INTEL CORPORATION 5200 N.E. Elam Young Parkway Hillsboro, Oregon 97123 (503) 681-8080



Dear Intel Personal Development System Customer:

INTEL is pleased to provide you with the newest addition to our comprehensive development systems product line. As the leading manufacturer of development systems products, we are dedicated to supplying the tools necessary to maximize productivity in all phases of your project design.

This iPDSTM package contains all of the hardware, software, and documentation necessary to start development of products incorporating INTEL 8-bit microprocessors. Please pay particular attention to the enclosed <u>iPDS Intel Personal Development System User's Guide</u>. This manual provides extensive information concerning system installation, operation, and use. Carefully follow all installation (Appendix A) and operating instructions before using the system.

A checklist is attached to allow you to verify receipt of all items ordered. An iPDS-100 Registration Card has been included in this package to ensure that updated documentation and enhanced software releases are forwarded to you.

COMPLETE THE CARD AND RETURN IT IMMEDIATELY UPDATES CANNOT BE SENT WITHOUT THIS INFORMATION

A questionnaire is enclosed to help us better understand the needs of our customers and insure the quality of our products. Please take a few minutes to fill out this form.

INTEL's Personal Development System is designed to provide you comprehensive, flexible, and easy to use development support. When assistance is needed, contact your local INTEL Sales Office or INTEL Distributor Sales Office.

Sincerely,

INTEL CORPORATION
MICROCOMPUTER AND DEVELOPMENT SYSTEMS DIVISION

CHECKLIST FOR MATERIAL INCLUDED IN

INTEL'S PERSONAL DEVELOPMENT SYSTEM PACKAGE

		ITEM	DESCRIPTION	QTY
()	1	iPDS Mainframe	1
()	2	Software Registration Card	1
			Accessory Kit consisting of:	•
()	3	Power Cord	1
()	4	Fuse (European Specs.)	1
()	5	Fuse Holder	1
			Literature Kit consisting of:	
()	6	iPDS User's Guide	1
()	7	ISIS-PDS System Diskette	1
()	8	8080/8085 ASM Language Programming Manual	1
()	9	ISIS-II 8080/8085 MACRO Assembler Operators Man.	1
()	10	MCS-80/85 Utilities User's Guide	1
()	11	Literature Package	1
()	12	Problem Report Form	1
()	13	iPDS Pocket Ref. Guide	1
()	14	80/85 ASM Pocket Ref. Guide	1
()	15	User's Questionaire	1
()	16	Disk Drive Insert Cards	4
()	17	EMV-51 Data Sheet	1
()	18	Base Processor Schematic	1
()	19	Field Service Manual Pack	1

()	20	Diskette Handling Letter	1
()	21	SDSO Customer Letter	1
()	22	ISIS Credit TM CRT Based Text Editor Users Guide	1

INTEL'S PERSONAL DEVELOPMENT SYSTEM INFORMATION

The 5 1/4" diskettes do not seat in the current drive assemblies the same as 8" disk drives. Consequently, the drive can be closed with the 5-1/4" diskette seated improperly. Ensure the disk is centered in the disk envelope, before installing the diskette, to avoid this problem.

A special cardboard retainer is factory installed in the iPDS disk drive to protect the drive heads during transportation. Be sure to remove this retainer before applying power to the system. Insert the protector only after the drive head has been reset to track 0. This is accomplished by resetting the unit or powering the unit OFF and then back ON. Always use the disk retainer when transporting the system.

The disk drive Read/Write heads should be cleaned once a month at a 25% duty cycle or 40 hours of productive usage, whichever occurs first. Clean more often (once in 20 hours) in industrial environments. The Shugart approved cleaning diskette is SAI12 P/N 54613.

The "LOAD BUFFER" check address is 3380H instead of 3180H as documented in the \underline{iPDS} User Guide.

FUNC-R is used to software reset the iPDS processor. Depressing FUNC-R while the processor is resetting; i.e., depressing FUNC-R twice, will lock up the processor. Depress the reset button to reboot the system.

When using both processors in the iPDS system, a single file copy command issued from one processor does not allow the second processor to access the directory. To avoid this situation, enter;

COPY (filename to be printed), (dummy filename), TO :LP:

The dummy file should consist of CR, LF.

The CNTR R command displays the current contents of the line editing buffer. If no commands or text have been entered, the line editing buffer essentially contains a blank line. Typing CNTR R as the first character of an ISIS command line however, does not result in a blank line being repeated.

When operating the iPDS with a line printer, depressing reset on the iPDS causes an automatic line feed to occur on the printer.

Resetting the iPDS with a PROM installed in one of the PROM programming modules, and the module installed in the iPDS, may damage the PROM. Remove the prom from the module before resetting or turning power off to the system.

A minimum of 2" of clearance is recommended on all sides of the iPDS system. This ensures proper cooling and guards against EMI interference with other instrumentation.

SYSTEM CONFIGURATION INFORMATION

The iPDS system is designed to run a number of options installed through the EMV/iUP door or on the iSBXTM Multimodule Adaptor Board. To ensure adequate power is available for these options, refer to the chart below and determine the power needed for your particular application. As a general rule, install only the EMV/Prom Programming Module (iPDS-140) or the Multimodule Adaptor Board (iPDS-120) at any one time. Running any EMV or Prom Programming Module and an iSBX board may exceed the available power and cause damage to the iPDS power supply.

IMPORTANT

The maximum option power requirements <u>must not exceed 33.6</u> watts for any configuration.

OPT	ION ELECTRICA	L REQUIREMENTS	(Max.)	
	+5v	+12v	-12v	TOTAL POWER
Optional Processor (iPDS-110)	1.0a	· •	-	5.0 w
Multimodule Adaptor (iPDS-120)	0 . 6a	-	-	3.0 w
EMV/Prom Adaptor (iPDS-140)	0.32a	0.14a	0.05a	3.88w
Emulation Vehicle	2.5a	-	• •	12.5 w
Prom Prog. Module	0.7a	0.85a	0.4a	18.5 w
Bubble Multimodule (iSBX-251/251C)	0.37a	0.4a	-	6.65w
Parallel I/O MM. (iPDS-SBX-350)	0.62a	-	· , -	3.1 w
Serial I/O MM. (iPDS-SBX-351)	0.53a	0.03a	0.03a	3.37w
IEEE-488 MM. (iPDS-SBX-488)	0.6a	-	- -	3.0 w

Intel is dedicated to providing quality service for all of its products. In addition to the hotline service outlined at the beginning of the users guide, Intel offers carry in service for the iPDS system at the following locations:

Intel Corp.
27 Industrial Ave.
Chelmsford, Ma 01824
617-256-1800 x232

Intel Corp.
26500 Northwestern Hwy.
Suite 401
Southfield, Mi 48075
313-354-1540

Intel Corp.
7322 S.W. Freeway
Suite 1490
Houston, Tx 77074
713-988-8088

Intel Corp.
385 Sylvan Ave.
Englewood Cliffs, N.J 07632
210-567-5152

Intel Corp. 1350 Shorebird Way Mt View, Ca 94043 415-940-7847 Intel Corp. 2000 E. 4th st., Suite 110 Santa Ana, Ca 92705 714-835-2670

Intel Corp. 3500 W. 80th Street Suite 360 Bloomington, Mn 55431 612-835-6722

Intel Corp. 1500 N.W. 62nd Street Suite 104 Ft. Lauderdale, Fl 33309 305-771-0600

Intel Corp. 2550 Gulf Road, Suite 815 Rolling Meadows, Ill 60008 312-981-7230

Intel Corp. 7257 Parkway Dr. Hanover, Md 21076 301-796-7500