

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this Document. As such, these terms and their meanings may not correspond to standard industry meanings or usage of these terms.

“AI”	artificial intelligence
“alternating current” or “AC”	an electric current that reverses its direction and changes its magnitude many times a second at regular intervals, typically used in power supplies
“application-specific integrated circuit” or “ASIC”	an integrated circuit designed for a particular application or specific use rather than general-purpose use
“artificial intelligence data center”, “AI data center”, or “AIDC”	a specialized data center designed to provide high-performance computing for AI applications
“automatic transfer switch” or “ATS”	a device that automatically transfers a load from one power source to another upon detecting a power interruption or failure
“battery backup unit” or “BBU”	a device that provides temporary backup power through batteries in the event of a power interruption or outage
“battery energy storage system” or “BESS”	system that store electrical energy in batteries for subsequent use and support power management, backup power supply, and grid balancing
“capacitor backup shelf” or “CBS”	a capacitor-based backup power assembly designed to provide short-duration power support during power disturbances
“China National Accreditation Service for Conformity Assessment” or “CNAS”	the national accreditation body of the PRC responsible for the accreditation of certification bodies, laboratories, and inspection bodies
“combined charging system” or “CCS”	a standardized electric vehicle charging system that combines alternating current and direct current charging in a single connector interface
“common redundant power supply” or “CRPS”	standardized power supply units designed with redundancy features to enhance system reliability and availability
“compound annual growth rate” or “CAGR”	the annualized rate of growth of an investment or metric over a specified period of time, assuming the profits are reinvested at the end of each period
“computer, communication and consumer electronics” or “3C”	electronic devices and products used for computing, communication, information processing and personal consumption purposes

GLOSSARY OF TECHNICAL TERMS

“cost, insurance and freight” or “CIF”	a trade term under which the seller is responsible for arranging and paying the cost, insurance, and freight necessary to bring the goods to the named port of destination, while the risk and title transfer from the seller to the buyer once the goods are loaded on board the vessel at the port of shipment
“digital signal processor” or “DSP”	a specialized microprocessor designed to perform high-speed signal processing and real-time control functions
“Direct current” or “DC”	an electric current flowing in one direction only
“electromagnetic compatibility” or “EMC”	the ability of electrical or electronic equipment to operate properly in its electromagnetic environment without causing or being affected by unacceptable electromagnetic interference
“energy-related products directive” or “ErP”	a set of European Union regulations that establish ecodesign requirements for energy-related products to improve energy efficiency and environmental performance throughout their lifecycle
“enterprise resource planning system” or “ERP system”	an integrated management system used to manage and automate an organization’s core business processes and operations
“EtherCAT bus”	a high-performance Ethernet-based fieldbus system designed for real-time industrial automation and control applications
“extremely dynamic pulse power ” or “EDPP”	transient peak power demand that rises sharply and fluctuates significantly within very short periods
“field programmable gate array” or “FPGA”	an integrated circuit that can be configured by a customer or designer after manufacturing
“free on board” or “FOB”	a trade term under which the seller delivers the goods on board the vessel designated by the buyer at the named port of shipment, and the risk and title transfer from the seller to the buyer once the goods pass the ship’s rail or are loaded on board the vessel, as applicable
“graphics processing unit” or “GPU”	a specialized electronic processor designed to accelerate graphics rendering and parallel computing tasks
“heating, ventilation and air conditioning” or “HVAC”	a building environmental control system or equipment designed to regulate indoor temperature, humidity, and air quality through heating, cooling, and air circulation functions
“high-voltage direct current” or “HVDC”	a power transmission technology using direct current at high voltages for efficient transmission of electricity
“IEC standards”	international standards issued by the International Electrotechnical Commission applicable to electrical, electronic and related technologies

