


## MCU 8-bit AVR RISC 16KB Flash 2.5V/3.3V/5V 40-Pin PDIP WTube



Images are for reference only

<b>Manufacturer:</b>	<a href="#">Microchip Technology, Inc</a>
<b>Package/Case:</b>	PDIP
<b>Product Type:</b>	Embedded Processors & Controllers
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active

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### General Description

The high-performance Microchip picoPower 8-bit AVR RISC-based microcontroller combines 16KB ISP flash memory with read-while-write capabilities, 512B EEPROM, 1KB SRAM, 32 general purpose I/O lines, 32 general purpose working registers, a real time counter, three flexible timer/counters with compare modes and PWM, two USARTs, a byte oriented 2-wire serial interface, an 8-channel 10-bit A/D converter with optional differential input stage with programmable gain, programmable watchdog timer with internal oscillator, SPI serial port, a JTAG (IEEE 1149.1 compliant) test interface for on-chip debugging and programming, and six software selectable power saving modes. The device operates between 1.8-5.5 volts.

By executing powerful instructions in a single clock cycle, the device achieves throughputs approaching 1 MIPS per MHz, balancing power consumption and processing speed.

## Key Features

Advanced RISC architecture

Power-on reset and programmable brown-out detection

Internal calibrated RC oscillator

External and internal interrupt sources

Six sleep modes - idle, ADC noise reduction, power-save, power-down, standby and extended standby

131 Powerful instructions-most single clock cycle execution

32 x 8 General purpose working registers

Fully static operation

Up to 20MIPS throughput at 20MHz

On-chip 2-cycle multiplier

QTouch® library support

JTAG (IEEE std. 1149.1 compliant) interface

Programmable watchdog timer with separate on-chip oscillator

On-chip analog comparator

Interrupt and wake-up on pin change

## Recommended For You

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### ATmega8-16PU

Microchip Technology, Inc

DIP

### ATmega162-16PU

Microchip Technology, Inc

DIP40

### AT91RM9200-CJ-002

Microchip Technology, Inc

BGA

### AT89C2051-12PU

Microchip Technology, Inc

DIP

### ATmega8515L-8PU

Microchip Technology, Inc

DIP

### AT91SAM9G20B-CFU

Microchip Technology, Inc

247-TFBGA

### ATtiny20-XUR

Microchip Technology, Inc

TSSOP14

### AT89LS52-16PU

Microchip Technology, Inc

DIP

### ATtiny12L-4SUR

Microchip Technology, Inc

SOP8

### ATmega324PA-PU

Microchip Technology, Inc

PDIP

### ATmega8535-16JU

Microchip Technology, Inc

PLCC44

### ATtiny44A-PU

Microchip Technology, Inc

DIP

**AT89C5131A-S3SUM**

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PLCC52

**ATmega162V-8PU**

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DIP40

**AT89C5115-SISUM**

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PLCC-28