

EMP-20

- Supports Most Intel Embedded Microcontrollers
- Support For Microcontroller Peripherals
- Standard Parallel Printer Interface
- Menu Driven Software
- Included Editor and Macro Functions
- Supports All Intel Data Formats
- Free Software Updates
- Unlimited Technical Support

The EMP-20 is a low cost, \$449.95, device programming tool that supports nearly all of Intel's programmable microcontrollers. It also supports all Intel Flash memory components, SIMMs, cards, PLD's and other memory devices frequently used in a microcontroller design. Located in the lower left area is the main device programming station consisting of a 48 pin ZIF. The ZIF will handle wide or narrow pattern dual in-line devices. Adapters are used to accommodate non DIP package types. Also in this area is the device "Family Module" connector. The devices that can be programmed at any given time are determined by which Family Module is installed. Family Module boards reconfigure supply voltage, ground and pin driver capabilities for different device families. EMP-20 can support many device families by simply changing the family module board. The use of relays and discrete DAC controlled analog drivers provide power and grounds that are rock solid and as a result the EMP-20 can usually program microcontroller devices at near their theoretical maximum performance.

The operating interface, EMP, is DOS based or functions as a well-behaved DOS application under Windows*. The included buffer editor allows the data to be placed exactly where you want it and provides HEX and ASCII strings as well as supporting SPLITS, SETS AND SWAPS. Included is a flexible macro facility allow-



ing frequently used procedures to be stored, then executed with a key stroke.

The heart of the hardware design is an SRAM based dynamic FPGA. Supported devices all have a unique FPGA configuration file. It's downloaded to the programmer by EMP as part of the device selection process.

MICROCONTROLLERS SUPPORTED:

87C196Kx, 87C196Mx, 87C196Nx, 87C3x, 87C5x, 87C51Fx, 87C51Rx, 87C151Sx, 87C251Sx

DEVELOPMENT PLATFORMS:

PC DOS, PC Windows

AVAILABILITY:

Now

CONTACT:

Needham's Electronics, Inc.
4630 Beloit Drive, Suite 20
Sacramento, CA 95838

Phone: (916) 924-8037

FAX: (916) 924-8065

e-mail: needhams@quiknet.com

Internet software updates:

<ftp://ftp.quiknet.com/pub/users/needhams>

BBS: (916) 924-8094

WWW: <http://www.needhams.com>

For international contacts, see Appendix B.

