

8085 MICROPROCESSOR TRAINING KIT

MTK-85

MICROENGINEER



Single board computer built with a Intel 8085 Microprocessor, best for learning the fundamental of computer system.

The MTK-85 is a low-cost single board computer designed for self-learning the 8085 Microprocessor. The trainer enables studying from low level programming with direct machine code entering to high level programming with PC tools easily. A nice feature, single-step running, helps students learn the operation of microprocessor instructions quickly and clearly. The user registers provide simple means to verify the code execution. Using a PC as the terminal, the MTK-8085 can receive the Intel hex file and disassemble the machine code into 8085 instructions. The MTK-8085 is professional design that combines classic microprocessor, peripheral chips with modern IC technology; Programmable Logic Device decoder, brownout reset, and text LCD.

Hardware Features:

- CPU: CMOS 80C85 4MHz
- Memory: 32kB Monitor ROM and 32kB SRAM
- Simple I/O Port: 8-bit GPIO built with 74LS175 D-type F-F and 74LS126 Tri-state buffer
- Programmable Ports: two 8255 chips, system and user ports
- Programmable Counter: 8254
- UART: Classic NS8250 compatible UART
- Onboard I/O devices:
 - 6-digit seven segment LED,
 - 28-keypad,
 - 4-bit dot LED indicates status of GPIO,

- Buzzer,
- Text LCD with CPU bus interface
- Serial Interface: 9600 RS232C
- +5V Power Supply: Low-dropout voltage regulator with input protection
- 40-pin header for CPU bus
- 40-pin header for user port, 8255 and 8254
- 16-pin header for simple GPIO port
- Onboard logic probe power supply
- Test button for single pulse generation to the interrupt pins
- Brownout Protection
- No jumper settings

Software Features:

- Enter the machine code in hexadecimal
- Single-Step execution
- Examine and modify user registers
- Run user code with software breakpoint
- Built-in LCD drivers
- Download Intel Hex file
- Display user registers and disassemble the instruction after single-stepping
- NVRAM Bootable: runs user program when power up.

Ordering Information

- MTK-85 Microprocessor Trainer board
- 20x4 LCD module
- RS232C Cable
- USB-To-RS232 Adaptor
- AC adapter input 100-240VAC output +6V 1000mA
- Monitor source code (4291 lines, 61 pages) in pdf format
- Installation Manual
- User Manual
- Instructor Manual

Note: Specification, Layout, Design etc. May Change Without Prior Notice For Products Continuous Development Process.