



MSX Technical Data Book

Hardware/Software Specifications

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Produced by ASCII Corporation

Printed in Japan

Scanned and converted to pdf by HansO, 2003

PREFACE

The Microsoft MSX standard was invented to provide end users and software developers with a standardized computer so that programs could run on any computer even though they were made by different manufacturers.

This book presents the MSX specifications in detail. It is intended to be a reference for advanced programmers and software developers. The information is generally divided four parts.

Part A, MSX HARDWARE SPECIFICATIONS, presents the specifications for the MSX system hardware.

Chapter 1, Hardware Specification, covers the MSX standard hardware configuration in terms of the requirements for the LSIs, memory size, interrupts, screen, keyboard, and sound used in the main unit; and the various (cassette, floppy, printer, serial, and slot) interfaces and connectors. It also covers topics such as cartridges, expansion, ports, and memory maps.

Part B, MSX SYSTEM SOFTWARE, contains a reference guide for MSX-BASIC and information for advanced programming.

Chapter 2, Language Specification, is a guide to MSX-BASIC and is for use with advanced programming requiring machine language routines.

Part C, EXPANDED MSX SYSTEM SOFTWARE, is about the advanced features of MSX, including Expanded Disk BASIC and MSX-DOS.

Chapter 3, MSX-DOS, contains a user's guide to MSX-DOS and Disk BASIC, and includes information needed for the advanced programmer.

Chapter 4, Other Expansion, covers the serial (RS-232C) expansion and BIOS calls available in the extended version.

Part D, SOFTWARE DEVELOPMENT GUIDE, contains information for software developers.

Chapter 5, International MSX Versions and their Differences, is for manufacturers or programmers who wish to make the hardware or software be usable internationally.

Chapter 6, Notes for MSX Software Developers, contains information that software developers should consider when programming for MSX computers.

Syntax Notation in Reference Sections

Wherever the format for a statement/command or a function is given, the following rules apply:

- CAPS Items in capital letters must be input as shown.
 - < > Items in lowercase letters enclosed in angle brackets (< >) are to be supplied by the user.
 - [] Items in square brackets ([]) are optional.
 - ... Items followed by an ellipsis (...) may be repeated any number of times (up to the length of the line).
 - { } Braces indicate that the user has a choice between two or more entries. At least one of the entries enclosed in braces must be chosen unless the entries are also enclosed in square brackets.
 - | Vertical bars separate the choices within braces. At least one of the entries separated by bars must be chosen unless the entries are also enclosed in square brackets.
- All punctuation except angle brackets and square brackets (i.e., commas, parentheses, semicolons, hyphens, equal signs) must be included where shown.

Arguments to functions are always enclosed in parentheses. In the formats given for the functions in this book, the arguments are abbreviated as follows:

- X and Y Represent any numeric expressions.
- I and J Represent integer expressions.
- X\$ and Y\$ Represent string expressions.

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