F8 MICROPROCESSOR

DEVELOPMENT SUPPORT HARDWARE

F8 Microprocessor Evaluation Kit
F8M Micromodule
F8S Development Module
F8SEM System Expansion Module
F8SPDM Development Module Set
F8 Formulator

FAIRCHILD
SEMICONDUCTOR

F8 MICROPROCESSOR EVALUATION KIT

Fairchild's Microprocessor Evaluation Kit is designed for use by engineers, scientists and technicians in order to provide a straightforward method for constructing, using and evaluating prototype F8 microprocessor systems in real applications or training situations. It provides all of the semiconductor components, technical specifications, and instructions necessary to interconnect devices, demonstrate microprocessor programs up to 1K bytes in length, and to debug those programs.

The F8 Microprocessor Evaluation Kit contains the following semiconductor parts and documentation:

● 16 Semiconductor Devices, including

    1 − 3850 Central Processing Unit
    1 − 3851A* FAIR-BUG Programmed Storage Unit
    1 − 3853 Static Memory Interface
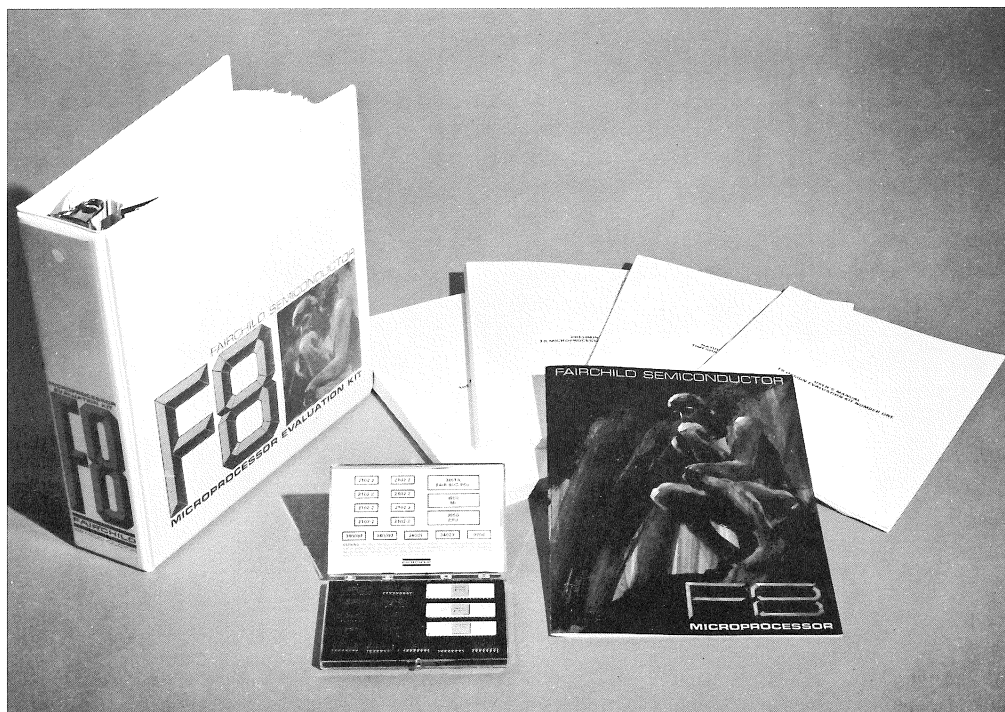   8 − 2102-2 1K Static RAM Devices

*The 3851 FAIR-BUG PSU is a fixed programmed Fairchild 3851 PSU which provides the programmer with all its I/O subroutines and allows the programmer to display or alter memory and register contents via a teletype terminal.

    1 − 34001 ⎫
    2 − 340097 ⎬ CMOS Gates and Buffers
    1 − 34023 ⎭
    1 − 9N06 TTL Hex Inverter

● 1 PC Card to Facilitate Device Hook-up

● F8 Microprocessor Brochure

● F8 Design Evaluation Kit Instruction Manual

● A Guide to Programming the Fairchild F8 Microprocessor

● F8 Microprocessor Data Book

● F8 Timesharing Systems Operators Guide

The F8 Microprocessor Evaluation Kit is available now from your local Fairchild Franchised Distributor.

Unit Price: $295.00

F8M − MICROMODULE

The F8M Micromodule is an inexpensive prototyping subassembly for the development and breadboarding of F8 Microprocessor designs. It is a complete printed circuit subassembly, requiring only the addition of power supplies and connection to a teleprinter to become fully operational.

Features of the F8M include:

● Switches and LEDs Provide Control and Monitor Functions

● 1K Bytes of Static MOS RAM

● Sockets for 2K Bytes of Bipolar PROM (Fairchild 93426)

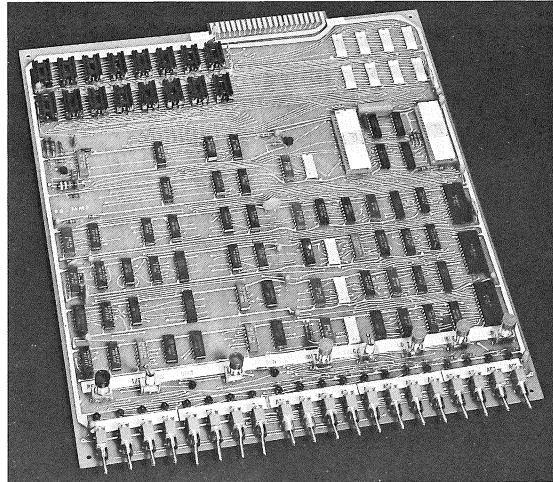● 2 Preprogrammed 93426 Devices Forming a Bootstrap Loader

● External Interrupt

● 4 I/O Ports Available on the Edge Connector

● Programmable Interval Timer

● Serial Communications Interface, RS232 Format, 20 mA Current Loop

The customer's system is ready to demonstrate after the connection of peripheral circuits and either loading an object program into the RAM, or plugging in preprogrammed PROMs. The program can be halted and single-stepped to demonstrate statically how the design functions. Any PROM or ROM memory location can be monitored by halting the program. RAM memory locations can be altered before resuming operation of the system.

