Embedded Serial Busses Development Kit

Sku: 53319-577

Development Kit Options

| Tools Included	w/Compiler	Just H/W	Only PCB
Compiler Software	●		
Programmer	●	●	
Prototyping board	●	●	●
Power supply & cables	●	●	
Exercise book	●	●	
Price			

This kit gives users an introduction to SPI and I2C serial buses. The development kit includes the powerful PCW Integrated Development Environment with compiler support for Microchip's PIC® PIC10, PIC12 and PIC16 families and an ICD-U64 in-circuit programmer/debugger that supports C-aware real time debugging. The prototyping board has two nodes and shares common I/O, memory and sensor components between two PIC16 MCUs.

The first node has a PIC16F877A chip connected to a 74HC165 parallel-in/serial-out shift register, which allows its user to read a bank of eight DIP switches. Four 74HC595 serial-in/ parallel-out shift registers allow the user to display information on a four digit 7-segment LED display.

The second node has a PIC16F876A chip, which shares an I^{2}C temperature sensor and a serial EEPROM with the first node. This allows for the investigation into data collision while accessing shared components. Both nodes have their own potentiometer, LEDs, push-button and RS-232 port.

Embedded Serial Busses Prototyping Board (Size 4.5" x 3.25") includes:

- PIC16F877A
- PIC16F876A
- 30 I/O Pins (7 Can Be Analog)
- Two Nodes
- Common I^{2}C Bus Between Nodes
- I^{2}C EEPROM
- I^{2}C Temperature Sensor
- SPI Bus to Real-Time Clock
- Three 7-Segment LEDs
- 8 DIP Switches
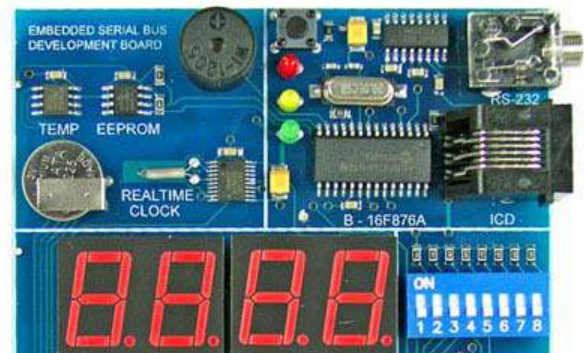
- Expansion I/O Bus
- Connections Between MCU Nodes for custom communications

Embedded Serial Busses Development Kit includes:

- Embedded Serial Busses Development Board
- In-Circuit Debugger/Programmer
- Exercise Tutorial
- 9V AC Adapter and Cables