
GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains explanations of certain technical terms used in this document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

“AI”	artificial intelligence
“AIoT”	artificial intelligence of things, the integration of artificial intelligence technologies with internet-of-things infrastructure to enable intelligent, automated decision-making at the device level
“AOI”	automated optical inspection, an automated quality control process that utilises high-resolution visual systems and computer vision software to rapidly scan, detect, and flag component defects and assembly errors during manufacturing
“baseband”	the signal processing unit in wireless devices that handles encoding, decoding, modulation, and demodulation
“beamforming”	an antenna technique that focuses radio signals in a specific direction to improve signal strength, coverage and interference resistance
“BLE”	Bluetooth low energy, a power-efficient Bluetooth technology designed for short-range data transmission, enabling prolonged battery life in smart, connected manufacturing devices and IoT sensors
“Bluetooth”	a short-range wireless communication protocol for data exchange between fixed and mobiles devices over short distances
“Cat.1 bis”	a simplified LTE category designed for mid-rate IoT applications, offering lower cost and lower complexity than standard LTE Cat.1 while remaining suitable for devices such as electric two-wheelers and public utilities
“CCC”	China Compulsory Certification, a mandatory product certification required for specified products sold in the PRC to demonstrate compliance with national safety and quality standards
“CCD”	charge-coupled device, a high-performance image sensor that converts light into digital signals, serving as the foundational optical component in high-resolution industrial inspection cameras
“CCL”	copper clad laminate, a base material for printed circuit boards consisting of an insulating substrate laminated with copper foil

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“CE”	Conformité Européenne, a mandatory conformity marking that certifies a product complies with the essential health, safety, and environmental protection standards required for sale within the European Economic Area
“CNC”	computer numerical control, an automated manufacturing process where pre-programmed computer software dictates the precise movement and operation of factory machinery and cutting tools
“crystal oscillator”	an electronic component that uses the mechanical resonance of a vibrating crystal to generate a precise frequency reference for timing and wireless communication circuits
“DIP”	dual in-line package, a traditional electronic component housing with two parallel rows of pins designed for through-hole mounting into printed circuit boards, typically utilised for high-durability or power-intensive applications
“DMS”	design and manufacturing services, an outsourcing model under which a specialist provider undertakes product design, engineering and/or manufacturing for brand owners and equipment manufacturers
“edge AI”	combination of artificial intelligence models with edge computing, allowing inference to run directly on local devices close to the data source for ultra-low latency processing
“electronic cloth”	a woven glass-fibre fabric used as the reinforcing substrate in copper clad laminates and printed circuit boards
“EMC”	electromagnetic compatibility, the ability of electronic equipment to operate as intended in its electromagnetic environment without causing or suffering unacceptable interference
“eMTC”	enhanced machine type communication, a cellular IoT technology based on LTE that supports moderate data rates, mobility and voice, typically used for applications requiring wider coverage than NB-IoT
“engineering plastics”	high-performance plastic materials used in antenna housings, structural parts and insulation, selected for mechanical strength, heat resistance and dimensional stability

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“ERP”	enterprise resource planning, a centralised management software system that integrates and automates core business processes, including manufacturing, supply chain, finance, and human resources, to optimise operational efficiency
“eSIM”	embedded subscriber identity module, a programmable SIM chip soldered onto a device that can be remotely provisioned without a physical SIM card
“FCC”	Federal Communications Commission, a mandatory regulatory approval certifying that electronic and electrical devices comply with United States limits for RF emissions and will not cause harmful electromagnetic interference
“FPC”	flexible printed circuit, a pliable electronic circuit patterned on a flexible plastic substrate, enabling components to fit into compact, complex, or moving geometries within devices
“generative AI”	a branch of artificial intelligence that focuses on generating new and original content
“GHz”	gigahertz, a unit of alternating current or electromagnetic wave frequency equal to one billion cycles per second, commonly used to measure the processing speed of microprocessors and wireless signal bandwidth
“GNSS”	global navigation satellite system, a collective term for satellite-based positioning systems (including GPS and other constellations) that provide location, timing and tracking data
“GPRS”	general packet radio service, a packet-based wireless communication service that enables continuous, moderate-speed data transmission over cellular networks for mobile devices and industrial tracking systems
“GPS”	global positioning system, a satellite-based navigation system that provides precise geographic location, synchronisation, and tracking data to assets and logistics operations worldwide
“HDI”	high-density interconnect, a printed circuit board technology that uses finer lines, smaller vias and higher layer density to support compact, high-performance electronic assemblies

