

AIR6N0-C-MB NX TRX

YUAN

1U Height, 4K60 AV1 & NDI Transceiver with AI

Features

- Powered by NVIDIA® Jetson Orin™ NX Super / NVIDIA® Jetson Orin™ Nano Super
- 4K60 Stream Transceiver
- Various I/O Daughter Board
- 2xM2 M Key, Gen 4x2 / Gen 4x1
- 1x12G-SDI Output (Optional)



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	1xHDMI2.0 1x12G-SDI (Optional)			
Ethernet	1xRJ45 for 10/100/1000Mbps Ethernet (DHCP Client)			
Expansion Slot	1xM.2 2280 M Key PCIe Gen4x1 Slot (Nano: Gen3x1) 1xM.2 2280 M Key PCIe Gen4x2 Slot (Nano: Gen3x2)			
USB	1xUSB3.2 Type-A 1xUSB3.2 Type-C (OTG) 2xUSB2.0 Type-A			
Audio	1x3.5mm Line In 1x3.5mm Line Out			
Misc. Features	Firmware Upgradable Tally LED			
Development Environment				
JetPack	6.2 or Higher			
Environment				
Power Supply	DC Input : 12~36V Support POE++ Input			
Power Consumption	50W			
Operating Temperature	0~60`C with Airflow			
Storage Temperature	-20~80`C			
Certification	CE, FCC			

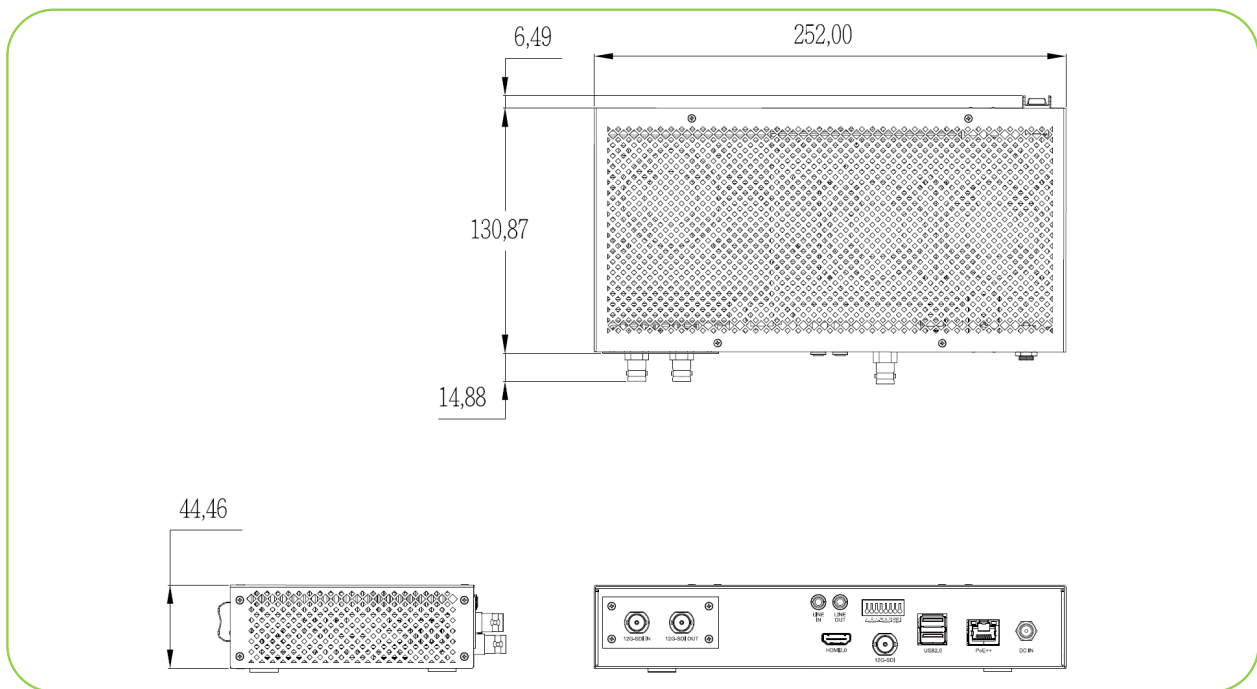
SDK / Software

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 PRO	Web Based User Interface			
	Encode & Decode Video Codec: AV1, H.26X, HEVC, SHQ Audio Codec: AAC, PCM Physical (HDMI2.0/12G SDI) Playback (Support MP4, TS, MOV) Failover / Preset / Hotkey Record to USB/NAS/FTP (Support MP4, TS, MOV) Scaling / Crop / Dynamic BitRate / Multi-Stream			
	Stream / Network RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*), Dante AV-H (*), SkyLink X *Separate License Required			
	Usage Monitoring (Long Term Tracking) CPU, GPU, Memory, Temperature, Disk, VENC, AENC, etc. Error Code			
	AI Model Import and Export Face Recognition Objects Detection Objects Segment Traffic License Plate Recognition Customizable Video AI Functions Upon Request			

Xtreamer PRO	OSD	
	Text and Image (PGN, JPG, GIF)	
	Support size, font, color, position, border, transparency	
	Marquee	
	Hotkey / Preset	
	Management Server	
	Monitor/ Software Update/ AI Model Import	
	PTZ	
	Visca over IP and Serial Port	

Mechanical

- Dimension of Case: 252mmx130.87mmx44.46mm
- Weight: TBA



I/O Layout

Case



Power Switch
Signal LED
Power LED
Reset to Default Button

USB3.2 OTG
Device Mode

USB3.2



LINE IN
LINE OUT

RS485 /
RS232 /
GPIO

HDMI2.0
Out

12G-SDI
Out
(Optional)

