multiROM ROM Emulator

Overview

multiROM Series ROM Emulators are advanced debugging tools for embedded systems. multiROM Series ROM Emulators are full-featured EPROM and FLASH memory emulators - EPROM or FLASH memory programming during the application development process is no longer required. multiROM Series ROM Emulators seamlessly replace the EPROM or FLASH memory of the system under development, thus allowing a very fast uploading of the user's code directly onto the instrument's built-in emulation memory. During the emulation, the uploaded code can be watched, edited and analyzed in real time.

Features

Support Services	Up to 16 Mbit devices (EPROM & FLASH memory)
Memory Access Time	<60 ns
Download Time	Less than 3 s for 1 Mbit
Additional Features	Virtual Terminal, Trace, Smart Download
User Interface	Windows 9x/Me/2000/NT compatible
Dimensions	195 x 115 x 30 mm
Power Supply	9-18 V DC, 1000 mA

Accessories

237-00132	12V AC/DC Switching Power Adapter
237-00143(included)	DIP-32 Emulation Pod
237-00144	DIP-40 Emulation Pod
237-00145	Dip-32 to PLCC-32 Emulation Adapter (for 512 Kbit devices and smaller)
237-00146	DIP-32 to PLCC-32 Emulation Adapter (for 1 Mbit devices and larger)
237-00147	DIP-40 to PLCC-44 Emulation Adapter
237-00149	Interface DLL
237-00150	PSOP-44 Emulation Pod (for 29FX00 devices, 16 bit)
237-00151	PSOP-44 Emulation Pod (for 29FX00 devices, 8 bit)

Fast Parallel Port Connection

multiROM Series ROM Emulators are connected to the host PC through a standard parallel port, in order to achieve faster transfer rates than commonly used serial ports. The multiROM Series ROM Emulators' pod is simply inserted into the target's memory socket-the emulators are independent from the target microprocessor, and the emulation of every EPROM or FLASH memory (in DIP, PLCC, TSOP or PSOP package) is completely transparent and straightforward.

multiROM emulators take advantage of the latest electronics technology

Support for Virtually Every Device

multiROM Series ROM Emulators emulate up to 16 Mbit devices, with data bus widths of 8 and 16 bits. The memory access time is guaranteed to be less than 60 ns. multiROM Series ROM Emulators can emulate 2.7 V, 3.3 V and 5 V devices, thanks to their internal circuitry-no external adapter is needed, thus ensuring no increase in memory access time.

Transparent, Real-Time Emulation

Real-time emulation (Live Accessing) allows the host PC to transparently view/edit the memory under emulation in real time, without in no way affecting the target's memory access timings (no wait states inserted). Real-time emulation allows you, for example, to modify control variables (loop counter variables, timing constants, etc.) and look-up tables, or to simulate conditions that trigger external signals; all this in real time, while the target system is running.

Virtually every device can be emulated, thanks to multiROM pods and adapters

The multiROM package includes emulation cables, a DIP-32 emulation pod, a test board, Reset and Trigger Out grabbers, parallel cable, user interface software and user's manual

Virtual Terminal Communication Channel

multiROM Series ROM Emulators also feature a Virtual Terminal, a communication channel between the host PC and the target system which allows the latter to send messages to the former during the emulation, and vice versa. By simply accessing some dedicated multiROM locations, the target can send, while running, the content of its variables or whatever other text messages to the host PC; the Virtual Terminal messages are displayed in a dedicated user interface window. The emulators provide an output Reset signal that can be generated as needed. multiROM Series ROM Emulators, additionally, can generate a trigger out signal (depending on memory access conditions specified in the user interface) that can be used by the target system. A trace buffer is also built in into the instruments.

Example of System Configuration - How to order

Emulation Needs	Model / Accessory	Description
One 27C512 DIP	multiROM 16L	ROM Emulator
	237-00132	Power Supply
	237-00149	Interface DLL (not mandatory)
Two 27C512 PLCC in 16-bit bus	multiROM 16L	ROM Emulator
	237-00132	Power Supply
	237-00143	DIP-32 Emulation Pod
	237-00146 (x2)	DIP-32 to PLCC-32 Emulation Adapter
	237-00149	Interface DLL (not mandatory)