate hedges	900	—	(86)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	2,061	3	(15)
		\$ 36	\$(275)
<b>As of August 31, 2023</b>			
Derivative instruments with hedge accounting designation			
Cash flow currency hedges	\$ 3,873	\$ 16	\$(180)
Cash flow commodity hedges	331	45	—
Fair value interest rate hedges	900	—	(100)
Derivative instruments without hedge accounting designation			
Non-designated currency hedges	1,839	2	(17)
		\$ 63	\$(297)

<sup>(1)</sup> Included in receivables and other noncurrent assets.

<sup>(2)</sup> Included in accounts payable and accrued expenses and other noncurrent liabilities.

### Derivative Instruments with Hedge Accounting Designation

**Cash Flow Hedges:** We utilize forward and swap contracts that generally mature within two years designated as cash flow hedges to minimize our exposure to changes in currency exchange rates or commodity prices for certain capital expenditures and manufacturing costs. Forward and swap contracts are measured at fair value based on market-based observable inputs including market spot and forward rates, interest rates, and credit-risk spreads (Level 2). We recognized gains from cash flow hedges of \$75 million and \$128 million for the second quarter and first six months of 2023, respectively, in accumulated other comprehensive income (loss). The amounts recognized for the second quarter and first six months of 2024 were not significant.

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For forward points excluded from our effectiveness testing, we recognized losses of \$34 million and \$70 million for the second quarter and first six months of 2024, respectively, in cost of goods sold. The amounts recognized for the second quarter and first six months of 2023 were not significant.

We reclassified losses of \$56 million and \$100 million for the second quarter and first six months of 2024, respectively, and losses of \$54 million and \$122 million for the second quarter and first six months of 2023, respectively, from accumulated other comprehensive income (loss) to earnings, primarily to cost of goods sold. As of February 29, 2024, we expect to reclassify \$126 million of pre-tax losses related to cash flow hedges from accumulated other comprehensive income (loss) into earnings in the next 12 months.

**Fair Value Hedges:** We utilize fixed-to-floating interest rate swaps designated as fair value hedges to minimize certain exposures to changes in the fair value of fixed-rate debt that result from fluctuations in benchmark interest rates. Interest rate swaps are measured at fair value based on market-based observable inputs including interest rates and credit-risk spreads (Level 2). The changes in the fair values of derivatives designated as fair value hedges and the offsetting changes in the underlying fair values of the hedged items are both recognized in earnings. When a derivative is no longer designated as a fair value hedge for any reason, including termination and maturity, the remaining unamortized difference between the carrying value of the hedged item at that time and the face value of the hedged item is amortized to earnings over the remaining life of the hedged item, or immediately if the hedged item has matured or been extinguished. The effects of fair value hedges on our consolidated statements of operations, recognized in interest expense, were not significant for the periods presented.

#### Derivative Instruments without Hedge Accounting Designation

**Currency Derivatives:** We generally utilize a rolling hedge strategy with currency forward contracts that mature within three months to hedge our exposures of monetary assets and liabilities from changes in currency exchange rates. At the end of each reporting period, monetary assets and liabilities denominated in currencies other than the U.S. dollar are remeasured into U.S. dollars and the associated outstanding forward contracts are marked to market. Currency forward contracts are valued at fair values based on the middle of bid and ask prices of dealers or exchange quotations (Level 2). Realized and unrealized gains and losses on derivative instruments without hedge accounting designation as well as the changes in the underlying monetary assets and liabilities from changes in currency exchange rates are included in other non-operating income (expense), net. The amounts recognized for derivative instruments without hedge accounting designation were not significant for the periods presented. We do not use derivative instruments for speculative purposes.

## Equity Plans

As of February 29, 2024, 72 million shares of our common stock were available for future awards under our equity plans, including 12 million shares approved for issuance under our employee stock purchase plan ("ESPP").

#### Restricted Stock and Restricted Stock Units ("Restricted Stock Awards")

Restricted Stock Awards activity is summarized as follows:

Six months ended	February 29, 2024	March 2, 2023
Restricted stock award shares granted	12	14
Weighted-average grant-date fair value per share	\$ 67.78	\$ 54.00

#### Employee Stock Purchase Plan ("ESPP")

For each six-month ESPP offering period that ended in the second quarter of 2024 and 2023, employees purchased 2 million and 3 million shares, respectively, at a share price of \$60.68 and \$52.45, respectively.



[Table of Contents](#)**Stock-based Compensation Expense**

Stock-based compensation expense recognized in our statements of operations is presented below. Stock-based compensation expense of \$98 million and \$88 million was capitalized and remained in inventory as of February 29, 2024 and August 31, 2023, respectively.

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
<b>Stock-based compensation expense by caption</b>				
Cost of goods sold	\$ 80	\$ 40	\$ 147	\$ 76
Research and development	77	59	145	112
Selling, general, and administrative	52	36	99	73
Restructure	—	(2)	—	(2)
	<u>\$ 209</u>	<u>\$ 133</u>	<u>\$ 391</u>	<u>\$ 259</u>
<b>Stock-based compensation expense by type of award</b>				
Restricted stock awards	\$ 191	\$ 116	\$ 354	\$ 225
ESPP	18	17	37	34
	<u>\$ 209</u>	<u>\$ 133</u>	<u>\$ 391</u>	<u>\$ 259</u>

As of February 29, 2024, \$1.69 billion of total unrecognized compensation costs for unvested awards, before the effect of any future forfeitures, was expected to be recognized through the second quarter of 2028, resulting in a weighted-average period of 1.3 years.

**Revenue and Customer Contract Liabilities**

Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Substantially all contracts with our customers are short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. From time to time, we have contracts with initial terms that include performance obligations that extend beyond one year. As of February 29, 2024, our future performance obligations beyond one year were not significant.

**Revenue by Technology**

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
DRAM	\$ 4,158	\$ 2,722	\$ 7,585	\$ 5,551
NAND	1,567	885	2,797	1,988
Other (primarily NOR)	99	86	168	239
	<u>\$ 5,824</u>	<u>\$ 3,693</u>	<u>\$ 10,550</u>	<u>\$ 7,778</u>

See "Segment and Other Information" for disclosure of disaggregated revenue by market segment.

[Table of Contents](#)**Customer Contract Liabilities**

Contract liabilities from customer prepayments made to secure product supply in future periods were approximately \$600 million as of February 29, 2024 and were reported within other current liabilities.

As of February 29, 2024 and August 31, 2023, other current liabilities also included \$562 million and \$453 million, respectively, for estimates of consideration payable to customers including estimates for pricing adjustments and returns.

**Restructure and Asset Impairments**

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Employee severance	\$ —	\$ 80	\$ —	\$ 93
Asset impairments and other asset-related costs	—	8	—	8
Other	—	(2)	—	(2)
	\$ —	\$ 86	\$ —	\$ 99

In 2023, we initiated a restructure plan in response to challenging industry conditions (the "2023 Restructure Plan"). Under the 2023 Restructure Plan, we reduced our headcount by approximately 15% by the end of calendar 2023, through a combination of voluntary attrition and personnel reductions. The plan was substantially completed in 2023.

**Other Operating (Income) Expense, Net**

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Patent cross-license agreement gain	\$ (200)	\$ —	\$ (200)	\$ —
(Gain) loss on disposition of property, plant, and equipment	(9)	(9)	(25)	(22)
Other	(15)	1	(14)	3
	\$ (224)	\$ (8)	\$ (239)	\$ (19)

**Income Taxes**

Our income tax (provision) benefit consisted of the following:

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Income (loss) before taxes	\$ 170	\$ (2,271)	\$ (985)	\$ (2,447)
Income tax (provision) benefit	622	(54)	549	(62)
Effective tax rate	(365.9)%	(2.4)%	55.7 %	(2.5)%



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In the first quarter of 2024, our tax expense was based on actual results for jurisdictions where small changes in our projected pre-tax income would have caused significant changes in the estimated annual effective tax rate. With our improved fiscal 2024 outlook, we can now estimate a more reliable annual effective tax rate and have reverted to a global annual effective tax rate method for all jurisdictions. Applying this updated rate to our year-to-date earnings resulted in the tax benefit of \$622 million recognized in the second quarter of 2024.

The change in our effective tax rate for the second quarter of 2024 as compared to the first quarter of 2024 was primarily due to the use of the estimated annual effective tax rate for the quarter. The change in our effective tax rate for the first six months of 2024 as compared to the first six months of 2023 was primarily due to changes in levels of profitability and the geographic mix of earnings.

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. As a result of the low level of profitability and the geographic mix of income, the benefit from tax incentive arrangements was not material for the periods presented.

As of February 29, 2024, other current assets included \$882 million related to income taxes.

## Earnings Per Share

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
Net income (loss) – Basic and Diluted	\$ 793	\$ (2,312)	\$ (441)	\$ (2,507)
Weighted-average common shares outstanding – Basic	1,104	1,091	1,102	1,091
Dilutive effect of equity plans	10	—	—	—
Weighted-average common shares outstanding – Diluted	1,114	1,091	1,102	1,091
Earnings (loss) per share				
Basic	\$ 0.72	\$ (2.12)	\$ (0.40)	\$ (2.30)
Diluted	0.71	(2.12)	(0.40)	(2.30)

Antidilutive potential common shares excluded from the computation of diluted earnings per share, that could dilute basic earnings per share in the future, were 4 million and 33 million for the second quarter and first six months of 2024, respectively, and were 33 million and 34 million for the second quarter and first six months of 2023, respectively.

## Segment and Other Information

Segment information reported herein is consistent with how it is reviewed and evaluated by our chief operating decision maker. We have the following four business units, which are our reportable segments:

**Compute and Networking Business Unit (“CNBU”):** Includes memory products and solutions sold into the client, cloud server, enterprise, graphics, and networking markets.

**Mobile Business Unit (“MBU”):** Includes memory and storage products sold into the smartphone and other mobile-device markets.

**Embedded Business Unit (“EBU”):** Includes memory and storage products and solutions sold into the automotive, industrial, and consumer markets.

**Storage Business Unit (“SBU”):** Includes SSDs and component-level solutions sold into the enterprise and cloud, client, and consumer storage markets.

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Certain operating expenses directly associated with the activities of a specific segment are charged to that segment. Other indirect operating income and expenses are generally allocated to segments based on their respective percentage of cost of goods sold or forecasted wafer production. We do not identify or report internally our assets (other than goodwill) or capital expenditures by segment, nor do we allocate gains and losses from equity method investments, interest, other non-operating income or expense items, or taxes to segments.

	Quarter ended		Six months ended	
	February 29, 2024	March 2, 2023	February 29, 2024	March 2, 2023
<b>Revenue</b>				
CNBU	\$ 2,185	\$ 1,375	\$ 3,922	\$ 3,121
MBU	1,598	945	2,891	1,600
EBU	1,111	865	2,148	1,865
SBU	905	507	1,558	1,187
All Other	25	1	31	5
	<u>\$ 5,824</u>	<u>\$ 3,693</u>	<u>\$ 10,550</u>	<u>\$ 7,778</u>
<b>Operating income (loss)</b>				
CNBU	\$ 28	\$ (35)	\$ (369)	\$ 155
MBU	(9)	(344)	(696)	(539)
EBU	(1)	88	9	282
SBU	(217)	(357)	(707)	(614)
All Other	21	1	25	4
	<u>(178)</u>	<u>(647)</u>	<u>(1,738)</u>	<u>(712)</u>
<b>Unallocated</b>				
Lower costs from sale of inventory written down in prior periods	382	—	987	—
Patent cross-license agreement gain	200	—	200	—
Stock-based compensation	(209)	(136)	(391)	(262)
Restructure and asset impairments	—	(86)	—	(99)
Provision to write-down inventories to net realizable value	—	(1,430)	—	(1,430)
Other	(4)	(4)	5	(9)
	<u>369</u>	<u>(1,656)</u>	<u>801</u>	<u>(1,800)</u>
Operating income (loss)	<u>\$ 191</u>	<u>\$ (2,303)</u>	<u>\$ (937)</u>	<u>\$ (2,512)</u>

## Certain Concentrations

Revenue by end market as an approximate percent of total revenue is presented in the table below:

Six months ended	February 29, 2024	March 2, 2023
Mobile	25 %	20 %
Automotive, industrial, and consumer	20 %	25 %
Client and graphics	20 %	20 %
Enterprise and cloud server	15 %	20 %
SSDs and other storage	15 %	15 %

Revenue from one customer, which is a distributor, was 11% of total revenue for the first six months of 2024. No customer accounted for 10% or more of total revenue for the first six months of 2023.



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**APPENDIX III            MANAGEMENT DISCUSSION AND ANALYSIS OF MICRON**

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For the purpose of this section only, unless the context requires otherwise, references to the “Company” are to Micron, and references to “we”, “us” and “our” shall be construed accordingly.

The following management discussion and analysis of the results of Micron is extracted from the annual reports/second quarterly report of Micron for the years ended 2 September 2021, 1 September 2022 and 31 August 2023 and for the six months ended 29 February 2024. It should be read in conjunction with the financial information of Micron for the years ended 2 September 2021, 1 September 2022 and 31 August 2023 and the six months ended 29 February 2024 set forth in Appendix II to this circular. The management discussion and analysis of the results of Micron was issued in English and the Chinese translated version is provided for information purposes only. In case of discrepancies between the two versions, the English version shall prevail.

The Directors wish to emphasise that the extracts reproduced below are not prepared for incorporation into this circular and the Group has not participated in their preparation. As such, the Directors do not express any view as to their truth, accuracy or completeness, and the Shareholders and investors should exercise caution and should not place undue reliance on such information.



## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion should be read in conjunction with the consolidated financial statements and accompanying notes for the year ended September 2, 2021. All period references are to our fiscal periods unless otherwise indicated. Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2021 contained 52 weeks, fiscal 2020 contained 53 weeks, and fiscal 2019 contained 52 weeks. Our fourth quarter of fiscal 2020 contained 14 weeks and all other fiscal quarters in the years presented contained 13 weeks. All tabular dollar amounts are in millions, except per share amounts.

For an overview of our business and certain related trends, see "Part I – Item 1. Business – Overview."

## Results of Operations

### Consolidated Results

For the year ended	2021		2020		2019	
Revenue	\$ 27,705	100 %	\$ 21,435	100 %	\$ 23,406	100 %
Cost of goods sold	17,282	62 %	14,883	69 %	12,704	54 %
Gross margin	10,423	38 %	6,552	31 %	10,702	46 %
Research and development	2,663	10 %	2,600	12 %	2,441	10 %
Selling, general, and administrative	894	3 %	881	4 %	836	4 %
Restructure and asset impairments	488	2 %	60	— %	(29)	— %
Other operating (income) expense, net	95	— %	8	— %	78	— %
Operating income	6,283	23 %	3,003	14 %	7,376	32 %
Interest income (expense), net	(146)	(1)%	(80)	— %	77	— %
Other non-operating income (expense), net	81	— %	60	— %	(405)	(2)%
Income tax (provision) benefit	(394)	(1)%	(280)	(1)%	(693)	(3)%
Equity in net income (loss) of equity method investees	37	— %	7	— %	3	— %
Net income attributable to noncontrolling interests	—	— %	(23)	— %	(45)	— %
Net income attributable to Micron	<u>\$ 5,861</u>	21 %	<u>\$ 2,687</u>	13 %	<u>\$ 6,313</u>	27 %

**Total Revenue:** Total revenue for 2021 increased 29% as compared to 2020 primarily due to increases in DRAM and NAND sales. Sales of DRAM products for 2021 increased 38% as compared to 2020 primarily due to growth in

bit shipments in the high-20% range and a high single-digit percent increase in average selling prices. Sales of NAND products for 2021 increased 14% as compared to 2020 primarily due to increases in bit shipments in the high-20% range, partially offset by a low-10% range decline in average selling prices. In the first quarter of 2022, we expect that our bit shipments may be adversely impacted as some customers are adjusting their memory and storage purchases due to shortages of non-memory components and due to constraints within our supply chain for certain IC components.

Total revenue for 2020 decreased 8% as compared to 2019 primarily due to a decline in DRAM sales partially offset by an increase in NAND sales. Sales of DRAM products for 2020 decreased 14% as compared to 2019 as average selling prices declined in the mid-30% range due to challenging market conditions, partially offset by growth in bit shipments in the low-30% range driven by cloud server, enterprise server, and mobile markets. Sales of NAND products for 2020 increased 14% as compared to 2019 primarily due to increases in bit shipments in the mid-20% range driven by sales of SSDs to data center customers and sales of managed NAND products, partially offset by a high-single-digit percent decline in average selling prices.

**Overall Gross Margin:** Our overall gross margin percentage increased to 38% for 2021 from 31% for 2020, primarily due to the increases in DRAM average selling prices and cost reductions resulting from strong execution in delivering products featuring advanced technologies, partially offset by the declines in NAND average selling prices. Our gross margins included the impact of underutilization costs at MTU of \$335 million for 2021, \$557 million for 2020, and \$384 million for 2019. Underutilization costs at MTU declined in 2021 primarily due to the plan to sell MTU's Lehi facility and classification of assets as held for sale at the end of the second quarter of 2021, which resulted in the cessation of depreciation on those assets (See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Lehi, Utah Fab and 3D XPoint"). Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to first-in, first-out ("FIFO"). Concurrently, as of the beginning of the second quarter of 2021, we modified our inventory cost absorption processes used to estimate inventory values, which affects the timing of when costs are recognized. These changes resulted in a one-time increase to cost of goods sold of approximately \$293 million in 2021.

Our overall gross margin percentage decreased to 31% for 2020 from 46% for 2019, primarily due to declines in average selling prices, partially offset by the effect of decreases in non-cash depreciation expense from the revision in estimated useful lives of equipment in our NAND wafer fabrication facilities, cost reductions resulting from strong execution in delivering products featuring advanced technologies, and continuous improvement initiatives to reduce production costs. Based on our assessment of planned technology node transitions, capital spending, and re-use rates, we revised the estimated useful lives of the existing equipment in our NAND wafer fabrication facilities and our research and development facilities from five years to seven years as of the beginning of the first quarter of 2020. The revision in estimated useful lives reduced NAND manufacturing depreciation expense and benefited cost of goods sold by approximately \$400 million for 2020.

