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larities, need to be taken into account for more precise measurements.

pass 1. To proceed or be allowed to proceed. For instance, the frequencies which a filter transmits. **2.** To be transmitted or transferred from one point to another, or between entities. For example, the transmission of messages in a communications network, the sending of signals between a CPU and peripheral, or the transfer of control from one device to another. **3.** To proceed from one state or condition to another. For instance, to go from a forward bias to a reverse bias. **4.** In computers, a complete read or write cycle. **5.** A single circuit made by a satellite within its orbit. **6.** An interval during which a satellite is within its telemetry range.

pass band Same as **passband**.

pass band filter Same as **passband filter**.

pass band ripple Same as **passband ripple**.

pass-through A component, circuit, device, unit, piece of equipment, or system, which acts an intermediary. Such an intermediary may act upon a signal, as in effecting a protocol conversion, or it may not as is the case of a USB hub. Also spelled **passthrough**.

passband Also spelled **pass band**. **1.** A frequency interval within which a signal is transmitted or passed. A frequency-sensitive device, such as an amplifier or filter, may have multiple passbands. Also called **transmission band**. **2.** A continuous range of frequencies which is passed or transmitted by a filter. That is, there is little or no attenuation of a signal in this interval. A filter may have multiple passbands. Also called **filter passband**.

passband filter A filter which selectively transmits or passes one or more frequency intervals, each of which is called **passband**. Also spelled **pass band filter**.

passband ripple Slight variations in attenuation occurring within a **passband**. A Butterworth characteristic has minimal passband ripple. Also spelled **pass band ripple**.

passivate To protect junctions, regions, layers, or surfaces of semiconductors through **passivation**.

passivation The protection of junctions, regions, layers, or surfaces of semiconductors by depositing a material which renders them chemically passive or unreactive. Used, for instance, to protect from oxidation, contamination, and other perils of harsh environments. Two common techniques are glassivation and oxide passivation.

passive **1.** A component or device which does not operate on an applied electrical signal, as in amplifying, rectifying, or switching, nor is a source of energy. Resistors, capacitors, and transformers are examples. **2.** Chemically inert.

passive absorber A medium or material which dissipates sound energy as heat.

passive antenna **1.** An antenna with no active components or devices, such as amplifiers. **2.** An antenna, such as a parasitic antenna, which is not connected to a transmission line.

passive circuit A circuit which does not incorporate any active components or devices. Such a circuit consists exclusively of passive components and devices.

passive communications satellite An artificial satellite which reflects signals between stations. Such a satellite does not provide signal amplification. Also known as **passive comsat**, or **passive satellite**.

passive component An electronic component, such as a capacitor or resistor, that can not operate on an applied electrical signal, as in amplifying, rectifying, or switching, nor is a source of energy. Also called **passive element** (1).

passive comsat Same as **passive communications satellite**.

passive control system A control system that does not regulate inputs and outputs to maintain or improve operating conditions. For example, one which relies on the natural forces of convection and diffusion to regulate heat.

passive crossover A speaker crossover which does not require power to operate.

passive detection Detection in which the location of the detector is not revealed.

passive device A device, such as a transformer, that does not operate on an applied electrical signal, as in amplifying, rectifying, or switching, nor is a source of energy.

passive display Same as **passive-matrix display**.

passive electric network An electric network with no active components or devices. Also called **passive network**.

passive element **1.** Same as **passive component**. **2.** Same as **parasitic element**. **3.** A chemically inert element.

passive equalizer An equalizer that does not require power to operate.

passive filter A filter that does not incorporate active components or devices, such as transistors, to assist in signal passing or rejection.

passive homing Homing in which guidance is provided by a signal or energy transmitted or radiated by a beacon or scanned object. This contrasts with **active homing**, in which a signal or energy is emitted or transmitted from a source and reflected back by a scanned object.

passive hub A central connecting device, such as a computer or router, which only passes signals sent through it, without regenerating them. This contrasts with **active hubs**, which regenerate and retransmit the signals sent through them.

passive infrared detection The detection of infrared radiation emitted by an object, such as a human body. This contrasts with **active infrared detection**, in which infrared energy is directed to, and reflected by, objects being detected. Its abbreviation is **passive IR detection**.

passive infrared detector A device utilized for **passive infrared detection**. Its abbreviation is **passive IR detector**. Also called **passive infrared sensor**.

passive infrared sensor Same as **passive infrared detector**. Its abbreviation is **passive IR sensor**.

passive IR detection Abbreviation of **passive infrared detection**.

passive IR detector Abbreviation of **passive infrared detector**.

passive IR sensor Abbreviation of **passive infrared sensor**.

passive matrix A technology used in **passive-matrix displays**.

passive-matrix display A liquid-crystal display in which the pixels of the screen are powered by a grid of wires. This contrasts with an **active-matrix display**, in which each pixel of the screen is powered separately and continuously by a transistor, which provides for a brighter image with higher contrast. Also called **passive display**, **passive-matrix LCD**, **passive-matrix LCD display**, or **passive-matrix screen**.

passive-matrix LCD Same as **passive-matrix display**.

passive-matrix LCD display Same as **passive-matrix display**.

passive-matrix liquid-crystal display Same as **passive-matrix display**.

passive-matrix screen Same as **passive-matrix display**.

passive mixer A mixer, such as that combining input signals or light beams, which does not utilize active components or devices, such as transistors.

passive modulator A modulator which utilizes no active devices such as transistors.

passive network Same as **passive electric network**.

passive optical network A broadband optical network in which an optical splitter not located at a headend, central office, or similar site, is utilized to provide multiple users optical terminations. Its abbreviation is **PON**.

passive radar A radar technology which is ordinarily given object. Such a radar enhance the detection of **radar**, in which microwave of scanned objects, information, such as distance

passive radiator A cone that vibrates in response to a disturbance. Utilized to reinforce **drone cone**.

passive reflector An object that reflects magnetic radiation, such as a mirror.

passive satellite Same as **passive communications satellite**.

passive solar building design

passive solar design A building design that takes into account factors such as the proper sizing of windows, selection of structural elements, and to help heat and/or cool the building. Also called **passive building design**.

passive sonar Sonar equipment that uses passive sonic sounds, and is thus contrasts with **active sonar**, which uses ultrasonic sounds, enabling detection of a wide range of objects.

passive star In a star network, such as a computer or router, which only passes signals sent through it, without retransmitting the signals sent through it.

passive substrate A substrate upon which components are mounted. Its abbreviation is **passive substrate** (1), components are mounted on the substrate.

passive system A radio system that receives signals without transmitting. This contrasts with **active system**, which transmits and receives.

passive tracking system **1.** A system that receives or re-transmits signals for tracking. **2.** A system that requires an external energy source which keeps solar panels from requiring external power. **3.** A system that utilizes any satellite it receives signals from, which utilizes passive detection.

passive transducer **1.** A device that converts energy from one form to another without an internal energy source. **2.** A transducer without an internal energy source.

passive transponder A transponder that does not require an external energy source. The power required for operation is provided by the reader's field. An active transponder requires an external energy source.

passthrough Same as **pass-through**.

password A character string used for authentication or the fulfillment of other requirements. For instance, to log on to a system, to protect files, gain access to networks, and so on. **1.** The actual name of a user. **2.** A commonly found in dictionaries, a sequence of letters repeated tend to be non-alphabetic character or combinations of these letters. **3.** In these situations, passwords should be frequently changed, and should be stored securely.

Password Authentication A protocol for authenticating users and their corresponding devices. It utilizes encryption for transmission. For instance, as Challenge Handshake Authentication Protocol (CHAP).