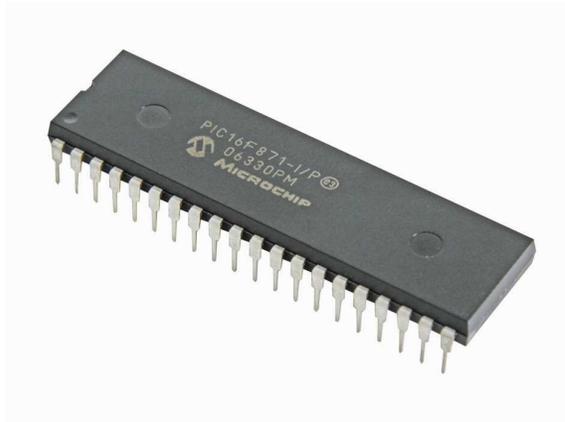


8-bit Microchip microcontroller PIC16F871

Bestelcode: PIC16F871-I/P



This powerful (200 nanosecond instruction execution) yet easy-to-program (only 35 single word instructions) CMOS FLASH-based 8-bit microcontroller packs Microchip's powerful PIC® architecture into an 40- or 44-pin package and is upwards compatible with the PIC16C5X, PIC12CXXX and PIC16C7X devices. The PIC16F871 features 64 bytes of EEPROM data memory, self programming, an ICD, 8 channels of 10-bit Analog-to-Digital (A/D) converter, 2 additional timers, a capture/compare/PWM functions and a Universal Asynchronous Receiver Transmitter (USART). All of these features make it ideal for more advanced level A/D applications in automotive, industrial, appliances and consumer applications.

Specificaties

- Performance
 - Only 35 single-word instructions
 - Direct, indirect and relative addressing modes for data and instructions
 - Operating speed:
 - External oscillator
 - 20 MHz
 - 200ns instruction cycle
 - Internal oscillator
 - 4 MHz
 - 1 μ s instruction cycle
 - In-Circuit Serial Programming™ (ICSP™)
 - Programmable code protection
 - 5 I/O ports
 - Timer 0: 8-bit timer/counter (TMR0) with 8-bit prescaler
 - Timer 1: 16-bit timer/counter with prescale
 - Timer 2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler
 - 10-bit multi-channel analog-to digital converter
 - Power-Saving sleep mode
 - Wake-up from sleep on pin charge
 - 2K Flash program memory (14-bit words)
 - 128 bytes SRAM data memory and 64 bytes EEPROM data memory
- Package

- 40 pin DIL version
- Operating voltage: 2V to 5.5V
- Operating current:
 - 1.6 mA @ 5V, 4MHz, typical
 - 20 μ A @ 3V, 32KHz, typical
- Standby current:
 - < 1nA @ 2V, typical

Can be programmed with Velleman [VM134](#) (=K8076) and our USB "in-circuit" programmer [PICKIT2](#)