### Revenue by Business Unit

For the year ended	2021		2020		2019	
CNBU	\$ 12,280	44 %	\$ 9,184	43 %	\$ 9,968	43 %
MBU	7,203	26 %	5,702	27 %	6,403	27 %
SBU	3,973	14 %	3,765	18 %	3,826	16 %
EBU	4,209	15 %	2,759	13 %	3,137	13 %
All Other	40	— %	25	— %	72	— %
	<u>\$ 27,705</u>		<u>\$ 21,435</u>		<u>\$ 23,406</u>	

Percentages of total revenue may not total 100% due to rounding.

Changes in revenue for each business unit for 2021 as compared to 2020 were as follows:

- CNBU revenue increased 34% primarily due to broad-based increases in bit shipments across markets and higher average selling prices for DRAM.
- MBU revenue increased 26% primarily due to increases in bit shipments for high-value mobile MCP products.

- SBU revenue increased 6% as increases in bit shipments for NAND products outpaced declines in average selling prices.
- EBU revenue increased 53% primarily due to increases in bit shipments driven by strong demand growth in automotive, industrial, and consumer markets and improved pricing in industrial and consumer markets.

Changes in revenue for each business unit for 2020 as compared to 2019 were as follows:

- CNBU revenue decreased 8% primarily due to DRAM price declines driven by imbalances in supply and demand, partially offset by bit sales growth across key markets, particularly in the cloud server and graphics markets. In addition, in the second quarter of 2020, we determined that the 3D XPoint technology and product roadmap were more closely aligned with our CNBU strategy than our SBU strategy and 3D XPoint became an integral part of CNBU. Accordingly, we began to report all 3D XPoint activities within CNBU from that date.
- MBU revenue decreased 11% primarily due to price declines, partially offset by bit sales growth for high-value mobile MCP products.
- SBU revenue decreased 2% primarily due to the decline in 3D XPoint revenue in SBU after the first quarter of 2020 as noted above and NAND selling price declines, partially offset by bit sales growth for SSDs. SBU revenue included products manufactured and sold to Intel under a long-term supply agreement at prices approximating cost, which included 3D XPoint memory and NAND, aggregating \$124 million for 2020 and \$682 million for 2019.
- EBU revenue decreased 12% primarily due to price declines resulting from the impact of the global COVID-19 pandemic on automotive, industrial, and consumer segments partially offset by bit sales growth from transitions to an increasing mix of high-density DRAM and NAND products.

### Operating Income (Loss) by Business Unit

For the year ended	2021		2020		2019	
CNBU	\$ 4,295	35 %	\$ 2,010	22 %	\$ 4,645	47 %
MBU	2,173	30 %	1,074	19 %	2,606	41 %
SBU	173	4 %	36	1 %	(386)	(10)%
EBU	1,006	24 %	301	11 %	923	29 %
All Other	20	50 %	(2)	(8)%	13	18 %
	<u>\$ 7,667</u>		<u>\$ 3,419</u>		<u>\$ 7,801</u>	

Percentages reflect operating income (loss) as a percentage of revenue for each business unit.

Changes in operating income or loss for each business unit for 2021 as compared to 2020 were as follows:

- CNBU operating income increased primarily due to increases in bit shipments, higher average selling prices, manufacturing cost reductions, and lower MTU underutilization costs.
- MBU operating income increased primarily due to increases in sales of high-value MCP products, manufacturing cost reductions for low-power DRAM, and increases in DRAM bit shipments.
- SBU operating income increased primarily due to lower manufacturing costs and increases in bit shipments, partially offset by decreases in selling prices and higher R&D costs.
- EBU operating income increased primarily due to improved pricing in industrial and consumer markets, cost reductions from an increasing mix of leading edge bits, and higher bit shipments.

Changes in operating income or loss for each business unit for 2020 as compared to 2019 were as follows:

- CNBU operating income decreased primarily due to declines in DRAM pricing and MTU underutilization costs in 2020 related to 3D XPoint.
- MBU operating income decreased primarily due to declines in low-power DRAM and NAND pricing, partially offset by increases in sales of high-value MCP products and manufacturing cost reductions.
- SBU operating margin improved primarily due to lower 3D XPoint underutilization costs, manufacturing cost reductions, increases in sales volumes, and improved product mix, partially offset by declines in selling prices.

- EBU operating income decreased as a result of declines in pricing, partially offset by increases in sales volumes to the automotive and industrial markets.

### Operating Expenses and Other

**Research and Development:** R&D expenses vary primarily with the number of development and pre-qualification wafers processed, the cost of advanced equipment dedicated to new product and process development, and personnel costs. Because of the lead times necessary to manufacture our products, we typically begin to process wafers before completion of performance and reliability testing. Development of a product is deemed complete when it is qualified through internal reviews and tests for performance and reliability. R&D expenses can vary significantly depending on the timing of product qualification.

R&D expenses for 2021 increased 2% as compared to 2020 primarily due to increases in employee compensation and depreciation expense resulting from higher capital spending, partially offset by lower volumes of development and prequalification wafers. R&D expenses for 2020 were 7% higher as compared to 2019 primarily due to increases in volumes of development and pre-qualification wafers, a reduction of R&D reimbursements from our partners, increases in employee compensation, and increases in subcontractor expense, partially offset by lower depreciation expense from the revision of the estimated useful lives of equipment.

**Selling, General, and Administrative:** SG&A expenses for 2021 were relatively unchanged as compared to 2020. SG&A expenses for 2020 were 5% higher as compared to 2019 due to increases in employee compensation and legal costs, partially offset by a reduction in consulting fees.

**Restructure and Asset Impairments:** In 2021, we ceased development of 3D XPoint technology and classified our Lehi facility assets as held for sale. We recognized a restructure charge of \$435 million to write down the assets held for sale to the expected consideration to be received under our agreement with TI. For further discussion see "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Lehi, Utah Fab and 3D XPoint."

**Other Operating and Non-Operating Income (Expense):** See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Other Operating (Income) Expense, Net" and "– Other Non-Operating Income (Expense), Net."

**Interest Income (Expense):** Net interest expense for 2021 increased by \$66 million as compared to 2020 primarily due a decrease of \$77 million in interest income as a result of decreases in interest rates on our cash and investments. Net interest expense for 2020 was \$80 million, as compared to \$77 million of net interest income for 2019 (a change of \$157 million), primarily due to (1) a \$91 million decrease in interest income as a result of decreases in interest rates, partially offset by higher average levels of cash and investment balances and (2) a \$66 million increase in interest expense primarily due to an increase in our average debt outstanding and a reduction in the amount of interest expense capitalized in 2020.

**Income Taxes:** Our income tax (provision) benefit consisted of the following:

For the year ended	2021	2020	2019
Income before taxes	\$ 6,218	\$ 2,983	\$ 7,048
Income tax (provision) benefit	(394)	(280)	(693)
Effective tax rate	6.3 %	9.4 %	9.8 %

Our effective tax rate decreased in 2021 as compared to 2020 primarily as a result of a \$104 million tax benefit recorded for the discrete \$435 million charge to write down the Lehi assets held for sale to the estimated consideration to be realized from the sale of these assets, less expected selling costs. Other changes to our effective tax rate in the periods presented were primarily due to the geographic mix of our earnings. Our income tax provision decreased in 2020 as compared to 2019 primarily as a result of reductions in our profit before tax.

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. The effect of tax incentive

arrangements reduced our tax provision by \$758 million (benefiting our diluted earnings per share by \$0.66) for 2021, by \$215 million (\$0.19 per diluted share) for 2020, and by \$756 million (\$0.66 per diluted share) for 2019.

See “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Income Taxes.”

### Liquidity and Capital Resources

Our primary sources of liquidity are cash generated from operations and financing obtained from capital markets and financial institutions. Cash generated from operations is highly dependent on selling prices for our products, which can vary significantly from period to period. We are continuously evaluating alternatives for efficiently funding our capital expenditures and ongoing operations. We expect, from time to time, to engage in a variety of financing transactions for such purposes, including the issuance of securities. As of September 2, 2021, \$2.50 billion was available to draw under our Revolving Credit Facility. We expect to receive \$900 million of proceeds from the sale of our Lehi facility to TI in the first quarter of 2022.

Cash and marketable investments totaled \$10.40 billion as of September 2, 2021 and \$9.19 billion as of September 3, 2020. Our investments consist primarily of bank deposits, money market funds, and liquid investment-grade, fixed-income securities, which are diversified among industries and individual issuers. To mitigate credit risk, we invest through high-credit-quality financial institutions and by policy generally limit the concentration of credit exposure by restricting the amount of investments with any single obligor. As of September 2, 2021, \$3.69 billion of our cash and marketable investments was held by our foreign subsidiaries.

To develop new product and process technology, support future growth, achieve operating efficiencies, and maintain product quality, we must continue to invest in manufacturing technologies, facilities and equipment, and R&D. We estimate capital expenditures in 2022 for property, plant, and equipment, net of partner contributions, to be between \$11 billion and \$12 billion, and we expect the timing of our capital expenditures to be weighted more toward the first half of 2022. Capital expenditures for 2022 are driven by our continued 176-layer NAND transition, pilot line enablement for next generation NAND and DRAM, and continued infrastructure and prepayments to support the introduction of EUV lithography. Actual amounts for 2022 will vary depending on market conditions. As of September 2, 2021, we had purchase obligations of approximately \$2.87 billion for the acquisition of property, plant, and equipment, of which approximately \$2.56 billion is expected to be paid within one year.

For a description of contractual obligations, such as debt, leases, and purchase obligations, see “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt,” “– Leases,” and “– Commitments.”

Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to a Rule 10b5-1 trading plan. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. Through September 2, 2021, we have repurchased an aggregate of \$4.04 billion of the authorized amount. See “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Equity.”

On August 2, 2021, we announced that our Board of Directors had declared a quarterly dividend of \$0.10 per share, payable in cash on October 18, 2021, to shareholders of record as of the close of business on October 1, 2021. The declaration and payment of any future cash dividends are at the discretion and subject to the approval of our Board of Directors. Our Board of Directors' decisions regarding the amount and payment of dividends will depend on many factors, such as our financial condition, results of operations, capital requirements, business conditions, debt service obligations, contractual restrictions, industry practice, legal requirements, regulatory constraints, and other factors that our Board of Directors may deem relevant.

We expect that our cash and investments, cash flows from operations, and available financing will be sufficient to meet our requirements at least through the next 12 months and thereafter for the foreseeable future.

**Cash Flows:**

For the year ended	2021	2020	2019
Net cash provided by operating activities	\$ 12,468	\$ 8,306	\$ 13,189
Net cash provided by (used for) investing activities	(10,589)	(7,589)	(10,085)
Net cash provided by (used for) financing activities	(1,781)	(317)	(2,438)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	41	11	26
Net increase in cash, cash equivalents, and restricted cash	\$ 139	\$ 411	\$ 692

**Operating Activities:** Cash provided by operating activities reflects net income adjusted for certain non-cash items, including depreciation expense, amortization of intangible assets, asset impairments, and stock-based compensation, and the effects of changes in operating assets and liabilities. The increase in cash provided by operating activities for 2021 as compared to 2020 was primarily due to higher net income adjusted for non-cash items compared with the prior period and the effect of lower inventories, partially offset by an increase in receivables due to a higher level of sales. The decrease in cash provided by operating activities for 2020 compared with 2019 was primarily due to lower net income and changes in working capital.

**Investing Activities:** For 2021, net cash used for investing activities consisted primarily of \$10.03 billion of expenditures for property, plant, and equipment, partially offset by inflows of \$502 million of partner contributions for capital expenditures, and \$1.06 billion of net outflows from purchases, sales, and maturities of available-for-sale securities.

For 2020, net cash used for investing activities consisted primarily of \$8.22 billion of expenditures for property, plant, and equipment, partially offset by inflows of \$272 million of partner contributions for capital expenditures, and \$415 million of net inflows from purchases, sales, and maturities of available-for-sale securities.

For 2019, net cash used for investing activities consisted primarily of \$9.78 billion of expenditures for property, plant, and equipment, partially offset by inflows of \$754 million of partner contributions for capital expenditures. Net cash used for investing activities also included \$1.17 billion of net outflows from purchases, sales, and maturities of available-for-sale securities.

**Financing Activities:** For 2021, net cash used for financing activities consisted primarily of \$1.20 billion for the acquisition of 15.6 million shares of our common stock under our \$10 billion share repurchase authorization, \$295 million of payments on equipment purchase contracts, \$185 million of cash payments to settle conversions of our 2032D Notes, and \$147 million of repayments of finance leases and other debt. In addition, we received proceeds of \$1.19 billion under an unsecured 2024 Term Loan A and used the proceeds to repay the \$1.19 billion Extinguished 2024 Term Loan A.

For 2020, net cash used for financing activities consisted primarily of \$4.37 billion of cash payments to reduce our debt, including \$2.50 billion to pay down borrowings under our Revolving Credit Facility, \$621 million for repayments of IMFT's debt obligations to Intel, \$534 million to prepay our 2025 Notes, \$266 million to settle conversions of notes, and \$248 million for scheduled repayment of finance leases; \$744 million for the acquisition of Intel's noncontrolling interest in IMFT; and \$176 million for the acquisition of 3.6 million shares of our common stock under our share repurchase authorization. Cash used for financing activities was partially offset by proceeds of \$2.50 billion from our Revolving Credit Facility, \$1.25 billion from the 2023 Notes, and \$1.25 billion from the Extinguished 2024 Term Loan A.

For 2019, net cash used for financing activities consisted primarily of \$2.66 billion for the acquisition of 67 million shares of treasury stock under our share repurchase authorization and cash payments to reduce our debt, including \$1.65 billion to settle conversions of notes, \$728 million to prepay the 2022 Term Loan B, \$316 million for repayments of IMFT's debt obligations to Intel, and \$643 million for scheduled repayment of other notes and capital leases. Cash used for financing activities was partially offset by net proceeds of \$3.53 billion from the aggregate issuance of the 2024 Notes, 2026 Notes, 2027 Notes, 2029 Notes, and 2030 Notes.

See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt."

### Critical Accounting Estimates

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may vary under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. Our management believes the accounting policies below are critical in the portrayal of our financial condition and results of operations and require management's most difficult, subjective, or complex judgments.

**Contingencies:** We are subject to the possibility of losses from various contingencies. Significant judgment is necessary to estimate the probability and amount of a loss, if any, from such contingencies. An accrual is made when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. In accounting for the resolution of contingencies, significant judgment may be necessary to estimate amounts pertaining to periods prior to the resolution that are charged to operations in the period of resolution and amounts related to future periods.

**Goodwill:** We test goodwill for impairment in our fourth quarter each year, or more frequently if indicators of an impairment exist, to determine whether it is more likely than not that the fair value of the reporting unit with goodwill is less than its carrying value. For reporting units for which this assessment concludes that it is more likely than not that the fair value is more than its carrying value, goodwill is considered not impaired and we are not required to perform the goodwill impairment test. Qualitative factors considered in this assessment include industry and market considerations, overall financial performance, and other relevant events and factors affecting the fair value of the reporting unit. For reporting units for which this assessment concludes that it is more likely than not that the fair value is below the carrying value, goodwill is tested for impairment by determining the fair value of each reporting unit and comparing it to the carrying value of the net assets assigned to the reporting unit. If the fair value of the reporting unit exceeds its carrying value, goodwill is considered not impaired. If the carrying value of the reporting unit exceeds its fair value, we would record an impairment loss up to the difference between the carrying value and implied fair value. For 2021, our qualitative assessment indicated that the fair value for all of our reporting units substantially exceeded their carrying value and that a quantitative assessment was unnecessary.

Determining when to test for impairment, the reporting units, the assets and liabilities of the reporting unit, and the fair value of the reporting unit requires significant judgment and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates, forecasted manufacturing costs, and other expenses and are developed as part of our long-range planning process. The same estimates are used in business planning, forecasting, and capital budgeting as part of our long-term manufacturing capacity analysis. We test the reasonableness of the output of our long-range planning process by calculating an implied value per share and comparing that to current stock prices, analysts' consensus pricing, and management's expectations. These estimates and assumptions are used to calculate projected future cash flows for the reporting unit, which are discounted using a risk-adjusted rate to estimate a fair value. The discount rate requires determination of appropriate market comparables. We base fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates.

**Income taxes:** We are required to estimate our provision for income taxes and amounts ultimately payable or recoverable in numerous tax jurisdictions around the world. These estimates involve significant judgment and interpretations of regulations and are inherently complex. Resolution of income tax treatments in individual jurisdictions may not be known for many years after completion of the applicable year. We are also required to evaluate the realizability of our deferred tax assets on an ongoing basis in accordance with U.S. GAAP, which requires the assessment of our performance and other relevant factors. Realization of deferred tax assets is dependent on our ability to generate future taxable income. Our income tax provision or benefit is dependent, in part, on our ability to forecast future taxable income in Japan, the United States, and other jurisdictions. Such forecasts are inherently difficult and involve significant judgments including, among others, projecting future average selling prices and sales volumes, manufacturing and overhead costs, levels of capital spending, and other factors that significantly impact our analyses of the amount of net deferred tax assets that are more likely than not to be realized.

**Inventories:** Inventories are stated at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Effective as of the beginning of the second quarter of 2021, we changed our method of inventory

costing from average cost to FIFO. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. Determining net realizable value of inventories involves significant judgments, including projecting future average selling prices and future sales volumes. To project average selling prices and sales volumes, we review recent sales volumes, existing customer orders, current contract prices, industry analyses of supply and demand, seasonal factors, general economic trends, and other information. Actual selling prices and volumes may vary significantly from projected prices and volumes due to the volatile nature of the semiconductor memory and storage markets. When these analyses reflect estimated net realizable values below our manufacturing costs, we record a charge to cost of goods sold in advance of when inventories are actually sold. As a result, the timing of when product costs are charged to costs of goods sold can vary significantly. Differences in forecasted average selling prices used in calculating lower of cost or net realizable value adjustments can result in significant changes in the estimated net realizable value of product inventories and accordingly the amount of write-down recorded. For example, a 5% variance in the estimated selling prices would have changed the estimated net realizable value of our inventory by approximately \$301 million as of September 2, 2021. Due to the volatile nature of the semiconductor memory and storage markets, actual selling prices and volumes often vary significantly from projected prices and volumes; as a result, the timing of when product costs are charged to operations can vary significantly.

