



Specifications

System Mainboard	NVIDIA® Jetson ORIN NX 16GB or 8GB/ORIN Nano 8GB or 4GB SOM + carrier board
CPU Type	EC3100-NX-16: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 EC3100-NX-8: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 EC3100-NANO-8 / EC3100-NANO-4: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3100-NX-16 / EC3100-NX-8: 2GHz EC3100-NANO-8 / EC3100-NANO-4: 1.5GHz
Memory	EC3100-NX-16: 16GB 128-bit LPDDR5, 102.4GB/s EC3100-NX-8: 8GB 128-bit LPDDR5, 102.4GB/s EC3100-NANO-8: 8GB 128-bit LPDDR5, 68 GB/s EC3100-NANO-4: 4GB 64-bit LPDDR5, 34 GB/s
Front Panel External I/O	2x Gigabit Ethernet (10/100/1000), RJ45 with LED 1x HDMI Type-A 1x 3.5mm phone jack for Line-out 1x 3.5mm phone jack for Mic 2x USB 3.2 Gen2 Type-A 2x USB 2.0 Type-A 4x SMD type LED: Power/WAN/2 software configurable 1x power button 1x Recovery button 1x Reset button 1x optional IDA-8104 module enabled 4-port PoE
Rear Panel External I/O	1x USB Type-C connector supports Recovery Mode and OTG 1x RS232 COM port DB9 connector 1x CANBus DB9 connector 4x DI + 4 x DO (pin1 with isolation output 5V @ 0.5A) 1x 3-pin power input 1x 2-pin Power on/off connector 1x SIM socket for 4G/5G 1x SIM socket for OOB 4G 3x Antenna jacks
Expansion Slots	1x M.2 3052 B-key for 4G/5G module 1x M.2 2230 E-key for WiFi/BT module 1x M.2 3042 B-key for OOB 4G module
Storage	1x M.2 2280 M-key NVMe (default 128GB)
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	220mm x 174mm x 80mm
Weight	3kg
Operating Temperature	-20°C~70°C (-40°F~158°F)(Target)
Storage Temperature	-40°C~80°C (-40°F~176°F)

Features

- NVIDIA® Jetson Orin NX and Nano series module
- 2x GbE LAN (1 for OOB)
- 1 x USB Type-C supports Recovery Mode and OTG
- 2 x USB 3.2 Type-A, 2 x USB 2.0 Type-A
- 1 x DB9 for RS232 COM port, 1 x DB9 for CANBus
- 1x HDMI
- 1x M.2 3052 B-Key for 4G/5G
- 1x M.2 3042 B-Key for OOB 4G
- 1x M.2 2230 E-Key for WiFi/BT/GPS
- 1x M.2 2280 M-Key for NVMe SSD
- 1x Summit connector for PoE Board
- Wide-power input range +9V to +36VDC
- Supports Ubuntu 22.04 OS

Relative Humidity	10%~90% (non-condensing)
Vibration	Operating: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC Class B

Ordering Information

EC3100-NX-16	NVIDIA Jetson Orin NX 16GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3100-NX-8	NVIDIA Jetson Orin NX 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3000-NANO-8	NVIDIA Jetson Orin Nano 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3000-NANO-4	NVIDIA Jetson Orin Nano 4GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery

Dimensions and Drawing

