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building-out section Same as **building-out circuit**.

buildup Also spelled **build-up**. The gradual process of increasing a quantity or magnitude, such as a voltage or magnetic field.

built-in Incorporated or otherwise constructed within a larger unit in a manner which makes something essentially non-detachable.

built-in font A font which is permanently stored into a printer's memory. Also called **internal font**, or **resident font**.

Built-In Self Test A testing method in which software and/or hardware is incorporated into a product, such as an IC, enabling self-testing. Its acronym is **BIST**.

bulb 1. A glass housing which encloses the elements of electric lamps, electron tubes, and similar devices. A bulb may or may not be evacuated. Also called **envelope** (1). 2. An incandescent lamp.

bulk The majority of something, such as its mass or volume.

bulk acoustic wave An acoustic wave traveling through the body of a piezoelectric material, such as quartz.

bulk effect An effect occurring in the bulk of a material, as opposed to a specific region, such as the surface. For example, that affecting the overall body of a semiconductor material, but not the junction.

bulk eraser A device which utilizes a strong magnetic field to erase all information from a recordable magnetic medium, such as a reel of magnetic tape or a floppy disk. In the case of a reel of magnetic tape, for instance, the use of such a device avoids the need for having to run the entire tape past the erase head. Also called **degausser** (2), or **demagnetizer** (2).

bulk storage A storage medium, such as an optical disc or a tape cartridge, with a large capacity.

bulletin board Same as **bulletin board system**.

bulletin board service Same as **bulletin board system**.

bulletin board system A computer system that serves as a message center that is accessed by other computers through a modem. These usually focus on specific interests, supply information, and generally provide a forum to exchange thoughts, files, programs, and email. Its abbreviation is **BBS**. Also called **bulletin board**, **bulletin board service**, or **electronic bulletin board system**.

bunch 1. A group of similar things that form a cluster. 2. A group of electrons that form a cluster. Also called **electron bunch**.

buncher Same as **buncher cavity**.

buncher cavity In a velocity-modulated tube, such as a klystron, the input cavity resonator, where electron velocities are modulated so that they form a **bunch** (2). Also called **buncher**, **buncher resonator**, or **input resonator**.

buncher grid In a klystron, one of the grids that modulates electron velocities in a **buncher cavity**.

buncher resonator Same as **buncher cavity**.

buncher voltage The RF voltage between **buncher grids**. Also called **bunching voltage**.

bunching In a velocity-modulated tube, such as a klystron, the forming of **bunches** (2). Also called **electron bunching**.

bunching voltage Same as **buncher voltage**.

bundled cable Two or more cables bound together and installed as a single unit.

bundled software A combination of application programs which are tailored to a given type of work, and which function especially well together. For example an office suite incorporating word processing, database, spreadsheet, presentation, and communications programs. Also called **software package** (1), **suite**, **package** (4), or **application suite**.

Bunsen cell An electrolytic cell with a carbon cathode in a solution of nitric acid, and a zinc anode in a solution of sulfuric acid. It has a potential of approximately 1.9 volts.

burden The power drawn from the circuit connected to a secondary winding. Usually expressed in volt-amperes at a given power factor.

Bureau International des Poids et Mesures An international organization dedicated to the uniformity of measurements, with emphasis on their adhering to the International System of Units (SI). It is French for International Bureau of Weights and Measures. Its abbreviation is **BIPM**.

buried layer In a semiconductor material, a higher-conducting layer between two less conducting layers.

burn 1. An imperfection on the screen of a CRT due to damage to the phosphor coating at that location. 2. To write code or data onto a PROM chip using a PROM blower. Also known as **blow** (2). 3. To write onto an optical medium which can be recorded only once, such as a CD-R or DVD-R. 4. To write onto a recordable optical medium, such as a CD, CD-ROM, or DVD.

burn-in 1. Same as **break-in** (1). 2. A **burn** (1) produced as a consequence of the same text and/or images being presented on a CRT screen for an extended period. Currently, few monitors are afflicted this problem.

burn-out Same as **burnout**.

burnout A failure, or the partial or complete destruction of a component, circuit, or device, due to excessive current and the resulting overheating. Also spelled **burn-out**.

burst 1. An abrupt and intense increase. 2. An abrupt increase in the strength of a signal. 3. A signal resulting from an abrupt and intense increase in a magnitude. 4. In a TV receiver, a color-synchronizing signal at the beginning of each scanning line, which establishes a frequency and phase reference for the chrominance signal. Also called **color burst**, **color-sync signal**, or **reference burst**. 5. A block of data which is transferred as a unit, and without interruption.

burst EDO DRAM Abbreviation of **burst extended data output dynamic RAM**. A type of EDO DRAM which processes four memory addresses in each of its short bursts synchronized with the CPU. Its own abbreviation is **BEDO DRAM**. Also called **burst EDO RAM**, or **BEDO RAM**.

burst EDO RAM Same as **burst EDO DRAM**.

burst error An abrupt increase in data errors. May be due, for instance, to damaged equipment.

burst extended data output dynamic RAM Same as **burst EDO DRAM**.

burst generator A generator of signals whose strength abruptly increases. Used for testing components, devices, and equipment, such as filters or speakers.

burst mode Same as **burst transmission** (2).

burst speed Same as **burst transmission** (3).

burst transmission 1. A transmission of data at a speed much higher than average. 2. A transmission in bursts, as opposed to a steady flow. Also called **burst mode**. 3. A transmission at the highest speed that a device is capable of uninterruptedly transmitting. Also called **burst speed**.

