

AX710 with Xavier Module

Features

- Specifically designed for high performance and low-power envelope AI computing.
- Additional driver to support Embedded peripheral modules for multiple I/O expansion capability.
- On-board 2x HDMI, 1x M.2 M Key, 1x M.2 E Key and 3x RJ45 to support rich multimedia.
- Support MIPI CSI by different extension modules. (Up to 8 x2-lanes)
- Extended temperature range -25°C to 80°C.
- Suitable for In-vehicle system, training server and drone.
- 60 pins extension slot for PCIe8.

Specifications

Xavier Processor

- GPU: 512-core Volta GPU with Tensor Cores
- CPU: 8-core ARM v8.2 64-bit CPU, 8MB L2 + 4MB L3
- Memory: 32GB 256-Bit LPDDR4x
- Storage: 32GB eMMC 5.1
- Performance: Up to 32 TOPS(INT8)
- Dimension: 105 mm x 105 mm x 65 mm



AX710 Board Dimension

- 112 x 107mm

I/O Interface

- 2x HDMI Type A
- 3x RJ-45 for GbE(1x Onboard, 2x Extension adapter)
- 2x USB3.1 Type A
- 1x USB Type C (USB 2.0 speed)
- 1x USB2.0 AB OTG
- 1x M.2 M Key
- 1x M.2 E Key
- 2x CAN BUS
- 1x Front Panel
- 1x RS-232 / 3 x UART / 1 x I2C / 5 x GPIO
- 1x DC-in 9V~20V
- 4x I-PEX Connector (Each one for 4 Lanes)
- 1x Extension slot (60pins)
- 1x Micro SD