The F8M is supported by a Cross Assembler available for purchase from Fairchild Semiconductor or through a National Timesharing Network. Contact your Fairchild Sales Representative for more information.

The F8M Micromodule is available off the shelf for immediate delivery from your Fairchild Franchised Distributor.

Unit Price: $850.00

F8S — DEVELOPMENT MODULE

The F8S is an inexpensive F8 development and debugging subassembly. A self-contained complete printed circuit module, the F8S needs only power supply and connection to a teleprinter and the customer's peripheral circuits to form a complete F8 microcomputer system. Memory may be expanded to a maximum of 64K bytes with the system expansion modules described elsewhere in this brochure.
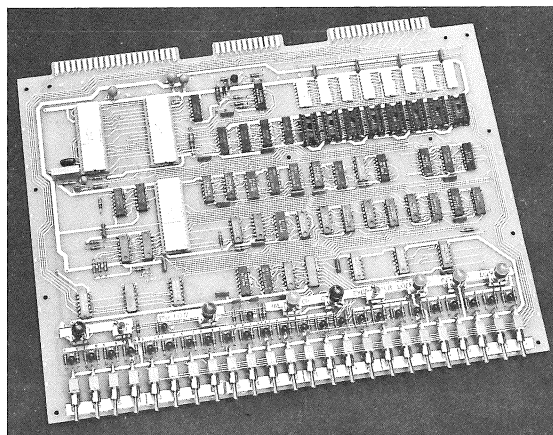
Features of the F8S include:

● Switches and LEDs Provide Control and Monitor Functions

● 64K Bytes of Addressable Memory Space (1K of Semiconductor Static RAM is Provided)

● Sockets for 2K Bytes of Bipolar PROM (Fairchild 93446)

● 2 External Interrupts

● 2 Programmable Interval Timers

● 4 Input/Output Ports (8 Bits Each)

● FAIR-BUG* Debugging Program

The F8S Development Module, with System Expansion Modules, allows source programs to be assembled inexpensively at the customer's location. Switches permit program RUN, HALT, and Single Step. Program breakpoints may be activated by changing instructions at the breakpoint locations. When a breakpoint is encountered, FAIR-BUG turns control over to you through the teleprinter. Commands consisting of single alphabetics allow you to examine or alter the contents of any memory location, group of locations or internal register of the CPU. Connection of peripheral circuits to the input/output ports enables the user to demonstrate his application.

The F8S is available now from your local Fairchild Franchised Distributor.

Unit Price: $995.00

*The 3851 FAIR-BUG PSU is a fixed programmed Fairchild 3851 PSU which provides the programmer with all its I/O subroutines and allows the programmer to display or alter memory and register contents via a teletype terminal.

F8SEM – SYSTEM EXPANSION MODULE

Designed to operate with the F8S Development Module, the F8SEM System Expansion Module adds 4K byte increments of memory to the F8 development system and four additional I/O ports. Switches contained on the module allow the user to select the active page address that the module will respond to, the addresses of the input/output ports and the interrupt addresses.
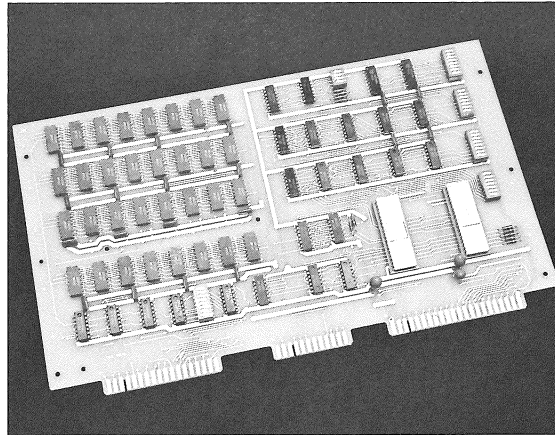
Features of the F8SEM System Expansion Module include:

● 4K Bytes of Static RAM

● Memory Page Selection

● 4 Input/Output Ports (8 Bits Each)

● Switch Selectable I/O Port Addresses

● 2 External Interrupts

● 2 Programmable Interval Timers

● Switch Selectable Interrupt Addresses

Available October 1, 1975 from your local Fairchild Franchised Distributor.

Unit Price: $695.00

F8SPDM – DEVELOPMENT MODULE SET

The F8SPDM is a combination set of modules containing one F8S module card, two F8SEM module cards, a paper tape F8S Native Assembler, and all necessary users manuals and F8 documentation literature.

Available October 1, 1975 from your local Fairchild Franchised Distributor.

Unit Price: $2,160.00

F8 FORMULATOR

The F8 Formulator is a complete benchtop microprocessor development system designed to support every F8 application.

F8 Formulator features and capability include:

● F8 CPU Module

● Up to 64K Bytes of Addressable Memory

● Control and Monitor Console

● Virtually Unlimited Expansion of I/O Ports

● 2 External Interrupts Available for Every 4 I/O Ports

● Modular Construction

● Self-contained Power Supplies

● Resident Assembler

● Source Text Editor

● Complete Debug Capability

Standard memory modules and input/output modules permit expansion of the F8 Formulator to meet your need. Additional peripheral interfaces will also be available.

Available January 1976. Contact your local Fairchild salesman, representative or franchised distributor for pricing information.