## MINI-MAX/51-D

## 8051-Compatible Microcontroller System

The 8051 micro-controller, first Introduced by Intel, is the most popular micro-controller in use today with applications ranging from industrial, medical, home automation to automotive.

MINI-MAX/51-D is a low-cost, powerful, yet easy-to-use microcomputer system based on the latest generation of flash-based 8051 micro-controllers from ATMEL MINI-MAX/51-D is suitable both as a stand-alone development platform and as an attractively priced OEM module that can be embedded into other products.

MINI-MAX/51-D is fully assembled and ready to use out of the box. MINI-MAX/51-D has 64K of flash memory that can store thousands of lines of BASIC, C or 8051 Assembly language programs. Program execution speeds reach over 1 million instructions per second. Programs are downloaded into the MINI-MAX/51-D with a personal computer through the RS232 serial (COM) port. Downloads typically take only few seconds.

MINI-MAX/51-D is fully backed by warranty, technical support and application assistance from BiPOM Electronics. Wide range of peripheral boards and accessories are available.

- ATMEL AT89C51ED2 Microcontroller
- 64K Flash program memory.
- 256 Bytes of scratch pad RAM
- 1792 Bytes of extended RAM (XRAM)
- 2K Bytes of data EEPROM
- 32 Digital Input/Output Lines
- LCD, keypad and expansion connectors.
- In-System Programming/Debugging
- Powerful, yet affordable development software options include Micro-IDE, Micro C Compiler, BASCOM51 Basic Compiler, Serial loader, simulator and debugger.
- · Regulated 5V DC Operation .
- 22.1184 MHz Clock speed (can be doubled to 44MHz in software)
- RS232 Serial Port
- Technical Manual and circuit schematics are provided.
- Serial Cable and serial downloader included.







## **Peripheral Boards**

DIO-1 I/O Expander Board

TB-1 Training Board

**LED-1** LED Display Board

PROTO-1 Prototyping Board

RTC-1 Real-Time Clock Board

MMC/RTC-1 Flash Multimedia Card Board

**DAQ-2543** 12-bit Analog input board

DAC-1 8 Bit analog output board

TERMINAL-1 Terminal Block Board

LCD242 Liquid Crystal Display

VFD202 Vacuum Fluorescent Display

KP1-4X4 and KP1-3X4 Matrix Keypads

X10-1 X10 Interface Module

MOTOR-1 Unipolar stepper motor driver

**RELAY-1** Relay board

**RELAY-4REED** Reed relay board