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“IATF 16949”	an international quality management standard for the automotive industry, specifying requirements for the design, development, production and servicing of automotive-related products
“impedance matching”	an RF design technique that aligns the impedance of an antenna with that of the connected circuit to maximise power transfer and minimise signal reflection
“IoT”	internet of things, a network of interconnected devices that communicate and exchange data with each other over the internet
“ISO”	the International Organization for Standardization, an independent, non-governmental organisation that develops and publishes international standards
“ISO 14001”	Environmental Management Systems – Requirements with Guidance for Use, a standard for environmental management systems published by the ISO
“ISO 9001”	Quality Management Systems – Requirements, an international standard on quality management systems developed by the ISO
“Kingdee Cloud”	a leading enterprise cloud service and management software platform used by manufacturers to streamline digital operations, financial reporting, and supply chain tracking
“LCP”	liquid crystal polymer, a high-frequency engineering plastic with low dielectric loss, commonly used in compact, high-performance antennas and flexible circuits
“LoRa”	long range, a proprietary digital wireless communication protocol designed for long-range, low power transmissions
“LoRaWAN”	long range wide area network, a media access control layer protocol designed to manage communication between low-power, long-range wireless devices and internet-connected gateways across large-scale industrial sites
“LPWAN”	low-power wide-area network, a class of wireless technologies designed to transmit small amounts of data over long distances with low power consumption, including NB-IoT, eMTC and LoRa
“LTE”	long term evolution, a communication type of fourth generation wireless communication protocol for mobile devices

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“Matter”	an open interoperability standard for smart home devices that enables products from different brands to communicate and work together over local networks
“mature-process”	semiconductor manufacturing nodes that are relatively established and cost-focused, typically used for many IoT, baseband and RF chips rather than leading-edge logic
“MCU”	microcontroller unit, a compact integrated circuit designed to govern a specific operation in an embedded system, combining a processor core, memory, and programmable input/output peripherals on a single chip
“MES”	manufacturing execution system, a software system used in manufacturing operations to monitor, control, and optimise the production process in real-time
“MIMO”	multiple-input multiple-output, an advanced wireless communication technology that uses multiple antennas at both the transmitter and receiver to improve signal reliability, capacity, and data transmission speeds
“MLCC”	multilayer ceramic capacitor, a widely used passive electronic component that stores electrical charge and is commonly found in wireless modules and other compact electronic assemblies
“MRP”	material requirements planning, a production planning and inventory control system used to calculate the exact quantities and timing of raw materials needed to meet manufacturing schedules
“NB-IoT”	narrowband internet-of-things, a low-power, wide-area network technology specifically designed to connect IoT devices that require small amounts of data transmission over long distances
“OA”	office automation, a suite of interconnected software tools, hardware systems, and digital networks designed to automate, streamline, and optimise administrative and clerical manufacturing workflows
“ODM”	original design manufacturer, a company that designs and manufactures products that are then marketed and sold under another company’s brand
“OEM”	original equipment manufacturer, a company that uses its brand advantages, core technologies and sales channels to have products produced by a manufacturer with production capabilities and then sells them to the market

