

IEEE Std 100-1996

The IEEE Standard
Dictionary of Electrical
and Electronics Terms

Sixth Edition



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The IEEE Standard Dictionary of Electrical and Electronics Terms

Sixth Edition

Standards Coordinating Committee 10, Terms and Definitions
Jane Radatz, Chair

This standard is one of a number of information technology dictionaries being developed by standards organizations accredited by the American National Standards Institute. This dictionary was developed under the sponsorship of voluntary standards organizations, using a consensus-based process.

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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 In some cases, terms from withdrawn standards are included when no current source can be found.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.

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Assistance was provided by the IEEE Standards editorial staff.

How to use this dictionary

The terms defined in this dictionary are listed in *letter-by-letter* alphabetical order. Spaces are ignored in this style of alphabetization, so *cable value* will come before *cab signal*. Descriptive categories associated with the term in earlier editions of IEEE Std 100 will follow the term in parentheses. New categories appear after the definitions (see Categories, below), followed by the designation of the standard or standards that include the definition. If a standard designation is followed by the letter *s*, it means that edition of the standard was superseded by a newer revision and the term was not included in the revision. If a designation is followed by the letter *w*, it means that edition of the standard was withdrawn and not replaced by a revision. A bracketed number refers to the non-IEEE standard sources given in the back of the book.

Acronyms and abbreviations are no longer listed in a separate section in the dictionary; rather, they are incorporated alphabetically with other terms. Each acronym or abbreviation refers to its expanded term, where it is defined. Acronyms and abbreviations for which no definition was included in past editions have been deleted from this edition of IEEE Std 100.

Abstracts of the current set of approved IEEE standards are provided in the back of the book. It should be noted that updated information about IEEE standards can be obtained at any time from the IEEE Standards World Wide Web site at <http://standards.ieee.org/>.

Categories

The category abbreviations that are used in this edition of IEEE Std 100 are defined below. This information is provided to help elucidate the context of the definition. Older terms for which no category could be found have had the category "Std100" assigned to them. Note that terms from sources other than IEEE standards, such as the National Electrical Code® (NEC®) or the National Fire Protection Association,

Categories sorted by abbreviation

AE	aerospace and electronic systems
AHDL	computer—Analog Hardware Descriptive Language
AMR	automatic meter reading and energy management
AP	antennas and propagation
ATL	computer—Abbreviated Test Language for All Systems
BA	computer—bus architecture
BT	broadcast technology
C	computer
CAS	circuits and systems
CE	consumer electronics
CHM	components, hybrids, and manufacturing technology
COM	communications
CS	control systems
DA	computer—design automation
DEI	dielectrics and electrical insulation
DESG	dispersed energy storage and generation
DIS	computer—distributed interactive simulation
ED	electron devices
EDU	education
EEC	electrical equipment and components
ELM	electricity metering
EM	engineering management
EMB	engineering in medicine and biology
EMC	electromagnetic compatibility
GRS	geoscience and remote sensing
GSD	graphic symbols and designations
IA	industry applications
IE	industrial electronics
II	information infrastructure
IM	instrumentation and measurement
IT	information theory
IVHS	intelligent vehicle highway systems
LEO	lasers and electro-optics
LM	computer—local and metropolitan area networks
MAG	magnetics
MIL	military
MM	computer—microprocessors and microcomputers
MTT	microwave theory and techniques
NEC	National Electrical Code
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NI	nuclear instruments
NIR	non-ionizing radiation
NN	neural networks
NPS	nuclear and plasma sciences
ODM	computer—optical disk and multimedia platforms
OE	oceanic engineering
PA	computer—portable applications
PE	power engineering
PEL	power electronics
PQ	power quality
PSPD	surge-protective devices
PV	photovoltaics
QUL	quantities, units, and letter symbols
R	reliability

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