

PIC16F877A DEVELOPMENT BOARD EM-05

Introduction

The immensely popular PIC development board for the PIC16F877A enables easy development and testing of various solutions of PIC projects. Microchip's powerful PIC 16F877A .It is used to develop the exciting PIC real-time applications. It is Ideal as a home controller, the RS232 connection can connect directly to a computer for monitoring and sending various commands to the system. The on-board clock allows time based commands and the integral EEPROM allows for easy data storage. All of the features make this board as the ideal for more advanced level A/D applications in automation, industrial appliances and consumer applications.

Board Specification

- Microchip: PIC 16F877A chip is used
- Power up provisions :USB cable & 7.5 adaptor
- Operating voltage 5V
- ON/OFF switch
- Reset switch
- Switches for selecting programming mode(USB or Serial)
- Supportable to USB programming and serial programming
- RS232 serial port for serial communication and programming
- Universal standard 40 pin GPIO connector
- IO pins are connected to GPIO connector for external interface
- Provision to operate the four channels of ADC and pins are available for operate the another four channels
- Potentiometers for Analog input & LCD contrast adjustment
- On board Input Output Devices
- Eight slide switches
- Three push buttons
- Eight LEDs
- Four seven segment displays
- 16x2 characters LCD module

Chip Specification

- Microchip: PIC 16F877A
- Operating frequency range DC -20MHz
- Operating voltage 2.0V to 5.5V
- Flash memory 8K(14 bit words)
- 368 bytes of Data memory
- 256 bytes of EEPROM data memory
- Eight channel 10 bit ADC
- Two capture/compare/PWM modules
- Two 8-bit timer and on e 16-bit timer
- Watch dog timer with its own on chip RC oscillator for reliable operation
- Data EEPROM retention greater than 40 years
- Self programmable under software control
- In-circuit serial programming(ICSP) via two pins
- Two analog comparators
- Serial communication obtained by MSSP,USART
- Parallel communication PSP
- Instruction set 35

