

MitySOM-A10S System on Module

**Production-ready,
industrial
performance SOM**

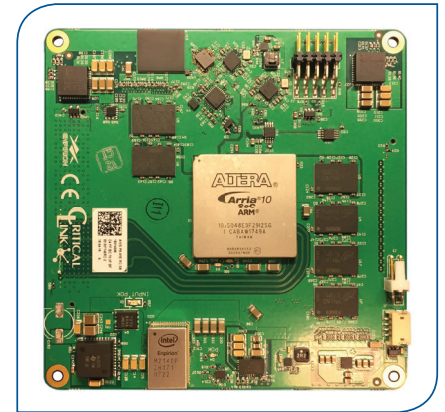
**Minimize risk and
development time.**

**Maximize your
resources.**

**A fully integrated
System on Module built
for high-performance
applications:**

- Intel Arria 10SX SoC up to 480K LE
- Combines FPGA fabric and dual ARM Cortex-A9's
- High-bandwidth interconnect
- DDR4 SDRAM
- 12 transceiver pairs up to 8 Gbps
- Commercial and industrial temp options

The MitySOM-A10S is an Intel/Altera Arria 10 SoC System on Module designed for a wide range of industrial embedded applications. In addition to the A10 processor, the module includes on-board power supplies, two DDR4 RAM memory subsystems, micro SD card, a USB 2.0 on the go (OTG) port, and a temperature sensor. The MitySOM-A10S SOM provides a complete and flexible CPU infrastructure for highly integrated embedded systems.



Features:

Hard Processor System (HPS)

- Dual-core ARM Cortex – A9 MPCore processor
- Up to 1500MHz per core
- NEON coprocessor with double-precision FPU (one per core)
- 32KB/32KB L1 caches per core
- 512KB shared L2 cache

Memory

- 4GB DDR4 CPU/FPGA RAM x32 bits
- Optional 2GB DDR4 FPGA RAM x16 bits*

High-Bandwidth System Interfaces:

- Twelve 8Gbps transceiver pairs
- x8 PCIe Hard Core up to Gen3
- Up to 168 I/O, many supporting 740Mbps SerDes (T66 LVDS pairs)
- 3 Gigabit Ethernet interfaces

High-Bandwidth On-Chip Interfaces

- 8.5 Gbps to DDR4

Integrated Power Management

JTAG Connector On-Module

Board-to-Board Connector

High Level OS Support

- Embedded Linux
- Micrium uC/OS
- Android
- QNX

Applications:

- Test and Measurement
- Industrial Instrumentation
- Medical Instrumentation
- Embedded Imaging
- Machine Vision
- Broadcast
- Military & Defense
- Automotive

*Selecting this FPGA direct connect to DDR will reduce the number of I/O options available.



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