LVEC ROM/RAM Emulator Options

FEATURES

♦ Emulates ROM and RAM using the same emulator cable

♦ Configurations from 128k by 8 to 516k by 16 available

♦ Access times down to 50nS available

♦ Very fast download

♦ Both 3.3V and 5V emulation when fitted in LV programmer

♦ Bi-directional communications channel

♦ Built in active-low/high reset function with additional programmable active-low/high reset or active-low/high interrupt

♦ Modify on the fly

The LVEC-EMUL add on cards for ICE Technology's range of single socket PC based programmers can be factory fitted at time of purchase or added by the user as required. These built-in emulator options turn your programmer into a powerful development tool. By using the resources already on the programmer, the additional circuitry required for emulation is minimised resulting in a high specification emulator at low cost.

PHYSICAL SPECIFICATIONS

The LVEC emulators are supplied as a card which fit inside any of the PC-based single socket programmers. The LV family support both 3.3V and 5V emulation, the 1000+ range emulate 5V only devices.

A cable is provided for connection to the target system. This has a 34 way IDC connector which plugs into the emulator board in the programmer. There is a 32 pin DIL plug which connects to the target system.

The 16 bit emulator has an additional IDC connector and cable. For emulation of two 8-bit ROMs, both cables are used. An adapter is also provided to convert the two 32 pin plugs to a 40 pin header.

All emulator options provide a guaranteed 100nS access time, which can be improved to 50nS by replacing the on-board RAM, which is socketed.
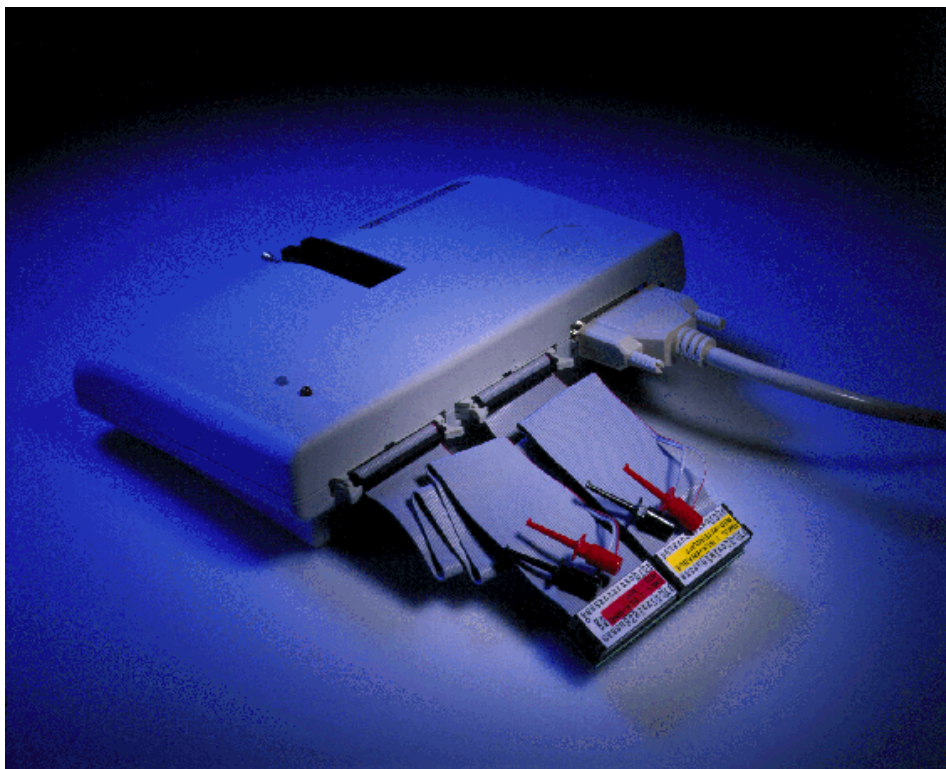
SOFTWARE FUNCTIONS

The easy to use menu driven software allows the emulator to be fully controlled from the PC. DOS command line batch software is also available for ease of use during code development.

Data Handling and Editing

The software enables data to be loaded into the buffer in popular formats including Raw/Binary, ASCII, Intel Hex, Motorola S1/S2/S3 Hex, etc. Data can then be edited and downloaded into the emulator.

Communications

As well as basic emulation, the LVEC emulator can perform communications with the target system. A comms window can be opened while emulating a device, allowing the user to send ASCII characters to the target system from the PC.

Modify on the Fly

It is possible to change data while the system is emulating. This can be done one byte at a time. The buffer is updated with the new data once the target system has accessed the specified address.

Programmable Interrupts

An interrupt signal is available through the red test probe on the cable which simulates a breakpoint facility. This can be set to active high or low. Three options are available, allowing the interrupt to be generated at either a specific address, one of 16 addresses, or any one of a 256 address segment.

Order Code	Emulates
LVEC-EMUL8	128K by 8 ROM 128K by 8 RAM
LVEC-EMUL8M	512K by 8 ROM 512K by 8 RAM
LVEC-EMUL16	128K by 16 ROM 256K by 8 ROM 2 by 128K by 8 ROM 256K by 8 RAM
LVEC-EMUL16M	512K by 16 ROM 1024K by 8 ROM 2 by 512K by 8 ROM 1024K by 8 RAM