

IEEE Std 100-1996

# The IEEE Standard Dictionary of Electrical and Electronics Terms

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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.

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 In some cases, terms from withdrawn standards are included when no current source can be found.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

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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

**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

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