V. 02/23

DLAP-411-Orin

Edge AI Platform Powered by NVIDIA® Jetson AGX Orin™

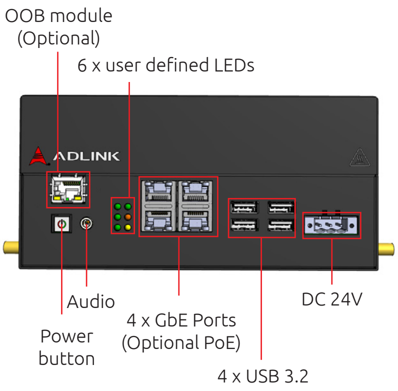
Preliminary

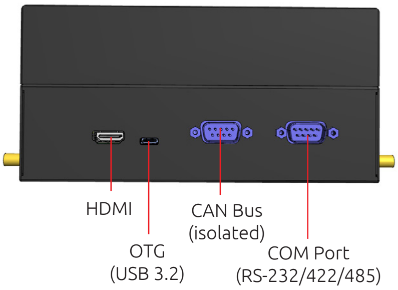
Features

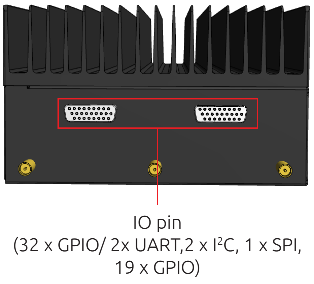
- NVIDIA® Jetson AGX Orin processing/inference engine
  8-core Carmel Arm 64-bit CPU, 1792-Core Ampere GPU,
  32 GB LPDDR5, 64 GB eMMC
- Fanless compact inference platform
- 4 GbE PSE Port(Optional), 4 USB 3.2, 1 OTG /Type C USB 3.2, 1 CAN bus (isolated) 1 COM(RS232/422/485), IO pin (32 x GPIO/ 2x UART,2 x I^{2}C, 1 x SPI, 19 x GPIO).
- 6 user defined LEDs, 1 Audio, 1 HDMI.
- M.2 2230 E key (Wifi6), 3042/3052 B key (5G), 2242/2280 M key (nvme).
- Remote control by Allxon Out-Of-Band (OOB) (optional)
- 24 V DC input, OCP.
- Operating Temp: -20 to +50°C
- Compact Size: 175(W) x 145(D) x 85(H) (mm)

Software Support

- Linux Ubuntu 20.04/22.04







Specifications

Model	DLAP-411-Orin
System Core	
GPU	NVIDIA Ampere architecture with 1792 NVIDIA® CUDA® cores and 56 Tensor Cores
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
RAM	32GB 256-bit LPDDR5
Storage	64GB eMMC 5.1
OS	Linux® Ubuntu
Front Panel I/O Ports	
Button	1x power, 1x reset, 1x recovery
HDMI	1x HDMI (Max. resolution 3840x2160 @ 60Hz)
USB	4x USB 3.0 Type-A
Ethernet	4x 10/100/1000Mbps Ethernets (Optional PoE support, IEEE 802.3af/at)
Audio	Mic-in, line-out
Expansion I/O	1x D-sub 37-pin connector (GPIO,I^2C,SPI,UART)
Back Panel I/O Ports	
USB	1x USB 3.0 Type-C (OTG)
Serial Port	1x COM RS-232/RS-422/RS-485 (DB9)
CAN Bus	1x 2.0b (DB9)
Extension	
M.2	1x M.2 M key 2242 and 2280 PCIe Gen4 1x M.2 B key 3042 and 3052 for 5G/LTE M.2 E key 2230 for Wifi
SD Card Slot	1x Micro SIM Slot (support)
Out-Of-Band (OOB)	Support Ethernet and Wifi, monitoring and managing at remote locations (thermal sensor, remote power on/off, restart, monitor debug port detection device status.)
LED indicator	
LED	6x user defined LEDs
Power Requirements	
DC Input	24V (OVP,OCP)
AC Input	160W power adapter
Power switch	1x Power ON/OFF Button (AT/ATX , Default : AT)
Mechanical	
Dimensions (W x D x H)	175x 145x 85mm
Weight	TBD
Mounting	Wall mount, VESA DIN rail (optional)
SMA Antenna Connector	6
Environmental	
Operating Temperature	Standard -20°C to 50°C (system level), -25°C to 85°C (board level)
Operating Humidity	~95% @40°C (non-condensing, optional with fanless solution)
Storage Temperature	-40°C to +85°C
Vibration	Operating 5Grms, 5-500Hz, 3 axes w/M.2 SSD
Shock	Operating 100G, half sine 11ms duration w/ SD, M.2 SSD
ESD	Contact ± 4kV, Air ± 8kV
Regularity	CE & FCC class B, (EN61000-6-4/-6-2), CE-LVD & UL by CB, FCCID
Internal	
Thermal sensor	1x Thermal sensor
F/W Support	
WDT	WDT supported
Wake on LAN	Wake on LAN supported