U.S. GAAP provides for products to be grouped into categories in order to compare costs to net realizable values. The amount of any inventory write-down can vary significantly depending on the determination of inventory categories. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of average cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group.

**Property, plant, and equipment:** We periodically assess the estimated useful lives of our property, plant, and equipment based on technology node transitions, capital spending, and equipment re-use rates. We also review the carrying value of property, plant, and equipment for impairment when events and circumstances indicate that the carrying value of an asset or group of assets may not be recoverable from the estimated future cash flows expected to result from its use and/or disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to the amount by which the carrying value exceeds the estimated fair value of the assets. The estimate of future cash flows involves numerous assumptions which require significant judgment by us, including, but not limited to, future use of the assets for our operations versus sale or disposal of the assets, future selling prices for our products, and future production and sales volumes. In addition, significant judgment is required in determining the groups of assets for which impairment tests are separately performed.

**Revenue recognition:** Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.

### Recently Adopted Accounting Standards

See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Recently Adopted Accounting Standards."

### Recently Issued Accounting Standards

No material items.



## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion should be read in conjunction with the consolidated financial statements and accompanying notes for the year ended September 1, 2022. All period references are to our fiscal periods unless otherwise indicated. Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2022 and 2021 contained 52 weeks and fiscal 2020 contained 53 weeks. Our fourth quarter of fiscal 2020 contained 14 weeks and all other fiscal quarters in the years presented contained 13 weeks. All tabular dollar amounts are in millions, except per share amounts.

For an overview of our business and certain related trends, see "Part I – Item 1. Business – Overview."

## Results of Operations

### Consolidated Results

For the year ended	2022		2021		2020	
Revenue	\$ 30,758	100 %	\$ 27,705	100 %	\$ 21,435	100 %
Cost of goods sold	16,860	55 %	17,282	62 %	14,883	69 %
Gross margin	13,898	45 %	10,423	38 %	6,552	31 %
Research and development	3,116	10 %	2,663	10 %	2,600	12 %
Selling, general, and administrative	1,066	3 %	894	3 %	881	4 %
Restructure and asset impairments	48	— %	488	2 %	60	— %
Other operating (income) expense, net	(34)	— %	95	— %	8	— %
Operating income	9,702	32 %	6,283	23 %	3,003	14 %
Interest income (expense), net	(93)	— %	(146)	(1)%	(80)	— %
Other non-operating income (expense), net	(38)	— %	81	— %	60	— %
Income tax (provision) benefit	(888)	(3)%	(394)	(1)%	(280)	(1)%
Equity in net income (loss) of equity method investees	4	— %	37	— %	7	— %
Net income attributable to noncontrolling interests	—	— %	—	— %	(23)	— %
Net income attributable to Micron	<u>\$ 8,687</u>	28 %	<u>\$ 5,861</u>	21 %	<u>\$ 2,687</u>	13 %

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**Total Revenue:** Total revenue for 2022 increased 11% as compared to 2021 primarily due to increases in sales of both DRAM and NAND products.

- Sales of DRAM products increased 12% primarily due to increases in bit shipments of slightly over 10%.
- Sales of NAND products increased 11% primarily due to a high-single-digit percent increase in bit shipments and a low-single-digit percent increase in average selling prices.

In the fourth quarter of 2022, the memory and storage industry environment deteriorated sharply due to global and macroeconomic challenges combined with downward inventory adjustments by customers, leading to significant reductions in bit shipments and average selling prices for both DRAM and NAND resulting in a 23% decline in revenue as compared to the third quarter of 2022. For the first quarter of 2023, continuation of these challenging conditions and inventory adjustments by customers have resulted in further reductions in near-term demand for both DRAM and NAND and we expect bit shipments and pricing to decline as compared to the fourth quarter of 2022.

Total revenue for 2021 increased 29% as compared to 2020 primarily due to increases in sales of both DRAM and NAND products.

- Sales of DRAM products increased 38% primarily due to growth in bit shipments in the high-20% range and a high single-digit percent increase in average selling prices.
- Sales of NAND products increased 14% primarily due to increases in bit shipments in the high-20% range, partially offset by a decline in average selling prices of slightly over 10%.

**Consolidated Gross Margin:** Our consolidated gross margin percentage increased to 45% for 2022 from 38% for 2021, as a result of improvements in margins for both DRAM and NAND products, primarily due to reductions in manufacturing costs. Manufacturing cost reductions were driven by strong execution in ramping our 1 $\alpha$  DRAM and 176-layer NAND technology nodes. Our consolidated gross margin percentage declined to 39% in the fourth quarter of 2022 from 47% in the third quarter of 2022 and we expect that in the first quarter of 2023 the percentage will decline further due to decreases in average selling prices as a result of the challenging industry environment for memory and storage products. To address our elevated inventory levels and reduce supply growth, in the first quarter of 2023, we are selectively reducing facility utilization in both DRAM and NAND. We also expect that inflationary pressure will continue to be a headwind to costs in the first quarter of 2023.

Our consolidated gross margin percentage increased to 38% for 2021 from 31% for 2020, primarily due to the increases in DRAM average selling prices and cost reductions resulting from strong execution in delivering products featuring advanced technologies, partially offset by declines in NAND average selling prices. Our gross margins included the impact of underutilization costs at MTU of \$335 million for 2021 and \$557 million for 2020. Underutilization costs at MTU declined in 2021 primarily due to the plan to sell MTU's Lehi facility and classification of assets as held for sale at the end of the second quarter of 2021, which resulted in the cessation of depreciation on those assets. See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Lehi, Utah Fab and 3D XPoint."

Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to first-in, first-out ("FIFO"). Concurrently, as of the beginning of the second quarter of 2021, we modified our inventory cost absorption processes used to estimate inventory values, which affects the timing of when costs are recognized. These changes resulted in a one-time increase to cost of goods sold of approximately \$293 million in 2021.

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### Revenue by Business Unit

For the year ended	2022		2021		2020	
CNBU	\$ 13,693	45 %	\$ 12,280	44 %	\$ 9,184	43 %
MBU	7,260	24 %	7,203	26 %	5,702	27 %
EBU	5,235	17 %	4,209	15 %	2,759	13 %
SBU	4,553	15 %	3,973	14 %	3,765	18 %
All Other	17	— %	40	— %	25	— %
	<u>\$ 30,758</u>		<u>\$ 27,705</u>		<u>\$ 21,435</u>	

Percentages of total revenue may not total 100% due to rounding.

Changes in revenue for each business unit for 2022 as compared to 2021 were as follows:

- CNBU revenue increased 12% primarily due to increases in bit shipments to cloud, enterprise, and networking markets.
- MBU revenue was relatively unchanged as both DRAM and NAND revenue was relatively flat.
- EBU revenue increased 24% primarily due to strong demand growth in industrial and automotive markets.
- SBU revenue increased 15% primarily due to higher average selling prices and increases in shipments of SSD products.

Changes in revenue for each business unit for 2021 as compared to 2020 were as follows:

- CNBU revenue increased 34% primarily due to broad-based increases in bit shipments across markets and higher average selling prices for DRAM.
- MBU revenue increased 26% primarily due to increases in bit shipments for high-value mobile MCP products.
- EBU revenue increased 53% primarily due to increases in bit shipments driven by strong demand growth in automotive, industrial, and consumer markets and improved pricing in industrial and consumer markets.
- SBU revenue increased 6% as increases in bit shipments for NAND products outpaced declines in average selling prices.

### Operating Income (Loss) by Business Unit

For the year ended	2022		2021		2020	
CNBU	\$ 5,844	43 %	\$ 4,295	35 %	\$ 2,010	22 %
MBU	2,160	30 %	2,173	30 %	1,074	19 %
EBU	1,752	33 %	1,006	24 %	301	11 %
SBU	513	11 %	173	4 %	36	1 %
All Other	12	71 %	20	50 %	(2)	(8)%
	<u>\$ 10,281</u>		<u>\$ 7,667</u>		<u>\$ 3,419</u>	

Percentages reflect operating income (loss) as a percentage of revenue for each business unit.

Changes in operating income or loss for each business unit for 2022 as compared to 2021 were as follows:

- CNBU operating income increased primarily due to higher bit shipments and manufacturing cost reductions.
- MBU operating income was relatively unchanged as slight increases in gross margins were offset by higher operating expenses.
- EBU operating income increased primarily due to manufacturing cost reductions from an increasing mix of leading-edge bits, higher bit shipments, and improved DRAM pricing in industrial and consumer markets, partially offset by higher R&D expenses.
- SBU operating income increased primarily due to improved product mix driving increases in average selling prices, increases in SSD shipments, and manufacturing cost reductions, partially offset by higher R&D expenses.

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Changes in operating income or loss for each business unit for 2021 as compared to 2020 were as follows:

- CNBU operating income increased primarily due to increases in bit shipments, higher average selling prices, manufacturing cost reductions, and lower MTU underutilization costs.
- MBU operating income increased primarily due to increases in sales of high-value MCP products, manufacturing cost reductions for low-power DRAM, and increases in DRAM bit shipments.
- EBU operating income increased primarily due to improved pricing in industrial and consumer markets, cost reductions from an increasing mix of leading-edge bits, and higher bit shipments.
- SBU operating income increased primarily due to lower manufacturing costs and increases in bit shipments, partially offset by decreases in selling prices and higher R&D costs.

### Operating Expenses and Other

**Research and Development:** R&D expenses vary primarily with the number of development and pre-qualification wafers processed, the cost of advanced equipment dedicated to new product and process development, and personnel costs. Because of the lead times necessary to manufacture our products, we typically begin to process wafers before completion of performance and reliability testing. Development of a product is deemed complete when it is qualified through internal reviews and tests for performance and reliability. R&D expenses can vary significantly depending on the timing of product qualification.

R&D expenses for 2022 increased 17% as compared to 2021 primarily due to higher employee compensation from increases in headcount, higher volumes of development and prequalification wafers, and higher depreciation expense. R&D expenses for 2021 increased 2% as compared to 2020 primarily due to increases in employee compensation and depreciation expense resulting from higher capital spending, partially offset by lower volumes of development and prequalification wafers.

**Selling, General, and Administrative:** SG&A expenses for 2022 were 19% higher as compared to 2021 primarily due to increases in employee compensation, professional services, and legal fees. SG&A expenses for 2021 were relatively unchanged as compared to 2020.

**Restructure and Asset Impairments:** In the first quarter of 2022, we sold our Lehi, Utah facility to TI. In 2021, the Lehi facility was classified as held for sale and we recognized a restructure charge of \$435 million to write down the assets held for sale to the expected consideration to be received under our agreement with TI. For further discussion see “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Lehi, Utah Fab and 3D XPoint.”

**Interest Income (Expense):** Net interest expense for 2022 decreased by \$53 million as compared to 2021 primarily due to an increase of \$59 million in interest income as a result of increases in interest rates on our cash and investments. Net interest expense for 2021 increased by \$66 million as compared to 2020 primarily due to a decrease of \$77 million in interest income as a result of decreases in interest rates on our cash and investments.

**Income Taxes:** Our income tax (provision) benefit consisted of the following:

For the year ended	2022	2021	2020
Income before taxes	\$ 9,571	\$ 6,218	\$ 2,983
Income tax (provision) benefit	(888)	(394)	(280)
Effective tax rate	9.3 %	6.3 %	9.4 %

Our effective tax rate increased in 2022 as compared to 2021 primarily due to the geographic mix of our earnings and a valuation allowance recorded against our Idaho deferred tax assets of \$189 million, partially offset by tax impacts of changes in foreign currency exchange rates. Our effective tax rate decreased in 2021 as compared to 2020 primarily as a result of a \$104 million tax benefit recorded for the discrete \$435 million charge to write down the Lehi assets held for sale.

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We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. The effect of tax incentive arrangements reduced our tax provision by \$1.12 billion (benefiting our diluted earnings per share by \$1.00) for 2022, by \$758 million (\$0.66 per diluted share) for 2021, and by \$215 million (\$0.19 per diluted share) for 2020.

Beginning in 2023, provisions in the Tax Cuts and Jobs Act of 2017 will require us to capitalize and amortize R&D expenditures rather than deducting the costs as incurred. Unless the effective date is deferred or the law is repealed, we expect an increase to our effective tax rate for several years. In addition, the mix of our income, together with U.S. and foreign tax rules, results in taxes becoming more fixed at lower profitability levels. As a result of these factors, we estimate tax expense of at least \$300 million for 2023. Beyond this level, our actual tax expense will depend on the level of operating income through the year.

Beginning in 2024, the Inflation Reduction Act of 2022 imposes a 15% book minimum tax on corporations with three-year average annual adjusted financial statement income exceeding \$1 billion. We are in the process of assessing whether the book minimum tax would impact our effective tax rate.

Various tax reforms are being considered in multiple jurisdictions that, if enacted, contain provisions that could increase our tax expense. We continue to monitor the potential impact of these various tax reform proposals to our overall global effective tax rate and financial statements.

See “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Income Taxes.”

**Other:** Further information can be found in “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Other Operating (Income) Expense, Net”; “– Other Non-Operating Income (Expense), Net”; and other notes to the financial statements.

## Liquidity and Capital Resources

Our primary sources of liquidity are cash generated from operations and financing obtained from capital markets and financial institutions. Cash generated from operations is highly dependent on selling prices for our products, which can vary significantly from period to period. Cash and marketable investments totaled \$10.98 billion as of September 1, 2022, and \$10.40 billion as of September 2, 2021. Our cash and investments consist primarily of bank deposits, money market funds, and liquid investment-grade, fixed-income securities, which are diversified among industries and individual issuers. To mitigate credit risk, we invest through high-credit-quality financial institutions and by policy generally limit the concentration of credit exposure by restricting the amount of investments with any single obligor. As of September 1, 2022, \$3.79 billion of our cash and marketable investments was held by our foreign subsidiaries.

We are continuously evaluating alternatives for efficiently funding our capital expenditures and ongoing operations. We expect, from time to time, to engage in a variety of financing transactions for such purposes, including the issuance of securities. As of September 1, 2022, \$2.50 billion was available to draw under our Revolving Credit Facility. Funding of certain significant capital projects is also dependent on the receipt of government incentives, which are subject to conditions and may not be obtained.

To develop new product and process technology, support future growth, achieve operating efficiencies, and maintain product quality, we must continue to invest in manufacturing technologies, facilities and equipment, and R&D. We estimate capital expenditures in 2023 for property, plant, and equipment, net of partner contributions, to be around \$8 billion. Actual amounts for 2023 will vary depending on market conditions. As of September 1, 2022, we had purchase obligations of approximately \$4.04 billion for the acquisition of property, plant, and equipment, of which approximately \$2.97 billion is expected to be paid within one year. For a description of other contractual obligations, such as debt, leases, and purchase obligations, see “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt,” “– Leases,” and “– Commitments.”

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To support expected memory demand in the second half of the decade, we will need to add new DRAM wafer capacity. Following the enactment of the CHIPS Act in 2022, we announced plans to invest in two leading-edge memory manufacturing fabs in the United States, contingent on CHIPS Act support through grants and investment tax credits. As part of this plan, in September 2022, we broke ground on a leading-edge memory manufacturing fab in Boise, Idaho. Construction of the fab is expected to begin in calendar 2023 with DRAM production targeted to start in calendar 2025. In addition, in October 2022, we announced plans to build a second leading-edge DRAM manufacturing fab in Clay, New York. We plan to start site preparation work in calendar 2023 and expect construction to begin in calendar 2024, with production anticipated to ramp in the latter half of the decade. We expect these new fabs to fulfill our requirements for additional wafer capacity starting in the second half of the decade and beyond, in line with industry demand trends.

On November 1, 2021, we issued \$1 billion in aggregate principal amount of unsecured 2032 Green Bonds. Over time, we plan to allocate an amount equal to the net proceeds to fund eligible sustainability-focused projects involving renewable energy, green buildings, energy efficiency, water management, waste abatement, and a circular economy.

Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. Through September 1, 2022, we have repurchased an aggregate of \$6.47 billion of the authorized amount. See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Equity."

On September 29, 2022, our Board of Directors declared a quarterly dividend of \$0.115 per share, payable in cash on October 26, 2022, to shareholders of record as of the close of business on October 11, 2022. The declaration and payment of any future cash dividends are at the discretion and subject to the approval of our Board of Directors. Our Board of Directors' decisions regarding the amount and payment of dividends will depend on many factors, including, but not limited to, our financial condition, results of operations, capital requirements, business conditions, debt service obligations, contractual restrictions, industry practice, legal requirements, regulatory constraints, and other factors that our Board of Directors may deem relevant.

We expect that our cash and investments, cash flows from operations, and available financing will be sufficient to meet our requirements at least through the next 12 months and thereafter for the foreseeable future.

**Cash Flows**

For the year ended	2022	2021	2020
Net cash provided by operating activities	\$ 15,181	\$ 12,468	\$ 8,306
Net cash provided by (used for) investing activities	(11,585)	(10,589)	(7,589)
Net cash provided by (used for) financing activities	(2,980)	(1,781)	(317)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	(106)	41	11
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ 510	\$ 139	\$ 411

**Operating Activities:** Cash provided by operating activities reflects net income adjusted for certain non-cash items, including depreciation expense, amortization of intangible assets, asset impairments, and stock-based compensation, and the effects of changes in operating assets and liabilities. The increase in cash provided by operating activities for 2022 as compared to 2021 was primarily due to higher net income adjusted for non-cash items and the effect of lower receivables, partially offset by an increase in inventories.

