

AIR6N0-C-MB NX

YUAN

Business Card Size AI Edge Motherboard

Features

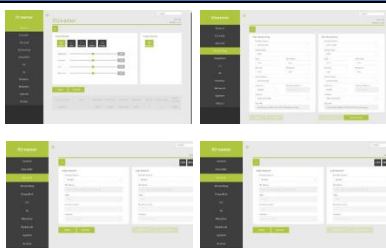
- Powered by NVIDIA® Jetson Orin™ NX Super up to 157 / 117 TOPS
- Business Card Size
- 2×M.2 Gen 4×2 M Key / Gen 4×1 E Key
- 1×USB3.2 Gen2
- 1×Mini DisplayPort



Specifications

System				
SOM	NVIDIA Jetson Orin™ NX 16GB Super	NVIDIA Jetson Orin™ NX 8GB Super	NVIDIA Jetson Orin™ Nano 8GB Super	NVIDIA Jetson Orin™ Nano 4GB Super
CPU	8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3	
GPU	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores		1024-core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	512-core NVIDIA Ampere Architecture GPU with 16 Tensor Cores
AI Performance	157 TOPS	117 TOPS	67 TOPS	34 TOPS
System Memory	16GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102 GB/s	4GB 64-bit LPDDR5 51 GB/s
Interface				
Storage	Supports External NVMe			
Display Interface	1×Mini DP1.4			
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet (DHCP Client)			
Expansion Slot	1×M.2 2230 M Key PCIe Gen4×2 Slot (Nano: Gen3×2) 1×M.2 2230 E Key PCIe Gen4×1 Slot (Nano: Gen3×1)			
USB	1×USB3.2 Gen2 (Type-C)			
MIPI	8 MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card)			
Peripheral Communication	Custom Connector 2×USB3.2 Gen2 1×PCIe Gen4×4 4×GPIO 2×UART (UART0(*), UART1) 3×I2C 1×CAN Bus			
	10 Pin Header 1×USB2.0 4×GPIO 1×I2C			
	6 Pin Wafer 1×UART (*)			
	4 Pin Header 5V / 3A			
	* Please select either Custom Connector UART or 6 Pin Wafer UART to use			
Misc. Features	Firmware Upgradable			
Development Environment				
JetPack	6.2 or Higher			
Environment				
Power Supply	DC input : 12~36V			
Power Consumption	TBA			
Operating Temperature	0~60` C with Airflow			
Storage Temperature	-20~80` C			
Certification	CE, FCC			

SDK / Software

Video Feature				
SOM	NVIDIA Jetson Orin™ NX 16GB Super	NVIDIA Jetson Orin™ NX 8GB Super	NVIDIA Jetson Orin™ Nano 8GB Super	NVIDIA Jetson Orin™ Nano 4GB Super
Video Encode	AV1 (UHP) 1×4K60 3×4K30 6×1080p60 12×1080p30		1080p30 supported by 1-2 CPU cores	
	H.265 (UHP) 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 10×1080p60 20×1080p30		AV1 (Main Profile) 1×4K60 2×4K30 5×1080p60 10×1080p30	
	H.265 (Main, Main10) 1×8K30 2×4K60 4×4K30 9×1080p60 18×1080p30		H.265 (Main, Main10) 1×4K60 2×4K30 5×1080p60 11×1080p30	
	H.264 (Baseline, Main, High) 1×4K60 2×4K30 5×1080p60 11×1080p30		H.264 (Baseline, Main, High) 1×4K30 3×1080p60 7×1080p30	
	VP9 (Profile 0, Profile 2) 1×4K60 3×4K30 7×1080p60 15×1080p30		VP9 (Profile 0, Profile 2) 1×4K60 2×4K30 5×1080p60 10×1080p30	
SDK				
QCAP	Capture High Performance Renderer Image Snapshot De-interlace, 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 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 (*) Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine *Separate License Required			
QDEEP	AI 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			
	Stream / Network RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*) *Separate License Required			

Mechanical

- Dimension: 90mm × 55mm
- Weight: 130g (With SOM and Fan)

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