

# MicroMod Alorium Sno M2 Processor

## Product Overview

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For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

SparkFun MicroMod Alorium Sno M2 Processor features the Sno System on Module (SoM) adapted to the MicroMod M.2 processor form factor. The FPGA of the Sno M2 processor provides a reconfigurable hardware platform that hosts an 8-bit AVR instruction set that is compatible with the ATmega328. This makes the processor fully compatible with the Arduino IDE. Alorium Technology provides a library of custom logic called Xcelerator Blocks (XBs) through the Arduino IDE that accelerates specific functionalities that are slow, problematic, or even impossible for an 8-bit microcontroller. The MicroMod Alorium Sno M2 processor USB serial programming interface, 3.3V operating voltage, and 16MHz/32MHz clock speed.



## Features

- Alorium Sno processor:
  - Intel® MAX® 10 FPGA (16K LEs):
    - 10M16SAU169C8G
  - Programmable with Arduino IDE
  - Embedded 8-bit AVR instruction set compatible microcontroller (ATmega328 compatible)
  - Configurable with custom Xcelerator Blocks (XBs) on the FPGA
  - Programming interface: USB Serial
  - 3.3V operating voltage
  - 16MHz/32MHz clock speed
- Digital I/O:
  - 32x Dedicated digital pins
  - 6x Shared digital with analog pins
  - 3.3V inputs
  - 3.3V outputs
- Analog inputs:
  - 6 Analog pins
  - 3.3V Analog reference
  - ADC Performance: 1MHz
  - Resolution: 12-bit sustained
  - Sample Rate: 254k samples/second

## Features

- Memory:
  - Program FLASH 32KB
  - Data memory SRAM 2KB
- Specific Peripherals available on MicroMod Alorium Sno M2 Processor:
  - JTAG footprint for direct FPGA programming
  - M.2 keyed interface for integration with SparkFun MicroMod carrier boards

## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/sparkfun/sparkfun-micromod-alorium-sno-processor/>