

GLOSSARY OF TECHNICAL TERMS

In this document, unless the context otherwise requires, explanations and definitions of certain terms used in this document in connection with our Company and our business shall have the meanings set out below. The terms and their meanings may not always correspond to standard industry meaning or usage of these terms.

“A2”	application performance class 2, a performance classification defined by the SD Association for microSD and SD memory cards that guarantees minimum sustained random read/write speeds and a baseline sequential write speed optimized for running applications and handling frequent random file access in devices such as smartphones and tablets
“AEC-Q100 Grade 2/3”	a set of qualification standards established by the Automotive Electronics Council to ensure the reliability of electronic components in automotive applications. Devices are qualified to operate reliably at ambient temperatures from –40°C to +105°C under Grade 2 and from –40°C to +85°C under Grade 3
“AI”	artificial intelligence
“AI PCs”	AI-powered personal computer, referring to computing devices — including advanced laptops and emerging AI-centric smartphones — that integrate specialized AI hardware and software to execute AI models locally, providing enhanced intelligence, responsiveness, and user-centric AI functionalities without reliance solely on cloud processing
“BGA”	ball grid array, a type of integrated circuit package where the electrical connections are made through an array of solder balls on the underside of the package, allowing for a higher number of input/output (I/O) connections compared to traditional packages
“CAGR”	compound annual growth rate
“chip”	a miniature electronic device or component that interconnects essential circuit elements, such as transistors, diodes, resistors, capacitors and inductors, through specific wiring methods with semiconductor fabrication processes into a complete electronic circuit, which are formed on one or several small semiconductor wafers or dielectric substrates and encapsulated in a package
“controller chip”	a specialized microprocessor that provides drive and high-speed data transfer for Flash memory storage medium, with specific external interfaces and protocol processing modules responsible for communication with the host, determining the form and category of the memory product
“CPU”	central processing unit, serving as the computational and control core of an electronic product
“DDR”	double data rate, an industry standard for synchronous dynamic random-access memory products introduced by JEDEC

GLOSSARY OF TECHNICAL TERMS

“DRAM”	dynamic random access memory, a type of volatile memory used in computers and other devices to store data that is actively being used or processed, requiring periodic refreshing to maintain the stored information
“DRAM module”	a module whose memory chips use DRAM technology — i.e. a board containing DRAM chips arranged in a standard form factor, ready to plug into a system
“embedded storage”	memory products that are integrated into the main system of an electronic product, featuring high-capacity embedded NAND Flash solutions or compounded NAND and DRAM solutions, and are primarily used in devices such as smartphones and tablets
“eMCP”	embedded multi-chip package, a semiconductor packaging technique where eMMC and LPDDR are enclosed within a single package, allowing for increased functionality and performance while minimizing space and enhancing connectivity between the chips
“eMMC”	embedded multi-media card, an integrated non-volatile memory system consisting of Flash memory and a Flash memory controller, used primarily in portable devices for reliable and efficient data storage and management
“ePOP”	embedded package on package, a semiconductor packaging technique where eMMC and LPDDR are integrated within a package, and stacked directly on top of the CPU surface
“ERP System”	enterprise resource planning system, a system consolidating the finance, supply chain, and customer management into a unified system for streamlined operations and data consistency with real-time data
“eSSD”	enterprise solid state drive, a high-performance, high-endurance solid-state storage device designed specifically for data center and enterprise computing environments
“firmware”	a pre-installed program code in memory, running within the Flash memory controller, responsible for core tasks such as protocol processing, data management and hardware driving in the memory
“Flash”	a type of non-volatile semiconductor memory chip, which retains stored information even when powered off, featuring the ability to be repeatedly read, erased and written, and is considered a major category of memory products
“Flash Translation Layer”	a layer below the file system that maps host side or file system logical block addresses to the physical address of the flash memory (logical-to-physical mapping)
“foundry”	a semiconductor manufacturer that provides integrated circuits on silicon wafers based on designs provided by customers, without engaging in IC design or branded chip sales

