



# EPMaster LV48 - EPROM Programmer



## FEATURES

- ◆ 48-pin ZIF sockets offers full 8 and 16 bit support up to 128Mbit, with NO additional modules
- ◆ Interfaces to PC parallel port
- ◆ Works from batteries or from adapter/recharger provided
- ◆ Supports low voltage devices down to 1.8V
- ◆ User friendly software works with DOS, Windows™ 95/98 and NT4
- ◆ High speed programme & verify - 27C010 in 21 seconds
- ◆ Optional ROM/RAM emulators for 128k by 8 up to 512k by 16
- ◆ Built in Chiptester for 74/4000 logic, SRAM and DRAM devices

An entry level programmer, supporting a full range of memory devices, and an ideal introduction for device programming. Intelligent software programs devices using only manufacturer approved algorithms, reducing programming times. With 48-pins available, all your DIP memory devices are supported with NO additional modules or adapters, even 16-bit and 42-pin EPROMs. A 48-pin socket also allows high density Flash devices to be programmed in 16-bit mode, greatly reducing programming times.

## BATTERY OPERATION

- Works from 8 AA batteries (standard or rechargeable)
- Long battery life - programmer automatically powers down during periods of inactivity, & powers up only during active operations
- Built in recharging circuit
- Ideal for use with Laptops
- Adapter / recharger supplied

## SPEED OF PROGRAMMING

With larger and larger devices, speed of programming is critical in cutting development and production times. Some EPROM programmers may be cheap, but what they save you in initial investment may cost you many times over in lost time. ICE Technology has always prided itself in having the fastest device programmers possible.

## DEVICE SUPPORT

- ✓ 8 and 16 bit EPROM to 64Mbit
- ✓ 42-pin EPROMs with NO additional adapters
- ✓ Paged EPROM
- ✓ Parallel & Serial EEPROM
- ✓ FPGA Configuration Serial EPROM
- ✓ Flash up to 128Mbit

**Low Voltage - 1.8V, 2.7V and 3.3V devices are fully supported in addition to standard 5V parts**

See full device support list for comprehensive parts listing.

## UNIQUE LOW VOLTAGE SUPPORT

The EPMaster LV48 features low voltage logic circuits which enable correct handling of devices down to 1.8V, a unique feature for a programmer in this price range. Rather than programming, and verifying 1.8V, 2.7V or 3.3V parts at 5V as most other programmers have to, the EPMaster LV48 is intelligent enough to select the correct voltage for the particular device, and most importantly to verify the device at it's nominal operating voltage.

- ▶ Take our speed challenge! We challenge you to find a competitor's programmer that can download, programme and verify these parts faster than the EPMaster LV48.

Device	Type	Time
27C512	32K by 8 EPROM	11 Secs.
28F400	4Mbit	9 Secs.
28F008	8Mbit	39 Secs.
93C46	Serial EEPROM	2 Secs.

## SOFTWARE FUNCTIONS

Our easy to use Windows and menu driven DOS software is fully functional and a delight to use. Download our demonstration software and compare the ease of use with other low cost programmer interfaces!

- File load, edit and save
- Data formats: Intel Hex, Motorola S-Record, Hex Auto-Recognition TekHex, Extended TekHex, ASCII, Raw Binary, Octal, Altera POF, etc.
- Extensive Buffer editing commands
- Password protected Buffer option
- Checksum & CRC checking
- Read Device, Device Checksum, Verify Data, Verify Signature, Blank Check, Bit Test, Device Erase, Over-Programme, Programme with Pre-Test
- Programming Options for device serialisation, marginal verify, Programme Pre-test etc.
- Hands-Free mode programming in Windows, single keystroke action in DOS, for continuous programming, reducing the margin of operator error
- Programming Successes counter
- Checks device selection and position in socket before applying programming voltages
- Project option allows complete device configuration to be stored, minimising future set-up times
- Batch software enables user macros to be written for customised software interface under DOS.
- On-line Help in Windows

## BUILT IN EMULATOR OPTIONS

Optional ROM/RAM Emulator cards turn the EPMaster LV48 into a powerful development tool. The cards fit inside the programmer and are available in 8 or 16-bit formats. The emulator kit comes complete with plug-in card, ROM/RAM cable, software and manual. A 40-pin DIP adapter is also provided with the 16-bit option.

Full details on the LVEC built in emulators are available on the Emulator data sheet.

## MANUFACTURER APPROVED

All device algorithms are implemented using only manufacturer approved programming specifications. ICE Technology works very closely with all of the semiconductor vendors to ensure the complete integrity and reliability of the algorithms.

The EPMaster LV48 programmer is a recommended programming tool by a number of major semiconductor manufacturers, including Altera, AMD, Atmel, Fairchild, Fujitsu, Intel, Macronix, Microchip, SST, ST Microelectronics, Winbond and Xilinx.

## SOFTWARE UPDATES

FREE software updates are available from our Internet Web page and can be downloaded at any time, giving you the very latest devices and software revisions at no extra charge.

## ENVIRONMENTAL SPECIFICATIONS

### *CE Compliance :*

The EPMaster LV48 complies to the requirements of the Low Voltage Directive 73/23/EEC and EMC directive 89/336/EEC. It was tested to and met the following standards:

- EN 55022 Emission Test (Class A)
- EN 50082-1 Immunity Tests
- FCC Level B

### *Temperature :*

- +41°F to +104°F (+5°C to +40°C)

### *Safety Standards :*

- UL1950, TUV EN60950

### *Humidity :*

- 20% to 80% RH non-condensing

**Designed & Manufactured in the UK**

For further information, availability & pricing details, contact:

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## PACKAGE ADAPTERS

Any device upto 48-pins in DIP packaging is supported without the need for any additional adapter or module. However, a range of high quality socket adapters is available to support surface mount parts: PLCC, QFP, SOIC, TSOP, PSOP, BGA etc. See price list for full details.

## GUARANTEE & SUPPORT

- Full refund if not completely satisfied within 30-days
- Full one year warranty
- Selftest software provided for full hardware and firmware diagnostics
- FREE lifetime technical support & software upgrades

## PHYSICAL SPECIFICATIONS

- Software operates under Windows® 9x/NT4 or DOS on any PC with parallel port support
- Hard-Disk requirement: 6MB
- Dimensions: 9.5" x 6" x 2" (24 x 15 x 5 cm)
- Weight: approx. 2lbs (1kg)
- Shipping weight: 6lbs (3kg)

### *Package Includes:*

- Programmer
- DOS/Windows
- Mains adapter
- PC software
- Parallel Cable
- Fault diagnostic software
- Installation Guide

### *Options:*

- ROM/RAM Emulator card
- Range of package adapters
- Mains adapters for other voltages (UK, USA, Euro, Japan available)

## ORDERING INFORMATION

EPMLV48-xxx

xxx = mains supply: UK:240V,  
EUR:230V, JAP:100V, USA:115V