YUAN

AIR6N0-C-MB NX 4×USB3.2

AI Edge for 4xUSB3.2

Features

- Powered by NVIDIA[®] Jetson Orin[™] NX up to 100 / 70 TOPS
- Business Card Size
- 2×M.2, Gen 4×2 M Key / Gen 4×1 E Key
- 1×USB3.2 Gen2, 4×USB3.2 Gen1
- 1×Mini DisplayPort



Specifications

System			
СРИ	NVIDIA Jetson Orin™ NX 8GB 6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	NVIDIA Jetson Orin™ NX 16GB 8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	
GPU	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores		
AI Performance	NVIDIA Jetson Orin™ NX 8GB 70 TOPS	NVIDIA Jetson Orin™ NX 16GB 100 TOPS	
System Memory	NVIDIA Jetson Orin™ NX 8GB 8GB LPDDR5	NVIDIA Jetson Orin™ NX 16GB 16GB LPDDR5	
Interface			
Storage	Supports External NVMe 1×Micro SD Card Slot		
Display Interface	1×Mini DP1.4		
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client		
Expansion Slot	M.2 1×M.2 2230 M Key PCIe Gen4×2 Slot 1×M.2 2230 E Key PCIe Gen4×1 Slot		
USB	1×USB3.2 Gen2 (Type-C) 4×USB3.2 Gen1 (Type-A)		
MIPI	Default: 2×4MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) Option: 4×2MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card)		
Peripheral Communication	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 2×6 Pin Header 3×GPIO 1×I2C 1×R5485 8 Pin Phoenix Connector 1×R5232 1×I2C 1×R52910		
Misc. Features	Firmware Upgradable		

Add-On Cards / SDK / Software

Video Feature		
	AV1 (UHP) 1×4K60 3×4K30 6×1080p60 12×1080p30	
	H.265 (UHP)	
Video Encode	1×4K60 3×4K30 6×1080p60 12×1080p30	
	H.264 (UHP)	
	1×4K60 2×4K30 5×1080p60 11×1080p30	
Video Decode	AV1 (Main Profile)	
	1×8K30 2×4K60 4×4K30 9×1080p60 20×1080p30	
	H.265 (Main, Main10)	
	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 AI SDK Integrated Multiple Algorithms and Deep-Learning Models in	n Various Fields of Applications
	Face Recognition	
	Objects Detection	
QDEEP	Objects Segment Optical Character Recognition	
	License Plate Recognition	
	Customizable Video AI Functions Upon Request	
Software (Optional)		
	Capture Auto Signal Detection	
	Deinterlace, OSD, Color Adjustment	
	Image Snapshot Animation Transform Effect for PGM	anna thai
	Record	
	AV1, H.26X	
Stream Catcher Pro	MP4, TS	
	Multi-Stream Recording Schedule Recording	
	Stream	
	Multi-Streams Stream Server	
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*),	
	Dante AV-H (*) *Separate License Required	
	Web Based User Interface	
	Encode / Decode	
Xtreamer	AV1, H.26X	
	Color Format Adjust	
	444 / 422 / 420, 10Bit / 8Bit Select	
	Record MP4, TS	
	Stream / Network	
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*),	
	Dante AV-H (*)	
	*Separate License Required	

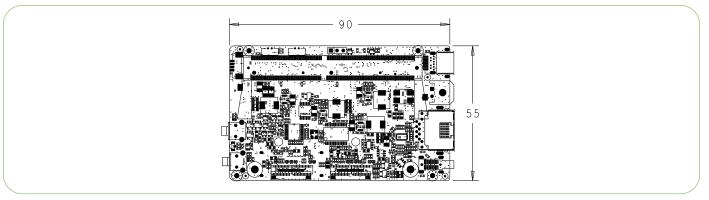
Environment

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

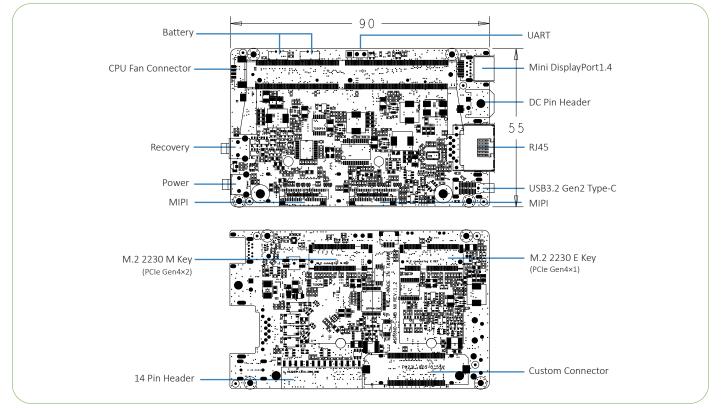
• Dimension of main Board: 90mm×55mm

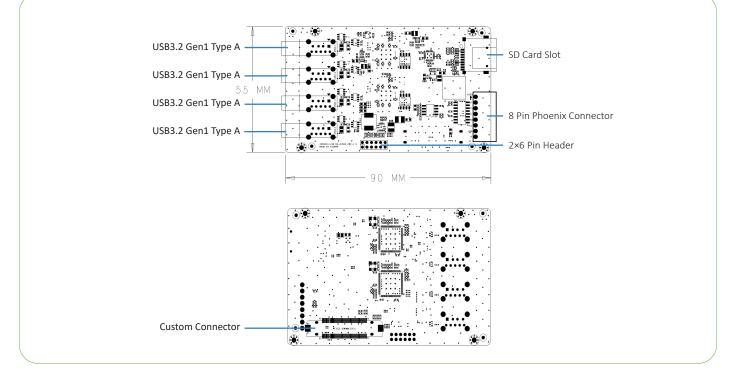
• Weight: TBA



I/O Layout

Carrier Board







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