

D1310XB

An Engineering Kit built with NVIDIA® Jetson Orin™ NX module

PRELIMINARY

Suggested Vertical Markets

Smart Retail/ Smart Security/ Smart Logistic

Enterprise-Leading Features

- 2 x 2 Lane MIPI CSI-2 Camera input/ 1 x 4 Lane MIPI CSI-2 Camera Input
- 2 x M.2. for Wi-Fi, SSD and Capture card
- 1 x GbE RJ-45 (Option PoE), 40-pin expansion header
- 4 x USB 3.2 Gen 1 (5G) Type A and 1 x 4Kp60 HDMI output
- Operating temperature: 0°C ~ 70°C (TBD)
- Dimension: 157mm(W) x 105mm(L) x 85mm(H) with Stand (without antenna)



Expandability

In addition to the default selection of interfaces, frame grabbers can be added for expanded functionality.

Model	Host Interface	Video Interface	Max Input Resolution
CN312MW	M.2 M key 2280	1x SDI; 1x HDMI	2Kp60 in (SDI) 1920 x 1200p60 in (HDMI) 1080p out
CN312SW	M.2 M key 2280	2x SDI	2Kp60 in - 1080p out
CN311-H	M.2 M key 2280	1x HDMI	4096 x 2160p30

Interface



MIPI Camera Compatibility

MIPI Camera	15-pin MIPI connector	<ol style="list-style-type: none"> raspberry pi camera v2 Manufacturer: APPRO.PHO <ul style="list-style-type: none"> B-04: IMX179 (8M) MIPI, 1080P (30fps) C-04: IMX290 (2M) MIPI, 1080P (30fps) C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps) Manufacturer: e-con Systems <ul style="list-style-type: none"> e-CAM131_CUNX - 4K Camera e-CAM50_CUNX - 5.0 MP e-CAM24_CUNX - Color Global shutter Camera
	36-pin MIPI connector	<p>Manufacturer: APPRO.PHO</p> <ul style="list-style-type: none"> B-03: IMX334 (4K) MIPI, 4K (30fps) A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps)

Specifications

Model	D131OXB
SoM	NVIDIA Jetson Orin NX
Networking	1x GbE RJ-45 (PoE option) 1x M.2. key E 2230 for Wi-Fi
Display Output	1x HDMI 2.0 (3840 x 2160 at 60Hz)
Temperature	Operating temperature 0°C~70°C (TBD) Storage temperature -40°C ~ 85°C Relative humidity 40°C @ 95%, Non-Condensing
MIPI Camera Inputs	2x 2 lane MIPI CSI-2, 15 pin FPC 1mm Pitch Connector 1x 4 lane MIPI CSI-2, 36 pin FPC 0.5mm Pitch Connector
USB	1x USB 2.0 Micro-B for recovery 4x USB 3.2 Gen 1 (5G) Type A
Storage*	1x M.2. key M 2280 for SSD
Expansion Header	40-pin: 1x UART, 2x SPI, 2x I2C, 1x I2S, GPIOs
Input Power	DC in jack on board & ATX 4-pin 12V/5A, 9V~24V is recommended
Power Cord	US/JP/EU/UK/TW/AU/CN
Thermal Solution	Fan
Buttons	Power and Recovery
RTC Battery	Support RTC Battery and Battery Life Monitoring by MCU
Dimensions	157mm(W) x 105mm(L) x 85mm(H) with stand (without antenna)
Certifications	CE, FCC, KC
Optional Accessory	<ul style="list-style-type: none"> PSE Board Wifi Kit APPRO IMX179 Camera module

*D131 have one mSD slot, but NVIDIA Orin NX/Orin Nano doesn't support mSD function. It's SOM limitation.