The increase in cash provided by operating activities for 2021 as compared to 2020 was primarily due to higher net income adjusted for non-cash items and the effect of lower inventories, partially offset by an increase in receivables due to a higher level of sales.

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**Investing Activities:** For 2022, net cash used for investing activities consisted primarily of \$12.07 billion of expenditures for property, plant, and equipment; inflows of \$115 million of partner contributions for capital expenditures; \$888 million of net inflows from the sale of the Lehi, Utah fab; and \$155 million of net outflows from purchases, sales, and maturities of available-for-sale securities.

For 2021, net cash used for investing activities consisted primarily of \$10.03 billion of expenditures for property, plant, and equipment, partially offset by inflows of \$502 million of partner contributions for capital expenditures, and \$1.06 billion of net outflows from purchases, sales, and maturities of available-for-sale securities.

For 2020, net cash used for investing activities consisted primarily of \$8.22 billion of expenditures for property, plant, and equipment, partially offset by inflows of \$272 million of partner contributions for capital expenditures, and \$415 million of net inflows from purchases, sales, and maturities of available-for-sale securities.

**Financing Activities:** For 2022, net cash used for financing activities included \$2.43 billion for the acquisition of 35.4 million shares of our common stock under our share repurchase authorization, \$2.03 billion of repayments of debt primarily to redeem the 2023 Notes and 2024 Notes, \$461 million of cash payments of dividends to shareholders, and \$141 million of payments on equipment purchase contracts. Cash used for financing activities was partially offset by aggregate proceeds of \$2.00 billion from the issuance of the unsecured 2032 Green Bonds, 2041 Notes, and 2051 Notes.

For 2021, net cash used for financing activities consisted primarily of \$1.20 billion for the acquisition of 15.6 million shares of our common stock under our share repurchase authorization, \$295 million of payments on equipment purchase contracts, \$185 million of cash payments to settle conversions of our 2032D Notes, and \$147 million of repayments of finance leases and other debt. In addition, we received proceeds of \$1.19 billion under an unsecured 2024 Term Loan A and used the proceeds to repay the \$1.19 billion Extinguished 2024 Term Loan A.

For 2020, net cash used for financing activities consisted primarily of \$4.37 billion of cash payments to reduce our debt, including \$2.50 billion to pay down borrowings under our Revolving Credit Facility, \$621 million for repayments of IMFT's debt obligations to Intel, \$534 million to prepay our 2025 Notes, \$266 million to settle conversions of notes, and \$248 million for scheduled repayment of finance leases; \$744 million for the acquisition of Intel's noncontrolling interest in IMFT; and \$176 million for the acquisition of 3.6 million shares of our common stock under our share repurchase authorization. Cash used for financing activities was partially offset by proceeds of \$2.50 billion from our Revolving Credit Facility, \$1.25 billion from the 2023 Notes, and \$1.25 billion from the Extinguished 2024 Term Loan A.

See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt."

## Critical Accounting Estimates

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may vary under different assumptions or conditions and involve a significant level of uncertainty. We evaluate our estimates and judgments on an ongoing basis. Our management believes the accounting policies below are critical in the portrayal of our financial condition and results of operations and require management's most difficult, subjective, or complex judgments.

**Contingencies:** We are subject to the possibility of losses from various contingencies. Significant judgment is necessary to estimate the probability and amount of a loss, if any, from such contingencies. An accrual is made when it is probable that a liability has been incurred or an asset has been impaired, and the amount of loss can be reasonably estimated. In accounting for the resolution of contingencies, significant judgment may be necessary to estimate amounts pertaining to periods prior to the resolution that are charged to operations in the period of resolution and amounts related to future periods.

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**Goodwill:** We test goodwill for impairment in our fourth quarter each year, or more frequently if indicators of an impairment exist, to determine whether it is more likely than not that the fair value of the reporting unit with goodwill is less than its carrying value. For reporting units for which this assessment concludes that it is more likely than not that the fair value is more than its carrying value, goodwill is considered not impaired, and we are not required to perform the goodwill impairment test. Qualitative factors considered in this assessment include industry and market considerations, overall financial performance, and other relevant events and factors affecting the fair value of the reporting unit. For reporting units for which this assessment concludes that it is more likely than not that the fair value is below the carrying value, goodwill is tested for impairment by determining the fair value of each reporting unit and comparing it to the carrying value of the net assets assigned to the reporting unit. If the fair value of the reporting unit exceeds its carrying value, goodwill is considered not impaired. If the carrying value of the reporting unit exceeds its fair value, we would record an impairment loss up to the difference between the carrying value and implied fair value. Our qualitative assessment for the current year indicated that the fair value for all of our reporting units substantially exceeded their carrying value and that a quantitative assessment was unnecessary.

Determining when to test for impairment, the reporting units, the assets and liabilities of the reporting unit, and the fair value of the reporting unit requires significant judgment and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates, forecasted manufacturing costs, and other expenses and are developed as part of our long-range planning process. The same estimates are used in business planning, forecasting, and capital budgeting as part of our long-term manufacturing capacity analysis. We test the reasonableness of the output of our long-range planning process by calculating an implied value per share and comparing that to current stock prices, analysts' consensus pricing, and management's expectations. These estimates and assumptions are used to calculate projected future cash flows for the reporting unit, which are discounted using a risk-adjusted rate to estimate a fair value. The discount rate requires determination of appropriate market comparables. We base fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates.

**Income taxes:** We are required to estimate our provision for income taxes and amounts ultimately payable or recoverable in numerous tax jurisdictions around the world. These estimates involve significant judgment and interpretations of regulations and are inherently complex. Resolution of income tax treatments in individual jurisdictions may not be known for many years after completion of the applicable year. We are also required to evaluate the realizability of our deferred tax assets on an ongoing basis in accordance with U.S. GAAP, which requires the assessment of our performance and other relevant factors. Realization of deferred tax assets is dependent on our ability to generate future taxable income. Our income tax provision or benefit is dependent, in part, on our ability to forecast future taxable income in Japan, the United States, Malaysia, and other jurisdictions. Such forecasts are inherently difficult and involve significant judgments including, among others, projecting future average selling prices and sales volumes, manufacturing and overhead costs, levels of capital spending, and other factors that significantly impact our analyses of the amount of net deferred tax assets that are more likely than not to be realized.

**Inventories:** Inventories are stated at the lower of cost or net realizable value, with cost being determined on a FIFO basis. Effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to FIFO. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. Determining net realizable value of inventories involves significant judgments, including projecting future average selling prices and future sales volumes. To project average selling prices and sales volumes, we review recent sales volumes, existing customer orders, current contract prices, industry analyses of supply and demand, seasonal factors, general economic trends, and other information. Actual selling prices and volumes may vary significantly from projected prices and volumes due to the volatile nature of the semiconductor memory and storage markets. When these analyses reflect estimated net realizable values below our manufacturing costs, we record a charge to cost of goods sold in advance of when inventories are actually sold. As a result, the timing of when product costs are charged to costs of goods sold can vary significantly. Differences in forecasted average selling prices used in calculating lower of cost or net realizable value adjustments can result in significant changes in the estimated net realizable value of product inventories and accordingly the amount of write-down recorded. For example, a 5% variance in the estimated selling prices would have changed the estimated net realizable value of our inventory by approximately \$337 million as of September 1, 2022. Due to the volatile nature of the semiconductor memory and storage markets, actual selling prices and volumes often vary significantly from projected prices and volumes; as a result, the timing of when product costs are charged to operations can vary significantly.



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U.S. GAAP provides for products to be grouped into categories in order to compare costs to net realizable values. The amount of any inventory write-down can vary significantly depending on the determination of inventory categories. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of average cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group.

**Property, plant, and equipment:** We periodically assess the estimated useful lives of our property, plant, and equipment based on technology node transitions, capital spending, and equipment re-use rates. We also review the carrying value of property, plant, and equipment for impairment when events and circumstances indicate that the carrying value of an asset or group of assets may not be recoverable from the estimated future cash flows expected to result from its use and/or disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to the amount by which the carrying value exceeds the estimated fair value of the assets. The estimate of future cash flows involves numerous assumptions which require significant judgment by us, including, but not limited to, future use of the assets for our operations versus sale or disposal of the assets, future selling prices for our products, and future production and sales volumes. In addition, significant judgment is required in determining the groups of assets for which impairment tests are separately performed.

**Revenue recognition:** Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.

#### Recently Adopted Accounting Standards

No material items.

#### Recently Issued Accounting Standards

No material items.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This discussion should be read in conjunction with the consolidated financial statements and accompanying notes for the year ended August 31, 2023. All period references are to our fiscal periods unless otherwise indicated. Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2023, 2022, and 2021 each contained 52 weeks. All tabular dollar amounts are in millions, except per share amounts.*

### Overview

For an overview of our business, see "Part I – Item 1. Business – Overview."

#### Industry Conditions

The memory and storage industry environment deteriorated sharply in the fourth quarter of 2022 and throughout 2023 due to weak demand in many end markets combined with global and macroeconomic challenges and lower demand resulting from customer actions to reduce inventory levels. This led to significant reductions in average selling prices for both DRAM and NAND and bit shipments for DRAM, resulting in declines in revenue across all our business segments and nearly all our end markets. Due to the challenging pricing environment, we recognized charges of \$1.83 billion in 2023 to write down inventories to their estimated net realizable value. Ongoing demand growth, customer inventory normalization, and industry-wide supply discipline have set the stage for increased revenue, and improved pricing and profitability throughout fiscal 2024. As a result, pricing trends have started to improve and there were no write downs of inventories to net realizable value in the fourth quarter of 2023. However, further write-downs of inventories in future quarters could occur if pricing expectations deteriorate. Given the challenging pricing environment, elevated levels of inventories for suppliers and customers, and significant supply-demand mismatch, we expect industry profitability will remain challenged into 2024.

As a result of these conditions and increases in our inventory levels, we have reduced capital expenditures and also significantly reduced wafer starts in 2023 for both DRAM and NAND. We expect wafer starts will remain significantly below peak capacity levels for the foreseeable future as we remain focused on managing down our inventories and controlling our supply. We recognized period costs from fabrication facility underutilization of \$382 million in 2023 due to wafer start reductions. We estimate that we will recognize approximately \$200 million of period costs from underutilization due to wafer start reductions in the first quarter of 2024. We have also taken significant steps to reduce our costs and operating expenses. These actions include the 2023 Restructure Plan discussed below and additional reductions in external spending, including implementing productivity programs across the business, suspension of our 2023 bonus company-wide, reductions in select product programs, lower discretionary spending, and cuts to 2023 executive salaries across the company.

#### Impact of China Cyberspace Administration Decision

On March 31, 2023, China's Cyberspace Administration (the "CAC") notified us that it was conducting a cybersecurity review of our products sold in China. On May 21, 2023, we received notice that the CAC had concluded its review and decided that our products presented a cybersecurity risk. As such, the CAC determined that critical information infrastructure operators in China may not purchase Micron products. There is no list of the companies that have been designated as critical information infrastructure operators published by the Chinese government or otherwise available to us. Therefore, the full impact of the CAC decision on our business remains uncertain.

The CAC decision has impacted our business, particularly in the domestic data center and networking markets in China. In addition, although demand for DRAM and NAND is improving as customer inventory levels continue to normalize and secular growth drivers remain intact, the CAC decision continues to impact our revenue opportunity in China. This significant headwind is impacting our outlook and slowing our recovery. We are working to mitigate this impact over time and expect quarter-to-quarter revenue variability. Our revenue with companies headquartered in mainland China and Hong Kong, including direct sales as well as indirect sales through distributors, is approximately a quarter of our worldwide revenue and remains our principal exposure to the CAC decision. Although the impact of the CAC decision remains uncertain, we believe that approximately half of that China-headquartered customer revenue, which equates to a low-double-digit percentage of our worldwide revenue, is at risk of being impacted. Despite the near-term impact to our demand as a result of the CAC decision, our long-term goal is to retain our worldwide DRAM and NAND market share.

### **2023 Restructure Plan**

We initiated a restructure plan in response to challenging industry conditions (the “2023 Restructure Plan”). Under the plan, we expect our headcount reduction to approach 15% by the end of calendar 2023, through a combination of voluntary attrition and personnel reductions. In connection with the plan, we incurred restructure charges of \$171 million in 2023 primarily related to employee severance costs. The 2023 Restructure Plan was substantially completed in 2023. As a result of the 2023 Restructure Plan, we expect to realize cost savings of approximately \$130 million per quarter (approximately 60% in cost of goods sold, 30% in R&D, and 10% in SG&A) subsequent to 2023. Further information on restructure activities can be found in “Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Restructure and Asset Impairments.”

### **Lehi, Utah Fab and 3D XPoint**

In 2021, we updated our portfolio strategy to further strengthen our focus on memory and storage innovations for the data center market. In connection therewith, we determined that there was insufficient market validation to justify the ongoing investments required to commercialize 3D XPoint at scale. Accordingly, we ceased development of 3D XPoint technology and engaged in discussions for the sale of our facility located in Lehi, Utah that was dedicated to 3D XPoint production. As a result, we classified the property, plant, and equipment as held for sale in 2021, ceased depreciating the assets, and recognized a \$435 million restructure and asset impairment charge and a \$104 million tax benefit.

We closed the sale of our Lehi facility to TI in 2022 for \$893 million and disposed of \$918 million of net assets, consisting primarily of property, plant, and equipment, resulting in a \$23 million loss, net of selling expenses and other adjustments.

## Results of Operations

### Consolidated Results

For the year ended	2023		2022		2021	
Revenue	\$ 15,540	100 %	\$ 30,758	100 %	\$ 27,705	100 %
Cost of goods sold	16,956	109 %	16,860	55 %	17,282	62 %
Gross margin	(1,416)	(9)%	13,898	45 %	10,423	38 %
Research and development	3,114	20 %	3,116	10 %	2,663	10 %
Selling, general, and administrative	920	6 %	1,066	3 %	894	3 %
Restructure and asset impairments	171	1 %	48	— %	488	2 %
Other operating (income) expense, net	124	1 %	(34)	— %	95	— %
Operating income (loss)	(5,745)	(37)%	9,702	32 %	6,283	23 %
Interest income (expense), net	80	1 %	(93)	— %	(146)	(1)%
Other non-operating income (expense), net	7	— %	(38)	— %	81	— %
Income tax (provision) benefit	(177)	(1)%	(888)	(3)%	(394)	(1)%
Equity in net income (loss) of equity method investees	2	— %	4	— %	37	— %
Net income (loss)	\$ (5,833)	(38)%	\$ 8,687	28 %	\$ 5,861	21 %

**Total Revenue:** Total revenue for 2023 was adversely impacted by the factors described in the section titled “Industry Conditions” above. Total revenue for 2023 decreased 49% as compared to 2022 primarily due to decreases in sales of both DRAM and NAND products.

- Sales of DRAM products decreased 51% primarily due to a high-40s percent range decline in average selling prices and decreases in bit shipments in the high-single-digit percent range.
- Sales of NAND products decreased 46% primarily due to a low-50s percent range decline in average selling prices partially offset by increases in bit shipments in the high-single-digit percent range.

Total revenue for 2022 increased 11% as compared to 2021 primarily due to increases in sales of both DRAM and NAND products.

- Sales of DRAM products increased 12% primarily due to increases in bit shipments of slightly over 10%.
- Sales of NAND products increased 11% primarily due to a high-single-digit percent increase in bit shipments and a low-single-digit percent increase in average selling prices.

**Consolidated Gross Margin:** Our consolidated gross margin has been adversely impacted by the factors described in the section titled “Industry Conditions” above. Our consolidated gross margin percentage decreased to negative 9% for 2023 from 45% for 2022 primarily due to declines in average selling prices for both DRAM and NAND and charges to write down inventories (as detailed in “Inventory NRV write-downs” below), and \$382 million of facility underutilization costs in 2023.

**Inventory NRV write-downs:** Our consolidated gross margin was impacted by charges to write down inventories to their estimated net realizable value as a result of declines in average selling prices for both DRAM and NAND. As charges to write down inventories are recorded in advance of when inventories are sold, costs of goods sold in subsequent periods are lower than they otherwise would be. The impact of inventory NRV write-downs for each period reflects (1) inventory write-downs in that period, offset by (2) lower costs in that period on the sale of inventory written down in prior periods. The impacts of inventory NRV write-downs are summarized below:

For the year ended	2023	2022	2021
Provision to write down inventory to NRV	\$ (1,831)	\$ —	\$ —
Lower costs from sale of inventory written down in prior periods	844	—	—
	<u>\$ (987)</u>	<u>\$ —</u>	<u>\$ —</u>

Our consolidated gross margin percentage increased to 45% for 2022 from 38% for 2021, as a result of improvements in margins for both DRAM and NAND products, primarily due to reductions in manufacturing costs. Manufacturing cost reductions were driven by strong execution in ramping our 1α DRAM and 176-layer NAND technology nodes. For 2021, our gross margins included the impact of underutilization costs at MTU of \$335 million. See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Lehi, Utah Fab and 3D XPoint." Also, effective as of the beginning of the second quarter of 2021, we changed our method of inventory costing from average cost to first-in, first-out ("FIFO"). Concurrently, as of the beginning of the second quarter of 2021, we modified our inventory cost absorption processes used to estimate inventory values, which affects the timing of when costs are recognized. These changes resulted in a one-time increase to cost of goods sold of approximately \$293 million in 2021.

**Revenue by Business Unit**

For the year ended	2023		2022		2021	
CNBU	\$ 5,710	37 %	\$ 13,693	45 %	\$ 12,280	44 %
MBU	3,630	23 %	7,260	24 %	7,203	26 %
EBU	3,637	23 %	5,235	17 %	4,209	15 %
SBU	2,553	16 %	4,553	15 %	3,973	14 %
All Other	10	— %	17	— %	40	— %
	<u>\$ 15,540</u>		<u>\$ 30,758</u>		<u>\$ 27,705</u>	

Percentages of total revenue may not total 100% due to rounding.

