

Preliminary

Sno Edge 50™

Intel MAX 10 FPGA System on Module



Sno Edge 50: High-Density I/O System on Module (SoM)

Based on Alorium Technology's very popular embeddable Snō FPGA module, the Sno Edge 50 enhances the powerful features and functionality of Snō with significantly increased digital I/O, additional ADCs, and more FPGA logic gates for custom Xcelerator Block development.

All of this functionality is packaged in a SODIMM form factor for the ultimate in low-profile physical integration.

Features

Programmable with Arduino

Rapidly develop your software code and even upload custom FPGA functionality using the free and flexible Arduino IDE.

FPGA Performance

Boost the speed and performance of your project through FPGA powered acceleration and offload.

Easily Customizable

Create custom FPGA logic using Alorium's OpenXLR8 development flow and upload new FPGA images without special JTAG hardware.

Technical Specifications

Digital I/O

- 3.3V
- 126 total digital I/O
- 60 differential pair I/O

Analog Inputs

- 16 analog inputs
- 16 ADCs accessible via microcontroller
- Maximum Range: 0-2.5V
- ADC Performance: 1 MHz
- Resolution: 12-bit sustained
- Sample Rate: 254k samples/second

Additional Interfaces and I/O

- FTDI
- JTAG
- 1 differential clock input for custom XB clocking
- 1 secondary PLL differential clock output

Physical Dimensions

- 2.7 inches x 1.3 inches
- 200-pin DDR2 form factor

Specification Table

Alorium Part Number	Sno Edge 50
FPGA	Intel MAX 10*
Embedded Microcontroller	ATmega328- Compatible
Operating Voltage	3.3V
Supply Voltage	3.3V via Edge I/O
Logic Elements	50K
Program FLASH	32 KB
SRAM	2 KB
Clock Speed	16/32 MHz

*FPGA Part Number: 10M50DAF256

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