

AN310 with TX2 Module

Features

- This product specifically designed for high performance and low-power envelope AI computing
- Connect with CSI adapter can support up to 6 camera (6 x2Lanes or 3x 4Lane)
- Extended temperature range -25°C to 80°C
- TX2 powered by Nvidia TEGRA X2 processor - the powerful new Nvidia Pascal architecture, 256 GPU cores, a 64-bit CPU.
- CPU complex combines a dual-core Nvidia Denver 2 alongside a quad-core ARM Cortex-A57.
- Suitable for general robotics, UAV, industrial inspection, medical imaging and deep learning.

Specifications

TX2 Processor

- NVIDIA Tegra X2
- HMP Dual Denver 2 / 2 MB L2 +Quad ARM A57 / 2 MB L2

Graphics

- Nvidia Pascal, 256 CUDA cores
- 1.5 TeroFLOPS

Board Dimension

- Carrier 87 x 70mm

I/O Interface

- 1x HDMI Type A
- 1x RJ-45 for GbE
- 2x USB3.0 Type A
- 1x USB2.0 Micro AB
- 1x mPCIe (Compatible with mSATA)
- 1x RS-232
- 5x GPIO
- 1x I2C
- 2x CAN BUS1
- 1x Front Panel (Power/Reset/Recovery/Sleep)
- 1x DC-in 9~19V (2 Pin Euroblock)
- 1x MIPI CSI-II connector (120pin)

Operating Temperature

- -25°C ~ +80°C (Standard temperature)