GLOSSARY OF TECHNICAL TERMS

“integrated product development” or “IPD”	a structured product development methodology that integrates cross-functional teams and processes throughout the product lifecycle
“internet data center” or “IDC”	a facility used to house computer systems and associated components, such as servers and networking equipment, that provides centralized storage, processing, and distribution of data and supports internet-based services and applications
“internet of things” or “IoT”	a network of physical devices embedded with sensors, software, and connectivity technologies that enable them to collect, exchange, and process data
“IP65 protection”	a degree of protection rating indicating that equipment is dust-tight and protected against low-pressure water jets from any direction in accordance with the applicable ingress protection standards
“kilowatt” or “kW”	a unit of power equal to one thousand watts
“light-emitting diode” or “LED”	a semiconductor device that emits light when an electric current passes through it
“manufacturing execution system” or “MES system”	a computerized system used to monitor, track, document, and control manufacturing operations on the factory floor
“megawatt” or “MW”	a unit of power equal to one million watts
“megawatt-hour” or “MWh”	a unit of energy equal to the amount of energy consumed by a one-megawatt load operating for one hour
“MGX”	a modular server and data center reference architecture developed by a leading global GPU and AI computing infrastructure company for building accelerated computing systems
“new energy vehicle” or “NEV”	vehicles that utilize electric power (fully or partially) instead of traditional fossil fuels
“OCP standard”	technical specifications and design standards developed by the Open Compute Project for data center hardware and infrastructure
“original design manufacturing” or “ODM”	a business model under which a manufacturer designs and produces products that are marketed and sold under another company’s brand
“original equipment manufacturer” or “OEM”	a company that manufactures products or components that are purchased by another company and marketed under the purchasing company’s brand
“ORv3 architecture”	hardware architecture specifications under the Open Rack Version 3 standards developed by the Open Compute Project

GLOSSARY OF TECHNICAL TERMS

“power conversion system” or “PCS”	a system that converts and controls electrical power between alternating current and direct current in energy storage and power applications
“power distribution board” or “PDB”	assemblies used to distribute electrical power from a source to multiple downstream circuits or loads
“power factor correction” or “PFC”	a technique used to improve the power factor of an electrical system and enhance energy efficiency
“power usage effectiveness” or “PUE”	a metric used to measure data center energy efficiency, calculated as the ratio of total facility energy consumption to energy consumption of computing equipment
“printed circuit board assembly” or “PCBA”	a printed circuit board onto which electronic components have been assembled and soldered
“product lifecycle management system” or “PLM system”	a system used to manage product-related information and processes throughout the entire product lifecycle, from product design and development to manufacturing and end-of-life management
“programmable logic controller” or “PLC”	an industrial digital computer designed for the control and automation of manufacturing processes and electromechanical systems
“quality management system” or “QMS”	a management system used to direct and control an organization with regard to quality, including the establishment, implementation, and continuous improvement of quality policies, processes, and procedures
“research & development” or “R&D”	activities involving the creation, design, testing, and improvement of products, technologies, or processes
“restriction of hazardous substances directive” or “RoHS”	a European Union directive restricting the use of certain hazardous substances in electrical and electronic equipment to protect human health and the environment
“solid-state transformer” or “SST”	an advanced power electronic device that combines the functionalities of traditional transformers with modern electronic control, enabling efficient voltage conversion and enhanced power management in electrical systems
“surface mounting technology” or “SMT”	a manufacturing process in which electronic components are mounted directly onto the surface of printed circuit boards
“Technischer Überwachungsverein” or “TÜV”	an independent German testing and certification organization providing testing, inspection, and certification services
“UL’s Client Test Data Program” or “UL-CTF”	a program under which qualified manufacturers may perform product safety testing at their own facilities using UL-approved procedures and equipment, with the resulting test data accepted by UL for certification purposes

GLOSSARY OF TECHNICAL TERMS

“UL’s Witness Test Data Program” or “UL-WTDP”	a program that allows qualified manufacturers to conduct electrical safety and compliance testing at their own facilities under UL witness, with the resulting test data accepted by UL for certification purposes
“uninterruptible power supply” or “UPS”	an electrical apparatus that provides emergency power to a load when the primary power source fails
“volt(s)” or “V”	the unit of electric potential difference, electromotive force, and voltage in the International System of Units