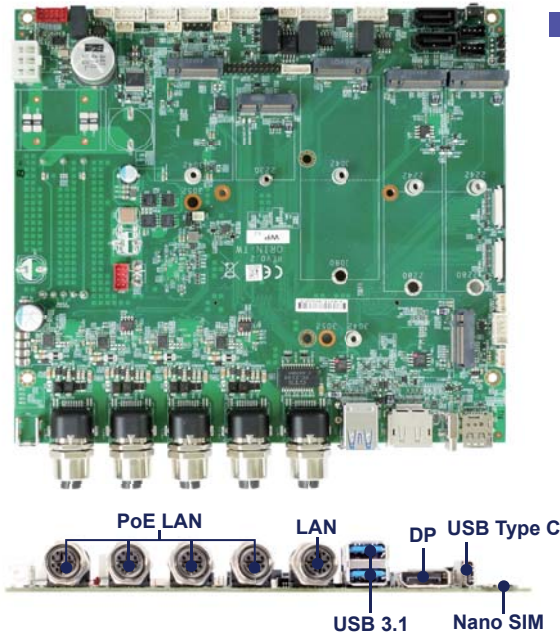


ORIN-TW(M12)

Carrier Board for NVIDIA® Jetson Orin™ Nano (Super) / NX SoM



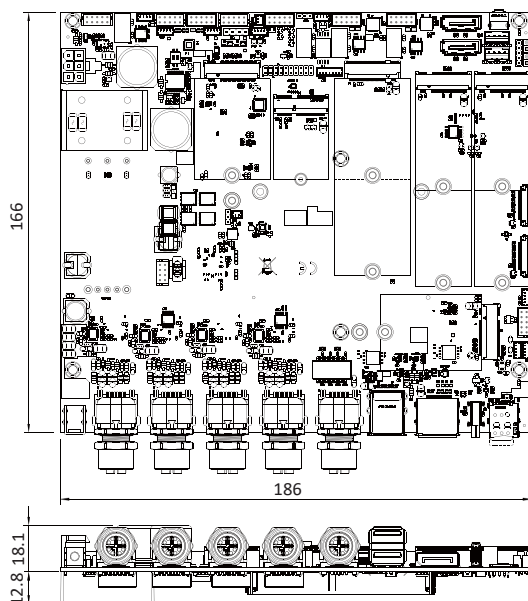
Specifications :

- CPU
 - 8-core Arm® Cortex®-A78AE 2.0 GHz
 - 6-core Arm® Cortex®-A78AE 1.5 GHz
- GPU
 - 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores
 - 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
- AI Accelerator
 - NVIDIA Jetson Orin NX: 70 / 100 TOPs
 - NVIDIA Jetson Orin Nano (Super): 20 / 40 TOPs
- System Memory
 - Jetson Orin NX: LPDDR5, 8 / 16GB
 - Jetson Orin Nano (Super): LPDDR5, 4 / 8GB
- Storage
 - 2 x SATA port
 - 1 x M.2 M key Type 2280 / 3080 (OEM to 2242 / 3042), Support NVMe SSD
 - 2 x M.2 B key Type 2242 (OEM to 2280), Support SATA SSD
- Display
 - 1 x DP
- LAN
 - 1 x GbE LAN
 - 4 x Intel GbE I210-IT (PoE PSE)
- Audio
 - Audio, Support Line-out / Mic-in
 - Two channel Class D Audio Amplifier 2W
- Expansion Interface
 - 1 x M.2 M key Type 3042 / 3080 (PCIe x 4)
 - 1 x M.2 B key Type 3042 / 3052 (PCIe x 1 / USB 2.0 (OEM to USB 3.1))
 - 1 x M.2 B key Type 3042 / 3052 (USB 3.1 / 2.0)
 - 1 x M.2 E key Type 2230 (PCIe x 1 / USB 2.0 / UART / I2S)
 - 2 x M.2 B key Type 2242 / 2280 (SATA-SSD)
 - 1 x Nano SIM
- Expansion Options
 - NF212A M.2 B + M Key 2242 PCIe to GbE LAN
 - NF212B M.2 B + M Key 3042 PCIe to Dual GbE LAN
 - NF226A M.2 B + M Key 2242 PCIe to 2.5G LAN
 - NF226B M.2 B + M Key 3042 PCIe to Dual 2.5G LAN
 - CC007 USB to 4 x RS232 / 485 / 422
- USB
 - 1 x USB 3.1 Type C (external) ; 2 x USB 3.1 Type A (external)
 - 1 x USB 2.0 (internal)
- Serial IO
 - 2 x ISO RS232 / 422 / 485
 - 1 x ISO CANBus
- SPI, I2C
 - SPI, I2S, 3 x I2C
- Camera interface
 - 2 x MIPI-CSI
- GPIO
 - Hardware digital Input & Output, 8 x DI / 8 x DO
- Power Input
 - ISO Wide Range +9~36V
 - CPC-Ignition on/off delay control
 - power brick 1/4 CQB100W-24S12 9~36V IN / 12V Out 100W (SYS) (Standard SPEC)
 - power brick 1/4 CQB100W-48S12 18~75V IN / 12V Out 100W (SYS) (OEM SPEC Non PSE)
 - power brick 1/4 CQB150W-24S48 9~36V IN / 48V Out 150W (SYS+PSE) (OEM SPEC)
- Dimension
 - 186 x 166 mm ; Weight: 345g
- Operation Temperature (100% CPU Usage)
 - 20°C~70°C
- Operation Humidity
 - 5~95%, non-condensing
- Chassis (OEM I/O Expansion by request)
 - Box PC: HAWK
- OS Support
 - JetPack 6.2 Ubuntu 22.04.05

CPU Board:

- NVIDIA Jetson Orin™ Nano (Super):
 - 4 / 8GB LPDDR5, 20 / 40 TOPs
 - NVIDIA Jetson Orin™ NX: 8 / 16GB LPDDR5, 70 / 100 TOPs
 - AI Accelerator: NVIDIA® Jetson Orin™ Nano (Super) / Orin™ NX
-
- 1 x DP, 5 x GbE (1 + 4 x PoE)
 - 1 x USB 3.1 Type C ; 2 x USB 3.1 Type A ; 1x USB 2.0
 - Mic-in / Line-out ; AMP 2W, 2 x SATA
 - 2 x Isolated RS232 / RS422 / RS485, 1 x Isolated CANBus
 - 1 x M.2 M key, 4 x M.2 B key, 1 x M.2 E Key, 1 x Nano SIM
 - 2 x MIPI CSI, SPI, I2S, 3 x I2C
 - 8DI / 8 DO, ISO Wide Range +9~36V, CPC-Ignition on/off control

Dimensions: (Unit:mm)



Specification are subject to change without prior notice. ODM / OEM is available.