Operating Humidity

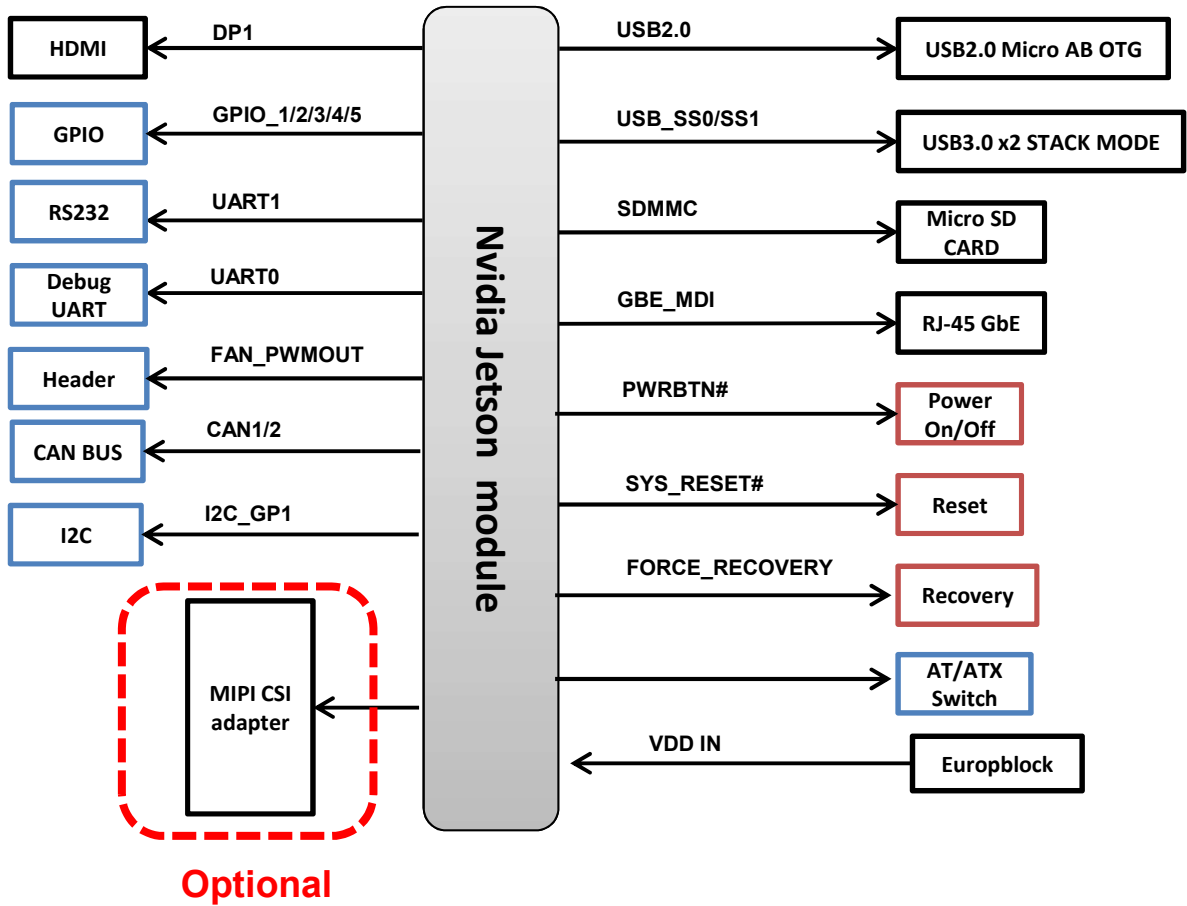
- 10% ~ 90%

Storage Temperature

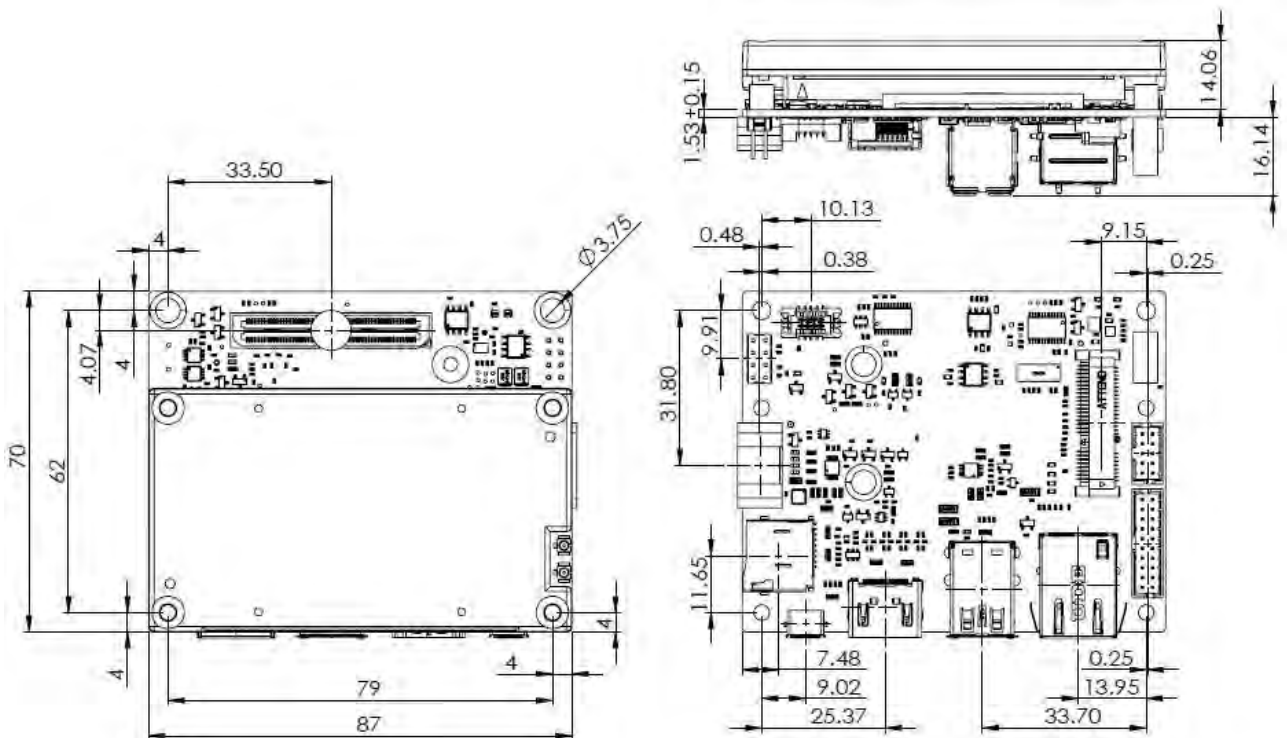
- -40°C ~ +125°C



Block Diagram



Mechanical



Ordering Information

Product name	Description
AN310-TX2-FN01	AN310 Carrier with Nvidia Jetson TX2 module, Standard temp -25°C to +80°C
AN310-TX2-FN02	AN310 + TX2 Module + FAN + Cable Kit + Power Adapter and Power Cord -25°C to +80°C
AN310-TX2-FN03	AN310 + TX2 Module + FAN + Cable Kit + Power Adapter and EU Power Cord -25°C to +80°C

Accessory (Optional)

MCAC-00000000CA100	CA-A01 6x CSI-2 Camera Carrier Board with FPC
7W9000000040	AN310 Cable kit(CAN bus / UART / RS232 / Front panel / GPIO / I2C)
9Z1253232020	Active Heat Sink(With FAN)
9Z2XX4141010	Passive Heat Sink
7W8000000040	US Power Cord SVT 18AWG Cable 1800mm Black 105 °C
7W8000000050	EU Power Cord H05VV-F 0.75mm2/3G SL-6+SL-3 Cable 1800mm Black
9Z3BC0000020	100-240V 60W 12V 5A Adapter

