

# AIR6N0-C-MB NX I/O

Card Size AI Edge with Multi AIoT Expansion

YUAN

### Features

- Powered by NVIDIA® Jetson Orin™ NX Super up to 157 / 117 TOPS
- Business Card Size
- 3×M.2, 8×MIPI CSI-2 Lanes and RS232 / RS485 / GPIO
- 2×USB3.2 Gen2
- 1×Mini DisplayPort



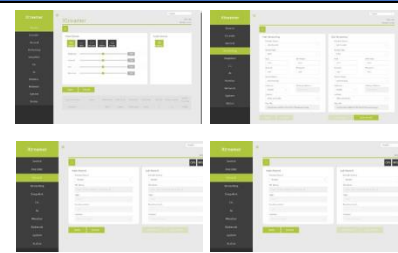
### Specifications

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 1×Micro SD Card Slot			
Display Interface	1×Mini DP1.4			
Ethernet	1×RJ45 for 10/100/1000Mbps Ethernet ( DHCP Client )			
Expansion Slot	1×M.2 2280 M Key PCIe Gen4×4 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 ) 1×USB3.2 Gen1 ( Type-A )			
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 ( CON2 ) 1×GPIO 2×I2C  8 Pin Phoenix Connector ( CON3 ) 1×RS232(*) 1×RS485 1×GPIO  2 Pin Header ( CON4 ) 1×GPIO  2 Pin Header ( CON5 ) 1×GPIO  * Please select either RS232 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
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: 165g ( With SOM and Fan )

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### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660