

NVDevKit –Apollo

Audio/Video Development Kit



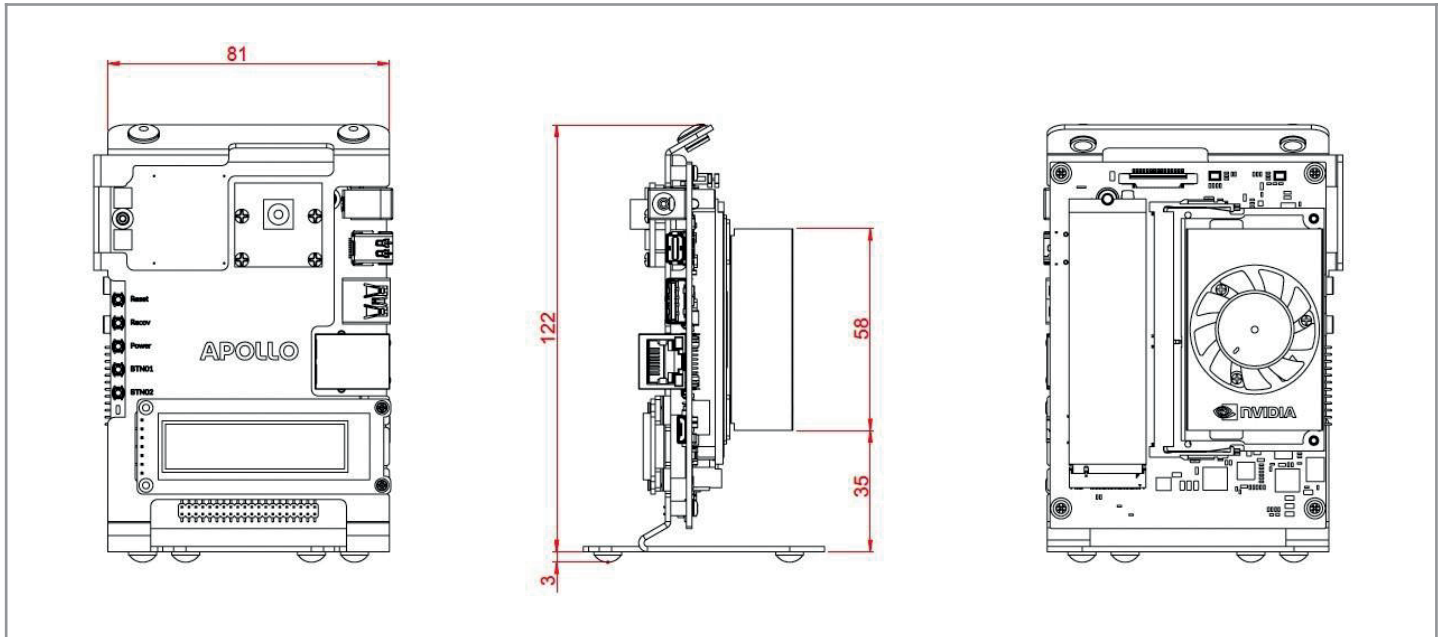
Features

- NVIDIA® Jetson Xavier™ NX as computing module
- Built-in Audio Codec with MEMS microphones
- Equipped with 8MP camera module, OLED, M.2 SSD
- Assembled with a base frame that allows the product to stand upright for a better user experience
- Integrated with NVIDIA RIVA and Deepstream SDK

Specifications

NVIDIA® Jetson Xavier NX	CPU	6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3 processor
	GPU	NVIDIA Volta™ architecture with 384 NVIDIA CUDA® cores and 48 Tensor cores
	Memory	8 GB 128-bit LPDDR4x @ 1600 MHz 51.2GB/s 16 GB 128-bit LPDDR4x @ 59.7GB/s
	Storage	16 GB eMMC 5.1
Physical I/O	Display	- 1x Mini DP
	Ethernet	- 1x RJ45 GbE (10/100/1000)
	Tact Switch	Recovery / Reset / Power / Programmable Buttons x2
	USB	- 1x USB3.2 Gen1 Type A - 1x USB2.0 Type C (OTG only)
	Line in	- 1x 3.5mm Phone Jack
	Line out	- 1x 3.5mm Phone Jack
Internal Connector	Speaker out	- 2x pin header (2-pin with 2.54pitch)
	Mic in	- 4x MEMS Microphone
	Camera	- 1x 15-pin FPC for MIPI CSI-II 2 Lanes
	2-pin header	- 1x RTC with CR2032 Battery
	4-pin header	- 1x Fan
	7-pin header	- 1x SPI for OLED
	12-pin header	- 1x UART (Debug only) - 1x Power LED - 1x Auto-power-on
	40-pin header	- 1x UART - 2x I2C - 1x SPI
Environment	Expansion slots	- 1x M.2 2280 Key M - 1x M.2 2230 Key E
	Power input	12V DC input with DC Jack
	Dimension	PCBA with base frame: 81 x 69 x 125 mm (L x W x H)
	Operating Temp	0°C ~ 50°C
	Storage Temp	-25°C ~+80°C
	Storage Humidity	95% @ 40 °C (non-condensing)
	Certification	CE, FCC
OS	Linux	Ubuntu 18.04 with BSP Jetpack 4.5.1

Mechanical



Ordering Information

Part Number	Description
PNYAPOLLONX-201	- Carrier board with 8G NX and Fan, including base frame, 2.08 inch OLED, IMX179, 128G NVMe SSD, Power adapter, EU power cord, 12V DC in, 0°C ~ 50°C

Packing List

Item	Description	Quantity
Base Frame	- 84.6 x 69 x 122.3 mm (L x W x H), T=1.5mm, SGCC, yellow	1
Fan	- Fan of NX module	1
OLED	- 2.08 inch, SPI interface, white	1
Camera	- IMX179 8MP camera module	1
M.2 SSD	- M.2 128G NVMe SSD, -20°C ~+75°C	1
Power Adapter	- DC 40W 12V	1
Power Cord	- EU Power Cord	1