AI EDGE COMPUTER

JCO-3000-ORN-B_4L

Mid-Range AI Edge Computer with NVIDIA Jetson Orin™ NX or Nano Super



Features

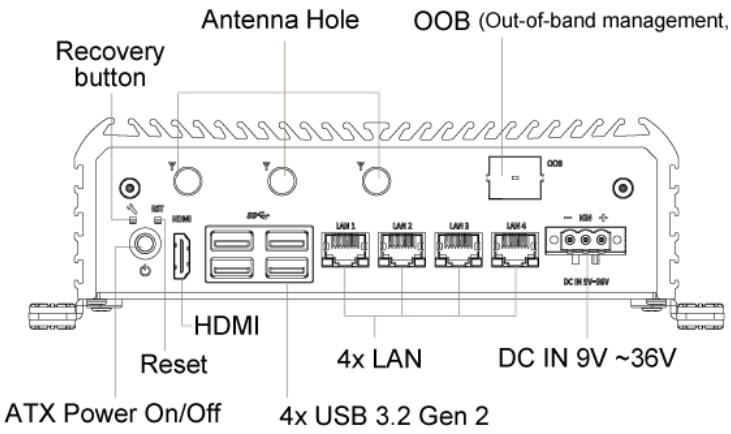
- NVIDIA® Jetson Orin™ NX 8GB/16GB or Orin Nano Super 8GB/4GB
- 1x HDMI 4K, 3840 x 2160 @ 60Hz
- 4x GbE RJ45 LAN with Optional PoE option
- 1x External Dual Nano SIM socket
- 1x M.2 (M-Key, 2242/2280, PCIe x4,Support NVMe)
- 4x USB 3.2 Gen 2, 1x USB Type-C
- 8x DI + 8x DO with isolation
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature -20°C up to 60°C

Specifications

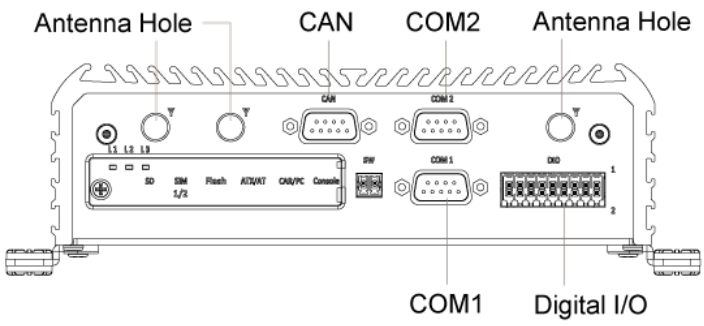
System	
Processor - NVIDIA® Jetson Orin™ NX/Nano Super (8-core/6-core Arm® Cortex®-A78AE 64-bit) • NX 16G: 1024-core NVIDIA Ampere architecture GPU (25W/100 TOPS) • NX 8G: 1024-core NVIDIA Ampere architecture GPU (20W/ 70 TOPS) • Nano Super 8G: 1024-core NVIDIA Ampere architecture GPU (25W/67 TOPS) • Nano Super 4G: 512-core NVIDIA Ampere architecture GPU (25W/34 TOPS)	
LAN Chipset	GbE1: RGMII GbE2~4: Intel LAN IC
System Memory	8G/16G LPDDR5 @ 3200 MHz on SOM
TPM	TPM 2.0
Display	
HDMI	1x HDMI 4K (3840*2160) 60Hz
Storage	
M.2	1x M.2 (M-Key, 2242/2280, PCIe x4, NVMe) (Default 128GB)
SD	1x Micro SD Slot
SIM Socket	1x External Dual Nano SIM socket (M.2 B-Key attached)
Expansion	
M.2	1x M.2 (B-Key, 2242/3042/3052, USB 3.2 Gen1, Support 4G/5G) 1x M.2 (E-Key, 2230, PCIe x1, USB 2.0, Support Wi-Fi/Bluetooth)
I/O	
CAN	CAN 2.0 B
COM	2x RS-232/422/485 (Switch by MCU)
DIO	8 in / 8 out (Isolated)
LAN	4x RJ45 LAN
OOB	1x RJ45 (Optional OOB Management Module, Occupied 1x COM & Micro USB Console Port)
PoE	4x RJ45 (Optional, PoE+ 120W Module, Type 2, Max 25W per Port)
USB	4x USB 3.2 Gen 2 (10 Gbps, Shared with USB 3 Hub) 1x Micro USB (Console) 1x USB Type-C (USB 2.0, For Flash OS)
Others	6x WiFi Antenna Holes 1x Power Switch, 1x Reset Switch, 1x Force Recovery Switch 1x 2P Terminal blcok for Remote Power SW 1x CMOS Battery Cable 1x 4-Pin FAN Connector
Operating System	
Linux	Linux Ubuntu 24.04 with JetPack 7.2 Linux Ubuntu 22.04 with JetPack 6.2
Power	
Power Adapter	Optional AC/DC 12V/5A, 60W Optional AC/DC 24V/5A, 120W (For PoE Model) Optional AC/DC 24V/9.2A, 220W (For PoE Model)
Power Mode	AT, ATX
Power Ignition Sensing	Adjustable Power Ignition Management
Power Supply Voltage	9~36VDC 12V: PoE Power Budget Supports Up to 60W 24V: PoE Power Budget Supports Up to 120W
Power Connector	3-pin Terminal Block
Power Protection	OVP (Over Voltage Protection); OCP (Over Current Protection) Reverse Protection
Environment	
Operating Temperature	-20°C to 60°C (15W) -20°C to 55°C (25W)
Storage Temperature	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	• CE, FCC Class A • UL 62368-1, 3rd Ed. • E-mark (E24) • RoHS 3.0, REACH
Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis)
Shock	With SSD: 50G half-sin 11ms
Physical	
Dimensions	192 (W) x 140(D) x 58(H) mm
Weights	2.8 ~ 3.6 kg
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting (Default) DIN-Rail (Optional)

* All specifications and photos are subject to change without notice.

