The New IEEE Standard Dictionary of Electrical and Electronics Terms
[Including Abstracts of All Current IEEE Standards]

Fifth Edition

Gediminas P. Kurpis, Chair

Christopher J. Booth, Editor

(less negative) of the two ranges of the logic levels chosen to represent the logic states.
91-1984

high-level firing time (microwave) (switching tubes). The time required to establish a radio-frequency discharge in the tube after the application of radio-frequency power. *See:* **gas tubes.**   161-1971w, [45]

high-level language (HLL) (1) (high-level microprocessor language). High-level language to be extended by IEEE trial use Std 755-1985. HLLs so extended are sometimes known as implementation languages.
755-1985w
(2). *See:* **higher order language.**   729-1983

high-level language. *See:* **high-order language.**
610.12-1990

high-level modulation. Modulation produced at a point in a system where the power level approximates that at the output of the system.
145-1983, 182-1961w

high-level radio-frequency signal (1) (microwave gas tubes). A radio-frequency signal of sufficient power to cause the tube to become fired. *See:* **gas tubes.**   161-1971w
(2) (microwave gas tubes) (nonlinear, active, and nonreciprocal waveguide components). A radio-frequency signal above the threshold power level necessary to cause the tube to become nonlinear (fired). *See:* **gas tube; limiting threshold; below-threshold firing time.**
457-1982

high-level voltage standing-wave ratio (microwave switching tubes) (nonlinear, active, and nonreciprocal waveguide components). The voltage standing-wave ratio caused by a fired tube located between a generator and matched termination in the waveguide. *See:* **gas tube.**   161-1971w, 457-1982

highlight. (A) A technique in which a display element is emphasized through visual modification such as blinking, brightening, or intensity modulation. (B) To draw attention to a display element by visual modification as in (A). *See also:* **blink.**   610.6-1991

high lights (any metal article). Those portions that are most exposed to buffing or polishing operations, and hence have the highest luster.
[119]

high-limit temperature (electrical heat tracing for industrial applications). The maximum allowable heat-tracing system temperature.   152-1953w

high-low signaling (telephone switching systems). A method of loop signaling in which a high-resistance bridge is used to indicate an on-hook condition and a low resistance bridge is used to indicate an off-hook condition.
312-1977w

higher-order language. *See:* **high-order language.**   610.12-1990

high-order language (HOL). A programming language that requires little knowledge of the computer on which a program will run, can be translated into several different machine languages, allows symbolic naming of operations and addresses, provides features designed to facilitate expression of data structures and program logic, and usually results in several machine instructions for each program statement. Examples include Ada, COBOL, FORTRAN, ALGOL, PASCAL. *Syn:* **high level language; higher order language; third generation language.** *Contrast with:* **assembly language; fifth generation language; fourth generation language; machine language.**
610.12-1990

high-order. Pertaining to the left-most digit or digits of a numeral.   610.1

high-order position. The leftmost position in a string; for example, the letter 'A' in 'APPLE' or the digit 9 in 965. *Contrast with:* **low-order position.** *See also:* **most significant character; most significant digit.**   610.5-1990

high-pass filter (data transmission) (harmonic control and reactive compensation of static power converters). A filter having a single transmission band extending from some cutoff frequency (not zero) up to infinite frequency.
599-1985w, 519-1981

high peaking. The introduction of an amplitude-frequency characteristic having a higher relative response at the higher frequencies. *See:* **television.**   [34]

high pot (hi-pot). *See:* **high-potential test.**

high-potential test (power operations). A test that consists of the application of a voltage higher than the rated voltage for a specified time for the purpose of determining the adequacy against breakdown of insulating materials and spacings under normal conditions. *Note:* The test is used as a proof test of new apparatus, a maintenance test on older equipment, or as one method of evaluating developmental insulation systems. *Syn:* **high pot (hi-pot).**   858-1987

high-power-factor mercury-lamp ballast. A multiple-supply type power-factor-corrected ballast, so designed that the input current is at a power factor of not less than 90 percent when the ballast is operated with center rated voltage impressed upon its input terminals and with a connected load, consisting of the appropriate reference lamp(s), operated in the position for which the ballast is designed.   [97]

high-power–factor transformer (power and distribution transformer). A high-reactance transformer that has a power-factor-correcting device, such as a capacitor, so that the input current is at a power factor of not less than 90

