



PRODUCT NAME : ATmega168 Microcontroller

PRICE : Rs 249.00
SKU : RM0075

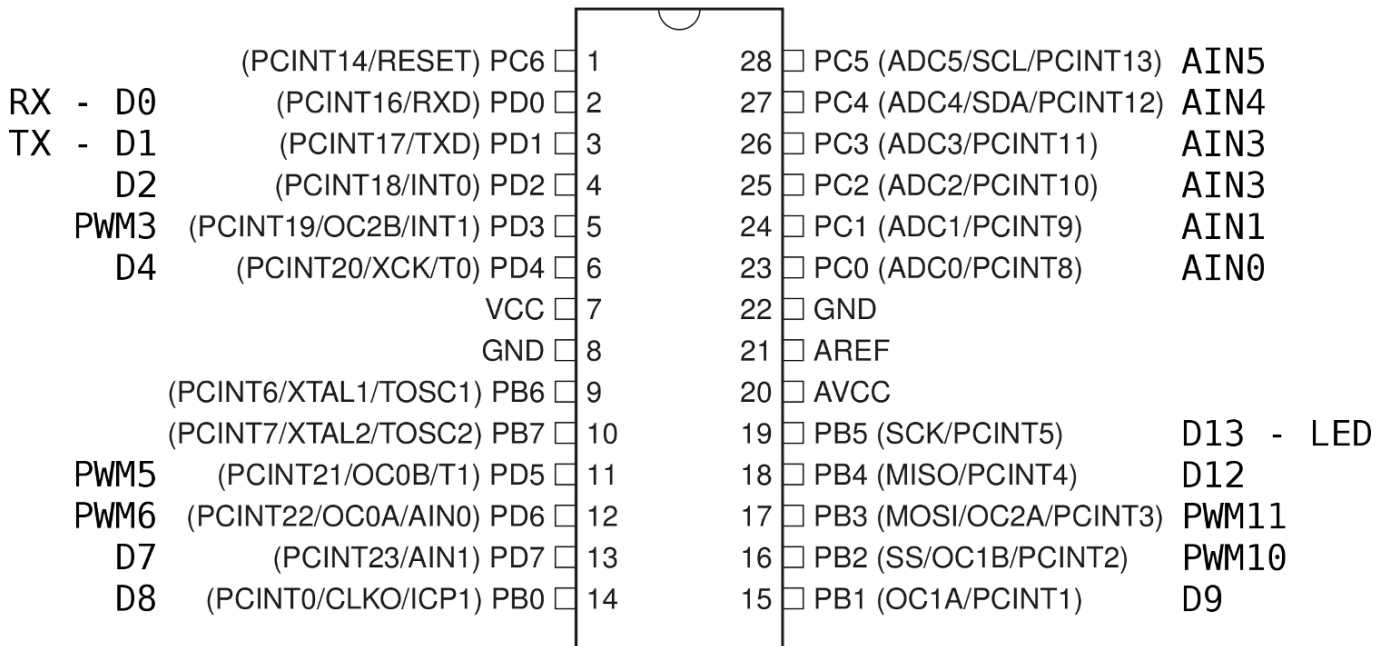


DESCRIPTION

The high-performance, low-power Atmel 8-bit **AVR RISC-based microcontroller** combines 16KB ISP flash memory, 1KB SRAM, 512B EEPROM, an 8-channel/10-bit A/D converter (TQFP and QFN/MLF), and debugWIRE for on-chip debugging. The device supports a throughput of 20 MIPS at 20 MHz and operates between 2.7-5.5 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.

Images/Pinout of ATmega168 Microcontroller



Features of ATmega168 Microcontroller:

- Advanced RISC Architecture.
- 32 x 8 General Purpose Working Registers.
- Fully Static Operation.
- Up to 20 MIPS Throughput at 20 MHz.
- 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.**
- Data retention: 20 years at **85°C/100** years at 25°C(1).
- 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.
- 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.
- Byte-oriented Two-wire Serial Interface.
- Programmable Serial USART.
- Master/Slave SPI Serial Interface.
- Programmable Watchdog Timer with Separate On-chip Oscillator.

Applications of ATmega168 Microcontroller:

- 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 :**atmega168 price,atmega168 datasheet,atmega168 avr microcontroller,atmega168 bootloader,atmega168 pinout.**