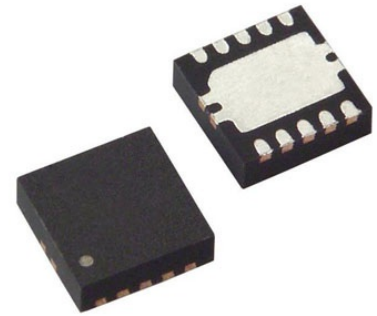8 Bit MCU, Low Power High Performance, AVR ATmega Family ATmega32 Series Microcontrollers, 16 MHz

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-44
Product Type	Embedded Processors & Controllers
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for ATMEGA32U4-MUR or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The low-power Microchip 8-bit AVR RISC-based microcontroller featuring 32KB self-programming flash program memory, 2.5KB SRAM, 1KB EEPROM, USB 2.0 full-speed/low speed device, 12-channel 10-bit A/D-converter, and JTAG interface for on-chip-debug. The device achieves up to 16 MIPS throughput at 16 MHz. 2.7 - 5.5 Volt operation.

By executing powerful instructions in a single clock cycle, the device achieves throughputs approaching 1 MIPS per MHz, allowing you to optimize power consumption versus processing speed.

Description :

The low-power Atmel 8-bit AVR RISC-based microcontroller featuring 32KB self-programming flash program memory, 2.5KB SRAM, 1KB EEPROM, USB 2.0 full-speed/low speed device, 12-channel 10-bit A/D-converter, and JTAG interface for on-chip-debug. The device achieves up to 16 MIPS throughput at 16 MHz. 2.7 – 5.5 Volt operation.

By executing powerful instructions in a single clock cycle, the device achieves throughputs approaching 1 MIPS per MHz, allowing you to optimize power consumption versus processing speed.

Features

USB 2.0 Full-speed/Low Speed Device Module with Interrupt on Transfer Completion

Complies fully with Universal Serial Bus Specification Rev 2.0

Supports data transfer rates up to 12Mbit/s and 1.5Mbit/s

Endpoint 0 for Control Transfers: up to 64-bytes

Six Programmable Endpoints with IN or Out Directions and with Bulk, Interrupt or Isochronous Transfers

Configurable Endpoints size up to 256 bytes in double bank mode

Fully independent 832 bytes USB DPRAM for endpoint memory allocation
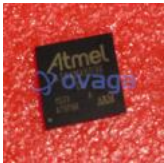
Suspend/Resume Interrupts

CPU Reset possible on USB Bus Reset detection

48MHz from PLL for Full-speed Bus Operation

USB Bus Connection/Disconnection on Microcontroller Request

Crystal-less operation for Low Speed mode

Related Products

ATSAMA5D36A-CU

Microchip Technology, Inc

LFBGA-324
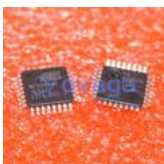
ATMEGA32M1-AU

Microchip Technology, Inc

TQFP-32

ATXMEGA128D3-AU

Microchip Technology, Inc

TQFP-64

ATTINY2313V-10SU

Microchip Technology, Inc

SOIC-20

ATMEGA64M1-15AZ

Microchip Technology, Inc

TQFP-32

ATMEGA16L-8PU

Microchip Technology, Inc

PDIP-40

ATTINY48-MU

Microchip Technology, Inc

VQFN-32

ATTINY4-TSHR

Microchip Technology, Inc

SOT-23-6