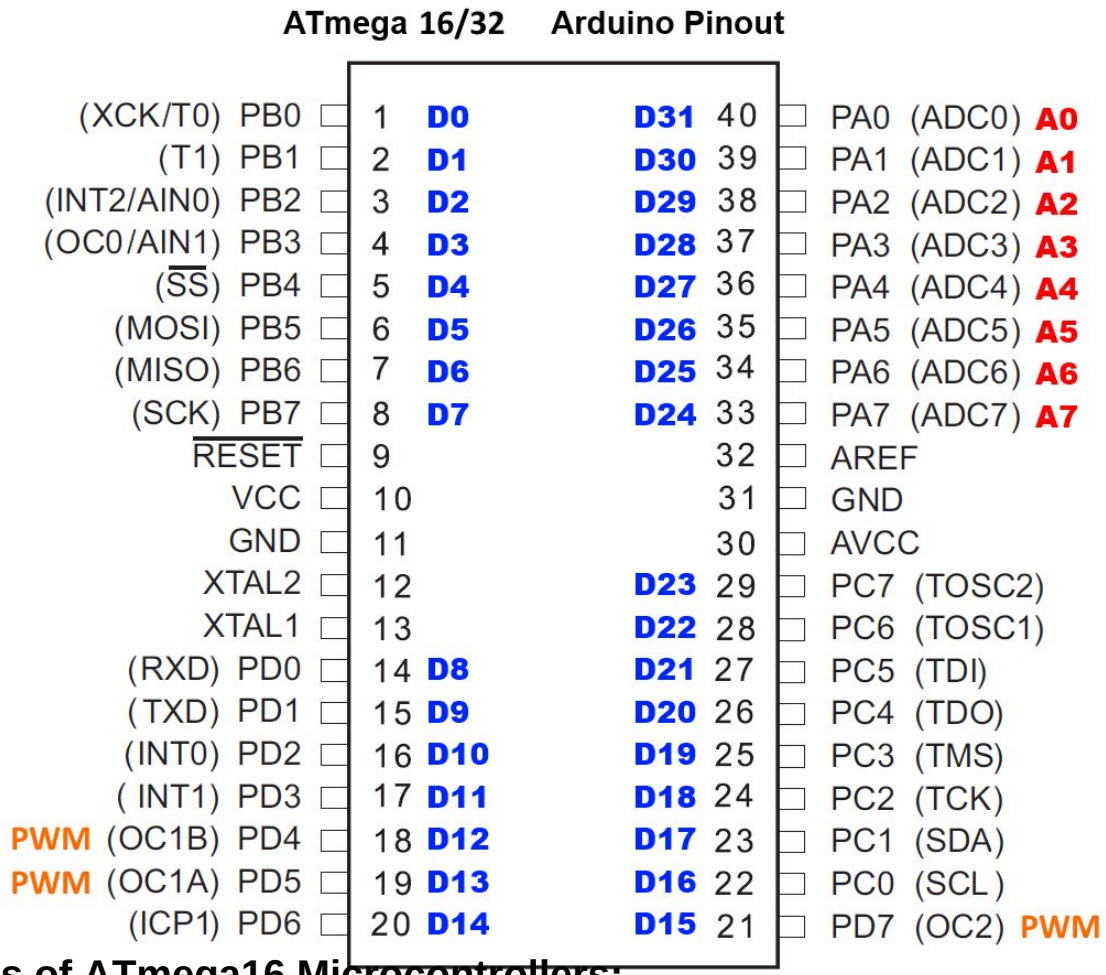
**PRODUCT NAME** : ATmega16 Microcontrollers

**PRICE** : Rs 220.00
**SKU** : RM0071

## DESCRIPTION

The AVR core combines a rich instruction set with 32 general purpose working registers. All the32 registers are directly connected to the Arithmetic Logic Unit (ALU), allowing two independent registers to be accessed in one single instruction executed in one clock cycle. The resulting architecture is more code efficient while achieving throughputs up to ten times faster than conventional **CISC microcontrollers**.

### Images/Pinout of ATmega16 Microcontrollers




## Features of ATmega16 Microcontrollers:

- Advanced RISC Architecture.
- 32 x 8 General Purpose Working Registers.

- Fully Static Operation.
- Up to **16 MIPS** Throughput at 16 MHz.
- Advanced RISC Architecture.
- On-chip 2-cycle Multiplier.
- High Endurance Non-volatile Memory segments.
- 16 Kbytes of In-System Self-programmable Flash program memory.
- 512 Bytes EEPROM.
- 1 Kbyte Internal SRAM.
- Write/Erase Cycles: 10,000 Flash/100,000 EEPROM.
- Optional Boot Code Section with Independent Lock Bits.
- In-System Programming by On-chip Boot Program.
- True Read-While-Write Operation.
- Programming Lock for Software Security.
- JTAG (IEEE std. 1149.1 Compliant) Interface.
- Boundary-scan Capabilities According to the JTAG Standard.
- Extensive On-chip Debug Support.
- Programming of Flash, EEPROM, Fuses, and Lock Bits through the JTAG Interface.
- Peripheral Features.
- Two 8-bit Timer/Counters with Separate Prescalers and Compare Modes.
- One 16-bit Timer/Counter with Separate Prescaler, Compare Mode, and Capture Mode.
- Real Time Counter with Separate Oscillator.
- Four PWM Channels.
- **8-channel**, **10-bit ADC**.
- 8 Single-ended Channels.
- 7 Differential Channels in TQFP Package Only.
- 2 Differential Channels with Programmable Gain at 1x, 10x, or 200x.
- Byte-oriented Two-wire Serial Interface.
- Programmable Serial USART.
- Master/Slave SPI Serial Interface.
- Programmable Watchdog Timer with Separate On-chip Oscillator.

## Applications of ATmega16 Microcontrollers:

- Multiple DIY projects.
- Projects requiring more than logical control for devices.
- Microcontroller applications for multiple device interface/Control.
- Replacement for Arduino module.
- Needs a USB AVR programmer.

Also Searched as :**atmega16 pinout**,**atmega16 usb programmer circuit**,**atmega16 avr microcontroller**,**atmega16 datasheet.**