

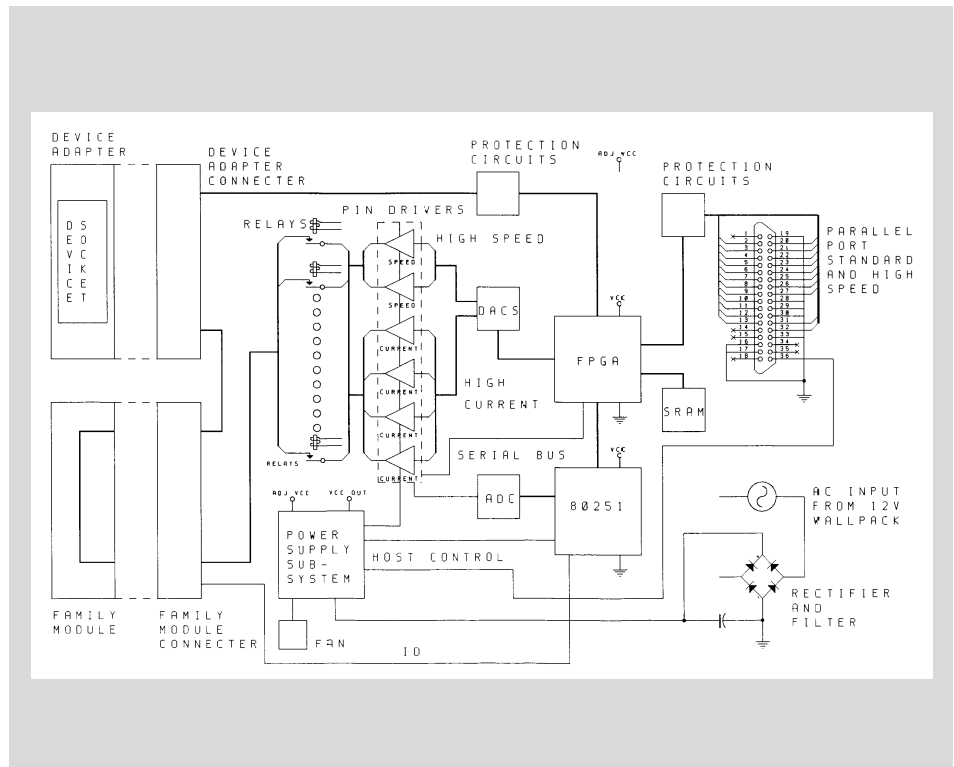
## EMP-30

- Support For All Intel Microcontrollers
- 2.4v to 5v Support
- Up to 70 Active Pins
- Standard Parallel Printer Interface
- Menu Driven Software
- Includes Editor and Macro Functions
- Free Software Updates
- Unlimited Technical Support

The EMP-30, for under \$1000.00, is for people that need to work with all the Intel products and a wide variety of other devices. The EMP-30 has enhanced speed and power capabilities that allows for older fuse link type technologies as well as the newer anti-fuse technologies to be handled. Up to 76 pins can be driven so high pin count devices can be supported.

The operating interface, EMP, is DOS based or it 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 allowing 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 unique FPGA configuration files that are downloaded to the programmer by EMP as part of the device selection process. When EMP verifies a successful download, the ground and programming pathways, not routed directly through the family module, are set up through relays. This arrangement guarantees the DAC controlled voltages are accurate and the grounds are solid at the device while programming. After a device ID check, the appropriate algorithm is taken from the EMP library and given control of the process of programming the device with the contents of the buffer. New devices, or changes to existing devices, are quickly and easily implement-



ed because all devices have library macros that implement programmer configuration and programming algorithms. New macros can easily be added to or deleted from the libraries without altering the other entries.

### MICROCONTROLLERS SUPPORTED:

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

### DEVELOPMENT PLATFORMS: PC DOS, PC Windows

### AVAILABILITY: Q4 '96

### CONTACT:

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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.