Changes in revenue for each business unit for 2023 as compared to 2022 were as follows:

- CNBU revenue decreased 58% primarily due to declines in average selling prices for DRAM and decreases in bit shipments.
- MBU revenue decreased 50% primarily due to declines in average selling prices for both DRAM and NAND and decreases in NAND bit shipments.
- EBU revenue decreased 31% primarily due to declines in average selling prices for both DRAM and NAND and decreases in bit shipments.
- SBU revenue decreased 44% primarily due to declines in average selling prices for NAND partially offset by increases in bit shipments.

Changes in revenue for each business unit for 2022 as compared to 2021 were as follows:

- CNBU revenue increased 12% primarily due to increases in bit shipments to cloud, enterprise, and networking markets.
- MBU revenue was relatively unchanged as both DRAM and NAND revenue was relatively flat.
- EBU revenue increased 24% primarily due to strong demand growth in industrial and automotive markets.
- SBU revenue increased 15% primarily due to higher average selling prices and increases in shipments of SSD products.

**Operating Income (Loss) by Business Unit**

For the year ended	2023		2022		2021	
CNBU	\$ (585)	(10)%	\$ 5,844	43 %	\$ 4,295	35 %
MBU	(1,750)	(48)%	2,160	30 %	2,173	30 %
EBU	382	11 %	1,752	33 %	1,006	24 %
SBU	(1,887)	(74)%	513	11 %	173	4 %
All Other	8	80 %	12	71 %	20	50 %
	<u>\$ (3,832)</u>		<u>\$ 10,281</u>		<u>\$ 7,667</u>	

Percentages reflect operating income (loss) as a percentage of revenue for each business unit.

Changes in operating income or loss for each business unit for 2023 as compared to 2022 were as follows:

- CNBU operating income (loss) deteriorated primarily due to declines in average selling prices and lower bit shipments.
- MBU operating income (loss) deteriorated primarily due to declines in average selling prices and lower NAND bit shipments.
- EBU operating income decreased primarily due to declines in average selling prices and lower bit shipments.
- SBU operating income (loss) deteriorated primarily due to declines in average selling prices.

Changes in operating income or loss for each business unit for 2022 as compared to 2021 were as follows:

- CNBU operating income increased primarily due to higher bit shipments and manufacturing cost reductions.
- MBU operating income was relatively unchanged as slight increases in gross margins were offset by higher operating expenses.
- EBU operating income increased primarily due to manufacturing cost reductions from an increasing mix of leading-edge bits, higher bit shipments, and improved DRAM pricing in industrial and consumer markets, partially offset by higher R&D expenses.
- SBU operating income increased primarily due to improved product mix driving increases in average selling prices, increases in SSD shipments, and manufacturing cost reductions, partially offset by higher R&D expenses.

**Operating Expenses and Other**

**Research and Development:** R&D expenses vary primarily with the number of development and pre-qualification wafers processed, the cost of advanced equipment dedicated to new product and process development, and personnel costs. Because of the lead times necessary to manufacture our products, we typically begin to process wafers before completion of performance and reliability testing. Development of a product is deemed complete when it is qualified through internal reviews and tests for performance and reliability. R&D expenses can vary significantly depending on the timing of product qualification.

R&D expenses for 2023 were relatively unchanged as compared to 2022 as decreases in employee compensation were offset by higher depreciation expense. R&D expenses for 2022 increased 17% as compared to 2021 primarily due to higher employee compensation from increases in headcount, higher volumes of development and prequalification wafers, and higher depreciation expense.

**Selling, General, and Administrative:** SG&A expenses for 2023 were 14% lower as compared to 2022 primarily due to decreases in employee compensation, legal fees, advertising, and professional services. SG&A expenses for 2022 were 19% higher as compared to 2021 primarily due to increases in employee compensation, professional services, and legal fees.

**Restructure and Asset Impairments:** For a discussion of restructure and asset impairments, see the Overview sections above titled “2023 Restructure Plan” and “Lehi, Utah Fab and 3D XPoint.”

**Interest Income (Expense), Net:** Interest income (expense) improved for 2023 as compared to 2022 primarily as a result of increases in interest income due to higher interest rates on our cash and investments, partially offset by increases in interest expense due to higher debt balances and interest rates. Interest income (expense) improved for 2022 as compared to 2021 primarily due to an increase of \$59 million in interest income as a result of increases in interest rates on our cash and investments.

**Income Taxes:** Our income tax (provision) benefit consisted of the following:

For the year ended	2023		2022		2021	
Income (loss) before taxes	\$	(5,658)	\$	9,571	\$	6,218
Income tax (provision) benefit		(177)		(888)		(394)
Effective tax rate		(3.1)%		9.3 %		6.3 %

The change in our effective tax rate for 2023 as compared to 2022 was primarily due to a pre-tax loss in 2023. Despite a consolidated pre-tax loss on a worldwide basis, we have taxes payable in certain geographies due to minimum taxable income reportable in those geographies. Our effective tax rate increased in 2022 as compared to 2021 primarily due to the geographic mix of our earnings and a valuation allowance recorded against our Idaho deferred tax assets of \$189 million, partially offset by tax impacts of changes in foreign currency exchange rates.

We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. As a result of a loss before taxes and geographical mix of income, the benefit from tax incentive arrangements was not material for 2023. The effect of tax incentive arrangements reduced our tax provision by \$1.12 billion (benefiting our diluted earnings per share by \$1.00) for 2022 and by \$758 million (\$0.66 per diluted share) for 2021.

Beginning in 2024, the Inflation Reduction Act of 2022 imposes a 15% book minimum tax on corporations with three-year average annual adjusted financial statement income exceeding \$1 billion. The impact of this tax will depend on our facts in each year, anticipated guidance from the U.S. Department of the Treasury, and other developing global tax legislation.

Various tax reforms are being considered in multiple jurisdictions that, if enacted, contain provisions that could materially impact our tax expense. We continue to monitor the potential impact of these various tax reform proposals to our overall global effective tax rate and financial statements.

**Other:** Further information can be found in the following notes contained in "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements":

- Lehi, Utah Fab and 3D XPoint
- Goodwill
- Equity Plans
- Restructure and Asset Impairments
- Other Operating (Income) Expense, Net
- Other Non-Operating Income (Expense), Net
- Income Taxes

## Liquidity and Capital Resources

Our primary sources of liquidity are cash generated from operations and financing obtained from capital markets and financial institutions. Cash generated from operations is highly dependent on selling prices for our products, which can vary significantly from period to period. Cash and marketable investments totaled \$10.44 billion as of August 31, 2023, and \$10.98 billion as of September 1, 2022. Our cash and investments consist primarily of bank deposits, money market funds, and liquid investment-grade, fixed-income securities, which are diversified among industries and individual issuers. To mitigate credit risk, we invest through high-credit-quality financial institutions and by policy generally limit the concentration of credit exposure by restricting the amount of investments with any single obligor. As of August 31, 2023, \$2.45 billion of our cash and marketable investments was held by our foreign subsidiaries.

We continuously evaluate alternatives for efficiently funding our capital expenditures and ongoing operations. We expect, from time to time, to engage in a variety of financing transactions for such purposes, including the issuance of securities. As of August 31, 2023, \$2.50 billion was available to draw under our Revolving Credit Facility. On March 27, 2023, we entered into amendments to the Multi-Tranche Term Loan Agreement and the agreements governing the Revolving Credit Facility and the 2024 Term Loan A to revise the leverage ratio covenant in each such agreement, as further described in "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt." Funding of certain significant capital projects is also dependent on the receipt of government incentives, which are subject to conditions and may not be obtained.

To develop new product and process technology, support future growth, achieve operating efficiencies, and maintain product quality, we must continue to invest in manufacturing technologies, facilities and equipment, and R&D. We estimate capital expenditures in 2024 for property, plant, and equipment, net of partner contributions, to be slightly above \$7 billion. Actual amounts for 2024 will vary depending on market conditions. As of August 31, 2023, we had purchase obligations of approximately \$915 million for the acquisition of property, plant, and equipment, of which approximately \$812 million is expected to be paid within one year. For a description of other contractual obligations, such as leases, debt, and commitments, see "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Leases," " – Debt," and " – Commitments."

To support expected memory demand in the second half of the decade, we will need to add new DRAM wafer capacity. Following the enactment of the CHIPS Act in 2022, we announced plans to invest in two leading-edge memory manufacturing fabs in the United States, contingent on CHIPS Act support through grants and investment tax credits. As part of this plan, in September 2022, we broke ground on a leading-edge memory manufacturing fab in Boise, Idaho. Construction of the fab began in October 2023 with DRAM production targeted to start in calendar 2025 and first output in early calendar 2026. In addition, in October 2022, we announced plans to build a second leading-edge DRAM manufacturing fab in Clay, New York. We expect construction to begin in calendar 2024, with production anticipated to ramp in the latter half of the decade. We expect these new fabs to fulfill our requirements for additional wafer capacity starting in the second half of the decade and beyond, in line with industry demand trends. On August 21, 2023 we announced that two of our subsidiaries had each submitted full applications on August 18, 2023 for federal funding in the form of grants under the CHIPS Act for both of these projects.

We are also advancing our global back-end assembly and test network in order to support our product portfolio and extend our ability to deliver on global customer demand in the future. We intend to make investments at our backend facility in Xi'an, China, including a new building to provide space to add more product capability, to allow us over time to serve more of the demand from our customers in China from the Xi'an facility. We also intend to build a new assembly and test facility in Gujarat, India to address demand in the latter half of this decade.

Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. Through August 31, 2023, we had repurchased an aggregate of \$6.89 billion of the authorized amount. See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Equity."



On September 27, 2023, our Board of Directors declared a quarterly dividend of \$0.115 per share, payable in cash on October 25, 2023, to shareholders of record as of the close of business on October 10, 2023. The declaration and payment of any future cash dividends are at the discretion and subject to the approval of our Board of Directors. Our Board of Directors' decisions regarding the amount and payment of dividends will depend on many factors, including, but not limited to, our financial condition, results of operations, capital requirements, business conditions, debt service obligations, contractual restrictions, industry practice, legal requirements, regulatory constraints, and other factors that our Board of Directors may deem relevant.

We expect that our cash and investments, cash flows from operations, and available financing will be sufficient to meet our requirements at least through the next 12 months and thereafter for the foreseeable future.

**Cash Flows**

For the year ended	2023	2022	2021
Net cash provided by operating activities	\$ 1,559	\$ 15,181	\$ 12,468
Net cash provided by (used for) investing activities	(6,191)	(11,585)	(10,589)
Net cash provided by (used for) financing activities	4,983	(2,980)	(1,781)
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	(34)	(106)	41
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ 317	\$ 510	\$ 139

**Operating Activities:** Cash provided by operating activities reflects net income (loss) adjusted for certain non-cash items, including depreciation expense, amortization of intangible assets, inventory write-downs, asset impairments, and stock-based compensation, and the effects of changes in operating assets and liabilities. The decrease in cash provided by operating activities for 2023 as compared to 2022 was primarily due to a net loss in the current year adjusted for non-cash items and the effect of an increase in inventories and a decline in accounts payable and accrued expenses, partially offset by a decrease in receivables.

The increase in cash provided by operating activities for 2022 as compared to 2021 was primarily due to higher net income adjusted for non-cash items and the effect of lower receivables, partially offset by an increase in inventories.

**Investing Activities:** For 2023, net cash used for investing activities consisted primarily of \$7.68 billion of expenditures for property, plant, and equipment; contributions of \$710 million received from partners to offset capital expenditures; and \$868 million of net inflows from maturities, sales, and purchases of available-for-sale securities.

For 2022, net cash used for investing activities consisted primarily of \$12.07 billion of expenditures for property, plant, and equipment; contributions of \$115 million received from partners to offset capital expenditures; \$888 million of net inflows from the sale of the Lehi, Utah fab; and \$155 million of net outflows from purchases, sales, and maturities of available-for-sale securities.

For 2021, net cash used for investing activities consisted primarily of \$10.03 billion of expenditures for property, plant, and equipment, partially offset by contributions of \$502 million received from partners to offset capital expenditures, and \$1.06 billion of net outflows from purchases, sales, and maturities of available-for-sale securities.

**Financing Activities:** For 2023, net cash provided by financing activities consisted primarily of \$3.20 billion of proceeds from our 2025, 2026, and 2027 Term Loan A borrowings, \$1.27 billion from the issuance of the 2029 B Notes, \$896 million from the issuance of the 2033 B Notes, \$749 million from the issuance of the 2033 A Notes, and \$599 million from the issuance of the 2028 Notes. Cash used for financing activities included \$761 million for repayments of debt, \$504 million for payments of dividends to shareholders, \$425 million for the acquisition of 8.6 million shares of our common stock under our share repurchase authorization, and \$138 million of payments on equipment purchase contracts.

For 2022, net cash used for financing activities included \$2.43 billion for the acquisition of 35.4 million shares of our common stock under our share repurchase authorization, \$2.03 billion of repayments of debt primarily to redeem the 2023 Notes and 2024 Notes, \$461 million of cash payments of dividends to shareholders, and \$141 million of payments on equipment purchase contracts. Cash used for financing activities was partially offset by aggregate proceeds of \$2.00 billion from the issuance of the unsecured 2032 Green Bonds, 2041 Notes, and 2051 Notes.

For 2021, net cash used for financing activities consisted primarily of \$1.20 billion for the acquisition of 15.6 million shares of our common stock under our share repurchase authorization, \$295 million of payments on equipment purchase contracts, \$185 million of cash payments to settle conversions of our 2032D Notes, and \$147 million of repayments of finance leases and other debt. In addition, we received proceeds of \$1.19 billion under an unsecured 2024 Term Loan A and used the proceeds to repay the \$1.19 billion Extinguished 2024 Term Loan A.

See "Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements – Debt."

## Critical Accounting Estimates

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. Estimates and judgments are based on historical experience, forecasted events, and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may vary under different assumptions or conditions and involve a significant level of uncertainty. We evaluate our estimates and judgments on an ongoing basis. Our management believes the accounting policies below are critical in the portrayal of our financial condition and results of operations and require management's most difficult, subjective, or complex judgments.

**Contingencies:** We are subject to the possibility of losses from various contingencies. Significant judgment is necessary to estimate the probability and amount of a loss, if any, from such contingencies. An accrual is made when it is probable that a liability has been incurred or an asset has been impaired, and the amount of loss can be reasonably estimated. In accounting for the resolution of contingencies, significant judgment may be necessary to estimate amounts pertaining to periods prior to the resolution that are charged to operations in the period of resolution and amounts related to future periods.

**Goodwill:** We test goodwill for impairment in our fourth quarter each year, or more frequently if indicators of an impairment exist, to determine whether it is more likely than not that the fair value of the reporting unit with goodwill is less than its carrying value. For reporting units for which this assessment concludes that it is more likely than not that the fair value is more than its carrying value, goodwill is considered not impaired, and we are not required to perform the goodwill impairment test. Qualitative factors considered in this assessment include industry and market considerations, overall financial performance, and other relevant events and factors affecting the fair value of the reporting unit. For reporting units for which this assessment concludes that it is more likely than not that the fair value is below the carrying value, goodwill is tested for impairment by determining the fair value of each reporting unit and comparing it to the carrying value of the net assets assigned to the reporting unit. If the fair value of the reporting unit exceeds its carrying value, goodwill is considered not impaired. If the carrying value of the reporting unit exceeds its fair value, we recognize an impairment loss up to the difference between the carrying value and implied fair value. We recognized a charge of \$101 million in 2023 to impair all of the goodwill assigned to our SBU reporting unit based on our quantitative assessment for impairment in the current year. The quantitative assessment indicated that the fair value for all of our other reporting units substantially exceeded their carrying value.

Determining when to test for impairment, the reporting units, the assets and liabilities of the reporting unit, and the fair value of the reporting unit requires significant judgment and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates, forecasted manufacturing costs, and other expenses and are developed as part of our long-range planning process. The same estimates are used in business planning, forecasting, and capital budgeting as part of our long-term manufacturing capacity analysis. These estimates and assumptions are used to calculate projected future cash flows for the reporting unit, which are discounted using a risk-adjusted rate to estimate a fair value. The discount rate requires determination of appropriate market comparables. We base fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates. We assess the reasonableness of our methodology, forecasts, and assumptions by comparing the aggregate calculated fair value for our reporting units to our market capitalization.

**Income taxes:** We are required to estimate our provision for income taxes and amounts ultimately payable or recoverable in numerous tax jurisdictions around the world. These estimates involve significant judgment and interpretations of regulations and are inherently complex. Resolution of income tax treatments in individual jurisdictions may not be known for many years after completion of the applicable year. We are also required to evaluate the realizability of our deferred tax assets on an ongoing basis in accordance with U.S. GAAP, which requires the assessment of our performance and other relevant factors. Realization of deferred tax assets is dependent on our ability to generate future taxable income. Our income tax provision or benefit is dependent, in part, on our ability to forecast future taxable income in Japan, Malaysia, the United States, Taiwan, and other jurisdictions. Such forecasts are inherently difficult and involve significant judgments including, among others, projecting future average selling prices and sales volumes, manufacturing and overhead costs, levels of capital spending, and other factors that significantly impact our analyses of the amount of net deferred tax assets that are more likely than not to be realized.

**Inventories:** Inventories are stated at the lower of cost or net realizable value, with cost being determined on a first-in, first-out ("FIFO") basis. Cost includes depreciation, labor, material, and overhead costs, including product and process technology costs. Determining net realizable value of finished goods and work in process inventories involves significant judgments, including projecting future average selling prices, future sales volumes, and future cost per part. To project average selling prices and sales volumes, we review recent sales volumes, existing customer orders, current contract prices, industry analyses of supply and demand, and general economic trends. To project cost per part, we review trends with historical results and consider known changes in our cost structure as applicable. Actual selling prices may vary significantly from projected prices due to the volatile nature of the semiconductor memory and storage markets. When these analyses reflect estimated net realizable values below our manufacturing costs, we record a charge to cost of goods sold in advance of when inventories are actually sold. As a result, the timing of when product costs are charged to costs of goods sold can vary significantly. Differences in future average selling prices used in calculating lower of cost or net realizable value adjustments can result in significant changes in the estimated net realizable value of finished goods and work in process inventories and accordingly the amount of write-down recorded. For example, a 5% decrease in future average selling prices would have changed the estimated net realizable value of our finished goods and work in process inventories by approximately \$600 million as of August 31, 2023.

