
GLOSSARY OF TECHNICAL TERMS

This glossary contains explanations of certain terms, definitions and abbreviations used in this document in connection with our Group and our business. The terms and their meanings may not correspond to standard industry meaning or usage of those terms.

“ABS”	acrylonitrile butadiene styrene, a common thermoplastic polymer which provides favorable mechanical properties such as impact resistance, toughness and rigidity when compared with other common polymers
“ASIC”	Application Specific Integrated Circuit. A proprietary integrated circuit designed and manufactured to meet a customer’s specific functional requirements
“ASTM”	acronym of American Society for Testing and Materials, the international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems and services, and is widely applied in the semiconductor industry
“back-end semiconductor transport media”	the carrier or casings for transporting and containing semiconductor components during all stages of the manufacturing process, typically made by using precision engineering plastics. For example, during component-assembly operations, transport and storage from the manufacturing plant to the board-assembly site, and when feeding components to automatic-placement machines for surface mounting on board assemblies
“BGA”	acronym of Ball Grid Array family of IC packaging design using substrate as interconnect structure and solder balls as external connection
“bonded warehouse”	domestic warehouses in overseas regions in which dutiable goods are stored without payment of duty
“Carrier tapes”	tape with sequential individual cavities that hold individual components, and a cover tape that seals the carrier tape to retain the components in the cavities. They provide mechanical protection during handling and storage and are commonly used for feeding components to automatic-placement machines for surface mounting on board assemblies
“CAGR”	compound annual growth rate, a method of assessing the average growth of a value over time

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“Cleanroom”	an environment, typically used in manufacturing or scientific research, with a low level of environmental pollutants such as dust, airborne microbes, aerosol particles, and chemical vapours
“CPAP”	acronym of Continuous Positive Airway Pressure, a form of positive airway pressure ventilation in which a constant level of pressure greater than atmospheric pressure is continuously applied to the upper respiratory tract of a person
“DFN”	acronym of Dual-Flat-Non-Leaded, or “Dual-Flat-No-Lead”, an IC packaging design structure which has external signal connection at two peripheral bottom sides of the package structure
“die”	one individual chip cut from a wafer before being packaged
“EIA”	The Electronic Industries Alliance, and EIA standard provides guidance on component marking, data modelling, colour coding and packaging materials for electronic component and systems and was developed in accordance with, and accredited by, the American National Standards Institute
“EMC”	acronym of Epoxy Molding Compound, which is a material widely accepted by the semiconductor industry used to encapsulate the delicate and fragile wire-bonded silicon die structure to protect the IC from harmful factors in external environment
“EMI”	acronym of Electromagnetic Interference, which is a key consideration of any electronic devices and electrical equipment design engineer to avoid disturbances and disruption during normal usage
“engineering plastics”	engineering plastics are a kind of innovative plastic-based material used in the industrial applications. They are engineered with extreme accuracy and attention to detail, allowing for precise and intricate designs to be created and offer a wide range of properties, such as high strength, heat resistance, high durability, high malleability and chemical resistance

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“engineering plastics casings”	engineering plastics casings are casing and packaging products manufactured using engineering plastics designed to meet the needs of a wide range of industries and applications such as housing and protecting semiconductor devices
“epoxy”	resin comprising two co-reactant hardeners often used for electrical components and structural adhesives
“ERAQFN”	acronym of Enhanced-Ring-Air-Cavity Quad Flat Non-lead, a patented MEMS and sensor packaging design
“ERP”	enterprise resource planning, a business process management software that allows an organization to use a system of integrated applications to manage the business and automate back-office functions relating to technology, services, and human resources
“ESD”	electro static discharge
“fabless foundry”	operating model in the semiconductor industry that production is split by (i) design; (ii) IC/wafer manufacturing; and (iii) IC assembly, packaging and testing
“GFA”	Gross Floor Area
“HVAC”	acronym of Heating, Ventilation and Air Conditioning, the use of various technologies to control the temperature, humidity, and purity of the air in an enclosed space
“IC”	acronym for integrated circuit, a semiconductor device that combines a number of transistors and electronic circuits onto a piece of silicone
“IDM”	integrated device manufacturer
“IoT”	acronym of Internet of Things, refers to a network of physical devices, vehicles, appliances and other physical objects that are embedded with sensors, software and network connectivity that allows them to collect and share data

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“ISO”	an acronym for a series of quality management and quality assurance standards published by International Organisation for Standardisation, a non-government organisation based in Geneva, Switzerland, for assessing the quality systems of business organisations
“ISO 9001”	an internationally recognised standard set by ISO for a quality management system. It aims at the effectiveness of the quality management system in meeting customer requirements. It prescribes requirements for ongoing improvement of quality assurance in design, development, production, installation and servicing
“ISO 14001”	an internationally recognised standard set by ISO for implementing an environment management system, which assist a company to continually improve its ability to efficiently identify, minimize, prevent and manage environmental impacts
“ISO 45001”	an internationally recognised standard set by ISO for occupational health and safety management system, which helps a company to manage occupational health and safety risks and improve performance through the implementation of policies and objectives
“JEDEC”	The Joint Electron Device Engineering Council, and JEDEC standard is an open industry standard and was primarily established to provide recognised technical standards and allow interoperability between different electrical components
“LCP-CNT”	LCP is the acronym of Liquid Crystal Polymer and CNT is the acronym of Carbon Nanotube. LCP-CNT means Liquid Crystal Polymer material embedded with Carbon Nanotube as ingredient
“MEMS”	Micro-Electro-Mechanical-System, a miniaturized mechanical and electro-mechanical elements (i.e. devices and structures) that are made using the techniques of microfabrication and photolithography process. It is a manufacturing technology and a paradigm for designing and creating complex mechanical devices and systems

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“MPPO”	modified PPO, a engineering thermoplastic blending PPO with various other engineering thermoplastic that produce materials with a wide range of physical and mechanical properties, heat resistance and flame retardancy
“OEM”	original equipment manufacturer
“PCB”	printed circuit board, an non-conductive board base on which electronic components are mounted through the application of SMT and are connected by conductive traces to form a working circuit or assembly
“PPO”	polyphenylene oxide, a high temperature thermoplastic that offers high heat resistance, dimensional stability and accuracy and favorable mechanical properties, such as impact resistance, toughness and rigidity
“QFN”	acronym of Quad-Flat-Non-Leaded, or Quad-Flat-No-Lead, an IC packaging design structure which has external signal connection at all four peripheral bottom sides of the package structure
“R&D”	acronym for research and development, a scientific work towards developing particular technologies
“REACH”	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, a European Union regulation dating from 18 December 2006, which addresses the production and use of chemical substances, and their potential impacts on both human health and the environment
“RoHS”	the Restriction of Hazardous Substances Directive 2002/95/EC, short for Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment, was adopted in February 2003 by the European Union
“SMT”	acronym for surface-mount technology, a method for constructing electronic circuits in which the components are mounted directly onto the surface of printed circuit boards
“tray and tray related products”	plastic containers for transporting back-end semiconductors that are conform to JEDEC standards

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"WLCSP"

acronym of Wafer Level Chip Scale Package, a very thin and tiny IC packaging structure usually without the protection of Epoxy Molding Compound encapsulation, very popular in mobile devices application