YUAN



AIR6N0-C-MB NX SDVoE-C

AI Edge for 10G Copper

Features

- · Powered by NVIDIA[®] Jetson Orin[™] NX Super up to 157 / 117 TOPS
- Business Card Size
- Support SDVoE
- · 1×USB3.2 Gen2
- 1×Mini DisplayPort



Specifications

System						
	NVIDIA Jetson Orin™ NX	NVIDIA Jetson Orin™ NX	NVIDIA Jetson Orin™ Nano	NVIDIA Jetson Orin™ Nano		
SOM	16GB Super	8GB Super	8GB Super	4GB Super		
CPU	8-Core Arm [®] Cortex [®] -A78AE v8.2	6-Core Arm [®] Cortex [®] -A78AE v8.2				
	64-Bit CPU 2MB L2 + 4MB L3	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	512-core NVIDIA Ampere		
	1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores		Architecture GPU	Architecture GPU		
			with 32 Tensor Cores	with 16 Tensor Cores		
AI Performance	157 TOPS	117 TOPS	67 TOPS	34 TOPS		
System Memory	16GB 128-bit LPDDR5	8GB 128-bit LPDDR5	8GB 128-bit LPDDR5	4GB 64-bit LPDDR5		
	102.4GB/s	102.4GB/s	102 GB/s	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)					
Expansion slot	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)					
	10 Pin Header					
	1×USB2.0					
	4×GPIO					
	1×I2C					
Peripheral Communication	6 Din Wafer					
	6 Pin Wafer 1×UART					
	4 Pin Header					
	5V / 3A					
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	
Video Input	1×RJ45 for 10Gbps Ethernet (Support SDVoE and DHCP Client)



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 H.265 (UHP) 1×4K60 3×4K30 6×1080p60 12×1080p30 H.264 (UHP)		3GB Super 4GB Super 1080p30 supported by 1-2 CPU cores			
Video Decode	1×4K60 2×4K30 5×1080p60 11×1080p30 AV1 (Main Profile) 1×8K30 2×4K60 4×4K30 10×1080p60 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		AV1 (Main Profile) 1×4K60 2×4K30 5×1080p60 10×1080p30 H.265 (Main, Main10) 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 2×4K30 5×1080p60 10×1080p30			
SDK	1					
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 Universal Stream Stream Server RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*) Animation Transition Effect Video Cropping, Scaling and Alpha Blending Engine					
QDEEP	*Separate License Required 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)	ii					
Xtreamer	Web Based User Interface Encode / Decode AV1, H.26X Color Format Adjust 444 / 422 / 420, 10Bit / 8Bit Sele Record MP4, TS Stream / Network RTSP, RTMP, HLS, SRT, TS, WebRT *Separate License Required					

Mechanical

- Dimension: 90mm × 55mm
- $\cdot\,$ Weight: 226g (With SOM and Fan)

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