GLOSSARY OF TECHNICAL TERMS

“full-stack”	a comprehensive approach to engineering or software development that involves mastering all the layers of a system, from the hardware and low-level firmware to the high-level software and user interface, to create an integrated and cohesive solution
“GB”	gigabyte, a unit of digital information storage equal to approximately one billion bytes, commonly used to quantify data storage capacity in computers and other electronic devices
“Integrated Circuit” or “IC”	integrated circuit, a type of miniature electronic device or component, manufactured using semiconductor techniques, integrating all the necessary transistors, resistors, capacitors, inductors and their connecting wires for a circuit onto a small semiconductor wafer (such as a silicon chip or substrate)
“Intelligent JBOF”	Intelligent Just a Bunch of Flash, a high-performance all-flash storage array designed for disaggregated compute — storage and diskless data center architectures. Building upon the traditional “pure disk enclosure” JBOF, it incorporates near-storage computing techniques by integrating intelligent control and acceleration units, enabling pooled management of flash resources and providing low-latency, high-bandwidth data access services to external hosts. This architecture is well suited for large-scale, data-intensive, and highly concurrent application scenarios in AI, HPC, and cloud data centers
“IoT”	internet of things, a network of interconnected devices that communicate and exchange data with each other over the internet
“ISO 14001”	an international standard that specifies the requirements for an effective environmental management system, helping organizations to improve their environmental performance and reduce their environmental impact
“ISO 26262”	an international standard for functional safety of electrical and/or electronic systems that are installed in serial production road vehicles (excluding mopeds)
“ISO 9001”	an international standard that sets out the requirements for a quality management system, helping organizations to consistently provide products and services that meet customer and regulatory requirements, and to demonstrate their ability to do so
“JEDEC”	Joint Electron Device Engineering Council
“JIRA System”	a system that tracks R&D project progress for efficient task assignment, issue tracking and collaboration across teams throughout the product development process
“Latency”	the time delay between the initiation of an action or request and the desired outcome or response, a critical factor in the performance and responsiveness of various electronic systems and communication networks

GLOSSARY OF TECHNICAL TERMS

“LBIST”	logic built-in self-test, a form of self-test (part of the broader built-in self-test, BIST) where test logic is embedded directly into an integrated circuit, allowing the IC to test its own internal digital logic circuits without requiring external automated test equipment
“LPDDR”	low power double data rate, an industry standard for low-power SDRAM products introduced by the JEDEC
“MB”	megabyte, a unit of digital information storage equal to approximately one million bytes, frequently used to describe the size of files or the capacity of storage devices
“MBIST”	memory built-in self-test, an embedded hardware mechanism that enables a chip to test its own internal memories for defects
“Mbps”	megabits per second, a unit of measurement for data transfer rates, typically used to describe the bandwidth or speed of communication networks and internet connections
“memory products”	hardware components or integrated products used to achieve temporary or permanent data storage and access in electronic devices and systems, including embedded storage, SSDs, DRAM, mobile storage, memory IC products and other memory products; for the avoidance of doubt, controller chips do not fall within this category
“memory module”	circuit boards equipped with memory chips that provide solutions for temporary data processing and program execution, and are used in a wide range of computing and other application scenarios, including personal computers, educational systems and industrial automation
“memory wafer”	wafer used for manufacturing memory products
“microSD”	a smaller version of the SD card, used in mobile phones and other compact electronic devices for additional storage capacity
“microSDHC”	micro secure digital high capacity, a flash memory card format standardized by the SD Association, using the same compact microSD physical format but supports larger storage capacities — specifically greater than 2 GB and up to 32 GB — as defined in the SD specification
“microSDXC”	micro secure digital extended capacity, a flash memory card format defined by the SD Association that supports storage capacities greater than 32 GB and up to 2 TB
“mobile storage”	portable storage devices such as USB Flash drives and memory cards; mobile storage products primarily serve as tools for data transfer and backup in applications such as security cameras, automotive systems and high-definition photography
“NAND Flash”	a type of non-volatile Flash memory technology and the products based on this technology, typically used for data storage

