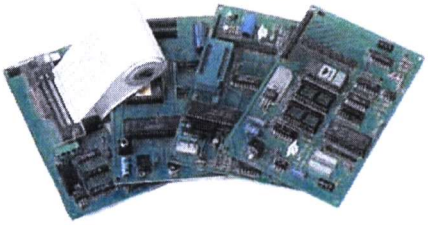
Learn Computing with the Micro-Professor-IP for $199

The Micro-Professor (MPF-IP) is a complete hardware and software system that will expose you to the amazing world of microprocessors.
A comprehensive teaching manual gives you detailed schematics and extensive examples of program code. All of this makes for a superb learning tool for students, hobbyists and microprocessor enthusiasts alike. Also serves as an excellent teaching aid for instructors of electrical engineering and computer science.

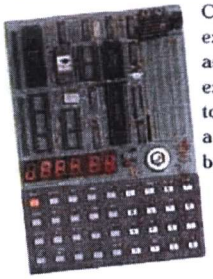
With the Micro-Professor-IP you get:
- Z-80 processor chip
- High quality 49-key keyboard
- On board 4 K-byte RAM
- On board 8 K-byte ROM including:
  - Interactive Monitor
  - Line Assembler
  - Two Pass Assembler
  - Tekt Editor
  - Disassembler
  - Language options of BASIC and FORTH.

You'll also get a lot more including:
- Built-in speaker
- 20 digit alphanumerical green tube display.
- 48 Input/Output lines
- Battery back-up circuits for RAM
- Bus expandable Z-80* architecture
- Three user's manuals
- Program storage/reading cassette interface

Options
- Student Workbook ($15)
- Printer ($99)
- Speech Synthesizer Board ($129)
- Sound Generation Board ($99)
- EPROM Programming Board ($169)
- Input/Output and Memory Board ($99)



MPF-I Micro-Professor
Z-80* CPU, 2K RAM expandable to 4K, 2K RAM, sophisticated monitor expandable 8K, 6-digit LED display plus a built-in speaker, cassette interface, and sockets to accept optional CTC/PIO, BUS is extendable. As well as being an exciting learning tool, the MPF-I is a great lowcost board for OEM's.



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*Z-80 is a trademark of Zilog Inc.

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CIRCLE 16 ON FREE INFORMATION CARD

SOFTWARE

MPF-IP Monitor Commands

RESET Enter and Initialize Monitor
CTRL Q Re-enter Monitor
CTRL E Initialize Text Buffer and Enter Text Editor
CTRL R Re-enter Text Editor
CTRL A Enter Two Pass Assembler
CTRL L Enter Line Assembler
CTRL D Enter Disassembler
CTRL B Initialize and Enter BASIC interpreter
CTRL C Re-enter BASIC interpreter
CTRL P Printer Control

Display/Alter Registers

R Display Register Contents
↓ Display contents of Next register set
↑ Display contents of Previous register set
: Alter Contents of register

Display/Alter Memory

M Display selected Memory contents
↓ Display Next four bytes of memory contents
↑ Display previous four bytes of memory contents
: Alter current memory contents
. Dump a block of memory contents
/ Move a block of memory contents
F Fill RAM buffer with data
J Relative address calculation
I Insert a block of data into memory
D Delete one byte of data from memory

Execution/Trace

G Execution of program
S Single step execution

Break point Manipulation

B Set/Clear Breakpoints

Load/Dump Memory

L Load memory contents from the tape recorder
W Store memory contents to the tape recorder

Advanced Interactive Monitor

MPF-IP software resides as firmware in 8K bytes ROM on the single-board computer. This monitor responds to a comprehensive set of self-prompting, single-key commands. The monitor include powerful Line Assembler, Disassembler, Text Editor and Two Pass Assembler. It also provides the interface to the optional BASIC and FORTH interpreters.

Line Assembler

The Line Assembler allow to keyin program by mnemonic codes. Each line will be store in memory in machine code. The memory space could be reduced.

Disassembler

The Disassembler allows you to list the Z80 machine codes on the green tube display and optional printer in mnemonic form with symbolic labels.

Text Editor

The Text Editor allows you to add, change or delete instructions anywhere in a program without affecting any other portion. It uses sample commands, which may be displayed or listed to the printer or display. The source code in the edit buffer is translated into machine code by the Two Pass Assembler.

Two Pass Assembler

The Two Pass Assembler allows the user to write exceptionally efficient programs for applications in which execution speed is critical-real-time process control, for example. The Two Pass Assembler shortens the development and documentation time for complex programs by allowing the user to assign labels to instructions, subroutines and data locations.

BASIC interpreter

An easy-to-learn language, BASIC is the most widely used programming tool for general computational tasks. The MPF-IP BASIC interpreter contained on 8K bytes ROM which includes floating point arithmetics. The MPF-IP BASIC interpreter can slove business, engineering and scientific problems, assist with decision-making, teach, even entertain.

FORTH Language

FORTH gives MPF-IP users an expandable, structured, stack-oriented language which is programmed in Reverse Polish Notation, the same as that used in popular, programmable scientific calculations. Relative to other language, FORTH is so simple to use for control applications that even non-programmers can use it successfully. FORTH is contained 8K bytes ROM., plugged directly into the MPF-IP single-board computer.

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