get changes its distance by one-half wave-length, or a multiple thereof, during each pulse repetition interval. 686-1982

blind spot (surge testing for equipment connected to low-voltage ac power circuits). A limited range within the total domain of application of a device, generally at values inferior to the maximum rating. Operation of the equipment or the protective device itself might fail in that limited range despite the device's demonstration of satisfactory performance at maximum ratings. C62.45-1987

blind study. *See:* **double-blind study; single-blind study.** 539-1990

blink. A technique in which a display element is alternately blanked and displayed. *See also:* **highlight.** 610.6-1991

blinker signal. *See:* **Morse signal light.**

blinking (pulse systems) (navigation aid terms). A method of providing information by modifying the signal at its source so that the signal presentation on the display at the receiver alternately appears and disappears, for example, in loran, blinking is used to indicate that the signals of a pair of stations are out of synchronization. 172-1983

blip (1) (radar) (navigation aid terms). A deflection or a spot of contrasting luminescence on a radar display caused by the presence of a target. 172-1983, 686-1982,
(2) (computer applications). *See:* **document mark.** 610.2-1987

blip-scan ratio (radar). The fraction of scans on which a blip is observed at a given range. Corresponds to probability of detection when observer's integration time is less than scan period. 686-1982

block (1) (microprocessor operating systems). A group of data that is contiguous in nature. 855-1985
(2) (data transmission). (A) A set of things, such as words, characters, or digits handled as a unit. (B) A collection of contiguous records recorded as a unit. (C) In data communications, a group of contiguous characters formed for transmission purposes. 599-1985w
(3) (railway practice). A length of track of defined limits on which the movement of trains is governed by block signals, cab signals, or both. *See:* **absolute block.** [119]
(4) (conductor stringing equipment). A device designed with one or more single sheaves, a wood or metal shell, and an attachment hook or shackle. When rope is reeved through two of these devices, the assembly is commonly referred to as a block and tackle. A set of 4s refers to a block and tackle arrangement utilizing two 4-inch double sheave blocks to obtain four load bearing lines. Similarly, a set of 5s or a set of 6s refers to the same number of load bearing lines obtained using two 5-

inch or two 6-inch double sheave blocks, respectively. *Syn:* **set of 4s; set of 5s; set of 6s.** 524-1980
(5) (relaying). An output signal of constant amplitude and specified polarity derived from an alternating input and with the duration controlled by the polarity of the input quantity. C37.100-1981
(6) (software).(A) A group of contiguous storage locations, computer program statements, records, words, characters, or bits that are treated as a unit. *Syn:* **data block.** *See also:* **block-structured language; delimiter.** (B) To form a group as in (A). *Contrast with:* **deblock.** 610.5-1990, 610.12-1990
(7) (computer applications). In text editing and text formatting, one or more contiguous characters or lines of text. *See also:* **block operation.** 610.2-1987
(8) (as applied to static relay design) (power switchgear). An output signal of constant amplitude and specified polarity derived from an alternating input and with the duration controlled by the polarity of the input quantity. C37.100-1981
(9) (city, town, or village) (National Electrical Code). A square or portion of a city, town, or village enclosed by streets and including the alleys so enclosed but not any street. [86]

block allocation. *See:* **paging (A).** 610.12-1990

block and tackle. *See:* **rope block.** 516-1987

block-block element (power switchgear). A signal element in which two blocks are compared as to coincidence or sequence. C37.100-1981

block cable (communication practice). A distribution cable installed on poles or outside building walls, in the interior of a block, including cable run within buildings from the point of entrance to a cross-connecting box, terminal frame, or point of connection to house cable. *See:* **cable.** [119]

block copy (computer applications). In text editing, an operation that copies a block of text from one point to another within a file or between files, leaving the original block of text intact. *Contrast with:* **block move.** 610.2-1987

block count readout. Display of the number of blocks that have been read from the tape derived by counting each block as it is read. *See:* **sequence number readout.** [61]

block delete (computer applications). In text editing, an operation that removes a block of text from a file. 610.2-1987

block diagram (software). A diagram of a system, computer, or device in which the principal parts are represented by suitably annotated geometrical figures to show both the functions of the parts and their functional relationships. *Syn:* **configuration diagram; system resources chart.** *See also:* **box diagram; bubble chart; flowchart; graph;**