8-bit Microchip microcontroller PIC16F627

Bestelcode: PIC16F627A

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 18-pin package and is upwards compatible with the PIC16F627, PIC16C62XA, PIC16C5X and PIC12CXXX devices. The PIC16F627A features 4MHz internal oscillator, 128 bytes of EEPROM data memory, a capture/compare/PWM, a USART, 2 Comparators and a programmable voltage reference that make it ideal for analog/integrated level 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 µs instruction cycle
    - In-Circuit Serial Programming™ (ICSP™)
    - Programmable code protection
    - 16 I/O pins with individual direction control
    - Timer 0: 8-bit timer/counter with 8-bit prescaler
    - Timer 1: 16-bit timer/counter
    - Timer 2: 8-bit timer/counter with 8-bit period register, prescaler and postscaler
    - Analog comparator module with 2 analog comparators
    - Power-Saving sleep mode
    - Wake-up from sleep on pin charge
    - 1024 Flash program memory
    - 224 bytes SRAM data memory and 128 bytes EEPROM data memory
- Package

- 18 pin DIL version
- Operating voltage: 2V to 5.5V
- Operating current:
  - 12 µA @ 2V, 32 kHz, typical
  - 120 µA @ 2V, 1 MHz, typical
- Standby current:
  - 100 nA @ 2V, typical

Can be programmed with Velleman VM134 (=K8076) and our USB “in-circuit” programmer PICKIT2