

Ex 15

IEEE 100
The Authoritative Dictionary of
IEEE Standards Terms

Seventh Edition



Published by
Standards Information Network
IEEE Press

Trademarks and disclaimers

IEEE believes the information in this publication is accurate as of its publication date; such information is subject to change without notice. IEEE is not responsible for any inadvertent errors.

Other tradenames and trademarks in this document are those of their respective owners.

*The Institute of Electrical and Electronics Engineering, Inc.
3 Park Avenue, New York, NY, 10016-5997, USA*

Copyright © 2000 by the Institute of Electrical and Electronics Engineers, Inc. All rights reserved. Published December 2000. Printed in the United States of America.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

To order IEEE Press publications, call 1-800-678-IEEE.

Print: ISBN 0-7381-2601-2

SP1122

See other standards and standards-related product listings at: <http://standards.ieee.org/>

The publisher believes that the information and guidance given in this work serve as an enhancement to users, all parties must rely upon their own skill and judgement when making use of it. The publisher does not assume any liability to anyone for any loss or damage caused by any error or omission in the work, whether such error or omission is the result of negligence or any other cause. Any and all such liability is disclaimed.

This work is published with the understanding that the IEEE is supplying information through this publication, not attempting to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be sought. The IEEE is not responsible for the statements and opinions advanced in this publication.

Library of Congress Cataloging-in-Publication Data

IEEE 100 : the authoritative dictionary of IEEE standards terms.—7th ed.
p. cm.

ISBN 0-7381-2601-2 (paperback : alk. paper)

1. Electric engineering—Dictionaries. 2. Electronics—Dictionaries. 3. Computer engineering—Dictionaries. 4. Electric engineering—Acronyms. 5. Electronics—Acronyms. 6. Computer engineering—Acronyms. I. Institute of Electrical and Electronics Engineers.

TK9 .I28 2000
621.3'03—dc21

00-050601

given information by means of a code. (E) To translate the program for the solution of a problem on a given computer into a sequence of machine-language or pseudo instructions acceptable to that computer.

(C) 610.5-1990, 610.12-1990, 162-1963

(3) (A) (computer terminology) In software engineering, computer instructions and data definitions expressed in a programming language or in a form output by an assembler, compiler, or other translator. *See also*: source code; machine code; object code; microcode. (B) (computer terminology) To express a computer program in a programming language.

(C) 610.12-1990

(4) (A) (computer terminology) A set of rules used to convert data from one form of representation to another. *Synonym*: coding scheme; data element tag; data code. (B) (computer terminology) To represent data in symbolic form. (C) (computer terminology) Data that have been expressed in symbolic form. (C) 610.5-1990, 1084-1986

(5) (A) (computer terminology) Data that have been converted from one form of representation to another, using a set of rules as in definition (5A). *Synonym*: encoded data. *See also*: coded representation; symbol; code set. (B) (computer terminology) To convert data from one form of representation to another, using a set of rules as in definition (5A). *See also*: encode; decode. (C) 610.5-1990

code audit (software) An independent review of source code by a person, team, or tool to verify compliance with software design documentation and programming standards. Correctness and efficiency may also be evaluated. *See also*: tool; inspection; code; audit; efficiency; walk-through; correctness; static analysis. (C/SE) 729-1983s

code bin A digital output that corresponds to a particular set of input values.

Code Transition Level	Code Bin	Code Bin Width
$T[2^N - 1]$	$2^N - 1$	
$T[2^N - 2]$	$2^N - 2$	$W[2^N - 2]$
.	.	.
.	.	.
.	.	.
$T[k + 2]$	$k + 1$	$W[k + 1]$
$T[k + 1]$	k	$W[k]$
$T[k]$	$k - 1$	$W[k - 1]$
$T[k - 1]$.	.
.	.	.
.	.	.
$T[2]$	1	$W[1]$
$T[1]$	0	

Definitions pertaining to input quantization

code bin K

(IM/WM&A) 1057-1994w

code bin width $W[k]$ The difference of the code transition levels that delimit the bin.

$$W[k] = T[k + 1] - T[k]$$

(IM/WM&A) 1057-1994w

code-bit In 100BASE-T, the unit of data passed across the Physical Medium Attachment (PMA) service interface, and the smallest signaling element used for transmission on the medium. A group of five code-bits constitutes a code-group in the 100BASE-X Physical Coding Sublayer (PCS).

(C/LM) 802.3-1998

code breakpoint A breakpoint that is initiated upon execution of a given computer instruction. *Synonym*: control breakpoint. *Contrast*: data breakpoint. *See also*: prolog breakpoint; dynamic breakpoint; static breakpoint; epilog breakpoint; programmable breakpoint. (C) 610.12-1990

codebook A combination of a coder and decoder operating in different directions of transmission in the same equipment.

(COM/TA) 1007-1991r

code character A particular arrangement of code elements representing a specific symbol or value.

(COM/PE) [49], 599-1985w

code classes (safety systems equipment in nuclear power generating stations) Levels of structural integrity and quality commensurate with the relative importance of the individual mechanical components of the nuclear power generating station. *Note*: For the recognized code classes, refer to the following documents: ANSI N18.2-1973, *Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants*; ANSI/ANS 51.8, *Nuclear Safety Criteria for the Design of Stationary Pressurized Water Reactor Plants*; ANSI/ASME BPV-III, *Boiler and Pressure Vessel Code* and its latest addenda, Section III; ANSI/ANS 52.1-1980, *Nuclear Safety Criteria for Design of Stationary BWR Plants*.

(PE/NP) 627-1980r

code conversion (telephone switching systems) The substitution of a routing code for a destination code.

(COM) 312-1977w

code converter A converter that changes the representation of data from one code to another.

(C) 610.10-1994w, 610.5-1990w

coded arithmetic data Data stored in a form that is acceptable for arithmetic calculations without conversion to an intermediate form; for example, data stored in integer form.

(C) 610.5-1990w

coded character set A set of characters for which coded representations exist. *Synonyms*: coded representation; code set.

(C) 610.5-1990w

coded decimal *See*: binary coded decimal.

coded-decimal code The decimal number system with each decimal digit expressed by a code. (IA/BEC) [61], [74]

code-decode table A table that identifies a correspondence between encoded and decoded data items. *Synonym*: encode-decode table. (C) 610.5-1990w

code density The number of characters that can appear per unit of length. (PE/TR) C57.12.35-1996

coded fire-alarm system A local fire-alarm system in which the alarm signal is sounded in a predetermined coded sequence. *See also*: protective signaling. (EBC/PB) [119]

code distance *See*: hamming distance.

coded pulse A pulse compression waveform in which a long pulse is divided into many subpulses, with the phase of each subpulse assuming a discrete value (often 0 or π radians) chosen in a deterministic manner (as in Barker codes, which result in all time sidelobes being equal) or chosen in a pseudorandom manner (such as with linear recursive or maximal-length sequences). *See also*: Barker code. (AES) 686-1997

coded representation The result of applying a code to a particular item of data. For example, the designation ORY for Paris International Airport, obtained by applying the international three-letter code for airports. *Synonym*: code value. *See also*: coded character set. (C) 610.5-1990w

coded track circuit A track circuit in which the energy is varied or interrupted periodically. (EBC/PB) [119]