
GLOSSARY OF TECHNICAL TERMS

This glossary contains explanations of certain terms used in this document in connection with our Company and our business. The terminology contained in this glossary and their given meanings may not correspond to standard industry meaning or usage of these terms.

“AC”	alternating current, an electric current which periodically reverses direction and changes its magnitude continuously with time in contrast to direct current, which flows only in one direction;
“amplifier”	an electronic device that can increase the power of a signal. It is a two-port electronic circuit that uses electric power from a power supply to increase the amplitude (magnitude of the voltage or current) of a signal applied to its input terminals, producing a proportionally greater amplitude signal at its output;
“API”	application programming interface, a way to enable different applications to interact with each other;
“chip probing”	a test of the electrical parameters of the chip, each chip in the wafer being tested in order to remove defective parts to reduce the cost of subsequent packaging;
“circuit verification”	a method to verify the correctness of a circuit and evaluate and confirm the initial design plan and to ensure the design satisfies the needs of downstream customers and conforms to the design initiatives;
“CoB”	Chip-on-Board, a method of circuit board manufacturing in which the ICs (e.g. microprocessors) are attached (wired, bonded directly) to a printed circuit board, and covered by a blob of epoxy;
“comparator”	a device that compares an analog voltage signal with voltage reference, and generally has a single-ended output with two states of high or low, allowing comparison and judgment of signals. Compared with amplifiers, comparators have limited frequency characteristics but a very short delay in time with a hysteresis circuit;
“DC”	direct current, a one-directional flow of electric charge;

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“DFN”	dual flat no-lead package, a small square-shaped or rectangular surface-mount plastic package with no leads, near chip scale package with a low profile, moderate thermal dissipation, and good electrical performance;
“die”	a small block of semiconducting material on which a given functional circuit is fabricated;
“EDA”	electronic design automation, a category of software tools for designing electronic systems such as ICs and printed circuit boards. The tools work together in a design flow that chip designers use to design and analyze entire semiconductor chips;
“electrification”	the process of powering by electricity and, in many contexts, the introduction of such power by changing over from an earlier power source;
“fabless”	the design and sale of hardware devices and semiconductor chips while outsourcing their manufacturing services to a specialized manufacturer called a semiconductor foundry;
“foundry”	a factory that produces metal castings;
“IDM”	integrated device manufacturer, a company that takes charge of design, manufacturing, packaging, testing and subsequent sales of the finished products;
“integrated circuit” or “IC”	a small unit or package which is made as a single indivisible structure (such as a chip) and is electrically equivalent to a conventional circuit of many separate components;
“Internet of Things”	the physical objects (or groups of such objects) with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks;
“IP” or “IP module”	intellectual property, which, in the context of IC design, refers to a reusable and verified IC layout design with a defined function;

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“LCD”	liquid-crystal display, a flat-panel display or other electronically modulated optical device that uses the light-modulating properties of liquid crystals combined with polarizers;
“LED”	light-emitting diode, a semiconductor diode that emits light when voltage is applied;
“lithium”	a metal chemical element, of which the element symbol is Li;
“microcontroller units”	a single IC that is typically used for a specific application and designed to implement certain tasks. It contains one or more CPUs (processor cores) along with memory and programmable input/output peripherals;
“Moore’s Law”	the observation that the number of transistors in an IC doubles about every two years, named after Gordon Moore;
“ODM”	original design manufacturer, a company that designs and manufactures a product that is eventually rebranded by another firm for sale;
“OLED”	organic light-emitting diode, a light-emitting diode in which the emissive electroluminescent layer is a film of organic compound that emits light in response to an electric current;
“OSAT”	outsourced semiconductor assembly and test, a company that offers third-party IC packaging and test services. Such company provides packaging to silicon devices that are made by foundries and test devices prior to shipping to the market;
“patterned wafer”	a wafer with built-on circuits, which are unpackaged when sold. A patterned wafer contains a number of dies, which can be easily turned into chips after subsequent packaging and testing by downstream customers;
“PMIC”	power management integrated circuit, a class of ICs that perform various functions related to power requirements. PMICs are commonly used to power small and battery-powered devices, as integrating multiple functions into a single chip provides higher space utilization rate and system power efficiency;

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“signal chain”	a series of signal-conditioning electronic components that receive input (data acquired from sampling either real-time phenomena or from stored data) sequentially, with the output of one portion of the chain supplying input to the next;
“SiP”	System-in-Package, a number of ICs enclosed in one or more chip carrier packages that may be stacked using package on package;
“SoC”	System-on-Chip, an IC that integrates most or all components of a computer or other electronic system. These components almost always include on-chip central processing unit, memory interfaces, input or output devices, input or output interfaces, and secondary storage interfaces, often alongside other components such as radio modems and a graphics processing unit;
“SOP”	small-outline package, a surface-mounted IC package which occupies an area about 30-50% less than an equivalent dual in-line package, with a typical thickness being 70% less;
“SOT”	small-outline transistor, a family of small footprint, discrete surface mount transistor commonly used in consumer electronics;
“topology”	a form taken by the network of interconnections of the circuit components. Different specific values or ratings of the components are regarded as being the same topology;
“wafer”	a thin slice of semiconductor, such as a crystalline silicon (c-Si), used for the fabrication of ICs; and
“wafer channel partner”	a company that provides IC product production management services to IC design companies.