

EXHIBIT 12



IEEE Std 100-1996

The IEEE Standard Dictionary of Electrical and Electronic Terms

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Introduction

Since the first edition in 1941 of the American Standard Definitions of Electrical Terms, the work now known as IEEE Std 100, The IEEE Standard Dictionary of Electrical and Electronics Terms, has evolved into the unique compendium of terms that it is today.

The current edition includes all terms defined in approved IEEE standards through December 1996. Terms are categorized by their technical subject area. They are also associated with the standards or publications in which they currently appear. In some cases, terms from withdrawn standards are included when no current source can be found. Earlier editions of IEEE Std 100 included terms from sources other than IEEE standards, such as technical journals, books, or conference proceedings. These terms have been maintained for the sake of consistency and their sources are listed with the standards in the back of the book.

The practice of defining terms varies from standard to standard. Many working groups that write standards prefer to work with existing definitions, while others choose to write their own. Thus terms may have several similar, although not identical, definitions. Definitions have been combined wherever it has been possible to do so by making only minor editorial changes. Otherwise, they have been left as written in the original standard.

Users of IEEE Std 100 occasionally comment on the surprising omission of a particular term commonly used in an electrical or electronics field. This occurs because the terms in IEEE Std 100 represent only those defined in the existing or past body of IEEE standards. To respond to this, some working groups obtain authorization to create a glossary of terms used in their field. All existing, approved standard glossaries have been incorporated into this edition of IEEE Std 100, including the most current glossaries of terms for computers and power engineering.

IEEE working groups are encouraged to refer to IEEE Std 100 when developing new or revised standards to avoid redundancy. They are also encouraged to investigate deficiencies in standard terms and create standard glossaries to alleviate them.

The sponsoring body for this document was Standards Coordinating Committee 10 on Definitions (SCC10), which consisted of the following members:

Jane Radatz, *Chair*

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ployed to detect a wanted signal in the presence of others. Three typical approaches utilizing these techniques are spread spectrum, frequency-time matrix, and frequency-hopping.

(COM) [19]

common storage A portion of main storage that can be accessed by two or more modules in a software system. *Synonyms*: common area; common block. *See also*: global data.

(C) 610.10-1994, 610.12-1990

common trunk (telephone switching systems) A trunk, link, or junctor accessible from all input groups of a grading.

(COM) 312-1977w

common use Simultaneous use by two or more utilities of the same kind.

(NESC) C2-1997

common winding (autotransformer) (power and distribution transformers) That part of the autotransformer winding which is common to both the primary and the secondary circuits.

(PE) C57.12.80-1978r

communication (1) (data transmission) (electric systems) (telecommunications) The transmission of information from one point to another by means of electromagnetic waves.

(PE) 599-1985w

(2) The flow of information from one point, known as the source, to another, the receive.

(C) 610.10-1994

communication access Passive and active attacks on information transmitted over communication channels and on the system's communication services themselves. This threat area assumes that an intruder has access to the communication media or the components (both hardware and software) that provide the communication services.

(BA/C) 896.3-1993

communication channel A facility that permits signaling between terminals.

(PE/SUB) 999-1992

communicational cohesion A type of cohesion in which the tasks performed by a software module use the same input data or contribute to producing the same output data. *Contrast*: coincidental cohesion; functional cohesion; logical cohesion; procedural cohesion; sequential cohesion; temporal cohesion.

(C) 610.12-1990

communication band *See*: frequency band of emission.

communication circuits (electric installations on shipboard)

Circuits used for audible and visual signals and communication of information from one place to another, within or on the vessel.

(IA) 45-1983r

communication conductor (measuring longitudinal balance of telephone equipment operating in the voice band) A conductor used in a communication network.

(COM) 455-1985r

communication control character (1) A functional character intended to control or facilitate transmission over data networks. Control characters form the basis for character-oriented communications control procedures.

(COM/LM) 168-1956w

(2) (data management) *See also*: transmission control character.

(C) 610.5-1990

communication facility (data transmission) Anything used or available for use in the furnishing of communication service.

(PE) 599-1985w

communication interface That part of the API devoted to communications with other application software, external data transport facilities, and devices.

(C/PA) 14252-1996

communication line *See*: telecommunication line.

communication lines (1) The conductors and their supporting or containing structures that are used for public or private signal or communication service, and which operate at potentials not exceeding 400 V to ground or 750 V between any two points of the circuit, and the transmitted power of which does not exceed 150 W. When operating at less than 150 V, no limit is placed on the transmitted power of the system. Under specified conditions, communication cables may include communication circuits exceeding the preceding limitation where such circuits are also used to supply power solely to communication equipment. *Note*: Telephone, telegraph, railroad-signal, data, clock, fire, police-alarm, cable television

and other systems conforming with the above are included. Lines used for signaling purposes, but not included under the above definition, are considered as supply lines of the same voltage and are to be so installed. *See also*: electric supply lines.

(NESC/T&D) C2.2-1960

(2) The conductors and their supporting or containing structures that are used for public or private signal or communications service, and which operate at potentials not exceeding 400 V to ground or 750 V between any two points of the circuit, and the transmitted power of which does not exceed 150 W. When operating at less than a nominal voltage of 90 V, no limit is placed on the transmitted power of the system. Under specified conditions, communication cables may include communication circuits exceeding the preceding limitation where such circuits are also used to supply power solely to communications equipment. *Note*: Telephone, telegraph, railroad-signal, data, clock, fire, police-alarm, cable-television, and other systems conforming with the above are included. Lines used for signaling purposes, but not included under the above definition, are considered as supply lines of the same voltage and are to be so installed.

(NESC) C2-1997

communication reliability (mobile communication) A specific criterion of system performance related to the percentage of times a specified signal can be received in a defined area during a given interval of time. *See also*: mobile communication system.

(VT) [37]

communications architecture The hardware and software structure that facilitates the communications operations.

(C) 610.7-1995

communication satellite A satellite used for communication between two or more ground points by transmitting the messages to the satellite and retransmitting them to the participating ground station.

(COM) [24]

communications cable A cable that carries a low level of electric energy used for the transmission of communication frequencies. A telephone-type cable consists of two or more solid, insulated, twisted, paired and/or quadded, shielded or unshielded conductors ranging from No 19 to No 26 AWG, with either a shielded or unshielded sheath.

(PE) 789-1988r

communications common carrier (1) (data transmission) A company recognized by an appropriate regulatory agency as having a vested interest in furnishing communications services to the public at large.

(PE) 599-1985w

(2) In telecommunication, a public utility company that is recognized by an appropriate regulatory agency as having a vested interest in and responsibility for furnishing communications services to the general public. *Synonym*: common carrier.

(C) 610.7-1995

communications computer A computer that is specially designed to be an interface between another computer or terminal and a network, or to control data flow in a network. *See also*: concentrator; front-end computer; switching computer.

(COM/C) 168-1956w, 610.10-1994, 610.7-1995

communications controller A dedicated computer that checks and manages data traffic through a network.

(C) 610.7-1995

communication security Protective measures for information transmitted between system components, over telecommunication links, and through networks to provide data confidentiality, integrity, and authenticity.

(BA/C) 896.3-1993

communication services interface (CSI) The boundary across which access to services for interaction between internal application software entities and application platform external entities is provided.

(C/PA) 14252-1996

communications interface equipment (relays and relay systems associated with electric power apparatus) A portion of a relay system that transmits information from the relay logic to a communications link, or conversely to logic, for example, audio tone equipment, a carrier transmitter-receiver when an integral part of the relay system.

(PE/SWG) C37.100-1992, C37.90-1978s