

Designed for



Microsoft®
Windows NT®
Windows 95

The Ultimate Computer Reference

*The Comprehensive Standard for Business,
School, Library, and Home*

**Over
2,300
New Terms**
With Online Updates
Available Quarterly

1 34.99
SALE
\$19.99 +TX

Microsoft Press® Computer Dictionary

Third Edition

- Over 7,600 terms and definitions
- 345 illustrations and diagrams
- Extensive Internet and Web coverage
- Featured in Microsoft® Bookshelf® 97

Microsoft® Press

AMR EX. 2007
Roku v AMR
IPR2024-01054

Microsoft Press

Computer Dictionary

Third Edition

Microsoft Press

PUBLISHED BY
Microsoft Press
A Division of Microsoft Corporation
One Microsoft Way
Redmond, Washington 98052-6399

Copyright © 1997 by Microsoft Corporation

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

Library of Congress Cataloging-in-Publication Data pending.

ISBN 1-57231-743-4

Printed and bound in the United States of America.

1 2 3 4 5 6 7 8 9 QMQM 2 1 0 9 8 7

Distributed to the book trade in Canada by Macmillan of Canada, a division of Canada Publishing Corporation.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office. Or contact Microsoft Press International directly at fax (425) 936-7329. Visit our Web site at mspress.microsoft.com.

Macintosh, Power Macintosh, QuickTime, and TrueType fonts are registered trademarks of Apple Computer, Inc. Intel is a registered trademark of Intel Corporation. DirectInput, DirectX, Microsoft, Microsoft Press, MS-DOS, Visual Basic, Visual C++, Win32, Win32s, Windows, Windows NT, and XENIX are registered trademarks and ActiveMovie, ActiveX, and Visual J++ are trademarks of Microsoft Corporation. Java is a trademark of Sun Microsystems, Inc. Other product and company names mentioned herein may be the trademarks of their respective owners.

Acquisitions Editor: Kim Fryer

Project Editors: Maureen Williams Zimmerman, Anne Taussig

Technical Editors: Dail Magee Jr., Gary Nelson, Jean Ross, Jim Fuchs, John Conrow,
Kurt Meyer, Robert Lyon, Roslyn Lutsch

secure a computer system from unauthorized access, such as the lock on the front of the cabinet of some personal computers.

hardware monitor \hărd'wâr mon'ə-tər\ *n.* A separate board-level circuit used to oversee the performance of a hardware/software system. A hardware monitor can detect the cause of a fatal error such as a system crash, whereas a software monitor or debugger cannot. *Compare* debugger.

hardware profile \hărd'wâr prō'fīl\ *n.* A set of data that describes the configuration and characteristics of a given piece of computer equipment. Such data is typically used to configure computers for use with peripheral devices.

hardware tree \hărd'wâr trē\ *n.* In Windows 95, a data structure containing information about the configuration and requirements of a system's hardware devices. Consisting of nodes that point to active devices, the hardware tree is dynamic and is reconstructed every time Windows 95 is started or refreshed. The hardware tree facilitates the Plug and Play capability of Windows 95.

hardwired \hărd'wīrd\ *adj.* **1.** Built into a system using hardware such as logic circuits, rather than accomplished through programming. **2.** Physically connected to a system or a network, as by means of a network connector board and cable.

Harvard architecture \hăr'vərd ār'kə-tek-chur\ *n.* A processor architecture that uses separate address buses for code and for data. This increases throughput by allowing the system to fetch instructions at the same time that it reads and writes data. This architecture also allows optimization of memory system design because instructions tend to be fetched sequentially, whereas data reads and writes are more random.

Harvard Mark I \hăr'vərd măr'k wən\ *n.* *See* Mark I.

hash¹ \hash\ *n.* In many FTP client programs, a command that instructs the FTP client to display a pound sign (#) each time it sends or receives a block of data. *See also* FTP client.

hash² \hash\ *vb.* To be mapped to a numerical value by a transformation known as a hashing function. Hashing is used to convert an identifier or key, meaningful to a user, into a value for the location of the corresponding data in a structure, such as a table. For example, given the key

MOUSE and a hashing function that added up the ASCII values of the characters, divided the total by 127, and took the remainder, MOUSE would hash to 12, and the data identified by MOUSE would be found among the items in entry 12 in the table.

hash coding \hash' kō'dēng\ *n.* *See* hash².

hash search \hash' sərçh\ *n.* A search algorithm that uses hashing to find an element of a list. Hash searches are highly efficient because the hashing enables direct or almost direct access to the target element. *See also* binary search, hash², linear search, search algorithm.

hash total \hash' tō'təl\ *n.* An error-checking value derived from the addition of a set of numbers taken from data (not necessarily numeric data) that is to be processed or manipulated in some way. After processing, the hash total is recalculated and compared with the original total. If the two do not match, the original data has been changed in some way.

Hayes-compatible \hāz'kəm-pat'ə-bl\ *adj.* Responding to the same set of commands as the modems manufactured by Hayes Microcomputer Products. This command set has become the de facto standard for microcomputer modems.

HDBMS \H'D-B'M-S'\ *n.* *See* hierarchical database management system.

HDF \H'D-F'\ *n.* *See* Hierarchical Data Format.

HDLC \H'D-L-C'\ *n.* Acronym for **H**igh-level **D**ata **L**ink **C**ontrol. A protocol for information transfer adopted by the ISO. HDLC is a bit-oriented, synchronous protocol that applies to the data-link (message-packaging) layer (layer 2 of the ISO/OSI model) for computer-microcomputer communications. Messages are transmitted in units called frames, which can contain differing amounts of data but which must be organized in a particular way. *See also* frame (definition 1), ISO/OSI model.

HDSL \H'D-S-L'\ *n.* *See* High-data-rate Digital Subscriber Line.

HDTV \H'D-T-V'\ *n.* Acronym for **h**igh-**d**efinition **t**elevision. A method of transmitting and receiving television signals that produces a picture with much greater resolution and clarity than does standard television technology.

head \hed\ *n.* The read/write mechanism in a disk or tape drive. It converts changes in the magnetic field of the material on the disk or tape surface to