2x
USB2.0

Ethernet
1G (PoE++)

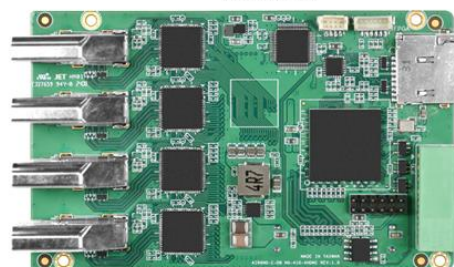
DC In

Optional Daughter Board

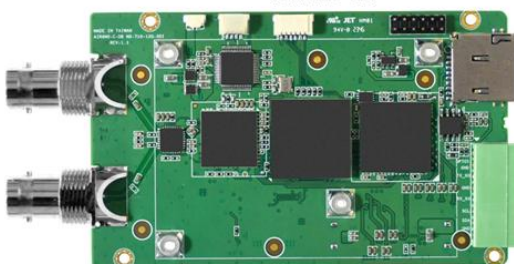
1CH HDMI2.0



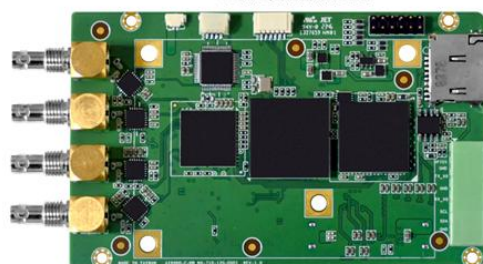
4CH HDMI



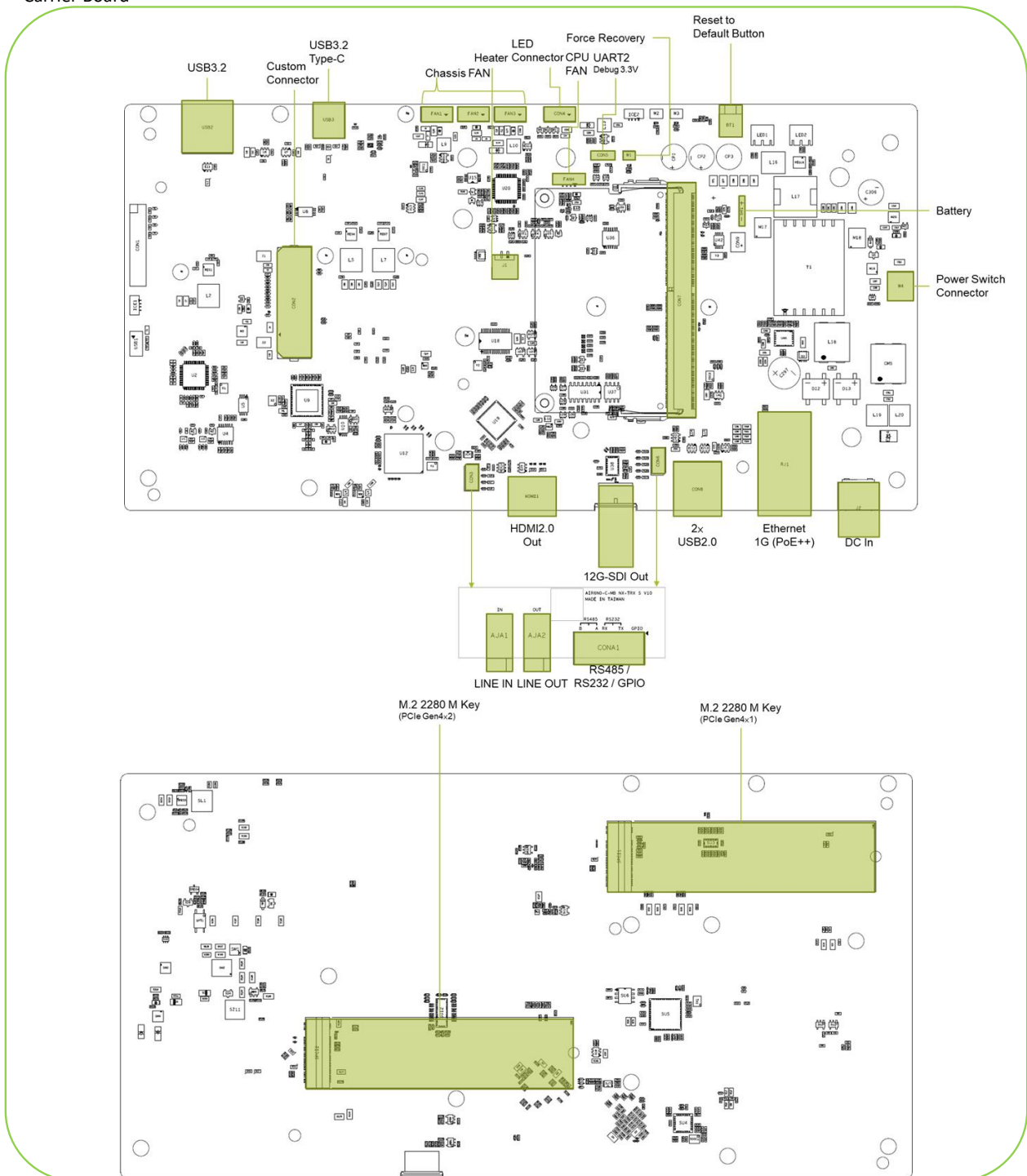
1CH 12G-SDI



1CH QuadLink SDI



Carrier Board



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