

# ATSAML22G16A-AUT

Data Sheet

Manufacturers Microchip Technology, Inc   Package/Case TQFP-48
Package/Case TQFP-48
Product Type Embedded Processors & Controllers
RoHS Images are for reference only
Lifecycle
Please submit RFQ for ATSAML22G16A-AUT or Email to us: sales@oyaga.com We will contact you in 12 hours.

## **General Description**

The ultra-low-power ATSAML22 based Flashmicrocontrollers (MCU) feature sophisticated power management technologies and consumes 39  $\mu$ A/MHz (CPU running CoreMark) in active mode and down to 490nA inultra low-power backup mode with RTC. In addition to ultra-low-powerperformance, these devices feature Segment LCD controller, tamper detection, smart card interface, Full Speed USB device, Event System and Sleepwalking, 12-bit analog, AES, capacitive touch sensing and much more.

Supported by MPLAB X IDE and MPLAB Harmony.

## Features

ARM Cortex-M0+ CPU running at up to 32 MHz

64 KB in-system self-programmable Flash

2 KB Flash Read-While-Write section

8 KB SRAM Main Memory

Operating voltage: 1.62V - 3.63V

Segment LCD (SLCD) controller

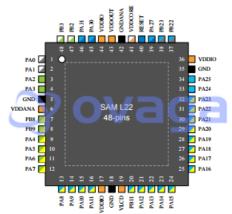
Ultra Low Power Architecture consuming 39µA/MHz

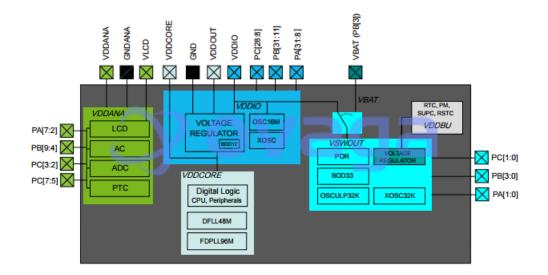
Idle, Standby, Backup, and Off sleep modes

Battery backup support

**Ovaga Technologies Limited** 

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
Peripheral Features:
16-channel Direct Memory Access Controller (DMAC)
8-channel Event System
16-bit Timer/Counters (TC)
One 24-bit Timer/Counters for Control (TCC)
Frequency Meter
32-bit Real Time Counter (RTC) with clock/calendar function
8x32-bit Backup Register
Tamper Detection
Watchdog Timer (WDT)
CRC-32 generator
One full-speed (12Mbps) Universal Serial Bus (USB) 2.0 Device
Up to six Serial Communication Interfaces (SERCOM) including one low-power SERCOM
ISO7816, USART, I2C, SPI
One AES Encryption Engine & TRNG
One Configurable Custom Logic (CCL)
One 12-bit, 1MSPS Analog-to-Digital Converter (ADC)
Two Analog Comparators (AC) with window compare function





#### **Related Products**



ATSAMA5D36A-CU



# Microchip Technology, Inc LFBGA-324



## ATXMEGA128D3-AU Microchip Technology, Inc

TQFP-64



## ATMEGA64M1-15AZ Microchip Technology, Inc TQFP-32



## ATTINY48-MU Microchip Technology, Inc VQFN-32











## ATMEGA32M1-AU

Microchip Technology, Inc TQFP-32

#### ATTINY2313V-10SU

Microchip Technology, Inc SOIC-20

## ATMEGA16L-8PU

Microchip Technology, Inc PDIP-40

## **ATTINY4-TSHR**

Microchip Technology, Inc SOT-23-6