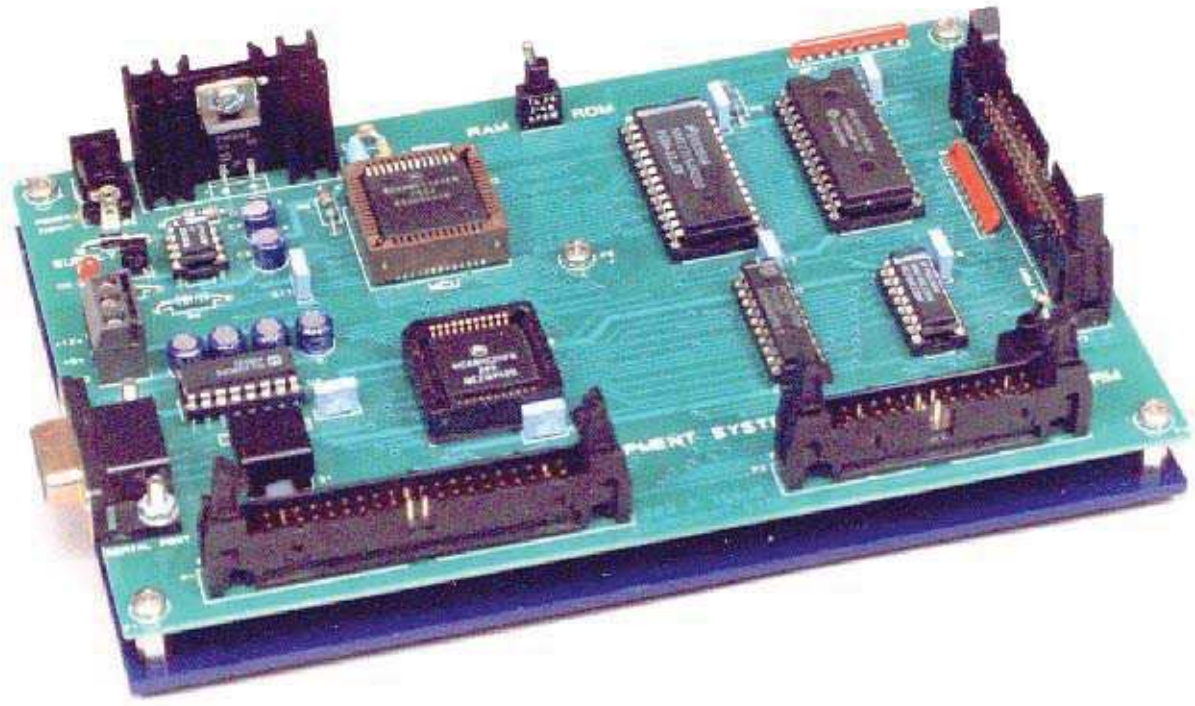
68HC11 DATS Development & Training System 24-102



The 24-102 68HC11 DATS is a single board computer based on the powerful and popular Motorola MC68HC11 micro-controller unit. This highly flexible product is designed to be used as a development system and training aid or as a stand-alone controller or computer.

The MC11-DATS consists of the MC11 board, complete with 8K monitor program ROM, 8 K RAM and serial port connection is via 9-way D socket. Two IDC connectors (26-way and 40-way) permit easy interfacing to peripheral hardware.

Using an adaptor, standard application products can be connected to the 40-way IDC peripheral connector. A third expansion port enables the system to be easily expanded if required. This expansion may consist of additional memory, additional serial communications, or extra input/output.

The user is able to develop and thoroughly test programs, which can eventually work on a microprocessor control unit (in single-chip mode).

The standard package consists of:

- MC11 board mounted on a perspex sub-plate
- User Manual Power Supply Serial cable
- PC Communications
- Software
- Windows based PC communications software

Hardware Features

- Powerful Motorola MC68HC11A1 MCU running at 2 MHz, with 256 bytes of RAM, 512 bytes of EEPROM and 8 lines of "on-chip" ADC
- Single input power requirement (9-18 V dc unregulated) via standard 2.1 mm power inlet plug. Alternatively, a screw terminal power connector allows the use of regulated +5 V d.c. and an LED indicates power healthy
- RS-232C Serial Port for communication with host computer
- 8 K monitor program ROM (can be substituted by the user's EPROM)
- 8 K RAM/pseudo-ROM
- Two input/output ports (26-way and 40-way IDC headers)
- System Expansion Port via 34-way IDC header
- All integrated circuits are socketed for ease of maintenance
- Hardware reset button

Software Features

- Register contents can be examined and modified
- Line Assembler enables Line-by-line assembler/Disassembler accepting 1 instruction at a time
- Breakpoints may be set (up to four maximum) to aid debugging. When a breakpoint is encountered, the register contents are displayed, then control returned to the monitor program
- Hexadecimal number handling
- Copy command allows a block of memory to be copied to a new location
- Memory Dump displays (hex dump) a block of memory in hexadecimal, with ASCII equivalents where appropriate
- Fill window enables a block of memory to be filled with a specified byte
- Erase all EEPROM locations
- Go command (start execution of the user's program)
- Halt command. This stops the 68HC11 processor
- Download programs in Motorola S-record format, from the PC into MC11's on board memory
- Memory command allows specified memory location to be examined and modified
- PROC (Proceed) command continues with program execution after a breakpoint
- STEP command single steps programs one instruction at a time. The register contents are displayed
- Watches window allows user to list memory locations updated after single step, breakpoint and return to monitor

An optional Cross-Assembler is available, which requires a PC running Windows 98 or higher.

Feedback

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