U.S. GAAP provides for products to be grouped into categories in order to compare costs to net realizable values. The amount of any inventory write-down can vary significantly depending on the determination of inventory categories. We review the major characteristics of product type and markets in determining the unit of account for which we perform the lower of cost or net realizable value analysis and categorize all inventories (including DRAM, NAND, and other memory) as a single group.

**Property, plant, and equipment:** We periodically assess the estimated useful lives of our property, plant, and equipment based on technology node transitions, capital spending, and equipment re-use rates. We also review the carrying value of property, plant, and equipment for impairment when events and circumstances indicate that the carrying value of an asset or group of assets may not be recoverable from the estimated future cash flows expected to result from its use and/or disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to the amount by which the carrying value exceeds the estimated fair value of the assets. The estimate of future cash flows involves numerous assumptions which require significant judgment by us, including, but not limited to, future use of the assets for our operations versus sale or disposal of the assets, future selling prices for our products, and future production and sales volumes.

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**Revenue recognition:** Revenue is primarily recognized at a point in time when control of the promised goods is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those goods. Contracts with our customers are generally short-term in duration at fixed, negotiated prices with payment generally due shortly after delivery. We estimate a liability for returns using the expected value method based on historical returns. In addition, we generally offer price protection to our distributors, which is a form of variable consideration that decreases the transaction price. We use the expected value method, based on historical price adjustments and current pricing trends, to estimate the amount of revenue recognized from sales to distributors. Differences between the estimated and actual amounts are recognized as adjustments to revenue.

## Recently Adopted Accounting Standards

No material items.

## Recently Issued Accounting Standards

No material items.

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*This discussion should be read in conjunction with the consolidated financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended August 31, 2023. All period references are to our fiscal periods unless otherwise indicated. Our fiscal year is the 52 or 53-week period ending on the Thursday closest to August 31. Fiscal 2024 and 2023 each contain 52 weeks. All tabular dollar amounts are in millions, except per share amounts.*

**Overview**

We are an industry leader in innovative memory and storage solutions transforming how the world uses information to enrich life for all. With a relentless focus on our customers, technology leadership, and manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND, and NOR memory and storage products through our Micron® and Crucial® brands. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experience.

We manufacture our products at wholly-owned facilities and also utilize subcontractors for certain manufacturing processes. Our global network of manufacturing centers of excellence not only allows us to benefit from scale while streamlining processes and operations, but it also brings together some of the world's brightest talent to work on the most advanced memory technology. Centers of excellence bring expertise together in one location, providing an efficient support structure for end-to-end manufacturing, with quicker cycle times, in partnership with teams such as research and development ("R&D"), product development, human resources, procurement, and supply chain. For our locations in Singapore and Taiwan, this is also a combination of bringing fabrication and back-end manufacturing together. We make significant investments to develop proprietary product and process technology, which generally increases bit density per wafer and reduces per-bit manufacturing costs of each generation of product. We continue to introduce new generations of products that offer improved performance characteristics, including higher data transfer rates, advanced packaging solutions, lower power consumption, improved read/write reliability, and increased memory density.

We face intense competition in the semiconductor memory and storage markets. To remain competitive we must continuously develop and implement new products and technologies and decrease manufacturing costs in spite of ongoing inflationary cost pressures. Our success is largely dependent on obtaining returns on our R&D investments, efficient utilization of our manufacturing infrastructure, development and integration of advanced product and process technologies, market acceptance of our diversified portfolio of semiconductor-based memory and storage solutions, and efficient capital spending.

**Product Technologies**

Our product portfolio of memory and storage solutions, advanced solutions, and storage platforms is based on our high-performance semiconductor memory and storage technologies, including DRAM, NAND, and NOR. We sell our products into various markets through our business units in numerous forms, including components, modules, SSDs, managed NAND, MCPs, HBM, and wafers. Our system-level solutions, including SSDs and managed NAND, combine NAND, a controller, firmware, and in some cases DRAM.

**DRAM:** DRAM products are dynamic random access memory semiconductor devices with low latency that provide high-speed data retrieval with a variety of performance characteristics. DRAM products lose content when power is turned off ("volatile") and are most commonly used in client, cloud server, enterprise, networking, graphics, industrial, and automotive markets. LPDRAM products, which are engineered to meet standards for performance and power consumption, are sold into smartphone and other mobile-device markets (including client markets for Chromebooks, notebook PCs, and gaming consoles), as well as into the automotive, industrial, consumer, and datacenter markets. HBM is a stacked DRAM technology optimized for memory-bandwidth intensive applications.

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**NAND:** NAND products are non-volatile, re-writeable semiconductor storage devices that provide high-capacity, low-cost storage with a variety of performance characteristics. NAND is used in SSDs for the enterprise and cloud, client, consumer, and automotive markets and in removable storage markets. Managed NAND is used in smartphones and other mobile devices, and in consumer, automotive, and embedded markets. Low-density NAND is ideal for applications like automotive, surveillance, machine-to-machine, automation, printer, and home networking.

**NOR:** NOR products are non-volatile, re-writable semiconductor memory devices that provide fast read speeds. NOR is most commonly used for reliable code storage (e.g., boot, application, operating system, and execute-in-place code in an embedded system) and for frequently changing small data storage and is ideal for automotive, industrial, and consumer applications.

#### Industry Conditions

The memory and storage industry environment deteriorated sharply in the fourth quarter of 2022 and through 2023 due to weak demand in many end markets combined with global and macroeconomic challenges and lower demand resulting from customer actions to reduce inventory levels. This led to significant reductions in average selling prices for both DRAM and NAND and reductions in bit shipments for DRAM, resulting in declines in revenue across all our business segments and nearly all our end markets. For the first six months of 2024, increasing demand growth, driven in part by deployment of artificial intelligence and mostly normal customer inventories, combined with industry-wide supply discipline, resulted in an improved industry supply and demand balance. As a result, we have experienced improvements in pricing and margins in 2024.

We reduced capital expenditures and wafer starts for both DRAM and NAND in response to challenging market conditions that began in the latter part of 2022 and increased levels of our inventories. In the first quarter of 2024, we recognized \$165 million of period costs due to wafer start reductions. In the second quarter of 2024, fabrication facility underutilization was reduced and principally related to legacy manufacturing capacity, accordingly period costs were not significant. In addition, to improve capital efficiency, we have redeployed equipment from older technology nodes to support conversions to leading-edge nodes, which has resulted in a meaningful reduction in DRAM and NAND wafer capacity.

#### Impact of China Cyberspace Administration Decision

On March 31, 2023, China's Cyberspace Administration (the "CAC") notified us that it was conducting a cybersecurity review of our products sold in China. On May 21, 2023, we received notice that the CAC had concluded its review and decided that our products presented a cybersecurity risk. As such, the CAC determined that critical information infrastructure operators in China may not purchase Micron products. The CAC decision has impacted our business, particularly in the domestic data center and networking markets in China, and we have been working to mitigate that impact. Our goal is to retain our worldwide DRAM and NAND market share.

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## Results of Operations

### Consolidated Results

	Second Quarter		First Quarter		Second Quarter		Six months ended			
	2024		2024		2023		2024		2023	
Revenue	\$ 5,824	100 %	\$ 4,726	100 %	\$ 3,693	100 %	\$ 10,550	100 %	\$ 7,778	100 %
Cost of goods sold	4,745	81 %	4,761	101 %	4,899	133 %	9,506	90 %	8,091	104 %
Gross margin	1,079	19 %	(35)	(1)%	(1,206)	(33)%	1,044	10 %	(313)	(4)%
Research and development	832	14 %	845	18 %	788	21 %	1,677	16 %	1,637	21 %
Selling, general, and administrative	280	5 %	263	6 %	231	6 %	543	5 %	482	6 %
Restructure and asset impairments	—	— %	—	— %	86	2 %	—	— %	99	1 %
Other operating (income) expense, net	(224)	(4)%	(15)	— %	(8)	— %	(239)	(2)%	(19)	— %
Operating income (loss)	191	3 %	(1,128)	(24)%	(2,303)	(62)%	(937)	(9)%	(2,512)	(32)%
Interest income (expense), net	(14)	— %	—	— %	30	1 %	(14)	— %	67	1 %
Other non-operating income (expense), net	(7)	— %	(27)	(1)%	2	— %	(34)	— %	(2)	— %
Income tax (provision) benefit	622	11 %	(73)	(2)%	(54)	(1)%	549	5 %	(62)	(1)%
Equity in net income (loss) of equity method investees	1	— %	(6)	— %	13	— %	(5)	— %	2	— %
Net income (loss)	\$ 793	14 %	\$ (1,234)	(26)%	\$ (2,312)	(63)%	\$ (441)	(4)%	\$ (2,507)	(32)%

**Total Revenue:** Total revenue for the second quarter and first six months of 2024 was impacted by the factors described in the section titled "Industry Conditions" above. These conditions drove significant quarterly declines in average selling prices throughout 2023 and a subsequent recovery of average selling prices in the first two quarters of 2024.

Total revenue for the second quarter of 2024 increased 23% as compared to the first quarter of 2024 due to increases in sales of both DRAM and NAND products.

- Sales of DRAM products in the second quarter of 2024 increased 21% as compared to the first quarter of 2024 primarily due to increases in average selling prices in the high-teens percentage range and a low-single-digit percent range increase in bit shipments.
- Sales of NAND products in the second quarter of 2024 increased 27% as compared to the first quarter of 2024 primarily due to a low-30% range increase in average selling prices, partially offset by a low-single-digit percent range decrease in bit shipments.

Total revenue for the second quarter of 2024 increased 58% as compared to the second quarter of 2023 due to increases in sales of both DRAM and NAND products.

- Sales of DRAM products in the second quarter of 2024 increased 53% as compared to the second quarter of 2023 primarily due to a high-50% range increase in bit shipments.
- Sales of NAND products in the second quarter of 2024 increased 77% as compared to the second quarter of 2023 primarily due to a low-60% range increase in bit shipments and an approximate 10% increase in average selling prices.

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Total revenue for the first six months of 2024 increased 36% as compared to the first six months of 2023 due to increases in both DRAM and NAND sales.

- Sales of DRAM products in the first six months of 2024 increased 37% as compared to the first six months of 2023 primarily due to a high-60% range increase in bit shipments, partially offset by a high-teens percentage range decline in average selling prices.
- Sales of NAND products in the first six months of 2024 increased 41% as compared to the first six months of 2023 primarily due to a high-60% range increase in bit shipments, partially offset by a high-teens percentage range decline in average selling prices.

**Consolidated Gross Margin:** Our consolidated gross margin has been impacted by the factors described in the section titled "Industry Conditions" above. Our consolidated gross margin percentage improved to 19% for the second quarter of 2024 from negative 1% for the first quarter of 2024, as a result of improvements in margins for both DRAM and NAND products, primarily due to increases in average selling prices and manufacturing cost reductions. Our consolidated gross margin percentage improved to 19% for the second quarter of 2024 from negative 33% for the second quarter of 2023 primarily due to increases in average selling prices for NAND, the effects of charges to write down inventories to their net realizable value ("NRV") in 2023, and the sale of previously written down inventories (see "Inventory NRV write-downs" below). Our consolidated gross margin percentage improved to 10% for the first six months of 2024 from negative 4% for the first six months of 2023 primarily due to cost reductions resulting from the effects of NRV write-downs as presented in the table below, partially offset by declines in average selling prices for both DRAM and NAND.

**Inventory NRV write-downs:** Our consolidated gross margin was impacted by charges in the second and third quarters of 2023 to write inventories down to their estimated NRV as a result of declines in average selling prices for both DRAM and NAND. As charges to write down inventories are recorded in advance of when inventories are sold, costs of goods sold in subsequent periods are lower than they otherwise would be. The impact of inventory NRV write-downs for each period reflects (1) inventory write-downs in that period, offset by (2) lower costs in that period on the sale of inventory written down in prior periods. The impacts of inventory NRV write-downs are summarized below:

	Second Quarter 2024	First Quarter 2024	Second Quarter 2023	Six months ended	
				2024	2023
Provision to write down inventory to NRV	\$ —	\$ —	\$ (1,430)	\$ —	\$ (1,430)
Lower costs from sale of inventory written down in prior periods	382	605	—	987	—
	<u>\$ 382</u>	<u>\$ 605</u>	<u>\$ (1,430)</u>	<u>\$ 987</u>	<u>\$ (1,430)</u>

## Revenue by Business Unit

	Second Quarter 2024		First Quarter 2024		Second Quarter 2023		Six months ended 2024		Six months ended 2023	
CNBU	\$ 2,185	38 %	\$ 1,737	37 %	\$ 1,375	37 %	\$ 3,922	37 %	\$ 3,121	40 %
MBU	1,598	27 %	1,293	27 %	945	26 %	2,891	27 %	1,600	21 %
EBU	1,111	19 %	1,037	22 %	865	23 %	2,148	20 %	1,865	24 %
SBU	905	16 %	653	14 %	507	14 %	1,558	15 %	1,187	15 %
All Other	25	— %	6	— %	1	— %	31	— %	5	— %
	<u>\$ 5,824</u>		<u>\$ 4,726</u>		<u>\$ 3,693</u>		<u>\$ 10,550</u>		<u>\$ 7,778</u>	

Percentages of total revenue may not total 100% due to rounding.

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Changes in revenue for each business unit for the second quarter of 2024 as compared to the first quarter of 2024 were as follows:

- CNBU revenue increased 26% primarily due to increases in DRAM average selling prices and bit shipments driven by improving demand in cloud and data center end markets.
- MBU revenue increased 24% primarily due to increases in average selling prices for both mobile DRAM and NAND, partially offset by decreases in bit shipments.
- EBU revenue increased 7% primarily due to increases in bit shipments driven by solid demand for leading-edge products in industrial markets.
- SBU revenue increased 39% primarily due to increases in NAND average selling prices and bit shipments driven by strong demand across markets.

Changes in revenue for each business unit for the second quarter and first six months of 2024 as compared to the corresponding periods of 2023 were as follows:

- CNBU revenue increased 59% and 26%, respectively, primarily due to increases in bit shipments, partially offset by declines in average selling prices.
- MBU revenue increased 69% and 81%, respectively, primarily due to increases in bit shipments for both DRAM and NAND. MBU average selling prices increased for the second quarter of 2024 as compared to the second quarter of 2023 and decreased slightly for the first six months of 2024 as compared to the first six months of 2023.
- EBU revenue increased 28% and 15%, respectively, primarily due to increases in bit shipments, partially offset by declines in average selling prices.
- SBU revenue increased 79% and 31%, respectively, primarily due to increases in bit shipments. SBU average selling prices increased for the second quarter of 2024 as compared to the second quarter of 2023 and decreased for the first six months of 2024 as compared to the first six months of 2023.

## Operating Income (Loss) by Business Unit

	Second Quarter		First Quarter		Second Quarter		Six months ended			
	2024		2024		2023		2024		2023	
CNBU	\$ 28	1 %	\$ (397)	(23)%	\$ (35)	(3)%	\$ (369)	(9)%	\$ 155	5 %
MBU	(9)	(1)%	(687)	(53)%	(344)	(36)%	(696)	(24)%	(539)	(34)%
EBU	(1)	— %	10	1 %	88	10 %	9	— %	282	15 %
SBU	(217)	(24)%	(490)	(75)%	(357)	(70)%	(707)	(45)%	(614)	(52)%
All Other	21	84 %	4	67 %	1	100 %	25	81 %	4	80 %
	<u>\$ (178)</u>		<u>\$ (1,560)</u>		<u>\$ (647)</u>		<u>\$ (1,738)</u>		<u>\$ (712)</u>	

Percentages reflect operating income (loss) as a percentage of revenue for each business unit.

For the second quarter of 2024 as compared to the first quarter of 2024, CNBU, MBU, and SBU operating income (loss) improved primarily due to increases in average selling prices as a result of improving conditions across most markets. Manufacturing cost reductions in the second quarter of 2024 also contributed to increases in operating income (loss). For EBU, operating income (loss) for the second quarter of 2024 deteriorated from the first quarter of 2024 primarily due to declines in average selling prices.

For the second quarter of 2024 as compared to the second quarter of 2023, MBU and SBU operating income (loss) improved primarily due to increases in average selling prices as a result of improving conditions across most markets in 2024. For CNBU, operating income (loss) for the second quarter of 2024 improved from the second quarter of 2023 primarily due to increases in bits sold and manufacturing cost reductions, partially offset by lower average selling prices that had not fully recovered from prior declines. For EBU, operating income (loss) for the second quarter of 2024 deteriorated from the second quarter of 2023 primarily due to declines in average selling prices in 2023, which had not yet fully recovered.

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For the first six months of 2024 as compared to the first six months of 2023, operating income (loss) deteriorated for all business units due to lower average selling prices, which had not fully recovered from the steep decline in market conditions across memory and storage markets that occurred throughout 2023. Manufacturing cost reductions and increases in DRAM bit shipments partially offset the adverse effects of pricing on operating margins.

## Operating Expenses and Other

**Research and Development:** R&D expenses vary primarily with the number of development and pre-qualification wafers processed, the cost of advanced equipment dedicated to new product and process development, and personnel costs. Because of the lead times necessary to manufacture our products, we typically begin to process wafers before completion of performance and reliability testing. Development of a product is deemed complete when it is qualified through internal reviews and tests for performance and reliability. R&D expenses can vary significantly depending on the timing of product qualification.

R&D expenses for the second quarter of 2024 compared to the first quarter of 2024 were relatively unchanged as lower volumes of development and prequalification wafers were offset by increases in employee compensation. R&D expenses for the second quarter and first six months of 2024 increased 6% and 2%, respectively, as compared to the corresponding periods of 2023, primarily due to an increase in employee compensation, partially offset by lower volumes of development and prequalification wafers.

