AIR6NO-C-MB NX HDMI2.0



Al Edge for 4K60

Features

- Powered by NVIDIA® Jetson Orin™ NX up to 100 / 70 TOPS
- Business Card Size (90mm×55mm)
- 1×HDMI2.0 In&Loop
- 1×USB3.2 Gen2
- 1×Mini DisplayPort





Specifications

NVIDIA Jetson Orin™ NX 8GB	System			
1.5MB L2 + 4MB L3 GPU 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores Al Performance NVIDIA Jetson Orin™ NX 8GB 70 TOPS 100 TOPS NVIDIA Jetson Orin™ NX 8GB NVIDIA Jetson Orin™ NX 16GB 100 TOPS NVIDIA		NVIDIA Jetson Orin™ NX 8GB	NVIDIA Jetson Orin™ NX 16GB	
Al Performance Al Performance NVIDIA Jetson Orin™ NX 8GB 70 TOPS NVIDIA Jetson Orin™ NX 8GB 70 TOPS NVIDIA Jetson Orin™ NX 8GB NVIDIA Jetson Orin™ NX 16GB 100 TOPS NVIDIA Jetson Orin™ NX 16GB 100 TOPS NVIDIA Jetson Orin™ NX 16GB 8GB LPDDRS Interface Supports External NVMe 1×Micro SD Card Slot Display Interface 1×RIA5 for 10/100/1000Mbps Ethernet DHCP Client M.2 Expansion Slot 1×M.2 2230 K Key PCle Gen4×2 Slot 1×M.2 2230 K Key PCle Gen4×1 Slot 1×M.2 2230 E Key PCle Gen4×1 Slot USB 1×USB3.2 Gen2 (Type-C) Default: 2×4MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) MIPI Option: 4×2MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) 14 Pin Header 1×USB2.0 4×2PID (1×UART 1×I2C) 3 Pin Header 1×UART	CPU			
Al Performance NVIDIA Jetson Orin™ NX 8GB 70 TOPS NVIDIA Jetson Orin™ NX 16GB 100 TOPS System Memory NVIDIA Jetson Orin™ NX 16GB 8GB LPDDRS NVIDIA Jetson Orin™ NX 16GB 16GB LPDDRS Interface Storage Supports External NVMe 1×Micro SD Card Slot Display Interface 1×Mini DP1.4 Ethernet DHCP Client M.2 Expansion Slot 1×M.2 2230 M Key PCle Gen4×2 Slot 1×M.2 2230 E Key PCle Gen4×1 Slot USB 1×USB3.2 Gen2 (Type-C) Default: 2×4MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) MIPI Option: 4×2MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) 14 Pin Header 1×USB2.0 4×GPIO 1×UART 1×I2C 3 Pin Header 1×UART 1×I2C 3 Pin Header 1×UART 1×I2C	CDLI			
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Option: 4×2MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) 14 Pin Header 1×USB2.0 4×GPIO 1×UART 1×I2C 3 Pin Header 1×UART Peripheral Communication				
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1×USB2.0 4×GPIO 1×UART 1×I2C 3 Pin Header 1×UART				
4×GPIO 1×UART 1×I2C 3 Pin Header 1×UART	Peripheral Communication			
1×UART 1×I2C 3 Pin Header 1×UART				
3 Pin Header 1×UART				
1×UART Peripheral Communication		1×I2C		
1×UART Peripheral Communication		3 Pin Header		
Peripheral Communication 2x6 Pin Header				
		2x6 Pin Header		
3×GPIO				
1×RS485				
1×I2C		1×12C		
8 Pin Phoenix Connector				
3×GPIO 1×RS232				
1×RS232 1×I2C				
Misc. Features Firmware Upgradable	Misc. Features	Firmware Upgradable		

Key Points

Video Feature	
Video Input	1×HDMI2.0
Video Output	1×HDMI2.0 (Loop)

