

# 8-bit Microchip microcontroller PIC16F630

Bestelcode: PIC16F630-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® MCU architecture into a 14-pin package and features 1 comparator and 128 bytes of EEPROM data memory. This device is easily adapted for automotive, industrial, appliances and consumer entry-level product applications that require field re-programmability.

## Specifications

- Performance
  - Only 35 single-word instructions
  - Direct, indirect and relative addressing modes for data and instructions
  - Operating speed:
    - Internal oscillator
      - 4 MHz internal clock
      - 1  $\mu$ s instruction cycle
    - External oscillator
      - 20 MHz
      - 200ns instruction cycle
  - In-Circuit Serial Programming™ (ICSP™)
  - Programmable code protection
  - 12 I/O pins with individual direction control
    - High current sink/source for direct LED drive
    - Wake-on-change
    - Weak pull-ups
  - Timer 0: 8-bit timer/counter (TMR0) with 8-bit programmable prescaler
  - Timer 1: 16-bit timer/counter with external gate input mode
  - Analog comparator module
  - Power-Saving sleep mode
  - Wake-up from sleep on pin charge
  - 1024 words Flash program memory
  - 64 bytes SRAM data memory and 128 bytes EEPROM data memory
- Package
  - 8 pin DIL version
  - Operating voltage: 2V to 5.5V
  - Operating current:
    - 8.5  $\mu$ A @ 2V, 32kHz, typical
    - 100  $\mu$ A @ 2V, 1MHz, typical
  - Standby current:
    - 1nA @ 2V, typical

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