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M68HC05EVS/D

M68HC05EVS

Product Preview

Motorola M68HC05 Family Evaluation System

The M68HC05EVS is an economical, two-board emulator for M68HC05 microcontroller units (MCUs); connected to your target system, it acts just like the actual (or eventual) target system MCU. The emulator's ease of reprogramming makes the design, debug and evaluation of your target system highly efficient. Note that the EVS does not support programming of OTP (one time programmable) devices.

The M68HC05EVS consists of two printed circuit board assemblies: the platform board (PFB), and an emulator module (EM). Each EM adapts the EVS's functionality to one or more specific MCUs. This modular design increases the EVS's flexibility to emulate different MCUs, by simply installing a different EM board. The PFB and EM boards are typically supplied separately.

To use your EVS, all you require is an IBM (or compatible) terminal or host computer and a 5 Vdc power supply. If you wish to connect the EVS to a target system, you will also require a target cable set, with appropriate connectors.

Most of your emulation activity consists of entering MCU code and data, running the code and debugging the code, The EVS resident debug monitor EVSbug lets you enter data and debug code. The EVS gives you two ways to enter MCU code: using the resident one-line assembler/disassembler or downloading assembled code from an external source.

Features

- An economical means of evaluating target systems incorporating M68HC05 MCUs
- Monitor/debugger firmware
- One-line assembler/disassembler
- Host computer download capability
- Dual monitor and user memory maps
- RS-232 terminal I/O port

Specifications

Characteristic	Specification
Terminal I/O port	RS-232 compatible
Operating temperature	+25°C
Storage temperature	-40 to +85°C
Relative humidity	0 to 90% (non-condensing)
Power requirements	+5 Vdc @ 1.0 A (maximum)
Platform board dimensions	10.0 x 7.5 inches (254 x 191 mm)

EVSBug Commands

Command	Description
ASM <start addr>	Assemble from <start addr>
BF <start addr> <end addr> <data>	Block fill memory with data
BR [<addr1 – addr5>]	Set breakpoint
G [<start addr>]	Go (execute program)
HELP	Help (display commands)
LOAD T	Load S-records from I/O port
MD <start addr> [<end addr>]	Memory display
MM <addr>	Memory modify (interactive)
NOBR [<addr1 – addr5>]	Remove breakpoint
P [<count>]	Proceed (through <count> breakpoints)
RD	Display registers
RM	Register modify (interactive)
T [<count>]	Trace <count> opcodes

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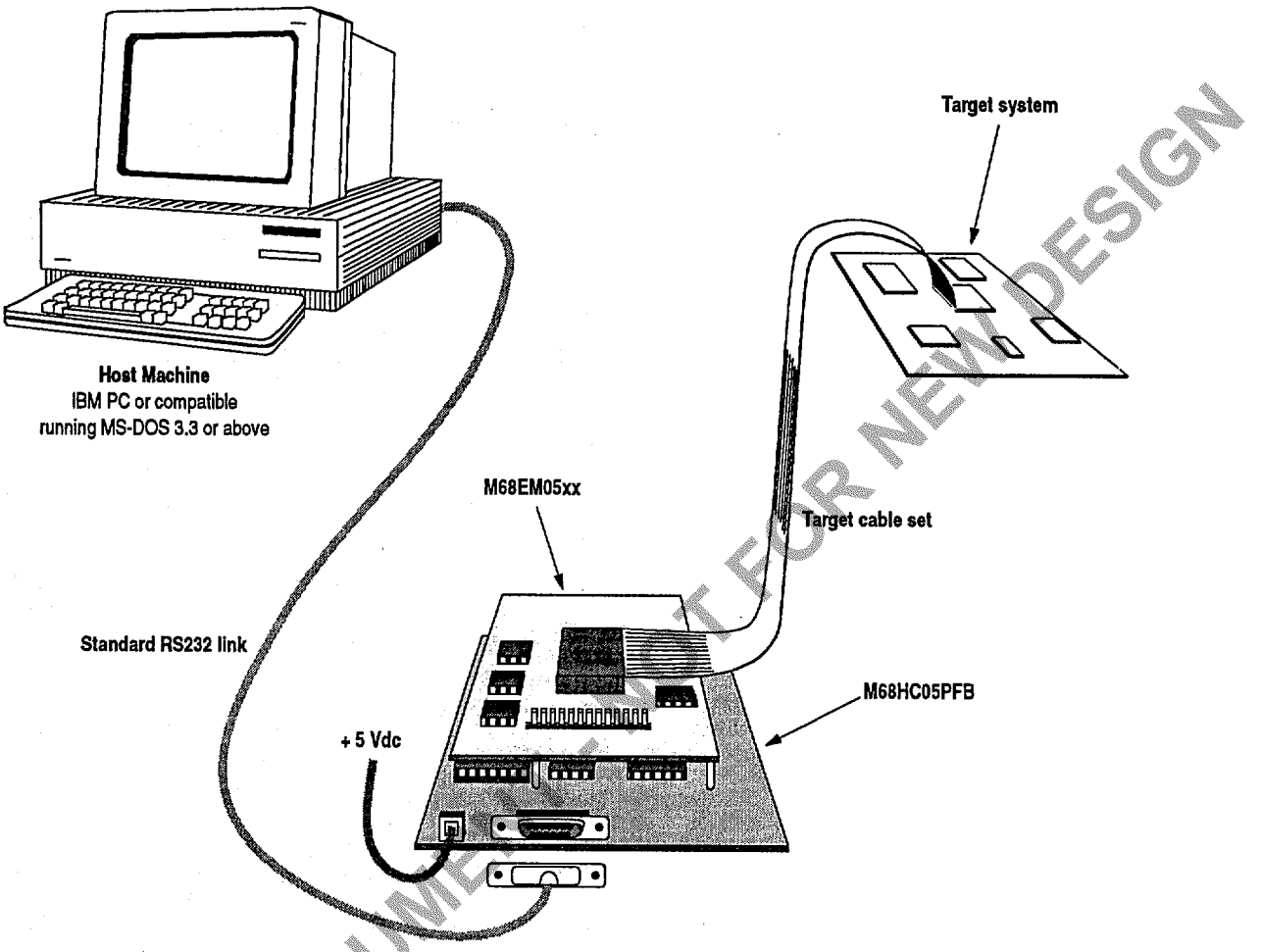

M68HC05EVS block diagram

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