

# AX720 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.
- Extended temperature range -25°C to 80°C
- Suitable for general robotics, UAV, industrial inspection, medical imaging and deep learning.

## Specifications

### NVIDIA® Jetson Xavier™

- GPU: 512-core Volta GPU with 64 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

### AX720 Board Dimension

- 131 x 120 x 30.5 mm

### I/O Interface

- 2x HDMI Type A
- 3x RJ-45 for GbE(1x Onboard, 2x Extension adapter)
- 2x USB3.2 Gen1 Type A
- 1x USB3.2 Gen2 Type C
- 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 / 1 x SPI
- 1x DC-in 9V~20V
- 1x MIPI CSI2 Connector  
(120 Pin / Support up to 16 Lanes)
- 1x Extension slot.  
**\*(Pinout not compatible with PCIe/104)**
- 1x Micro SD

### Operating Temperature

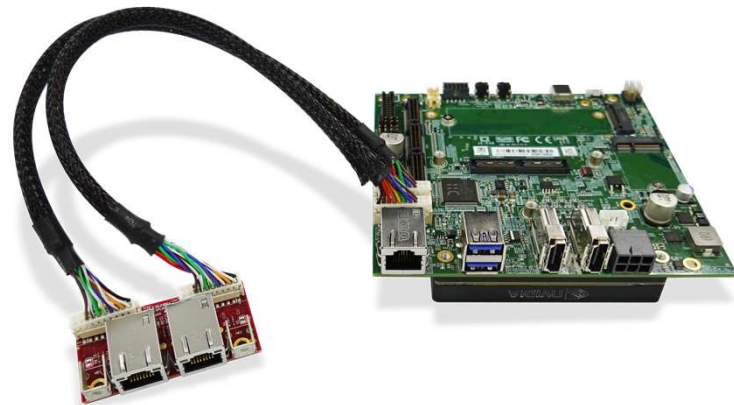
- -25°C ~ 80°C

### Operating Humidity

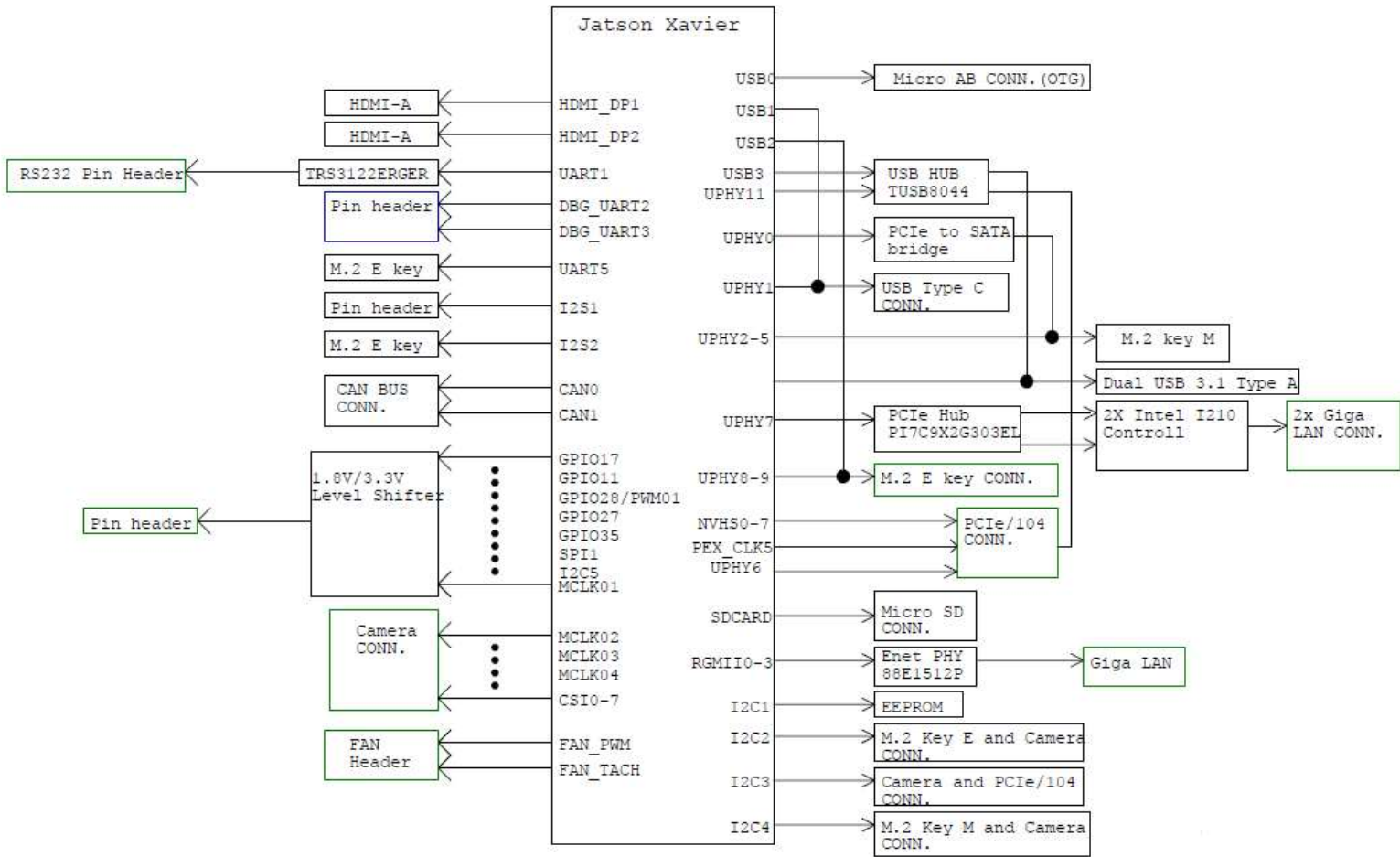
- 10% ~ 90%

### Storage Temperature

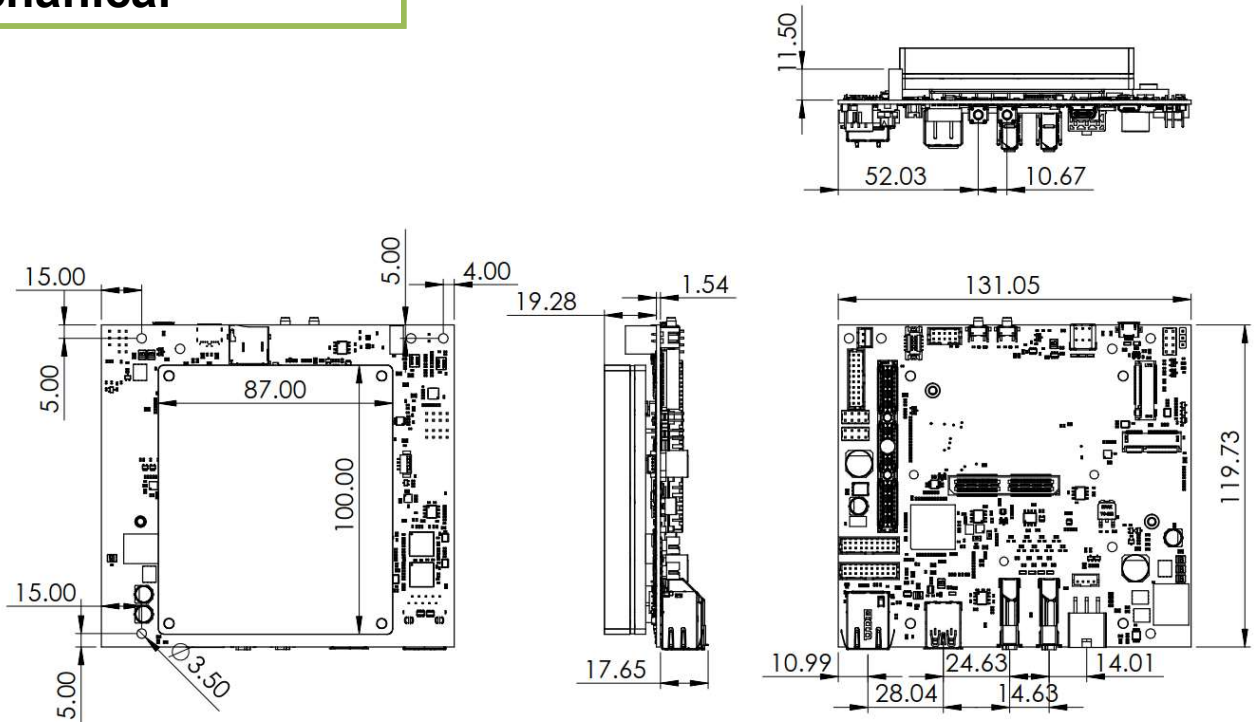
- -40°C ~ +125°C



## Block Diagram



## Mechanical



## Ordering Information

Product name	Description
AX720-STD-AN00	AX720 Carrier, Standard temp -40°C to +85°C
AX720-X32-FN02	AX720 + 32G Xavier™ Module + FAN + Cable Kit + Power Adapter and US Power Cord -25°C to +80°C
AX720-X32-FN03	AX720 + 32G Xavier™ Module + FAN + Cable Kit + Power Adapter and EU Power Cord -25°C to +80°C

## Accessory (Optional)

7W9000000040	AX720 Cable kit(CAN bus / UART / RS232 / Front panel / GPIO / I2C)
MCAC-00000000CA100	CA-A01 6x CSI-2 Camera Carrier Board with FPC
9Z1256161010	AX720 Active Heat Sink
7W8000000040	US Power Cord SVT 18AWG Cable 1800mm Black 105 °C
7W8000000050	EU Power Cord H05VV-F 0.75mm <sup>2</sup> /3G SL-6+SL-3 Cable 1800mm Black
9Z3D10000010	100-240V 120W Power Adapter

Active Heat Sink



Cable Kit



6 x MIPI CSI-II Camera Board



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

### 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