

Product Name :
MCU Training and Testing Devices

Product Code :
CIVIL-MCU-98-0001

Description :

MCU Training and Testing Devices

Technical Specification :

Our structure, including power supply, smallest single-chip system, ISP downloader, MCU simulated load, matrix keypad, nixie tube, logic level indication, logic level input, various I / O interface chips frequently used by microcontrollers, 122 × 32 dot matrix LCD application circuit, KEIL programming software, PROTEL drawing software, and others. The power supply unit can provide various low-voltage power supply required by experiments, such as $\pm 5V/1A$ DC voltage source, $\pm 12V/1A$ DC voltage source, and $5V/3A$ DC voltage source.

On this MCU training and testing device, students can finish a lot of training content, like the understanding of the smallest single-chip system, programming training, analog unit training, expansion of SCM, etc. Complete the training of basic skills, professional skills and job skills through the project content drafting, project analysis, project implementation, project summary, and capacity assessment.

Experimental training content

I. Electronic Part

1. Differential amplifier
2. Common-emitter single-tube amplifier
3. Two-stage transistor amplifier
4. FET amplifier

-
5. Negative feedback amplifier
 6. Emitter follower
 7. RC sine wave oscillator
 8. LC sine-wave oscillator
 9. Integrated operational amplifier indicator test
 10. Basic application of integrated operational amplifier - Analog arithmetic circuit
 11. Basic application of integrated operational amplifier - Waveform generator
 12. DC stabilized power supply - Transistor regulated power supply
 13. DC stabilized power supply - Integrated voltage regulator
 14. Low-frequency power amplifier - Integrated power amplifier
 15. Logic functions and parametric tests of TTL integrated logic gate
 16. Logic functions and parametric tests of CMOS integrated logic gate
 17. Design and test of combinational logic circuit
 18. Decoder and its application
 19. Data selector and its application
 20. Flip-flop and its application
 21. Counter and its application
 22. Shift register and its application
 23. Pulse distributor and its application
 24. Using gate circuit to generate pulse signal
 25. Monostable trigger and Schmitt trigger
 26. 555 time base circuit and its application
 27. Intelligence contest responder device
 28. Electronic stopwatch

II. SCM Part

1. Binary code to BCD code conversion

-
2. Binary code to ASCII code conversion
 3. Program jump table
 4. Memory block movement
 5. Data sorting
 6. I / O
 7. Counter
 8. Timer
 9. Digital clock
 10. External interrupt
 11. Basic I / O port experiment
 12. Relay control experiment
 13. A/D conversion experiment
 14. D/A conversion experiment
 15. Electronic organ simulation
 16. Calculator
 17. Static serial display
 18. Dynamic scanning display
 19. Query-based keyboard
 20. Array-style keyboard
 21. Buzzer sound experiment
 22. RS232 serial communication of the SCM and PC
 23. 16 × 2 dot matrix liquid crystal display
 24. LED dot matrix display
 25. 8255 expansion
 26. Digital voltmeter
 27. V / F conversion interface circuit
 28. Digital frequency meter

29. Real-time clock experiment

30. Stepper motor motion control

31. DC motor control

Civil Mechanical India

Website: www.civilmechanicalindia.com, **Email:** export@civilmechanicalindia.com

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India, **Phone:** +91-0171-2643080, +91-0171-2601773