

D131OXB/D131NXB/D131NOB

PRELIMINARY

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

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 3.1 Gen 1 Type A and 1 x 4Kp60 HDMI output
- 1 x micro-SD card slot
- Operating temperature: 0°C ~ 60°C (TBD)
- Dimension: 157mm(W) x 105mm(L) x 85mm(H) with Stand (without antenna)

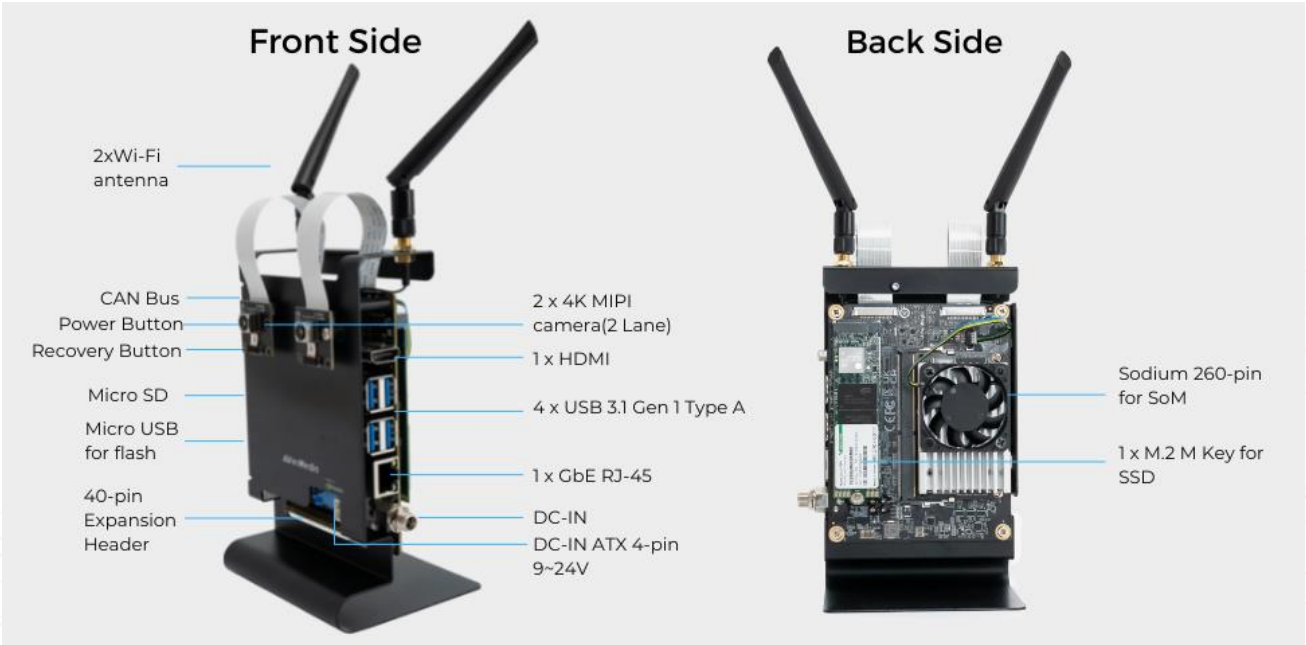


Expandability

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	1. raspberry pi camera v2 2. Manufacturer: APPRO.PHO - B-04: IMX179 (8M) MIPI, 1080P (30fps) - C-04: IMX290 (2M) MIPI, 1080P (30fps) - C-05: IMX290 (2M) +ISP (YUV), 1080P (30fps) 3. Manufacturer: e-con Systems - e-CAM131_CUNX - 4K Camera - e-CAM50_CUNX - 5.0 MP - e-CAM24_CUNX - Color Global shutter Camera
	36-pin MIPI connector	Manufacturer: APPRO.PHO - B-03: IMX334 (4K) MIPI, 4K (30fps) - A-06: IMX334 (4K) V-by-One® HS x1, 4K (30fps)

Specifications

Model	D131OXB		D131NXB	D131NOB
SoM	NVIDIA Jetson Orin NX		NVIDIA Jetson Xavier™ NX	NVIDIA Jetson Nano™
Networking	1x GbE RJ-45 (PoE option) 1xM.2. key E 2230 for Wi-Fi			1x GbE RJ-45 (PoE option)
Display Output	1x HDMI 2.0 (3840 x 2160 at 60Hz)			
Temperature	Operating temperature 0℃~60℃ (TBD) Storage temperature -40℃ ~ 85℃ Relative humidity 40℃ @ 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 3.1 Gen 1 Type A			
Storage	1x M.2. key M 2280 for SSD	1x micro-SD card slot 1x M.2. key M 2280 for SSD		
Expansion Header	40-pin: 1x UART, 2x SPI, 2x I2C, 1x I2S, GPIOs 1x CAN			
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) Weight: (TBD)			
Certifications	CE, FCC, KC			
Package	1 x Carrier Board 1 x NVIDIA® Jetson module + Fan 1 x Stand Power cord and Adapter 1 x 256G SSD 2 x APPRO.PHO IMX179 Camera			