GLOSSARY OF TECHNICAL TERMS

“Original Memory Manufacturers”	memory manufacturers with original memory wafer or chip design, research and development and manufacturing capabilities, typically covering the development, production and supply of core memory wafers or chips such as NAND Flash and/or DRAM; according to Frost & Sullivan, Original Memory Manufacturer is an industry term in the memory product industry
“OSAT”	outsourced semiconductor assembly and test, critical stages of the production process of semiconductor products outsourced to third-party services providers to handle the assembly and testing of semiconductor devices
“packaging”	the process of encapsulating the bare die into a finished chip product with external shell and leads, which is electrically connected to external pins through wires or other interconnection methods and then securely closed
“PB”	petabyte, a unit of digital information storage equal to approximately 1,000 terabytes, commonly used to quantify data storage capacity in computers and other electronic devices
“PCB”	printed circuit board, a board used in electronics to connect electronic components using conductive pathways, tracks, or signal traces etched from copper sheets laminated onto a non-conductive substrate
“PCI-SIG”	Peripheral Component Interconnect Special Interest Group, an electronics industry consortium responsible for specifying the Peripheral Component Interconnect (PCI), PCI-X, and PCI Express (PCIe) computer buses
“PCIe”	PCI Express, a high-speed interface type used to connect hardware components inside computers and designed to replace older expansion bus standards
“Portable SSD”	a compact, external storage device that uses solid-state memory to store data
“RDIMM”	registered dual in-line memory module, a memory module with a register between the memory controller and DRAM chips to improve signal integrity, stability and scalability, commonly used to provide system RAM in servers, workstations, data centers and other enterprise-grade computing systems
“RTL”	register-transfer level, a design abstraction which models a synchronous digital circuit in terms of the flow of digital signals (data) between hardware registers, and the logical operations performed on those signals
“SATA”	serial advanced technology attachment, an interface standard that uses serial connection, and is widely used to connect storage devices like hard disk drives and SSDs to a computer’s motherboard, facilitating data transfer
“SD”	secure digital memory card, a non-volatile memory card format used in portable devices like cameras, smartphones and tablets for data storage and transfer

GLOSSARY OF TECHNICAL TERMS

“SHR System”	Strategic Human Resources system, a system that manages employee information and organization information for efficient human resources management
“SMT”	surface-mount technology, a method in which the electrical components are mounted directly onto the surface of a printed circuit board
“SODIMM”	small outline dual in-line memory module, a compact form factor memory module used to provide system RAM (random-access memory) in devices where space is limited, such as laptops, small PCs, and embedded systems
“SSD”	solid-state drive, an internal storage component installed within a computer or server, providing enhanced performance and reliability over traditional hard disk drives
“T-box”	an embedded automotive system that acts as a gateway between a vehicle’s internal networks and external wireless networks
“TB”	terabyte, a unit of digital information storage equal to approximately one trillion bytes, commonly used to quantify data storage capacity in computers and other electronic devices
“Tier 1 Suppliers”	suppliers that directly provide components, modules, systems or solutions to automotive manufacturers, typically under direct supply or contractual relationships and subject to the relevant qualification, validation, quality control and delivery requirements of such automotive manufacturers; according to Frost & Sullivan, “tier 1 supplier” is an industry term commonly used in the automotive supply chain
“Type-A”	original and most common USB connector type — widely supported by devices and peripherals over many generations of the USB standard, from early USB 1.0/1.1 through USB2.0, USB 3.x, up to the latest USB specifications
“Type-C”	a connector standard developed by USB Implementers Forum (USB-IF), defining a compact, reversible 24-pin connector (plug and port) that replaces earlier legacy USB connectors (Type-A, Type-B, and Mini/Micro variants)
“UDIMM”	unbuffered dual in-line memory module, a type of computer memory module where the memory controller interfaces directly with DRAM chips without an intermediary buffer or register
“UFS”	universal flash storage, a high-performance, scalable flash storage specification designed for use in mobile devices and consumer electronics, offering fast data transfer speeds and improved power efficiency
“UHS-I”	ultra high speed I, a bus interface standard specified by the SD Association for SD memory cards (including SDHC and SDXC) that enables theoretical maximum transfer speeds up to 104 MB/s over the standard SD bus interface

GLOSSARY OF TECHNICAL TERMS

“uMCP”	UFS-based multi-chip package, a semiconductor packaging technique that integrates UFS and LPDDR within a single package, designed to be versatile and adaptable for various applications by supporting a wide range of functionalities and interconnections
“USB”	universal serial bus, a standardized interface that enables communication and power supply between computers and peripheral devices, facilitating easy connectivity and data transfer across a wide range of electronic equipment
“V30”	video speed class 30, a performance classification defined by the SD Association indicating that a microSD or SD card supports a minimum sustained write speed of 30 MB/s, making it suitable for continuous high-resolution video recording such as 4K UHD
“wafer”	a thin slice of semiconductor used for the fabrication of integrated circuits
“wear leveling”	a technique used in SSDs and other flash-based storage devices to distribute write and erase cycles evenly across the entire storage medium, improving the overall lifespan and endurance of the device
“ZB”	zettabyte, a unit of digital information storage equal to approximately one billion terabytes, commonly used to quantify data storage capacity in computers and other electronic devices