

# AIR6N0-C-MB NX 4×HDMI

YUAN

### Card Size AI Edge with Multi AloT Expansion

#### Features

- · Powered by NVIDIA<sup>®</sup> Jetson Orin<sup>™</sup> NX Super up to 157 / 117 TOPS
- Business Card Size
- · 4×HDMI In
- · 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 <sup>®</sup> Cortex <sup>®</sup> -A78AE v8.2 64-Bit CPU 2MB L2 + 4MB L3	6-Core Arm <sup>®</sup> Cortex <sup>®</sup> -A78AE v8.2 64-Bit CPU 1.5MB L2 + 4MB L3		2 64-Bit CPU 1.5MB L2 + 4MB L3	
GPU		64-Bit CPU 2/MB L2 + 4/MB L3     64-Bit CPU 1.5/MB L2 + 4/MB L3       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 1×Micro SD Card Slot				
Display Interface	1×Mini DP1.4				
Ethernet	1×RJ45 for 10/100/1000Mbps Ethe	rnet ( DHCP Client )			
Expansion Slot	1×M.2 2230 Key PCle Gen4×1 Slot ( Nano: Gen3×2 ) 1×M.2 2230 E Key PCle 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	10 Pin Header 1×USB2.0 4×GPIO 1×I2C 6 Pin Wafer 1×UART (*) 4 Pin Header 5V / 3A 8 Pin Phoenix Connector 1×GPIO 1×R5232 (*) 1×I2C 2×6 Pin Header 3×GPIO 1×R5485 1×I2C * Please select either R5232 of 8 Pin Phoenix Connector or UART of 6 Pin Wafer 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				



#### Key Points

Video Feature			
Input	4×HDMI		

#### SDK / Software

Video Feature					
SOM	NVIDIA Jetson Orin <sup>™</sup> NX	NVIDIA Jetson Orin <sup>™</sup> NX	NVIDIA Jetson Orin <sup>™</sup> Nano	NVIDIA Jetson Orin™ Nano	
30101	16GB Super	8GB Super	8GB Super	4GB Super	
	AV1 ( UHP )				
	1×4K60   3×4K30   6×1080p60	12×1080p30			
	H.265 ( UHP )		1090n20 supported by 1.2 CPU a	1000-20 suggested by 1.2 CDU same	
Video Encode	1×4K60   3×4K30   6×1080p60	12×1080p30	1080p30 supported by 1-2 CP0 C	1080p30 supported by 1-2 CPU cores	
	H.264 ( UHP )				
	1×4K60   2×4K30   5×1080p60   11×1080p30				
	AV1 (Main Profile ) AV1 (Main Profile )				
	1×8K30   2×4K60   4×4K30   10×1080p60   20×1080p30		1×4K60   2×4K30   5×1080p60   10×1080p30		
	H.265 ( Main, Main10 )		H.265 ( Main, Main10 )		
	1×8K30   2×4K60   4×4K30   9×1080p60   18×1080p30		1×4K60   2×4K30   5×1080p60   11×1080p30		
Video Decode	H.264 (Baseline, Main, High)		H.264 ( Baseline, Main, High )		
	1×4K60   2×4K30   5×1080p60	11×1080p30	1×4K30   3×1080p60   7×1080	1×4K30   3×1080p60   7×1080p30	
	VP9 (Profile 0, Profile 2)		VP9 (Profile 0, Profile 2)		
	1×4K60   3×4K30   7×1080p60	15×1080p30	1×4K60   2×4K30   5×1080p60	)   10×1080p30	
SDK					
	Capture				
	High Performance Renderer				
	Image Snapshot				
	De-interlace, Alpha Blending En	gine			
	Auto Signal Detection				
	2D/3D Video, Audio and VANC Streams Capture				
	Record				
	Encrypt / Sync / Clone / Recordi	ng			
	Time-Shifting / Rewind / Pre-Ev	ent / 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 (*)				
	Animation Transition Effect				
	Video Cropping, Scaling and Alpha Blending Engine				
	*Separate License Required				
	AI SDK Integrated Multiple Algorithms and Deep-Learning Models in Various Fields of Applications				
	Face Recognition				
	Objects Detection				
QDEEP	Objects Segment Optical Character Recognition				
	License Plate Recognition Customizable Video AI Functions Upon Request				
Software (Ontional)	Customizable video Al Puliction	s opon kequest			
Software (Optional)	with the state of				
	Web Based User Interface		A Caracteria Control C	and	
	Encode / Decode				
	AV1, H.26X				
	Color Format Adjust				
Xtreamer	444 / 422 / 420, 10Bit / 8Bit Select				
Automet	Record				
		MP4, TS			
	Stream / Network				
	RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*)				
	*Separate License Required				



Software (Optional)		
SCP	Capture Auto Signal Detection Deinterlace, OSD, Color Adjustment Image Snapshot Animation Transform Effect for PGM Record AV1, H.26X MP4, TS Multi-Stream Recording Schedule Recording Stream Multi-Streams Stream Server RTSP, RTMP, HLS, SRT, TS, WebRTC, Full NDI (*), NDI-HX(*) * Separate License Required	

#### **Mechanical**

- Dimension: 90mm × 55mm
- $\cdot$  Weight: 185g (With SOM and Fan )

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