EOS-JNX Series

NVIDIA® Jetson Xavier™ NX Edge AI Vision Inference System

Features

- AI inference acceleration with NVIDIA® Jetson Xavier™ NX
- Fanless system 187.5(W) x 149.5(D) x 55.25(H) mm
- Wide temperature range from -20°C to 70°C
- Pre-installed 64G microSD with OS and M.2 2280 slot for PCIe SSD
- Supports 12V to 24V DC-in
- 4 PoE ports supporting 60W total power
- Smart PoE software API supports power output control remotely and proactive power loss detection
- Internal USB connector for software license dongle

EOS-JNX-I

EOS-JNX-G

Introduction

ADLINK's EOS-JNX series of NVIDIA Jetson-based Edge AI vision systems include integrated Nvidia Jetson Xavier NX, 4-channel PoE and digital I/O in a fanless chassis with verified thermal stability. The EOS-JNX series has a built-in Smart PoE feature to control PoE power remotely to reduce maintenance efforts in challenging environments and provides PoE power loss detection to alert of any unexpected PoE disconnection. The EOS-JNX-I is designed as an AI PoE switch for connecting to IP cameras to enable AI inferencing, and also provides an uplink port to connect to a network video recorder (NVR) for recording video streams, making upgrading existing surveillance systems easy. The EOS-JNX-G is designed for industrial AI machine vision applications, providing a dedicated bandwidth of 1Gb per channel with a GigE camera connection, which is crucial for production line and manufacturing applications. Moreover, by using the internal USB connector, users can install a software license dongle inside the chassis to avoid loss or theft of the dongle for even greater protection.

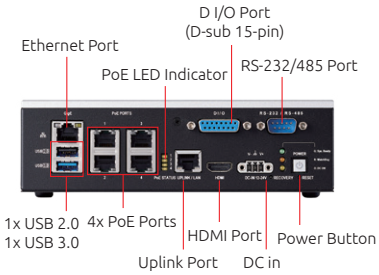
Ordering Information

- **EOS-JNX-I**
  NVIDIA® Jetson Xavier™ NX AI System for IP camera surveillance with 4 PoE ports
- **EOS-JNX-G**
  NVIDIA® Jetson Xavier™ NX AI System for industrial GigE cameras with 4 PoE ports

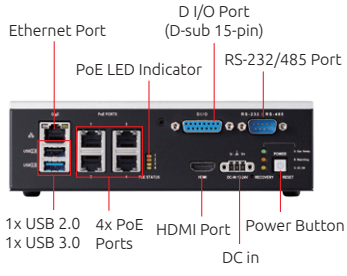
Optional Accessories

- 160W Power Adapter, 24V/6.67A DC, cord end (31-62120-0010)
- DIN-37D-01, 37-pin D-sub Termination board (91-14025-1020)
- DI/O Cable, D-sub 15-pin to 37-pin (30-01332-0010-A0)
- Wall Mount KIT (91-95320-100E)
- Din Rail Mount KIT (91-95320-000E)
- Terminal Block for cord end (20-C2M2C-0030, 2 pcs attached in system)
- EOS-JNX WIFI and BT Kit(91-95327-000E)

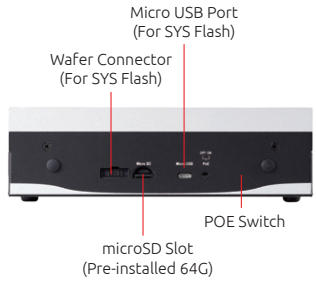
EOS-JNX-I Front Side



EOS-JNX-G Front Side



EOS-JNX-I / EOS-JNX-G Rear Side



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EOS-JNX Series

Specifications

Model	EOS-JNX-I	EOS-JNX-G
System Core		
Platform	Nvidia® Jetson Xavier™ NX	
Processor	6-core NVIDIA Carmel ARM® v8.2 64-bit CPU 6 MB L2 + 4 MB L3	
GPU	NVIDIA Volta architecture with 384 NVIDIA CUDA® cores and 48 Tensor cores	
Memory	8 GB 128-bit LPDDR4	
eMMC	16G	
Front Panel I/O Interface		
Ethernet	1x GigE w/o PoE	
PoE Port 1~4 (Total 60W)	4x PoE ports (30W max. per channel, 802.3at) for IP Camera (10M/100M)	4x PoE ports (30W max. per channel, 802.3at) for GigE Camera (1Gb)
Uplink Port	1Gb NVR connection	No
USB Port	1x USB2.0, 1x USB3.0	
Graphics Output	1x HDMI 1.4	
Serial Port	1x RS-232 / RS-485	
Digital I/O	D-sub 15-pin (expandable to 37-pin DIO board) 4-ch D I/O with isolation	
Rear Panel I/O Interface		
microSD Slot	1x microSD slot (OS boot from microSD card, pre-installed 64G)	
Micro USB	1x Micro USB (to flash Jetson NX)	
Wafer Connector	For System Flash with Jumper	
Internal I/O Interface		
M.2 2280 slot	M key, and support for B+M key PCIe (Gen2 x1) SSD	
M.2 2230 slot	E key, and support for A+E key PCIe or USB devices	
Internal USB	1x USB2.0 (for license protection)	
Power		
DC Input	DC 12~24V	
Fail Reset	Reset and Recovery Buttons	
PoE Switch	PoE initial mode setup	
Mechanical		
Dimensions	187.5(W) x 149.5(D) x 55.25(H) mm	
Weight	1.85kg	
Mount	Supports Wall Mount & Din Rail Mount	
Environmental		
Operating Temperature	-20°C to 70°C (w/ 0.6m/s airflow) PoE full load and Xavier NX @ max. 20W: max. 50°C PoE full load and Xavier NX @ max. 15W: max. 60°C PoE full load and Xavier NX @ max. 10W: max. 70°C	
Storage Temperature	-40°C to 85°C	
Humidity	40% to 95% (non-condensing)	
Vibration	Operating, 5-500 Hz, 5 Grms, 3 axes	
Shock	Operating, 11ms duration, 30G, half sine, 3 axes	
ESD	Contact ± 4kV, Air ± 8kV	
EMC	CE and FCC Class A (EN61000-6-4/ 6-2 EN61000-6-3/ 6-1)	
Safety	UL(62368) and CB	

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