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“OTA”	over-the-air, a method of remotely delivering firmware, software or configuration updates to connected devices through a wireless network
“PCB”	printed circuit board, a medium used to connect or wire components to one another in a circuit
“PCBA”	printed circuit board assembly, a completed PCB assembly that contains electronic components, or the process of assembling electronic components on to a PCB
“plating materials”	metals and chemical materials used to coat connectors and other conductive parts, typically to improve conductivity, corrosion resistance and solderability
“polyimide film”	a high-temperature, flexible polymer film used as a substrate in flexible printed circuits and certain antenna structures
“Radar”	radio detection and ranging, an electromagnetic system that emits radio waves to detect, track, and measure the distance, angle, and velocity of physical objects
“REACH”	registration, evaluation, authorization and restriction of chemicals, the main European Union law to protect human health and the environment from the risks that can be posed by chemicals
“RedCap”	reduced capability, a new 5G device category with lower complexity, lower cost, lower power consumption and moderate data rates commonly used in the IoT industry
“RF”	radio frequency, the electronic components and circuits used to generate, amplify, transmit, and receive radio signals in wireless communication systems
“RF front-end”	the analog portion of a wireless communication system that sits between the antenna and the baseband or RF transceiver, typically comprising filters, amplifiers and switches used to transmit and receive radio signals
“RoHS”	restriction of hazardous substances, the European Union rules restricting the use of hazardous substances in electrical and electronic equipment to protect the environment and public health
“SDK”	software development kit, a collection of software tools, libraries, and documentation bundled into one package to help programmers build applications for a specific platform, operating system, or hardware device

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“shielding cover”	a metal or metallised enclosure mounted over RF or other sensitive circuits to reduce electromagnetic interference
“SIM”	subscriber identity module, a removable or embedded chip that stores subscriber credentials and enables a device to authenticate and connect to a cellular network
“SME”	small and medium-sized enterprise
“SMT”	surface mount technology, a modern electronics assembly method where components are mounted directly onto the surface of printed circuit boards, maximising production speed and circuit density
“SoC”	system-on-chips, an integrated circuit that integrates most or all components of a computer or other electronic system
“SoM”	system-on-module, a compact, board-level computing module that integrates a processor, memory and essential interfaces and can be mounted onto a carrier board for a specific application
“SPI”	solder paste inspection, an inline quality control process that uses optical sensors to measure the volume, alignment, and distribution of solder paste on circuit boards before component placement
“SRRC”	State Radio Regulatory Commission, a mandatory type approval issued by China’s Ministry of Industry and Information Technology that regulates RF limits to ensure all wireless transmitting equipment complies with national spectrum management standards
“Sub-GHz”	wireless communication operating at frequencies below 1 GHz, commonly used in long-range, low-power IoT applications such as metering, sensing and industrial control
“UWB”	ultra-wideband, a short-range wireless technology that uses a wide radio spectrum to enable high-precision ranging, positioning and data transmission with low power consumption
“Wi-Fi”	a wireless networking technology that uses radio waves to provide wireless internet access
“Wi-Fi 6”	the sixth generation of Wi-Fi (IEEE 802.11ax), offering higher throughput, improved efficiency in dense environments and better power management than earlier Wi-Fi standards

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“Wi-Fi 7”	the seventh generation of Wi-Fi (IEEE 802.11be), designed to deliver higher data rates, lower latency and improved multi-device performance than Wi-Fi 6
“Zigbee”	a low-power, short-range wireless communication protocol commonly used in mesh networks for smart home, sensing and industrial control applications
“2G”	second generation wireless communication protocol for mobile devices, typically used for basic voice and low-speed data services
“3G”	third generation wireless communication protocol for mobile devices, offering higher data rates than 2G and supporting early mobile internet applications
“4G”	fourth generation wireless communication protocol for mobile devices
“5G”	fifth generation wireless communication protocol for mobile devices
“5G-A”	an enhanced evolution of 5G, also known as 5G-Advanced, that improves capacity, coverage, latency and energy efficiency and supports more advanced IoT and industrial applications
“5G RedCap”	a 5G wireless communication protocol for mobile devices designed for medium-speed IoT application. It retains key features of 5G broadband while reducing complexity, power consumption and cost