MTS-51

8051 Microcomputer Trainer

MTS-52 ICE

MTS-52 ICE (Option)
1. 32Kbyte Emulator break point setting
2. Single Trace Step into/step over & Step out. Auto step Function
3. Register & memory (data program) editor
4. Support line assembly
5. Download LST & HEX file & full run

Features & Benefits

1. Through series port interface, the ISP and IAP functions of Philips's P89V51RD2BN control chip enable the program codes to be downloaded to flash memory and show the results at real time.
2. Built-in power supply
   Input AC power : 110/ 220V, 50/60Hz
   Output DC power : 12V/1.5A, 5V/2.5A
3. Reserving external connection pins for advanced experiments
4. Plenty of experiments to do various basic I/O control applications
5. The single chip of the trainer can be replaced by INTEL's 8751 / 52 series (without ISP function) and ATMEL's AT89C51 / 52 series (with ISP function)
6. With various common I/O components and experiments, MTS-51 turned learners into experienced users of basic control application with 8051 microtroller.

List of Experiments

1. LED display control
2. Dot Matrix LED Control
3. Step Motor Control
4. Input Port Expansion
5. Pulse Counter
6. Speaker Control
7. Serial Communications
8. 7-Segment Display Control
9. Matrix Keyboard Control
10. Output Port Expansion
11. Photo Interrupter Control
12. Timer/Counter
13. LCM Display Control

Specification

1. P89C51 single chip x 1, with ISP (In System Programming) function
2. LCM x 1, back light (20 x 2 lines) LCD module
3. 7-segment display x 4
4. LED-bar 10 bit x 2
5. 4 x 4 matrix keyboard x 1
6. 12V stepping motor x 1, 200 steps, with A, B, $\overline{A}$, $\overline{B}$ coil output connector
7. Photochopper x 2
   PH1 for interrupt request signal and interdict counter
   PH2 for counter, pulse counter or counter control and interdict counter
8. IC555 x 1, instable oscillating circuit for pulse signal output
9. 8 x 8 dot matrix LED x 1
10. RS-232 interface x 1, interface for ISP function
11. 8-bit DIP switch x 3 for circuit start control
12. Micro speaker x 1
13. 10 x 2 extend socket 1pc, for P0 and P2 output
14. Through RxD, TxD connector for multi-chip transfer control