External I/O Mechanical Layout



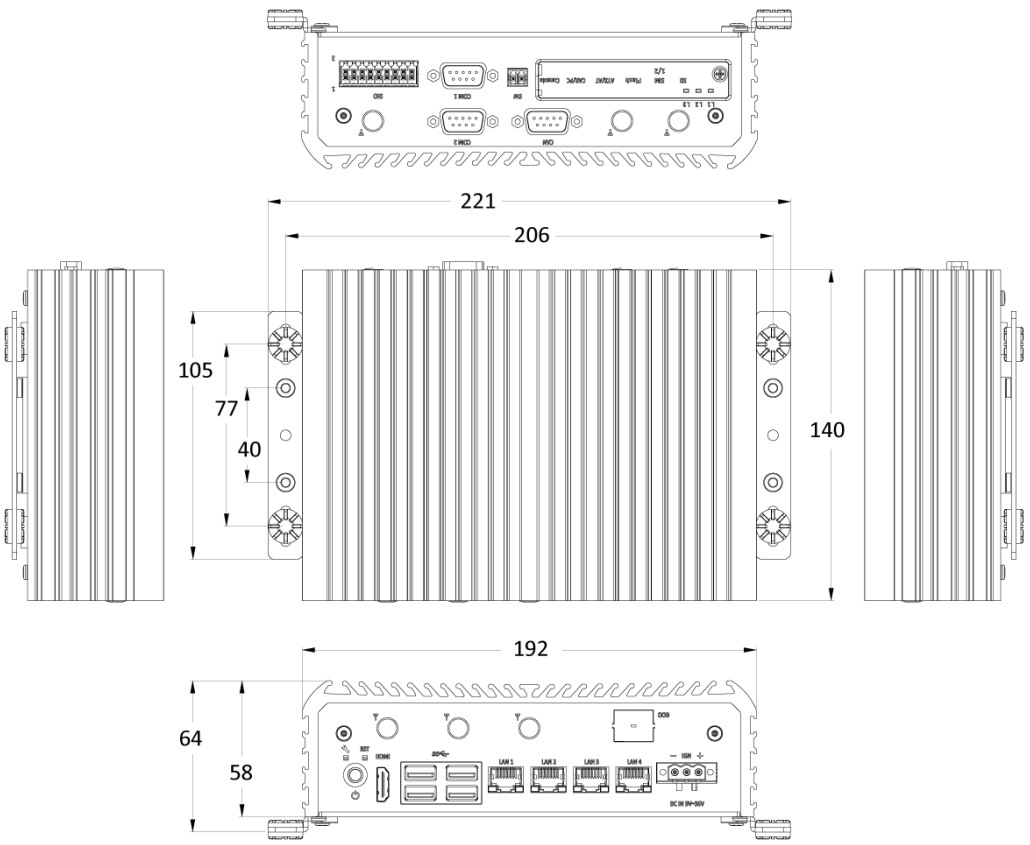
Front Panel



Rear Panel

Dimension

Unit: mm



Compliances and Standards

Shock	With SSD: 50G half-sin 11ms IEC60068-2-27:2008 Designed to comply with MIL-STD-810H Method 516.8 Procedure I
Vibration	With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) IEC60068-2-64:2008 Designed to comply with MIL-STD-810H Method 514.8 Procedure I
Operating Temperature	-20°C to 60°C (15W) -20°C to 55°C (25W) IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
EMC	• FCC Class A • CE • ICES-003 • UKCA • Industrial EMC Compliance - EN 61000-4-2: 2009 - EN IEC 61000-4-3: 2020 - EN 61000-4-4: 2012 - EN 61000-4-5: 2014 +A1: 2017 - EN 61000-4-6: 2014
Safety	• UL Safety: UL 62368-1, 3rd Ed., (cULus) • Test procedure: CB Scheme • Standard: IEC 62368-1:2018 • E-mark (E24)
Environmental Compliance	• RoHS 3 (2015/863/EU) • REACH

Available Models

Model No.	Description
JCO-3000-ORN-B-4L	Mid-Range AI Edge Computer With NVIDIA Jetson Orin™ NX/Nano Super, 4x LAN
JCO-3000-ORN-B-4P	Mid-Range AI Edge Computer With NVIDIA Jetson Orin™ NX/Nano Super, 4x PoE
JCO-3000-ORN-B-4L-P	Mid-Range AI Edge Computer With NVIDIA Jetson Orin™ NX/Nano Super, 4x LAN, w/ Power Adapter
JCO-3000-ORN-B-4P-P	Mid-Range AI Edge Computer With NVIDIA Jetson Orin™ NX/Nano Super, 4x PoE, w/ Power Adapter

Optional Accessories

Model No.	Description
1-E09A06008	Adapter AC/DC 12V 5A 60W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A12002	Adapter AC/DC 24V 5A 120W with 3pin Terminal Block Plug 5.0mm Pitch
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-TPCD00005	Power Cord, 3-pin US Type, 180cm (120W)
1-TPCD00002	Power Cord, European Type, 180cm (120W)
1-TPCD00001	Power Cord, UK Type, 180cm (120W)

Packing List

1x JCO-3000-ORN-B_4LAN Mid-Range AI Computer
1x Wall Mount Kit

US Exports And Tariff Codes

ECCN	5A992.c
HTS	8471.50.0150
Schedule B	84.71

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