



## Features

### High-Performance 8052 CPU:

- Fully compatible with 8052 ISA
- 1 instruction cycle per instruction byte
- Maximum 24MHz operating speed

### Memories

- 4K bytes program OTP
- 256 bytes data RAM

### Special Features:

- Precision internal oscillator: Factory calibrated to 3%, Range from 18MHz to 30MHz
- Run-time calibrates internal oscillator by external reference clock
- External crystal oscillator support, multiplexed with I/O pin
- In-system serial programming support
- In-system debugging support
- Power-on reset, Power-exceed reset
- Watchdog timer with dedicated internal oscillator for reliable operation
- CPU-Hold mode and System-Sleep mode
- Wake-up from sleep on pin change
- Wake-up from sleep on comparator change
- High current sink/source for direct LED drive

### Low-Power Features:

- Operation current:
- System-Sleep current: 12.7uA
- Wide operation voltage range: 1.9V to 5.5V

### Peripheral Features:

- 5 I/O pins with individual direction control(P10 is input only)
- USB 2.0 interface:  
low-speed/full-speed, EP0/1/2 in/out

### Package

- SOP8

### Actual picture



### Pin Assignment

