



MitySOM & MitySBC-A5E

Altera Agilex 5 Family of Products



MitySBC-A5E



MitySOM-A5E



MitySOM-A5E
Mini

CRITICAL LINK OFFERS:

Production-ready
solutions for a wide
range of industries

US-based design &
support

Lifetime product
support and
maintenance

Flexible & scalable
solutions grow with
you and your
application

ISO 9001:2015

	MitySOM-A5E Mini	MitySOM-A5E	MitySBC-A5E
Board Type	System on Module	System on Module	Single Board Computer
Device	85 to 656 KLE Agilex 5 E-Series		
ARM	Dual core Cortex-A55 + Dual core Cortex-A76		
Transceivers	Up to 12 pairs 17.16 / 28.1 Gbps	Up to 24 pairs 17.16 / 28.1 Gbps	8 pairs available on FMC 17.16 / 28.1 Gbps
LPDDR4	8GB	8GB HPS/FPGA + 8GB FPGA	8GB HPS + 8GB FPGA
Add'l Memory	SD / eMMC, USD, QSPI NOR for configuration		
Power	5-12Vdc Input, all supplies generated on board		12Vdc Input, all supplies generated on board
I/O	<u>FPGA IO:</u> -120 User FPGA HVIO Pins -24 User FPGA HSIO Pins (1 24 1.1V Single Ended, Up to 12 LVDS Rx Only pair, 1 x4 MIPI D-PHY to 2.5/3.5Gbps) -48 HPS IO Pins <u>HPS IO:</u> -Up to 3 10/100/1000/2500 Mbps Ethernet MACs with TSN Support -1 USB 2.0 OTG Port -1 USB 3.1 Gen 1 Superspeed Port -2 UARTs -1 MMC/SD/SDIO -2 SPI Masters and 2 SPI Slaves -5 I2C/2 I3C controllers	<u>FPGA IO:</u> -120 User FPGA HVIO Pins -216 User FPGA HSIO Pins (24 1.1V Single Ended, (2) 96 pin banks supporting 1.1V/1.2V/1.3V, Up to 108 LVDS pair, 14 x4 MIPI D-PHY to 2.5/3.5Gbps) -48 HPS IO Pins <u>HPS IO:</u> -Up to 3 10/100/1000/2500 Mbps Ethernet MACs with TSN Support -1 USB 2.0 OTG Port -1 USB 3.1 Gen 1 Superspeed Port -2 UARTs -1 MMC/SD/SDIO -2 SPI Masters and 2 SPI Slaves -5 I2C/2 I3C controllers	FMC (HPC + 8 Transceivers) - MIPI (x4 lanes x 7) - QSFP+ (4 x 10/25 Gbit) 10M / 100M / 1G / 2.5G Ethernet 10M / 100M / 1G Ethernet - Display Port - M.2 M Key (NVME) - USB-C & USB 2 - I3C Expansion Hdr - JTAG
Board Size	50mm x 82mm	82mm x 82mm	152mm x 216mm
Connectors	(1) 400-pin board-to-board	(2) 400-pin board-to-board	N/A
Availability	Available now	Available Q1 2026	Available now



MitySOM-A5E vs Chip-Down Design

Key Differentiators and Value-Add	Chip-Down	MitySOM
Hardware can be customized to fit requirements	✓	✓
Utilize the latest technology to maximize performance & features	✓	✓
One-stop-shopping at approved distributors for parts sourcing	✓	✓
Application Engineering support	✗	✓
Software development can work in parallel with hardware design	✗	✓
Reduce complexity by leveraging proven DDR layout	✗	✓
Leverage proven HW design, board schematics, IP, BSPs	✗	✓
Tested and configured Linux kernel & Yocto filesystem, supports on-board interfaces	✗	✓
Offload parts obsolescence management for life of design	✗	✓
Accomplish more while reducing cost, schedule, and risk	✗	✓

AGILEX 5 TARGET APPLICATIONS

Artificial Intelligence
Video & Vision Analytics
Biometrics
Radios & Communications
Automated Test & Measurement

Robotics
Industry 4.0 / Industrial IOT
Medical Equipment & Imaging
Process Automation
Equipment / Condition Monitoring