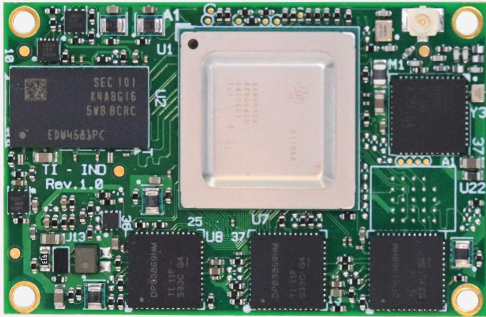


# AM64X SOM

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

## TI AM64X SITARA SOM Processor System on Module

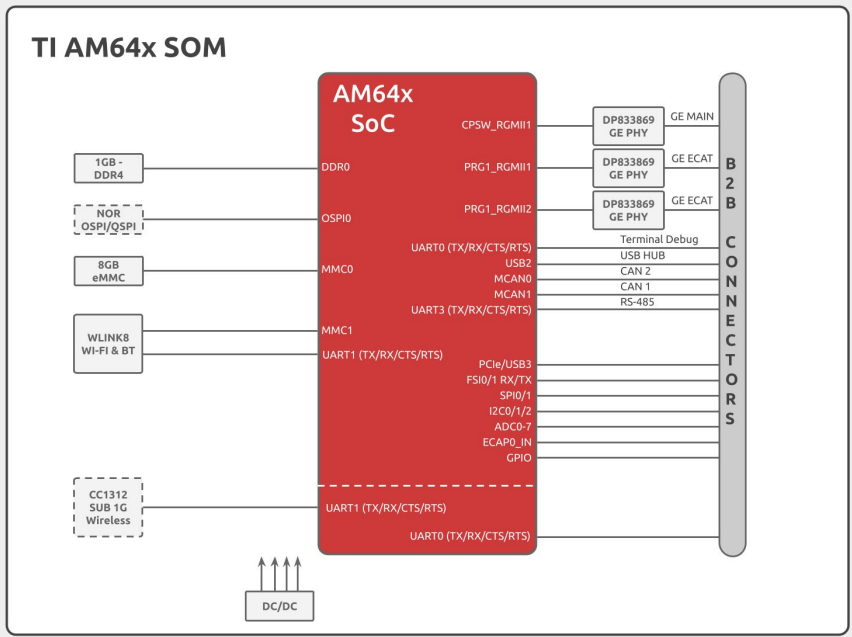


- Best in class real-time and low latency processing for industrial applications
- Support for multi-protocol industrial ethernet using in chip PRU-ICSSG (Programmable Real-time Unit for Gigabit Industrial Communication Subsystem)
- Inline ECC and functional safety capabilities for mission-critical use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



Sitara AM6442		
CPU Details	CPU Name	TI Sitara AM6442F (F stands for Industrial protocols support TSN, EtherCAT, PROFINET, EtherNET/IP, IO Link)
	CPU Type	2 x Cortex A53 4 x Cortex R5F 1 x Cortex M4
	CPU Speed	1.1GHz Industrial
	Floating Point	✓
RAM	Memory & Storage	1GB DDR4 with inline ECC, 2GB DDR4 (Optional)
	Internal Storage	From 8GB eMMC Optional QSPI Flash
	External Storage Support	PCIe-nVME 2230 form factor USB2.0 / USB3.0
Networking	Ethernet	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
	PCIe	1 (Gen 2.0)
	I2C	Up to 4
	SPI	Up to 5
	UART	Up to 9
	GPIO	Supported, limited by pin configuration
	PWM	Up to 9 channels
	CAN-FD	2
	SD/MMC	2
JTAG	✓	
OS Support	Embedded Linux	Linux - Images available for BuildRoot or Debian , Other Linux distribution to be generated from sources ( Yocto etc)
Physical	Size	47 x 30 mm
	Interface	3 x Hirose DF40 connectors
Power	Main Voltage	5V
	I/O Voltage	3.3V
Environment	Temperature	Industrial: -40°C to 85°C
	Humidity	Humidity (Non-condensing): 10% – 90%

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



### Ordering Information

#### Available on Shop

SKU	Description
	TI Sitara AM6442 SOM  1GB DD  8GB eMMC  Industrial Temperature

- 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](#)