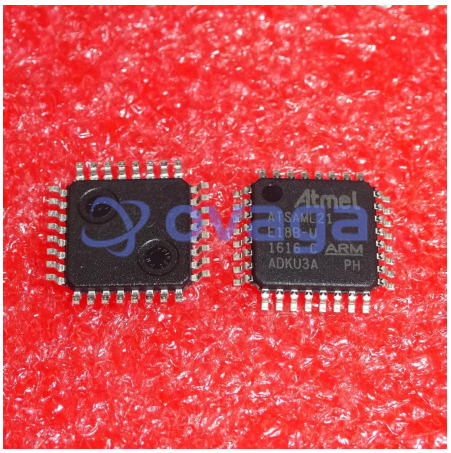
ATSAML21E18B-AUT

Data Sheet

Cortex-M0+, 256KBFLASH,32KBSRAM T&R,USB, ULP - 32TQFP 85C, GREEN,1.6-3.6V,48MHz

Manufacturers	Microchip Technology, Inc
Package/Case	TQFP-32
Product Type	Embedded Processors & Controllers
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ATSAML21E18B-AUT or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

Theultra-low-power ATSAML21 based Flash microcontroller (MCU) featuresophisticated power management technologies and consumesunder 35 µA/MHz in active mode and 200nA in Sleep mode. In addition toultra-low-power performance, these devices feature Full Speed USB host anddevice, Event System and Sleepwalking, 12-bit analog, AES, capacitive touchsensing, built in opAmps and much more.

Supported by MPLAB X IDE and MPLAB Harmony.

Features

ARM Cortex-M0+ CPU running at up to 48MHz

256KB in-system self-programmable Flash

8KB Flash Read-While-Write section

32KB SRAM Main Memory

8KB SRAM Low power Memory

Operating voltage: 1.62V – 3.63V

Ultra Low Power Architecture consuming under 35uA/MHz in Active mode

Idle, Standby, Backup, and Off sleep modes

Battery backup support

Two Performance Levels

Embedded Buck/LDO regulator supporting on-the-fly selection

Peripheral Touch Controller (PTC)

Wake-up on touch in standby mode

Two-pin Serial Wire Debug (SWD) programming, test and debugging interface

Temperature Range - 40°C to 85°C, - 40°C to 105°C

Peripheral Features:

16-channel Direct Memory Access Controller (DMAC)

12-channel Event System

16-bit Timer/Counters (TC) including one low-power TC

Two 24-bit and one 16-bit Timer/Counters for Control (TCC)

32-bit Real Time Counter (RTC) with clock/calendar function

Watchdog Timer (WDT)

CRC-32 generator

One full-speed (12Mbps) Universal Serial Bus (USB) 2.0 interface

Up to six Serial Communication Interfaces (SERCOM) including one low-power SERCOM

USART, I2C, SPI, LIN slave

One AES Encryption Engine & TRNG

One Configurable Custom Logic (CCL)

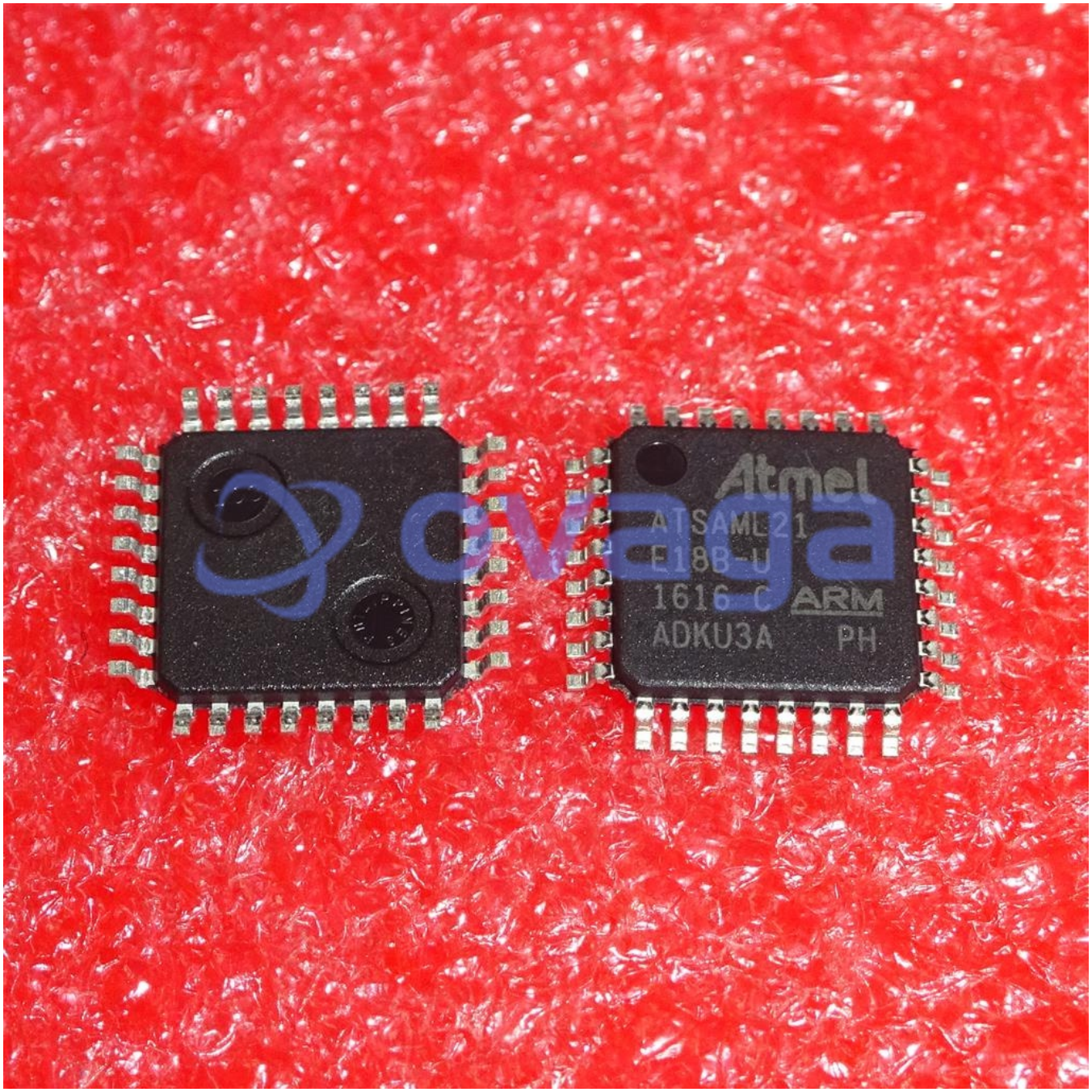
Advanced Analog :

One 12-bit, 1MSPS Analog-to-Digital Converter (ADC)

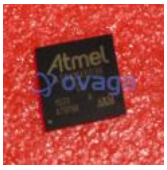
Two channel, 12-bit, 1MSPS Dual Output Digital-to-Analog Converter (DAC)

Two Analog Comparators (AC) with window compare function

Three Operational Amplifiers (OPAMP)



Related Products



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LFBGA-324

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[ATXMEGA128D3-AU](#)

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PDIP-40

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ATTINY4-TSHR

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SOT-23-6