Operating Temperature

- -25°C ~ 80°C

Operating Humidity

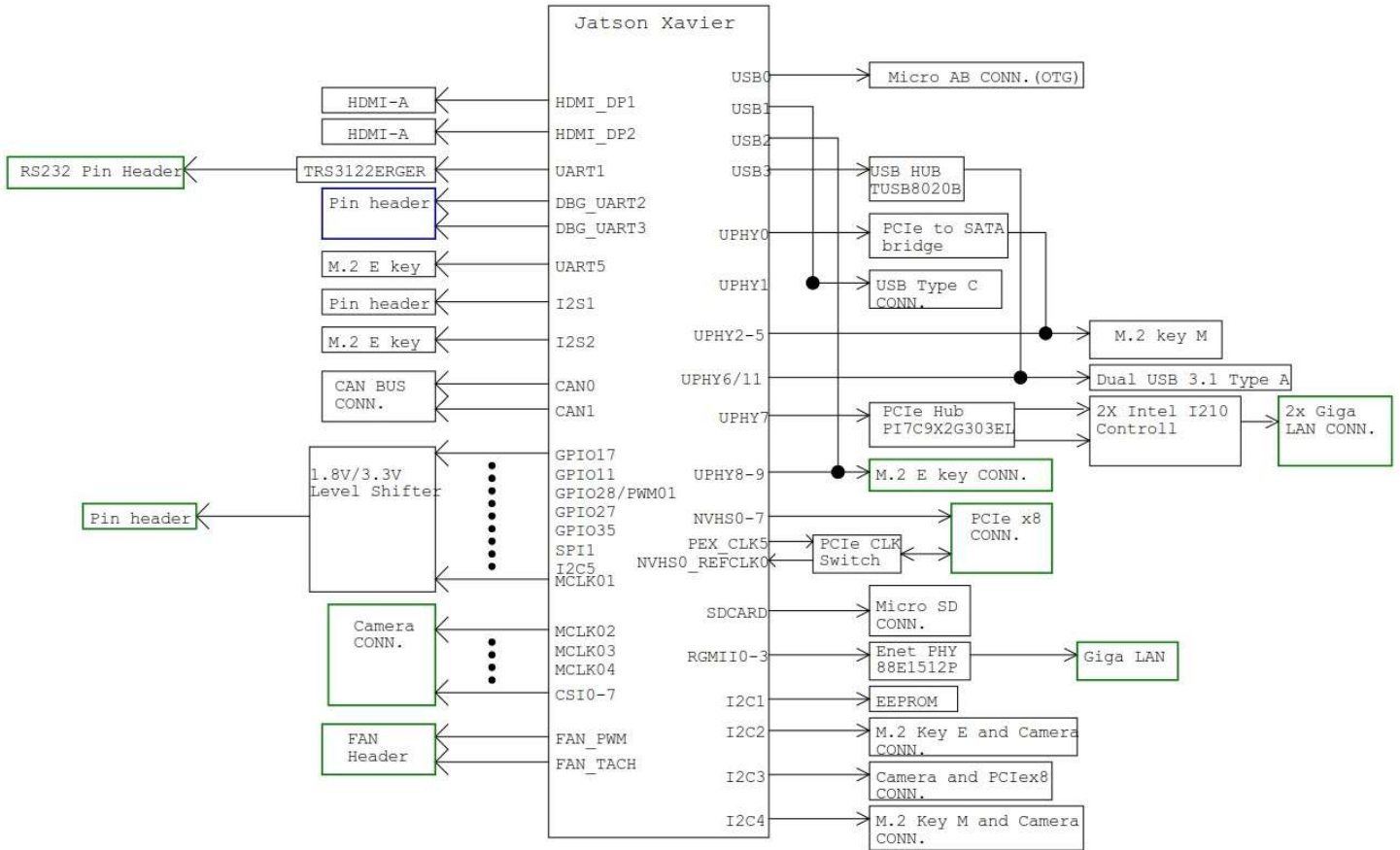
- 10% ~ 90%

Storage Temperature

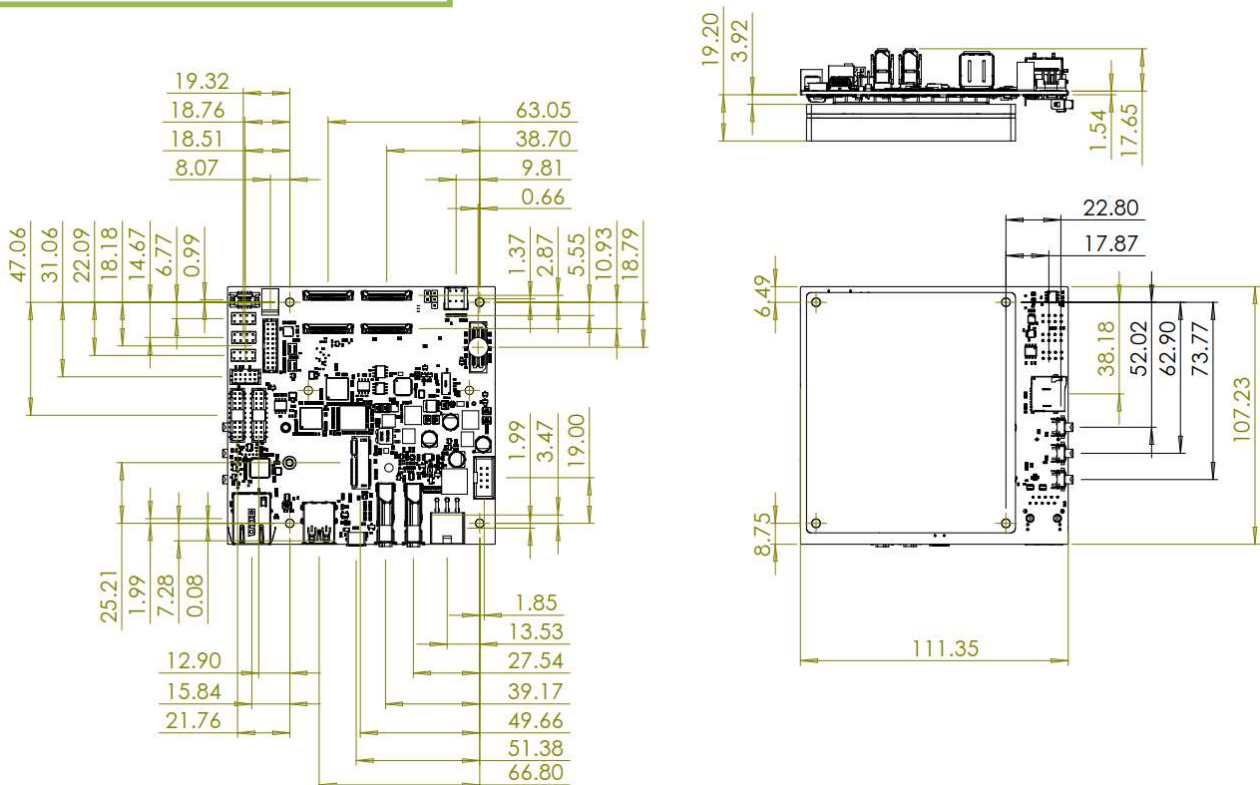
- -40°C ~ +85°C



Block Diagram



Mechanical



Ordering Information

Product name	Description
AX710-X32-FN02	AX710 + 32G Xavier™ Module + FAN + Cable Kit + Power Adapter and US Power Cord -25°C to +80°C
AX710-X32-FN03	AX710 + 32G Xavier™ Module + FAN + Cable Kit + Power Adapter and EU Power Cord -25°C to +80°C
AX710-X32-FN70	AX710 + 32G Xavier™ Module + FAN + Chassis + Power Adapter -25°C to +80°C

Accessory (Optional)

7W9000000040	AX710 Cable kit(CAN bus / UART / RS232 / Front panel / GPIO / I2C)
RCAC-00000000CB100	CA-B01 option 3x CSI-2 and 3x 4K Camera Carrier Board
9Z1256161010	AX710 Active Heat Sink
7W8000000040	US Power Cord SVT 18AWG Cable 1800mm Black 105 °C
7W8000000050	EU Power Cord H05VV-F 0.75mm ² /3G SL-6+SL-3 Cable 1800mm Black
9Z3D10000010	100-240V 120W Power Adapter

Active Heat Sink



Cable Kit



3 x MIPI CSI-II Camera Board (4K)



120W Power Adapter



AVL List

MIPI CAMERA

Vendor	Sensor	Frame rate	Sensor Size	Shutter	Resolution	Pixel Size
APPRO	SONY CMOS IMX290	30fps/60fps	1/2.8"	Rolling	2M(1920x1080)	2.9um x 2.9um
APPRO	SONY CMOS IMX334	30fps	1/1.8"	Rolling	4K(3840x2160)	2.0um x 2.0um

M.2 Device

Vendor	Product	Function	Form factor	Description
Intel	Intel SSD 760P/256GB M.2 M	SSD	M.2 M Key	M.2 M Key 2280 NVME SSD 256GB
Intel	Intel 8265NGW	WiFi/BT	M.2 E Key	Dual Band Wireless-AC M.2 2230 Device