bus 1. A set of conductors which serve as a channel which provides parallel data transfer from one part of a computer to another. An example is the local bus, which is the pathway between the CPU, the memory, and high-speed peripherals. A bus is subdivided into two parts: the address bus, which identifies specific locations of stored data, and the data bus, which transfers the data. The width of the bus determines the amount of data which can be transferred at a time. A 256-bit bus, for example, can transfer 256 bits at a time. The clock speed determines how fast these transfers take place. Also called **computer bus**. 2. In a communications network, a common cable, or wire, that connects all

nodes. Also called **network bus**. 3. A heavy and rigid conductor, which is normally non-insulated, that is utilized to carry large currents between several circuits. Also called **bus bar**. 4. One or more conductors which serve as a common connection for multiple circuits.

bus architecture Also called **bus topology** (1). 1. The physical layout of the conductors of a bus (1). 2. The physical layout of the common cable, or wire, in a bus (2).

bus bar Same as bus (3).

bus bridge A device which connects two computer buses, whether they are similar or not.

bus card A card, such as a network interface card, which plugs into a computer's expansion bus.

bus configuration The physical arrangement or layout of a bus network.

bus extender 1. A device which expands the capabilities of a bus (1). It may be, for instance, an expansion board which provides multiple expansion slots. 2. A board which physically distances a board in a computer from those surrounding it, to facilitate repairs and testing.

bus mastering A feature which enables a device controller to communicate directly with other devices, bypassing the CPU. This improves performance, as the CPU can tend to other tasks while data transfer is accelerated.

bus mouse A computer mouse that attaches directly to a computer's bus via an expansion card, as opposed to utilizing a port.

bus network A communications network configuration in which all nodes are connected to a common cable or wire. Also, a network with such a layout.

bus system The set of conductors which serve as a channel which provides parallel data transfer from one part of a computer to another, and the mechanisms which control these conductive paths.

bus topology 1. Same as bus architecture. 2. The topology of a bus network.

busbar Same as bus (3).

business card CD An optical disc, such as a CD, CD-ROM, or DVD, that is in the general shape of a business card, and which is utilized for promotion. Alternatively, other shapes may be used. Also called **CD business card**.

business computing The use of computers for business purposes.

business continuity plan Its abbreviation is **BCP**. A set of procedures which are implemented once a disaster recovery plan has been executed. Once the immediate crisis, such as a fire, is under control, the BCP enumerates the key resources, such as personnel, computers, and telephones, along with the tasks that must be performed, to help ensure that the disruption in business is minimized.

business information system A system utilized for one or more processes involving the handling of the data of an enterprise. These processes may include the collection, processing, storage, retrieval, or transmission of data, and the devices, programs, channels, and equipment used for these purposes.

business machine Any electronic or electromechanical devices or equipment intended for business use. These include typewriters, calculators, and copiers. Computers and external peripherals, such as printers, may or may not be included in this concept.

business software Software that is utilized to run one or more aspects of a business. Depending on the enterprise, this may encompass a single program, an application suite, or thousands of programs.

business-to-business Same as **B2B**.

business-to-business ecommerce Same as **B2B ecommerce**.

business-to-consumer Same as **B2C**.

business-to-consumer ecommerce Same as **B2C ecommerce**.

busy hour The time interval during which power or communications usage is at a maximum. The duration is not necessarily equal to an hour, and refers more to a general time of day. Also called **busy period**, **peak period**, or **peak hour**.

busy period Same as **busy hour**.

busy signal An intermittent tone that may be heard when dialing a telephone number. There are two types: a slow busy, which indicates that the dialed number is currently in use, and a fast busy, which indicates that the central office either did not understand the dialed digits, or that a part of the network is too busy to process the call. Also called **busy tone**.

busy test A test by a telephone company to verify whether a subscriber line, or circuit, is busy. Also called **busy verification**.

busy tone Same as **busy signal**.

busy verification Same as **busy test**.

Butler oscillator A crystal oscillator with a two-stage amplifier and a piezoelectric crystal placed in a feedback loop from output to input.

butterfly capacitor A variable capacitor with stator and rotor plates which allow for varying of the inductance and capacitance, and whose shapes resemble the wings of a butterfly. It is used as a tuner in the very-high frequency and ultra-high frequency ranges.

Butterworth characteristic A response characteristic, such as that of a filter, which has minimal passband ripple. Also called **maximally flat characteristic**.

Butterworth filter A filter characterized by minimal passband ripple. Used, for example, in audio applications.

Butterworth response A response, such as that of an amplifier, which has minimal passband ripple. Also called **maximally flat response**.

button 1. A knob, disk, or the like, which is pressed to activate or operate a circuit, device, component, machine, and so on. For instance, a button may be pressed to activate an electric circuit. A button may also be virtual, as seen when a computer mouse presses such a button on-screen by clicking the mouse. Also called **pushbutton**. 2. A small piece of metal alloyed to a semiconductor wafer to form a junction. Also called **dot** (3). 3. In a carbon microphone, a container that holds carbon granules. Also called **carbon button**, or **microphone button**. 4. On a computer mouse, a surface which is pressed, or clicked, to select objects, perform functions, or the like. Also called **mouse button**.

button battery Same as **button cell**.

button cell A small primary cell that uses an alkaline electrolyte solution, usually potassium hydroxide. Used mostly for small devices such as hearing aids and watches. Also called **button battery**, or **coin battery**.

button microphone A carbon microphone with one or two buttons (3).

button switch A switch that is operated by pressing a button (1). Also called **push-button switch**.

buzz 1. A vibratory or droning sound, such as that produced by a buzzer, or resulting from certain electrical interferences. 2. A vibratory force with controlled amplitude and frequency, which is continuously applied to a device which is servomotor driven, so as to avoid it sticking in the null position. Also called **dither** (2).

buzzer An electromagnetic device whose armature vibrates rapidly, which produces a vibratory or droning sound. Used for producing audible signals, such as warnings.

BW Abbreviation of **bandwidth**.