Passive Heat Sink



Active Heat Sink



Cable Kit



6 x MIPI CSI-II Camera Board



12V/5A 60W Adapter



AVL List

Mini PCIe Extension Module

Vendor	Module name	Function	Temp.	Module Type
Innodisk	TMPL-G101-C1	Gbe LAN x 1	0 °C to 70 °C	mPCIe to Single Isolated LAN
Innodisk	TMPL-G101-W1	Gbe LAN x 1	-40 °C to 85 °C	mPCIe to Single Isolated LAN
Innodisk	TMPL-G201-C1	Gbe LAN x 2	0 °C to 70 °C	mPCIe to Dual Isolated LAN
Innodisk	TMPL-G201-W1	Gbe LAN x 2	-40 °C to 85 °C	mPCIe to Dual Isolated LAN
Innodisk	TMPL-G102-C1	Gbe LAN x 1	0 °C to 70 °C	mPCIe to Single Isolated LAN Horizontal
Innodisk	TMPL-G102-W1	Gbe LAN x 1	-40 °C to 85 °C	mPCIe to Single Isolated LAN Horizontal
Innodisk	TMPL-G202-C1	Gbe LAN x 2	0 °C to 70 °C	mPCIe to Dual Isolated LAN Horizontal
Innodisk	TMPL-G202-W1	Gbe LAN x 2	-40 °C to 85 °C	mPCIe to Dual Isolated LAN Horizontal
Innodisk	TMPL-G2P1-C1	PoE x 2	0 °C to 70 °C	mPCIe to dual Isolated PoE Module, Mounting hole, 4pin header
Innodisk	TMPL-G2P1-W1	PoE x 2	-40 °C to 85 °C	mPCIe to dual Isolated PoE Module, Mounting hole, 4pin header
Innodisk	TMPL-G2P1-C3	PoE x 2	0 °C to 70 °C	mPCIe to dual Isolated PoE Module, Mounting hole, DC Jack
Innodisk	TMPL-G2P1-W3	PoE x 2	-40 °C to 85 °C	mPCIe to dual Isolated PoE Module, Mounting hole, DC Jack
Innodisk	TMPL-G2P2-C1	PoE x 2	0 °C to 70 °C	mPCIe to dual Isolated PoE/PoE+ Module, Mounting hole, 4pin header
Innodisk	TMPL-G2P2-W1	PoE x 2	-40 °C to 85 °C	mPCIe to dual Isolated PoE/PoE+ Module, Mounting hole, 4pin header
Innodisk	TMPL-G2P2-C3	PoE x 2	0 °C to 70 °C	mPCIe to dual Isolated PoE/PoE+ Module, Mounting hole, DC Jack
Innodisk	TMPL-G2P2-W3	PoE x 2	-40 °C to 85 °C	mPCIe to dual Isolated PoE/PoE+ Module, Mounting hole, DC Jack
Innodisk	TMPU-3401-C1	USB 3.0 x 4	0 °C to 70 °C	mPCIe to USB 3.0 (x4)
Innodisk	TMPU-3401-W1	USB 3.0 x 4	-40 °C to 85 °C	mPCIe to USB 3.0 (x4)
Innodisk	TMPU-3201-C1	USB 3.0 x 2	0 °C to 70 °C	mPCIe to USB 3.0 (x2)
Innodisk	TMPU-3201-W1	USB 3.0 x 2	-40 °C to 85 °C	mPCIe to USB 3.0 (x2)
Innodisk	TMP2-X202-W1	RS422/485 x 2	-40 °C to 85 °C	mPCIe to RS422/485 (x2)
Innodisk	TMP2-X402-W1	RS422/485 x 4	-40 °C to 85 °C	mPCIe to RS422/485 (x4)
Innodisk	TMP2-X203-W1	RS232 x 2	-40 °C to 85 °C	mPCIe to RS232 (x2)
Innodisk	TMP2-X403-W1	RS232 x 4	-40 °C to 85 °C	mPCIe to RS232 (x4)
Innodisk	TMP2-X404-W1	RS232/422/485 x 4	-40 °C to 85 °C	mPCIe to RS232/422/485 (x4)

Vendor	Module name	Function	Module Type	Display Video Resolution
YUAN	SC330N4 MC	Frame Grabber	4Channel SD	NTSC: 720×480@30fps PAL: 720×576@25fps
YUAN	SC3C0N4 MC	Frame Grabber	4Channel SD	NTSC: 960×480@29.97fps (WD1), 720×480@29.97fps (D1) PAL: 960×576@25fps (WD1)720×576@25fps (D1)
YUAN	SC330N8 MC	Frame Grabber	8Channel SD	NTSC: 720×480@30fps PAL: 720×576@25fps
YUAN	SC3C0N8 MC	Frame Grabber	8Channel SD	NTSC: 240fps@960/720×480 PAL: 200fps@960/720×576
YUAN	SC550N1 MC HDV	Frame Grabber	1Channel Full-HD 1080P60	1920×1200p@60/50fps in → 1920×1200p@60/50fps out 1920×1080p@60/50fps in → 1920×1080p@60/50fps out
YUAN	SC5C0N1 MC HDV	Frame Grabber	1Channel Full-HD 1080P60	1920×1080p@60/50fps in → 1920×1080p@60/50fps out
Avermedia	C353	Frame Grabber	1Channel Full-HD 1080P60	Max. Input Resolution: 1080p60 → Max. Resolution Captured: 1080p30