**Selling, General, and Administrative:** SG&A expenses for the second quarter of 2024 increased 6% as compared to the first quarter of 2024 primarily due to an increase in employee compensation. SG&A expenses for the second quarter and first six months of 2024 increased 21% and 13%, respectively, as compared to the corresponding periods of 2023, primarily due to an increase in employee compensation.

**Restructure and Asset Impairments:** See "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Restructure and Asset Impairments".

**Other Operating (Income) Expense, Net:** See "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Other Operating (Income) Expense, Net".

**Interest (Income) Expense, Net:** Interest income (expense) was not significant for the second quarter of 2024. Interest income (expense) deteriorated for the second quarter and first six months of 2024 as compared to the corresponding periods of 2023 primarily due to increases in interest expense as a result of higher debt balances and interest rates, partially offset by increases in interest income due to higher interest rates on our cash and investments.

**Income Taxes:** Our income tax (provision) benefit consisted of the following:

	Second Quarter		First Quarter		Second Quarter		Six months ended			
	2024		2024		2023		2024	2023		
Income (loss) before taxes	\$	170	\$	(1,155)	\$	(2,271)	\$	(985)	\$	(2,447)
Income tax (provision) benefit		622		(73)		(54)		549		(62)
Effective tax rate		(365.9)%		(6.3)%		(2.4)%		55.7 %		(2.5)%

In the first quarter of 2024, our tax expense was based on actual results for jurisdictions where small changes in our projected pre-tax income would have caused significant changes in the estimated annual effective tax rate. With our improved fiscal 2024 outlook, we can now estimate a more reliable annual effective tax rate and have reverted to a global annual effective tax rate method for all jurisdictions. Applying this updated rate to our year-to-date earnings resulted in the tax benefit recognized in the second quarter of 2024.

The change in our effective tax rate for the second quarter of 2024 as compared to the first quarter of 2024 was primarily due to the use of the estimated annual effective tax rate for the quarter. The change in our effective tax rate for the first six months of 2024 as compared to the first six months of 2023 was primarily due to changes in levels of profitability and the geographic mix of earnings.

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We operate in a number of jurisdictions outside the United States, including Singapore, where we have tax incentive arrangements. These incentives expire, in whole or in part, at various dates through 2034 and are conditional, in part, upon meeting certain business operations and employment thresholds. As a result of the low level of profitability and the geographical mix of income, the benefit from tax incentive arrangements was not material for the periods presented.

Various tax reforms are being considered in multiple jurisdictions that, if enacted, contain provisions that could materially impact our tax expense. We continue to monitor the potential impact of these various tax reform proposals to our overall global effective tax rate and financial statements.

**Other:** Further information can be found in "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Equity Plans".

## Liquidity and Capital Resources

Our primary sources of liquidity are cash generated from operations and financing obtained from capital markets and financial institutions. Cash generated from operations is highly dependent on selling prices for our products, which can vary significantly from period to period. Cash and marketable investments totaled \$9.63 billion as of February 29, 2024, and \$10.44 billion as of August 31, 2023. Our cash and investments consist primarily of bank deposits, money market funds, and liquid investment-grade, fixed-income securities, which are diversified among industries and individual issuers. To mitigate credit risk, we invest through high-credit-quality financial institutions and by policy generally limit the concentration of credit exposure by restricting the amount of investments with any single obligor. As of February 29, 2024, \$1.96 billion of our cash and marketable investments was held by our foreign subsidiaries.

We continuously evaluate alternatives for efficiently funding our capital expenditures and ongoing operations. From time to time, we expect to engage in a variety of financing transactions for such purposes as well as to refinance our existing indebtedness, including the issuance of securities. As of February 29, 2024, \$2.50 billion was available to draw under our Revolving Credit Facility. Funding of certain significant capital projects is also dependent on the receipt of government incentives, which are subject to conditions and may not be obtained.

To develop new product and process technology, support future growth, achieve operating efficiencies, and maintain product quality, we must continue to invest in manufacturing technologies, facilities and equipment, and R&D. We estimate capital expenditures in 2024 for property, plant, and equipment, net of proceeds from government incentives, to be in the range of \$7.5 billion to \$8.0 billion. Actual amounts for 2024 will vary depending on market conditions and may vary from quarter to quarter due to the timing of expenditures. As of February 29, 2024, we had purchase obligations of approximately \$1.01 billion for the acquisition of property, plant, and equipment, of which approximately \$938 million is expected to be paid within one year. For a description of other contractual obligations, such as leases and debt, see "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Leases," and " – Debt."

To support expected memory demand in the second half of the decade, we will need to add new DRAM wafer capacity. Following the enactment of the CHIPS Act in 2022, we announced plans to invest in two leading-edge memory manufacturing fabs in the United States, contingent on CHIPS Act support through grants and investment tax credits. As part of this plan, in September 2022, we broke ground on a leading-edge memory manufacturing fab in Boise, Idaho. Construction of the fab began in October 2023 with DRAM production targeted to start in calendar 2025 and first output in early calendar 2026. In addition, in October 2022, we announced plans to build a second leading-edge DRAM manufacturing fab in Clay, New York. We expect construction to begin in calendar 2024, with production anticipated to ramp in the latter half of the decade. We expect these new fabs to be key to meeting our requirements for additional wafer capacity starting in the second half of the decade and beyond, in line with industry demand trends. On August 21, 2023, we announced that two of our subsidiaries had each submitted full applications on August 18, 2023 for federal funding in the form of grants under the CHIPS Act for both of these projects.

We are also advancing our global back-end assembly and test network in order to support our product portfolio and extend our ability to deliver on global customer demand in the future. We intend to make investments at our

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backend facility in Xi'an, China, including a new building to provide space to add more product capability, to allow us over time to serve more of the demand from our customers in China from the Xi'an facility. We began construction of a new assembly and test facility in Gujarat, India to address demand in the latter half of this decade.

Our Board of Directors has authorized the discretionary repurchase of up to \$10 billion of our outstanding common stock through open-market purchases, block trades, privately-negotiated transactions, derivative transactions, and/or pursuant to Rule 10b5-1 trading plans. The repurchase authorization has no expiration date, does not obligate us to acquire any common stock, and is subject to market conditions and our ongoing determination of the best use of available cash. Through February 29, 2024, we had repurchased an aggregate of \$6.89 billion of the authorized amount. See "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Equity."

On March 20, 2024, our Board of Directors declared a quarterly dividend of \$0.115 per share, payable in cash on April 16, 2024, to shareholders of record as of the close of business on April 1, 2024. The declaration and payment of any future cash dividends are at the discretion and subject to the approval of our Board of Directors. Our Board of Directors' decisions regarding the amount and payment of dividends will depend on many factors, including, but not limited to, our financial condition, results of operations, capital requirements, business conditions, debt service obligations, contractual restrictions, industry practice, legal requirements, regulatory constraints, and other factors that our Board of Directors may deem relevant.

We expect that our cash and investments, cash flows from operations, and available financing will be sufficient to meet our requirements at least through the next 12 months and thereafter for the foreseeable future.

## Cash Flows

	Six months ended	
	2024	2023
Net cash provided by operating activities	\$ 2,620	\$ 1,286
Net cash provided by (used for) investing activities	(2,709)	(4,181)
Net cash provided by (used for) financing activities	(458)	4,434
Effect of changes in currency exchange rates on cash, cash equivalents, and restricted cash	(8)	9
Net increase (decrease) in cash, cash equivalents, and restricted cash	\$ (555)	\$ 1,548

**Operating Activities:** Cash provided by operating activities reflects net income (loss) adjusted for certain non-cash items, including depreciation expense, amortization of intangible assets, stock-based compensation, and inventory write-downs, and the effects of changes in operating assets and liabilities. The increase in cash provided by operating activities for the first six months of 2024 as compared to the first six months of 2023 was primarily due to a smaller net loss in the current year adjusted for non-cash items and the effect of an increase in accounts payable and accrued expenses and an increase in other current liabilities largely due to approximately \$600 million of customer prepayments to secure product supply, partially offset by an increase in receivables and an increase in other current assets primarily due to the second quarter 2024 income tax benefit.

**Investing Activities:** For the first six months of 2024, net cash used for investing activities consisted primarily of \$3.18 billion of expenditures for property, plant, and equipment; contributions of \$234 million received from government incentives to offset capital expenditures; partially offset by \$261 million of net inflows from maturities, sales, and purchases of available-for-sale securities.

For the first six months of 2023, net cash used for investing activities consisted primarily of \$4.65 billion of expenditures for property, plant, and equipment, partially offset by \$480 million of net inflows from maturities, sales, and purchases of available-for-sale securities.

**Financing Activities:** For the first six months of 2024, net cash used for financing activities consisted primarily of \$1.10 billion of repayments of debt, which included the prepayment of the 2024 Term Loan A and a portion of the 2025 Term Loan A borrowings, \$256 million for payments of dividends to shareholders, and \$82 million of payments on equipment purchase contracts, partially offset by approximately \$1.00 billion of proceeds from the issuance of the 2031 Notes. See "Item 1. Financial Statements – Notes to Consolidated Financial Statements – Debt."

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For the first six months of 2023, net cash provided by financing activities consisted primarily of \$3.20 billion of proceeds from our 2025, 2026, and 2027 Term Loan A borrowings, \$1.27 billion from the issuance of the 2029 B Notes, and \$749 million from the issuance of the 2033 A Notes. Cash used for financing activities included \$425 million for the acquisition of 8.6 million shares of our common stock under our share repurchase authorization, \$252 million of cash payments of dividends to shareholders, and \$76 million of payments on equipment purchase contracts.

### **Critical Accounting Estimates**

For a discussion of our critical accounting estimates, see "Part II – Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Estimates" of our Annual Report on Form 10-K for the year ended August 31, 2023. There have been no significant changes to our critical accounting estimates since our Annual Report on Form 10-K for the year ended August 31, 2023.

### **Recently Adopted Accounting Standards**

No material items.

### **Recently Issued Accounting Standards**

No material items.

**UNAUDITED PRO FORMA FINANCIAL INFORMATION OF  
THE GROUP FOLLOWING THE ACQUISITION OF MICRON SHARES  
AND POP MART SHARES AND THE FURTHER ACQUISITION OF  
MICRON SHARES AND POP MART SHARES**

**A. UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION**

The following is an illustrative unaudited pro forma consolidated statement of assets and liabilities of Brainhole Technology Limited (the “**Company**”) and its subsidiaries (hereinafter collectively referred to as the “**Group**”) (the “**Unaudited Pro Forma Financial Information**”) prepared in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited and with reference to Accounting Guideline 7 “Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars” issued by the Hong Kong Institute of Certified Public Accountants and on the basis of the notes set out below, to illustrate the financial position of the Group as if the acquisition and further acquisition of listed securities (the “**Major Transaction**”) had been completed on 31 December 2023.

This Unaudited Pro Forma Financial Information has been prepared by the directors of the Company for illustrative purpose only and because of its hypothetical nature, it may not purport to represent the true picture of the financial position of the Group had the Major Transaction been completed on 31 December 2023. The Unaudited Pro Forma Financial Information should be read in conjunction with other financial information included elsewhere in this circular.

**Unaudited pro forma statement of assets and liabilities of the Group**

	Audited							Unaudited
	31 December	Pro forma	Pro forma	Pro forma	Pro forma	Pro forma	Pro forma	Pro forma
	2023	adjustment (1)	adjustment (2)	adjustment (3)	adjustment (4)	adjustment (5)	adjustment (6)	2023
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
	(Note 1)	(Note 2)	(Note 3)	(Note 4)	(Note 5)	(Note 6)	(Note 7)	
<b>Non-current assets</b>								
Plant and equipment	37,887							37,887
Right-of-use assets	4,910							4,910
Intangible assets	880							880
Deferred tax assets	20,182							20,182
Prepayment for plant and equipment	29							29
	<u>63,888</u>							<u>63,888</u>

**APPENDIX IV**
**UNAUDITED PRO FORMA FINANCIAL INFORMATION OF  
THE GROUP FOLLOWING THE ACQUISITION OF MICRON SHARES  
AND POP MART SHARES AND THE FURTHER ACQUISITION OF  
MICRON SHARES AND POP MART SHARES**

	Audited							Unaudited
	31 December	Pro forma	Pro forma	Pro forma	Pro forma	Pro forma	Pro forma	31 December
	2023	adjustment (1)	adjustment (2)	adjustment (3)	adjustment (4)	adjustment (5)	adjustment (6)	2023
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
	(Note 1)	(Note 2)	(Note 3)	(Note 4)	(Note 5)	(Note 6)	(Note 7)	
<b>Current assets</b>								
Inventories	29,000							29,000
Trade and other receivables	65,814							65,814
Contract assets	2,202							2,202
Amounts due from related companies	6,543							6,543
Financial assets at fair value through								
profit or loss	69,276	19,840	17,988	-	9,955	4,992	4,995	127,046
Bank balances and cash	42,473	(19,890)	(18,053)	30,078	(9,980)	(5,010)	(5,013)	14,605
	<u>215,308</u>							<u>245,210</u>
<b>Current liabilities</b>								
Trade and other payables	71,095							71,095
Lease liabilities	2,744							2,744
Deferred income	392							392
Loans from related companies	49,930							49,930
Income tax payables	34							34
	<u>124,195</u>							<u>124,195</u>
<b>Net current assets</b>	<u>91,113</u>							<u>121,015</u>
<b>Total assets less current liabilities</b>	<u>155,001</u>							<u>184,903</u>
<b>Non-current liabilities</b>								
Lease liabilities	2,760							2,760
Deferred tax liability	435							435
Deferred income	1,695							1,695
Loan from ultimate controlling party	83,349			30,078				113,427
	<u>88,239</u>							<u>118,317</u>
	<u>66,762</u>							<u>66,586</u>

APPENDIX IV

UNAUDITED PRO FORMA FINANCIAL INFORMATION OF  
THE GROUP FOLLOWING THE ACQUISITION OF MICRON SHARES  
AND POP MART SHARES AND THE FURTHER ACQUISITION OF  
MICRON SHARES AND POP MART SHARES

	Audited							Unaudited
	31 December 2023	Pro forma adjustment (1)	Pro forma adjustment (2)	Pro forma adjustment (3)	Pro forma adjustment (4)	Pro forma adjustment (5)	Pro forma adjustment (6)	Pro forma 31 December 2023
	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000	HK\$'000
	(Note 1)	(Note 2)	(Note 3)	(Note 4)	(Note 5)	(Note 6)	(Note 7)	
<b>Capital and reserves</b>								
Share capital	8,000							8,000
Reserves	58,762	(50)	(65)		(25)	(18)	(18)	58,586
	<u>66,762</u>							<u>66,586</u>

Notes to the unaudited pro forma statement of assets and liabilities of the Group:

- (1) The consolidated statement of financial position of the Company as at 31 December 2023 has been extracted from the annual report of the Company dated 27 March 2024.
- (2) The Group acquired Micron Technology, Inc. (Nasdaq stock code: MU) shares (“**Micron Shares**”) through the open market with details below. Total consideration of Micron Shares was HK\$19,890,000, being assumed to the fair value of Micron Shares as at 31 December 2023.

Trade date	Number of shares acquired	Average purchase price per share US\$	Average purchase price per share HK\$	Consideration		Total consideration HK\$'000
				(excluding stamp duty and related expenses) HK\$'000	Stamp duty and related expenses HK\$'000	
21 March 2024	23,200	109.92	855.17	19,840	50	19,890

- (3) The Group further acquired Pop Mart International Group Limited (HKEX: 9992) shares (“**Pop Mart Shares**”) through the open market with details below. Total consideration of Pop Mart Shares was HK\$18,053,000, being assumed to the fair value of Pop Mart Shares as at 31 December 2023.

Trade date	Number of shares acquired	Average purchase price per share HK\$	Consideration		Total consideration HK\$'000
			(excluding stamp duty and related expenses) HK\$'000	Stamp duty and related expenses HK\$'000	
22 March 2024	650,000	27.67	17,988	65	18,053



**UNAUDITED PRO FORMA FINANCIAL INFORMATION OF  
THE GROUP FOLLOWING THE ACQUISITION OF MICRON SHARES  
AND POP MART SHARES AND THE FURTHER ACQUISITION OF  
MICRON SHARES AND POP MART SHARES**

- (4) On 27 March 2024, in order to finance the acquisition of Micron Shares and Pop Mart Shares, the Group has obtained shareholder's loan amounted to HK\$30,078,000 from Yoho Bravo Limited, which is indirectly held by a controlling Shareholder of the Company. The shareholder loan is not repayable within 12 months from the borrowing date and classified as non-current liabilities as if the transaction had taken place at 31 December 2023.
- (5) The Group further acquired Micron shares through the open market with details below. Total consideration of Micron Shares was HK\$9,980,000, being assumed to the fair value of Micron Shares as at 31 December 2023.

Trade date	Number of shares acquired	Average purchase price per share <i>US\$</i>	Average purchase price per share <i>HK\$</i>	Consideration (excluding stamp duty and related expenses) <i>HK\$'000</i>	Stamp duty and related expenses <i>HK\$'000</i>	Total consideration <i>HK\$'000</i>
1 April 2024	10,400	123.04	957.22	9,955	25	9,980

- (6) The Group further acquired Pop Mart shares through the open market with details below. Total consideration of Pop Mart Shares was HK\$5,010,000, being assumed to the fair value of Pop Mart Shares as at 31 December 2023.

Trade date	Number of shares acquired	Average purchase price per share <i>HK\$</i>	Consideration (excluding stamp duty and related expenses) <i>HK\$'000</i>	Stamp duty and related expenses <i>HK\$'000</i>	Total consideration <i>HK\$'000</i>
2 April 2024	166,000	30.08	4,992	18	5,010

- (7) The Group further acquired Pop Mart shares through the open market with details below. Total consideration of Pop Mart Shares was HK\$5,013,000, being assumed to the fair value of Pop Mart Shares as at 31 December 2023.