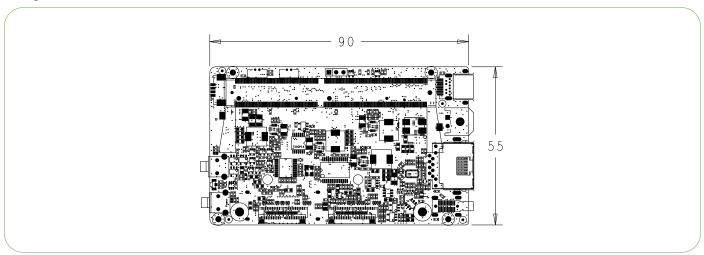
Video Feature			
	AV1 (UHP)		
Video Encode	1×4K60 3×4K30 6×1080p60 12×1080p30		
	H.265 (UHP)		
	1×4K60 3×4K30 6×1080p60 12×1080p30		
	H.264 (UHP)		
	1×4K60 2×4K30 5×1080p60 11×1080p30 AV1 (Main Profile)		
	1×8K30 2×4K60 4×4K30 9×1080p60 20×1080p30		
	H.265 (Main, Main10)		
Video Decode	1×8K30 2×4K60 4×4K30 9×1080p60 18×1080p30		
	H.264 (Baseline, Main, High) 1×4K60 2×4K30 5×1080p60 11×1080p30		
	VP9 (Profile 0, Profile 2)		
	1×4K60 3×4K30 7×1080p60 15×1080p30		
SDK			
	Capture		
	High Performance Renderer		
	Image Snapshot Deinterlace, Alpha Blending Engine		
	Auto Signal Detection		
	2D/3D Video, Audio and VANC Streams Capture		
	Record		
	Encrypt / Sync / Clone / Recording Time-Shifting / Rewind / Pre-Event / Recording		
QCAP	Multi-Streams (3D) Recording		
	Animation Transition Effect		
	Video Cropping, Scaling and Alpha Blending Engine		
	Stream 2D/3D Universal Stream Client		
	2D/3D Multi-Streams Stream Server		
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*), Dante AV-H (*)		
	Animation Transition Effect		
	Video Cropping, Scaling and Alpha Blending Engine *Separate License Required		
QDEEP	Al SDK Integrated Multiple Algorithms and Deep-Learning Models in Various Fields of Applications		
	Face Recognition Objects Detection		
	Objects Segment		
	Optical Character Recognition License Plate Recognition		
	Customizable Video AI Functions Upon Request		
Software (Optional)			
Xtreamer	Web Based User Interface		
	Encode / Decode AV1, H.26X		
	Color Format Adjust		
	444 / 422 / 420, 10Bit / 8Bit Select		
	Record MP4 TS		
	MP4, TS Stream / Network		
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*),		
	Dante AV-H (*)		
	*Separate License Required		

Environment

Development Environment		
OS	Ubuntu: 20.04	
Kernel	5.10.104-tegra or Higher	
BSP	Linux for Tegra(L4T) R35.3.1 or Higher	
SDK	JetPack 5.1.1 or Higher	
Environment		
Power Supply	DC input: 9~24V	
Power Consumption	TBA	
Operating Temperature	Standard Version: 0~60 °C with Airflow	
Storage Temperature	-20~80 ° C	

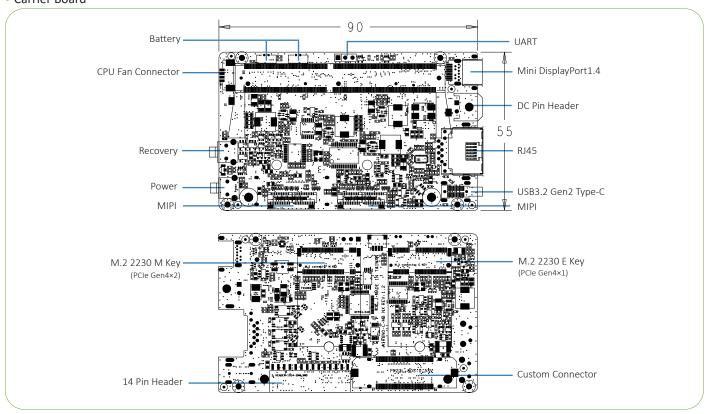
Mechanical

- Dimension of main Board: 90mm×55mm
- Weight: TBA

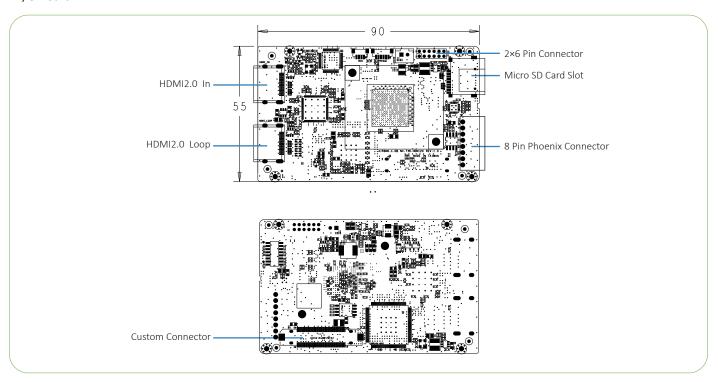


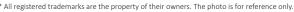
I/O Layout

• Carrier Board



• I/O Board





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