

AC Alternating Current. Electrical power whose current and voltage vary periodically from positive to negative.

Arc An intense, localized electrical discharge.

Chip An integrated circuit or discrete device.

CVD Chemical Vapor Deposition. A process that chemically deposits a film onto a substrate from a gaseous state.

Deposition A process where a thin film of material is placed on the surface of a wafer.

DC Direct Current. Electrical power that does not vary substantially and whose current and voltage do not change from positive to negative.

DVD Digital Versatile (or Video) Disk.

Etch Process of removing material (such as thin films or oxides) by chemical, electrolytic, or plasma (ion bombardment) means.

Flat Panel Display Computer or video display device whose depth dimension is substantially less than its width or height. Manufactured using many of the same processes as used for semiconductor chips.

Frequency The number of times per second that an electrical signal repeats its basic variation. Usually measured in cycles per second or hertz (Hz).

Front End In semiconductor manufacturing, the fabrication process in which the integrated circuit is formed in and on the wafer.

Impedance Quantity defined as the ratio of voltage to current in an electrical circuit.

Ion An atom that is not electrically neutral, usually because of the removal of an electron.

Ion implantation Process of precisely placing foreign atoms in a crystal matrix by bombarding the matrix with foreign ions.

kHz Abbreviation for kilohertz; describes a frequency equal to 1000 cycles per second.

LCD Liquid Crystal Display. Thin film device capable of displaying patterns on command of electrical signals. First used in computer displays and calculators, but now used pervasively in displays from telephones to gasoline pumps.

Liquid Crystal Solution containing crystals that line up under the influence of electrical signals and affect the passage of light through the solution. (See LCD)

Media Generic term for information storage devices such as hard disks, CD-ROMs, and DVD-ROMs.

Micro One millionth of a meter.

OEM Original Equipment Manufacturer. OEM customers build our power supplies into their equipment.

Plasma Cloud of electrons and ions in roughly the same number so that the cloud is electrically neutral.

Plasma Etch Process where a substrate is etched as a result of a chemical reaction created by an electrically energized plasma.

Power Conversion Technology that uses digital techniques to radically shrink the size and energy storage of electrical circuitry.

Power Supply Source of electrical power, usually customized for a particular use.

Pulsed Power Flow of electrical energy that is interrupted periodically to form a series of pulses.

PVD Physical Vapor Deposition. Process that forms a coating on a surface without relying on chemical reactions. Most common form of PVD used in semiconductor fabrication is sputtering.

RF Radio Frequency. Alternating power at a frequency in the range used for radio transmission (typically above 1000 kHz).

ROM Read Only Memory. A memory whose contents aren't intended to be changed.

Semiconductor An electronic device (also referred to as an integrated circuit or IC), such as memory or microcontroller, used in a variety of applications, including computer, automotive, and telecommunications products.

Sputtering PVD process where a target material is bombarded by ions from a plasma to loosen its surface atoms so that they deposit elsewhere.

Stored Energy Amount of energy in a power supply which would be deposited into an arc if not interrupted. The lower the value, the less damage caused by arcing.

Substrate Material to be modified in a process by etching its surface or by depositing a film on it.

Surface Modification Process whereby the surface of a substrate is changed to enhance some property. For example, to enhance paint adhesion on plastics.

Switchmode Method of power conversion using high speed semiconductor switches that convert power to a high frequency to enhance accuracy and speed of control and to lower stored energy.

Thin Film Term used to describe a process of working with films of thicknesses less than a few microns (millionths of a meter).

Wafer Round, thin slices of silicon that form the base substrate for semiconductor processing. Current diameter sizes include four-, five-, six-, eight-, and twelve-inch (300 millimeter).