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## Appendix B: Annotated Bibliography

There are a wide variety of texts available for those who are interested in learning more about assembly language or other topics this text covers. The following is a partial list of texts that may be of interest to you. Many of these texts are now out of print. Please consult your local library if you cannot find a particular text at a bookstore.

Microprocessor Programming for Computer Hobbyists

Neill Graham

TAB books

ISBN 0-8306-6952-3

1977

This book provides a gentle introduction to data structures for computer hobbyists. Although it uses the PL/M programming language, many of the concepts apply directly to assembly language programs.

IBM Assembler Language and Programming

Peter Able

Prentice-Hall

ISBN 0-13-448143-7

1987

A college text book on assembly language. Contains good sections on DOS and disk formats for earlier versions of DOS.

MS-DOS Developer's Guide

John Angermeyer and Keven Jaeger

Howard W. Sams & Co.

ISBN 0-672-22409-7

An excellent reference book on programming MS-DOS.

Compilers: Principles, Techniques, and Tools

Alfred Aho, Ravi Sethi, and Jeffrey Ullman

Addison Wesley

ISBN 0-201-10088-6

1986

The standard text on compiler design and implementation. Contains lots of material on pattern matching and other related subjects.

C Programmer's Guide to Serial Communications

Joe Campbell

Howard W. Sams & Co.

ISBN 0-672-22584-0

An indispensable guide to serial communications. Although written specifically for C programmers, the material applies equally well to assembly language programmers.

The MS-DOS Encyclopedia

Ray Duncan, General Editor & various authors

Microsoft Press

ISBN 1-55615-049-0

An excellent description of MS-DOS programming. Contains especially good sections on resident programs and device drivers. Quite expensive, but well worth it.

Zen of Assembly Language

Michael Abrash

Scott Foresman

ISBN 0-673-38602-3

1990

The first really great book on 80x86 code optimization. There are only two things wrong with this book. (1) It is out of print. (2) The optimization techniques apply mostly to the 8088 and 80286 processors, they do not apply as well to the 80386 and later processors. That's okay, see the next entry below.

Zen of Code Optimization

Michael Abrash

Coriolis Group Books

ISBN 1-883577-03-9

1994

Here is Michael Abrash's book updated for the 80386, 80486, and Pentium processors. An absolute must-have for 80x86 assembly language programmers.

Assembler Inside & Out

Harley Hahn

McGraw-Hill

ISBN 0-07-881842-7

1992

A reasonable 80x86 assembly language text. This one is notable because Microsoft ships this text with every copy of MASM.

Assembly Language Subroutines for MS-DOS (2nd Edition)

Leo J. Scanlon

Windcrest

ISBN 0-8306-7649-X

This book is full of little code examples. The routines themselves are not earth-shaking, but it does provide lots of good code examples for those individuals who learn by example.

Advanced Assembly Language

Steven Holzner

Brady/Peter Norton

ISBN 0-13-658774-7

1991

This book provides a basic introduction to programming many of the PC's hardware devices in assembly language. Despite its name, it is not truly an *advanced* assembly language programming text.

Assembly Language. For Real Programmers Only.

Marcus Johnson

Sams Publishing

ISBN 0-672-48470

A comprehensive book (over 1,300 pages) with lots of example code.

The Revolutionary Guide to Assembly Language

Vitaly Maljugin, Jacov Izrailevich, Semyon Lavin, and Alksandr Sopin

Wrox Press

ISBN 1-874416-12-5

1993

Another comprehensive text on assembly language. This one spends considerable time discussing the PC's hardware. This text also includes sections on how to interface assembly language with the Clipper (dBase compiler) programming language.

The Waite Group's Microsoft Macro Assembler Bible

Nabajyoti Barkakati and Randall Hyde

Sams

ISBN 0-672-30155-5

1992

A comprehensive reference manual to MASM 6.x and the 8088 through the 80486.

Computer Organization & Design: The Hardware/Software Interface

David Patterson and John Hennessy

Morgan Kaufmann Publishers

ISBN 1-55860-223-2

1993

An excellent text on machine organization, one of the best in the field.

Computer Architecture, A Quantitative Approach

John Hennessy and David Patterson

Morgan Kaufmann Publishers

ISBN 1-55860-069-8

1990

One of the standard texts on computer architecture. Although it emphasizes RISC processors over CISC, many of the topics discussed apply to superscalar and pipelined CISC processors as well.

IBM Microcomputers: A Programmer's Handbook

Julio Sanchez and Maria P. Canton

McGraw Hill

ISBN 0-07--54594-4

1990

One of the best reference manuals covering the PC's hardware. An absolute must-have book for those interested in programming peripheral devices on the PC.

The Undocumented PC

Frank Van Gilluwe

Addison Wesley

ISBN 0-201-62277-7

1994

Another excellent text that covers the PC's hardware and how to program peripheral devices.

The Indispensable PC Hardware Book

Hans-Peter Messmer

Addison Wesley

ISBN 0-201-62424-9

Yet another great PC hardware book. This one even describes the low-level operation of various silicon devices in a way even beginners can understand. It also provides an excellent hardware reference guide to the 80386 and 80486 microprocessor chips.

Programmer's Technical Reference: The Processor and Coprocessor

Robert L. Hummel

Ziff-Davis Press

ISBN 1-56276-016-5

1992

One of the premier references on the 80x86 family from the 8088 through the 80486 chips. Also provides an excellent discussion of the 8087, 80287, 80387, and 487 math coprocessors.

Microsoft MS-DOS Programmer's Reference

Written by Microsoft Corporation

Microsoft Press

ISBN 1-55615-329-5

1991

The official guide to programming MS-DOS, directly from Microsoft.

Undocumented DOS. A Programmer's Guide to Reserved MS-DOS Functions and Data Structures

Andrew Schulman, Raymond Michels, Jim Kyle, Tim Patterson, David Maxey, and Ralf Brown

Addison Wesley

ISBN 0-201-57064-5

1990

This book describes lots of features available to MS-DOS that Microsoft never bothered to document. This text contains vital information to TSR and protected mode programmers.

Introduction to Automata Theory, Languages, and Computation

John Hopcroft and Jeffrey Ullman

Addison Wesley

1979

ISBN 0-201-02988-X

Very concise, but one of the standard texts on automata theory, pattern matching, and computability.

The Art of Computer Programming,

Vol 1: Fundamental Algorithms

Vol 2: Seminumerical Algorithms

Vol 3: Sorting and Searching

Donald Knuth

Addison Wesley

1973

One of the finest sets of text on data structures and algorithms available for assembly language programmers. Donald Knuth uses a hypothetical assembly language, *MIX*, to present most algorithms. Code in these texts is very easy to convert to 80x86 assembly language.