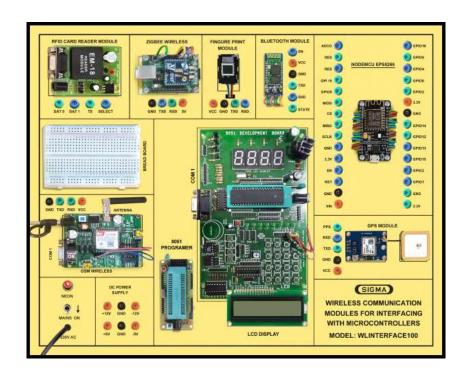


WIRELESS COMMUNICATION MODULES FOR INTERFACING WITH MICROCONTROLLERS MODEL-WLINTERFACE100

SPECIFICATIONS



This trainer has been designed with a view to provide practical and experimental knowledge of Sensors programing with 8051 Microprocessor Board.

SPECIFICATIONS

A. Main Specs

- 1. Following Parts and Modules are assembled on Single PCB of size 18 Inch x 15 Inch.
- 2. The complete circuit diagram is screen printed on component side of the PCB with circuit and Parts at the same place.
- 3. The PCB with components on front side is fitted in elegant wooden box having lock and key arrangement.
- 4. Modules and Parts should be removable without desodlering for easy repair / replacement
- 5. The acrylic cover is fitted on PCB to safeguard main parts.

B. 8051 Microcontroller Board

- 1. Core 8051 MCU
- 2. DIL40 ZIF Socket Microcontroller socket
- 3. Quartz Crystal 11.0592Mhz
- Power plug-in jack Power supply AC/DC 12V
- 5. On board Regulated Power Supply +5v, 12V supplies
- 6. A Serial Port for ISP
- 7. An RS232 Serial Port
- 8. 7 Segment multiplexed Display.
- 9. Interface for 16 x 2 LCD display for both programming mode and run mode
- 10. 24Cxx I2C EEPROM
- 11. RTC DS1307
- 12. 8 LED array
- 13. 4 x 4 Matrix Key Pad
- 14. ULN2003 to Drive Stepper Motor and Relays

C. 8051 Programmer Board

- 1. Ready to run programmer to support family of controllers AT89C51/52 & 55
- 2. Supporting both programming modes Key Pad and PC
- 3. Easy To flash 89V51RD2 Through Flash Magic Software

D. Application Modules

- 1. RFID Card Reader
- 2. Finger Print
- 3. Zigbee Module
- 4. GPS Module
- 5. GSM Module
- 6. Bluetooth Module
- 7. WiFi Module

E. Hardware

- 1. DC Power Supplies +12V, -12V, +5V & -5V
- 2. Breadboard 400 Points to make circuits
- 3. 2 mm interconnection Sockets

F. Accessories

1. USB Cable: 1 No2. Ethernet Cable: 1 No

3. Jumper wires : 30 Nos.

4. Simulation Software and Driver CD : 1 No.5. Practical Manual - Printed + Soft Copy : 1 No.

6. E-Books for IOT Subject : 10 Nos. in PDF Format

7. Mp4 Video Class for Microprocessor Subject : 40 Nos

EXPERIMENTS

A. Theory Experiments for 8051 Board

- 1. To understand theory and working of 8051 Microcontroller operating software.
- 2. To understand Pin and Connection Diagram of 8051 Microcontroller
- 3. To understand USB Interface for 8051 Microcontroller.
- 4. To understand theory of 16 x 2 LCD Display
- 5. To understand theory of RFID card and RFID card reader
- 6. To understand theory of Finger Print module
- 7. To understand theory of Zigbee module
- 8. To understand theory of GPS module
- 9. To understand theory of GSM module
- 10. To understand theory of Bluetooth module
- 11. To understand theory of Wi-Fi module

B. Practical Experiments

- 12. To make LED blink
- 13. To display data on 7 segment display
- 14. To display data on 16 x 2 LCD Display
- 15. To transfer data using RS232 serial port
- 16. To use 4 x 4 Matrix Key Pad
- 17. To convert Analog Data into Digital Data using ADC
- 18. To measure time using RTC
- 19. To program 8051 using 8051 programmer
- 20. To read RFID card using RFID card reader
- 21. To detect finger data using Finger Print module
- 22. To interface Zigbee module to 8051 Microcontroller
- 23. To interface GPS module to 8051 Microcontroller
- 24. To interface GSM module to 8051 Microcontroller
- 25. To interface Bluetooth module to 8051 Microcontroller
- 26. To interface Wi-Fi module to 8051 Microcontroller

Contact us

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