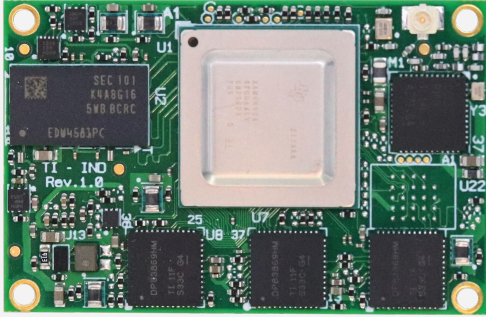


AM64X SOM

Up to 2 x Arm Cortex-A53, 4 x Cortex-R5F,
1 x Cortex-M4, 1GHz

TI AM64X SITARA SOM Processor System on Module

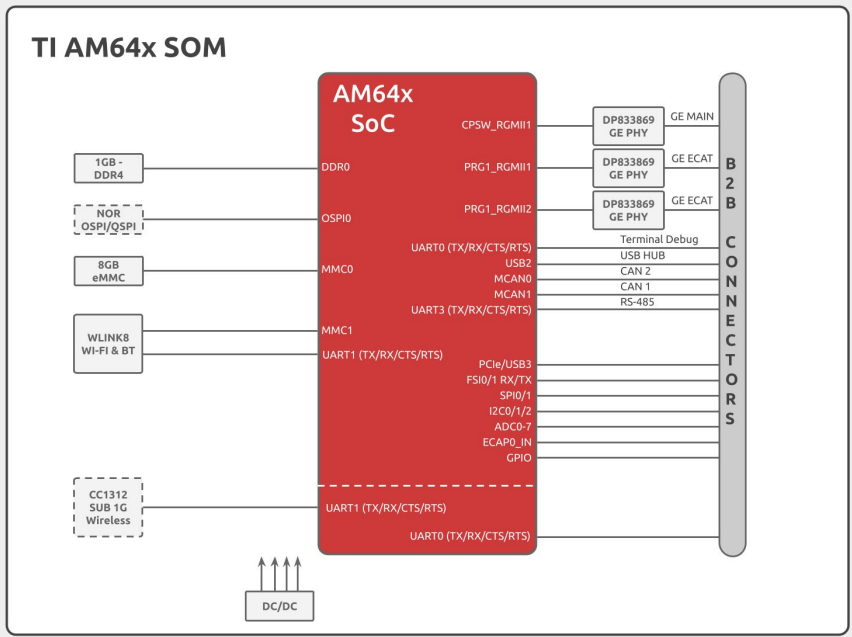


- Best in class real-time and low latency processing for industrial applications
- Support for multi-protocol industrial ethernet using in chip PRU-ICSSG (Programmable Real-time Unit for Gigabit Industrial Communication Subsystem)
- Inline ECC and functional safety capabilities for mission-critical use cases



		Sitara AM6442R	Sitara AM6442A
CPU Details	CPU Name	TI Sitara AM6442	TI Sitara AM6442
	CPU Type	2 x Cortex A53 4 x Cortex R5 1 x Cortex M4	2 x Cortex A53 4 x Cortex R5 1 x Cortex M4
	CPU Speed	1Ghz Industrial	1Ghz Industrial
RAM	Memory & Storage	1GB DDR4 with inline ECC	1GB DDR4 with inline ECC
	Internal Storage	8GB eMMC	8GB eMMC Optional QSPI
	External Storage Support	NOR-Flash SD PCIe-SSD	NOR-Flash SD PCIe-SSD
Networking	Ethernet	1 x 10/100/1000 Mbps (PRU ICSSG, Supporting ; TSN, EtherCAT, PROFINET, EtherNET/IP)	1 x 10/100/1000 Mbps 2 x 10/100/1000 Mbps (PRU ICSSG, Supporting ; TSN, EtherCAT, PROFINET, EtherNET/IP)
	Wireless		Optional CC1312 SimpleLink sub 1GHz wireless MCU
Connectivity	USB 3.0	1	1
	PCIe	1 (Gen 2.0)	1 (Gen 2.0)
	I2C	4	4
	SPI	✓	✓
	UART	Up to 9	
	GPIO	✓	✓
	PWM	✓	✓
	CAN	2	2
	SD/MMC	2	2
JTAG	✓	✓	
OS Support	Embedded Linux	Linux	Linux
Physical	Size	47 x 30 mm	47 x 30 mm
	Interface	3 x Hirose DF40 connectors	3 x Hirose DF40 connectors
Power	Main Voltage	5V	5V
	I/O Voltage	3.3V	3.3V
Environment	Temperature	Industrial: -40°C to 85°C	Industrial: -40°C to 85°C
	Humidity	Humidity (non-condensing): 10% – 90%	Humidity (non-condensing): 10% – 90%

(*) Configurable SERDESs based on Marvell CN913x processor specifications.



Ordering Information

Available on Shop

SKU	Description

- To choose your ideal configuration see our [Product Configurator Tool](#)

Accessories:

SKU	Description

Kits

SKU	Description

For more information about the AM64X SOM Software/Hardware visit our:

Developer Center