Trade date	Number of shares acquired	Average purchase price per share <i>HK\$</i>	Consideration (excluding stamp duty and related expenses) <i>HK\$'000</i>	Stamp duty and related expenses <i>HK\$'000</i>	Total consideration <i>HK\$'000</i>
23 April 2024	145,000	34.45	4,995	18	5,013

**B. INDEPENDENT REPORTING ACCOUNTANTS' ASSURANCE REPORT ON THE  
COMPILATION OF UNAUDITED PRO FORMA FINANCIAL INFORMATION**

*The following is the text of the independent reporting accountants' assurance report received from CWK CPA Limited, Certified Public Accountants, Hong Kong, the reporting accountants of Company, in respect of the unaudited pro forma financial information prepared for the purpose of incorporation in this circular.*



The Directors  
Suites 1801-03  
18/F, One Taikoo Place  
979 King's Road  
Quarry Bay  
Hong Kong

We have completed our assurance engagement to report on the compilation of unaudited pro forma financial information of Brainhole Technology Limited (the “**Company**”) and its subsidiaries (hereinafter collectively referred to as the “**Group**”) by the directors of the Company (the “**Directors**”) for illustrative purposes only. The unaudited pro forma financial information consists of the unaudited pro forma statement of assets and liabilities of the Group as at 31 December 2023, and related notes as set out on pages IV-1 to IV-4 of Appendix IV of the circular dated 24 May 2024 (the “**Circular**”) (the “**Unaudited Pro Forma Financial Information**”) issued by the Company in connection with the acquisitions and further acquisitions of listed securities (the “**Major Transaction**”). The applicable criteria on the basis of which the Directors have compiled the Unaudited Pro Forma Financial Information are described on IV-1 to IV-4 of Appendix IV of the Circular.

The Unaudited Pro Forma Financial Information has been compiled by the Directors to illustrate the impact of the Major Transaction on the Group's financial position as at 31 December 2023 as if the transaction had taken place at 31 December 2023. As part of this process, information about the Group's financial position has been extracted by the Directors from the Group's financial statements for the year ended 31 December 2023, on which an audited annual report has been published.

**Directors' responsibility for the Unaudited Pro Forma Financial Information**

The Directors are responsible for compiling the Unaudited Pro Forma Financial Information in accordance with paragraph 4.29 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “**Listing Rules**”) and with reference to Accounting Guideline (“**AG**”) 7 Preparation of Pro Forma Financial Information for Inclusion in Investment Circulars issued by the Hong Kong Institute of Certified Public Accountants (the “**HKICPA**”).

**Our independence and quality management**

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the HKICPA, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our firm applies Hong Kong Standard on Quality Management 1 Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**Auditor's responsibilities**

Our responsibility is to express an opinion, as required by paragraph 4.29(7) of the Listing Rules, on the Unaudited Pro Forma Financial Information and to report our opinion to you. We do not accept any responsibility for any reports previously given by us on any financial information used in the compilation of the Unaudited Pro Forma Financial Information beyond that owed to those to whom those reports were addressed by us at the dates of their issue.

We conducted our engagement in accordance with Hong Kong Standard on Assurance Engagements 3420 Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus issued by the HKICPA. This standard requires that the reporting accountants plan and perform procedures to obtain reasonable assurance about whether the Directors have compiled the Unaudited Pro Forma Financial Information in accordance with paragraph 4.29 of the Listing Rules and with reference to AG 7 issued by the HKICPA.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the Unaudited Pro Forma Financial Information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the Unaudited Pro Forma Financial Information.

The purpose of the Unaudited Pro Forma Financial Information included in the Circular is solely to illustrate the impact of Major Transaction on unadjusted financial information of the Group as if the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the transaction would have been as presented.

A reasonable assurance engagement to report on whether the Unaudited Pro Forma Financial Information has been properly compiled on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by the Directors in the compilation of the Unaudited Pro Forma Financial Information provide a reasonable basis for presenting the significant effects directly attributable to the transaction, and to obtain sufficient appropriate evidence about whether:

- the related pro forma adjustments give appropriate effect to those criteria; and
- the Unaudited Pro Forma Financial Information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the reporting accountants' judgment, having regard to the reporting accountants' understanding of the nature of the Group, the transaction in respect of which the Unaudited Pro Forma Financial Information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the Unaudited Pro Forma Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

**Opinion**

In our opinion:

- (a) the Unaudited Pro Forma Financial Information has been properly compiled on the basis stated;
- (b) such basis is consistent with the accounting policies of the Group; and
- (c) the adjustments are appropriate for the purpose of the Unaudited Pro Forma Financial Information as disclosed pursuant to paragraph 4.29(1) of the Listing Rules.

**CWK CPA Limited**

*Certified Public Accountants*

Hong Kong,

24 May 2024

## 1. RESPONSIBILITY STATEMENT

This circular, for which the Directors collectively and individually accept full responsibility, includes particulars given in compliance with the Listing Rules for the purpose of giving information with regard to the Company. The Directors, having made all reasonable enquiries, confirm that to the best of their knowledge and belief the information contained in this circular is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement in this circular misleading.

## 2. DISCLOSURE OF INTERESTS

### (a) Directors' and chief executives' interests and short positions in shares of the Company

As at the Latest Practicable Date, the Directors and chief executives of the Company and their associates had the following interests in the Shares, underlying Shares and debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO), or which were required, pursuant to Section 352 of the SFO, to be entered in the register referred to therein, or which were required, pursuant to the Model Code for Securities Transactions by Directors of Listed Companies of the Listing Rules (the "Model Code") to be notified to the Company and the Stock Exchange.

#### *Long positions in the shares and underlying shares of the Company*

Name of Director	Nature of interest	Number of ordinary shares held	Approximate percentage of interest in the Company as at Latest Practicable Date
Mr. Zhang Liang Johnson	Interest of controlled Corporation ( <i>Note</i> )	599,658,000 Shares (L)	74.96%

(L) denotes long position

*Note:* Mr. Zhang Liang Johnson, an executive Director, was interested in 599,658,000 Shares, representing approximately 74.96% of the Company's issued share capital, through Yoho Bravo Limited which is wholly-owned by him.

**(b) Substantial Shareholders' interests and short positions**

Name of Shareholder	Nature of interest	Number of ordinary shares held	Approximate percentage of interest in our Company as at the Latest Practicable Date
Yoho Bravo Limited (Note)	Beneficial owner	599,658,000 (L)	74.96%

(L) denotes long position

*Note:* Mr. Zhang Liang Johnson, an executive Director, was interested in 599,658,000 Shares, representing approximately 74.96% of the Company's issued share capital, through Yoho Bravo Limited which is wholly-owned by him.

Save as disclosed herein, at the Latest Practicable Date, none of the Directors or chief executive of the Company had any interests or short positions in any Shares, underlying Shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which were taken or deemed to have under such provisions of the SFO); or were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein; or were required, pursuant to the Model Code to be notified to the Company and the Stock Exchange.

Save as disclosed above, as at the Latest Practicable Date, none of the Directors is a director or employee of a company which had an interest or short position in the Shares or underlying Shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO.

**3. DIRECTORS' SERVICE CONTRACTS**

As at the Latest Practicable Date, none of the Directors entered, or proposed to enter, into any service contract with any member of the Group, excluding contracts expiring or determinable by the Group within one year without payment of compensation (other than statutory compensation).

#### 4. DIRECTORS' INTERESTS IN ASSETS AND CONTRACTS OF THE GROUP

As at the Latest Practicable Date, so far as the Directors are aware, none of the Directors had any interest, either directly or indirectly, in any assets which has since 31 December 2023 (being the date to which the latest published audited consolidated financial statements of the Company were made up) been acquired or disposed of by or leased to, any member of the Group or are proposed to be acquired or disposed of by, or leased to, any member of the Group.

As at the Latest Practicable Date, none of the Directors was materially interested, directly or indirectly, in any contract or arrangement entered into by any member of the Group subsisting at the Latest Practicable Date and which is significant in relation to the businesses of any member of the Group.

#### 5. MATERIAL CONTRACTS

The Group has entered into the following contract (not being contract entered into in the ordinary course of business) within the two years immediately preceding the Latest Practicable Date which is or may be material:

- (a) on 31 July 2023 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 131,400 American depository shares of XPeng Inc. through the open market at the aggregate consideration of approximately US\$2.6 million (equivalent to approximately HK\$20.6 million) (for which no written contract was entered into between the parties thereto);
- (b) on 20 December 2023 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 17,650 Class A common stocks of Affirm Holdings, Inc. through the open market at the aggregate consideration of approximately US\$0.9 million (equivalent to approximately HK\$7.0 million) (for which no written contract was entered into between the parties thereto);
- (c) on 24 January 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 1,910 common stocks of NVIDIA Corporation through the open market at the aggregate consideration of approximately US\$1.1 million (equivalent to approximately HK\$8.9 million) (for which no written contract was entered into between the parties thereto);
- (d) on 30 January 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 1,960 common stocks of Super Micro Computer, Inc. through the open market at the aggregate consideration of approximately US\$1.0 million (equivalent to approximately HK\$8.0 million) (for which no written contract was entered into between the parties thereto);



- (e) on 30 January 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 1,430 common stocks of NVIDIA Corporation through the open market at the aggregate consideration of approximately US\$0.9 million (equivalent to approximately HK\$7.0 million) (for which no written contract was entered into between the parties thereto);
- (f) on 6 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 3,220 class A common stocks of Coinbase Global, Inc. through the open market at the aggregate consideration of approximately US\$0.4 million (equivalent to approximately HK\$3.0 million) (for which no written contract was entered into between the parties thereto);
- (g) on 15 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 3,740 class A common stocks of Coinbase Global, Inc. through the open market at the aggregate consideration of approximately US\$0.6 million (equivalent to approximately HK\$5.0 million) (for which no written contract was entered into between the parties thereto);
- (h) on 15 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 880 common stocks of NVIDIA Corporation through the open market at the aggregate consideration of approximately US\$0.6 million (equivalent to approximately HK\$5.0 million) (for which no written contract was entered into between the parties thereto);
- (i) on 16 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 2,650 common stocks of NVIDIA Corporation through the open market at the aggregate consideration of approximately US\$1.9 million (equivalent to approximately HK\$15.0 million) (for which no written contract was entered into between the parties thereto);
- (j) on 16 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 3,470 class A common stocks of Coinbase Global, Inc. through the open market at the aggregate consideration of approximately US\$0.6 million (equivalent to approximately HK\$5.0 million) (for which no written contract was entered into between the parties thereto);

- (k) on 16 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 1,020 common stocks of Super Micro Computer, Inc. through the open market at the aggregate consideration of approximately US\$1.0 million (equivalent to approximately HK\$7.0 million) (for which no written contract was entered into between the parties thereto);
- (l) on 20 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the disposal of 16,370 class A common stocks of Coinbase Global, Inc. through the open market at the aggregate consideration of approximately US\$2.9 million (equivalent to approximately HK\$22.3 million) (for which no written contract was entered into between the parties thereto);
- (m) on 20 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the acquisition of 213,000 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB15.5 million (equivalent to approximately HK\$17.1 million) (for which no written contract was entered into between the parties thereto);
- (n) on 21 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 51,500 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB3.7 million (equivalent to approximately HK\$4.0 million) (for which no written contract was entered into between the parties thereto);
- (o) on 22 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 1,920 common stocks of Super Micro Computer, Inc. through the open market at the aggregate consideration of approximately US\$1.7 million (equivalent to approximately HK\$12.9 million) (for which no written contract was entered into between the parties thereto);
- (p) on 27 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 33,350 class A common stocks of Affirm Holdings, Inc. through the open market at the aggregate consideration of approximately US\$1.3 million (equivalent to approximately HK\$9.9 million) (for which no written contract was entered into between the parties thereto);
- (q) on 28 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 93,800 domestic shares of Seres Group Co., Ltd. through the open market at the

aggregate consideration of approximately RMB8.3 million (equivalent to approximately HK\$9.1 million) (for which no written contract was entered into between the parties thereto);

- (r) on 29 February 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 1,490 Super Micro Shares through the open market at the aggregate consideration of approximately US\$1.3 million (equivalent to approximately HK\$9.9 million) (for which no written contract was entered into between the parties thereto);
- (s) on 1 March 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 101,200 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB9.2 million (equivalent to approximately HK\$10.1 million) (for which no written contract was entered into between the parties thereto);
- (t) on 6 March 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 780 common stocks of Super Micro Computer, Inc. through the open market at the aggregate consideration of approximately US\$0.9 million (equivalent to approximately HK\$6.9 million) (for which no written contract was entered into between the parties thereto);
- (u) on 7 March 2024, the Company executed a trade order with BOCI Securities Limited relating to the acquisition of 305,000 domestic shares of IEIT SYSTEMS Co., Ltd. through the open market at the aggregate consideration of approximately RMB12.9 million (equivalent to approximately HK\$14.2 million) (for which no written contract was entered into between the parties thereto);
- (v) on 21 March 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the Acquisition of Micron Shares through the open market at the aggregate consideration of approximately US\$2.6 million (equivalent to approximately HK\$19.8 million) (for which no written contract was entered into between the parties thereto);
- (w) on 21 March 2024 (after trading hours of the Stock Exchange), the Company executed a trade order with BOCI Securities Limited relating to the disposal of 181,000 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB18.4 million (equivalent to approximately HK\$20.3 million) (for which no written contract was entered into between the parties thereto);

- (x) on 22 March 2024, the Company executed a trade order with BOCI Securities Limited relating to the Acquisition of Pop Mart Shares through the open market at the aggregate consideration of approximately HK\$18.0 million (for which no written contract was entered into between the parties thereto);
- (y) on 22 March 2024, the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 94,000 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB9.2 million (equivalent to approximately HK\$10.2 million) (for which no written contract was entered into between the parties thereto);
- (z) on 1 April 2024, the Company executed a trade order with BOCI Securities Limited relating to the Further Acquisition of Micron Shares through the open market at the aggregate consideration of approximately US\$1.3 million (equivalent to approximately HK\$10.0 million) (for which no written contract was entered into between the parties thereto);
- (aa) on 1 April 2024, the Company executed a trade order with BOCI Securities Limited relating to the further acquisition of 740 common stocks of Super Micro Computer, Inc. through the open market at the aggregate consideration of approximately US\$0.8 million (equivalent to approximately HK\$6.0 million) (for which no written contract was entered into between the parties thereto);
- (bb) on 2 April 2024, the Company executed a trade order with BOCI Securities Limited relating to the Further Acquisition of Pop Mart Shares through the open market at the aggregate consideration of approximately HK\$5.0 million (for which no written contract was entered into between the parties thereto);
- (cc) on 23 April 2024, the Company executed a trade order with BOCI Securities Limited relating to the April Further Acquisition of Pop Mart Shares through the open market at the aggregate consideration of approximately HK\$5.0 million (for which no written contract was entered into between the parties thereto);
- (dd) on 30 April 2024, the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 66,100 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB6.5 million (equivalent to approximately HK\$7.1 million) (for which no written contract was entered into between the parties thereto); and
- (ee) on 7 May 2024, the Company executed a trade order with BOCI Securities Limited relating to the further disposal of 82,900 domestic shares of Seres Group Co., Ltd. through the open market at the aggregate consideration of approximately RMB7.3 million (equivalent to approximately HK\$8.0 million) (for which no written contract was entered into between the parties thereto).

## 6. LITIGATION

As at the Latest Practicable Date, so far as the Directors are aware, the Group is not engaged in any material litigation or arbitration proceedings nor is any material litigation or claim pending or threatened against it.

## 7. DIRECTORS' INTEREST IN COMPETING BUSINESS

As at the Latest Practicable Date, so far as the Directors are aware of, none of the Directors nor their respective close associates had any interest in any business which competes or is likely to compete, or is in conflict or is likely to be in conflict, either directly or indirectly, with the business of the Group.

## 8. EXPERT AND CONSENT

The following is the qualification of the expert who has given opinion or advice contained in this circular:

<b>Name</b>	<b>Qualification</b>
CWK CPA Limited	Certified Public Accountants under Professional Accountant Ordinance (Cap. 50 of Laws of Hong Kong) and Registered Public Interest Entity Auditor under Financial Reporting Council Ordinance (Cap. 588 of Laws of Hong Kong)

CWK CPA Limited has given and has not withdrawn its written consent to the issue of this circular with the inclusion of its report or letter (as the case may be) and references to its name in the form and context in which they are included.

As at the Latest Practicable Date, CWK CPA Limited had no shareholding in any member of the Group, nor did it have any right (whether legally enforceable or not) to subscribe for or nominate persons to subscribe for any securities in any member of the Group.

As at the Latest Practicable Date, CWK CPA Limited did not have any direct or indirect interest in any assets which have been, since 31 December 2023 (being the date to which the latest published audited financial statements of the Group were made up), acquired or disposed of by or leased to, or were proposed to be acquired or disposed of by or leased to any member of the Group.

The letter or report (as the case may be) from the above expert is given as at the date of this circular for incorporation therein.

**9. GENERAL**

- (a) The registered address of the Company is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, the Cayman Islands.
- (b) The principal place of business of the Company in Hong Kong is at Suites 1801-03, 18/F, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong.
- (c) The Hong Kong share registrar of the Company is Tricor Investor Services Limited at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong.
- (d) The company secretary of the Company is Ms. Wong Tik. Ms. Wong is a certified public accountant and an associate member of the Hong Kong Institute of Certified Public Accountants.
- (e) In the event of any inconsistency, the English version of this circular shall prevail over the Chinese version.

**10. DOCUMENTS ON DISPLAY**

Copies of the memorandums giving full particulars of the transaction contemplated under each of the Acquisition of Micron Shares, the Acquisition of Pop Mart Shares, the Further Acquisition of Micron Shares, the Further Acquisition of Pop Mart Shares and the April Further Acquisition of Pop Mart Shares (material contracts (v), (x), (z), (bb) and (cc) as mentioned above) will be published on the websites of the Stock Exchange ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Company (<http://www.brainholetechnology.com>) for a period of 14 days from the date of this circular.