

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
- 2×M2 M Key, Gen 4×2 / Gen 4×1
- 1×12G-SDI Output (Optional)





Specifications

| System | | | | | | | | |
|--------------------------|--|--|--|------------------------------|--|--|--|--|
| 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 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 Archited | DIA Ampere Architecture GPU with 32 Tensor Cores 47chitecture GPU with 32 Tensor Cores 47chitecture GPU 44chitecture GPU 44ch | | | | | | |
| 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×HDMI2.0 1×12G-SDI (Optional) | | | | | | | |
| Ethernet | 1×RJ45 for 10/100/1000Mbps Ethernet (DHCP Client) | | | | | | | |
| Expansion Slot | 1×M.2 2280 M Key PCIe Gen4×1 Slot (Nano: Gen3×1) 1×M.2 2280 M Key PCIe Gen4×2 Slot (Nano: Gen3×2) | | | | | | | |
| USB | 1×USB3.2 Type-A 1×USB3.2 Type-C (OTG) 2×USB2.0 Type-A | | | | | | | |
| Audio | 1×3.5mm Line In 1×3.5mm Line Out | | | | | | | |
| Peripheral Communication | 4×Fan Connector 1×Custom Connector 1×LED Connector | | | | | | | |
| Misc. Features | Firmware Upgradable | | | | | | | |
| 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 | NVIDIA Jetson Orin™ NX | NVIDIA Jetson Orin [™] Nano | NVIDIA Jetson Orin [™] Nano | | | | | | |
| | 16GB Super | 8GB Super | 8GB Super | 4GB Super | | | | | | |
| Video Encode | AV1 (UHP) | | | | | | | | | |
| | 1×4K60 3×4K30 6×1080p | 60 12×1080p30 | | | | | | | | |
| | H.265 (UHP) | | 1080p30 supported by 1-2 CPU cores | | | | | | | |
| | 1×4K60 3×4K30 6×1080p | 60 12×1080p30 | _ | | | | | | | |
| | H.264 (UHP) | | | | | | | | | |
| | 1×4K60 2×4K30 5×1080p | ьо 11×1080р30 | | | | | | | | |
| Video Decode | AV1 (Main Profile) | 10-10-00-00 - 20-10-00-20 | | V1 (Main Profile) 1×4K60 2×4K30 5×1080p60 10×1080p30 | | | | | | |
| | 1×8K30 2×4K60 4×4K30 | 10×1080p60 20×1080p30 | | 50 10×1080p30 | | | | | | |
| | H.265 (Main, Main10) 1×8K30 2×4K60 4×4K30 | 9×1080560 18×1080520 | H.265 (Main, Main10) 1×4K60 2×4K30 5×1080p60 11×1080p30 | | | | | | | |
| | H.264 (Baseline, Main, High) | 3~1080000 18~1080030 | H.264 (Baseline, Main, High) | | | | | | | |
| | 1×4K60 2×4K30 5×1080p | 60 11×1080p30 | 1×4K30 3×1080p60 7×108 | 30n30 | | | | | | |
| | VP9 (Profile 0, Profile 2) | | VP9 (Profile 0, Profile 2) | | | | | | | |
| | 1×4K60 3×4K30 7×1080p | 60 15×1080p30 | | 1×4K60 2×4K30 5×1080p60 10×1080p30 | | | | | | |
| SDK | | | | | | | | | | |
| | 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 / Reco | Encrypt / Sync / Clone / Recording | | | | | | | | |
| | - | Time-Shifting / Rewind / Pre-Event / Recording | | | | | | | | |
| QCAP | Multi-Streams (3D) Recordi | 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 | | | | | | | | |
| QDEEP | | Objects Detection | | | | | | | | |
| QUEEP | Objects Segment | | | | | | | | | |
| | Optical Character Recognition | | | | | | | | | |
| | | License Plate Recognition Customizable Video AI Functions Upon Request | | | | | | | | |
| Software (Optional) | | ions opon nequest | | | | | | | | |
| Software (Optional) | Web Record Licer Interface | | | | | | | | | |
| | Web Based User Interface | | | | | | | | | |
| | Encode & Decode | | \Xi YUAN StreamerWeb | 💽 🕥 Die 🔒 annes | | | | | | |
| | Video Codec: AV1, H.26X, HE Audio Codec: AAC, PCM | NC, 3HQ | Source Exiting Na. Alea Type Description | ÷ Ast Source b Delay Buffor Hocorection Fakower | | | | | | |
| | Physical (HDMI2.0/12G SDI) | | 1 Socier 0 NDI Oningi 11,044,1 | lana 500 ma Nover Na 🗵 tell 🖉 Dente | | | | | | |
| Xtreamer PRO | Playback (Support MP4, TS, | | 2 Sozar I NOI Circle 1040 1 Noit | tere 30 m Nove Ni Z tel Z Dato | | | | | | |
| | Failover / Preset / Hotkey | | 5 Soccer 2 NDR Concer 1 NDR 4 Big 3 RTSP Rep.V10.13.42.72 | lanne 300 ms Never No Z Eas Z Danke 256464 300 ms Never No Z Eas Z Danke | | | | | | |
| | Record to USB/NAS/FTP (Su | pport MP4, TS, MOV) | e 5 Big 4 RTSP mp.173.13.43.23 6 | | | | | | | |
| | Scaling / Crop / Dynamic Bit | | 6 Big 5 RTSP (%)113.13.43.22 | | | | | | | |
| | Stream / Network | | | | | | | | | |
| | | bRTC. NDI-HX (*), Full NDI (*), Dante AV- | ·H (*), | | | | | | | |
| | SkyLink X | | I YUAN StreamerWeb | Updina: Eine Zzza: 👞 🅤 EN 🙆 admin | | | | | | |
| | *Separate License Required | | | | | | | | | |
| | Usage Monitoring (Long Term | Tracking) | CPU 1 GPU 1 | Memory 1 Disk 1 VENC 1 | | | | | | |
| | CPU, GPU, Memory, Tempera | | Video Source Audio Source Channel 1 HDMI Enterbedied | Resolution Frame Role Channels Bits per Sample Bengle Preparenty 2849 x 2160 50:54 2 10 46000 | | | | | | |
| | Error Code | - | History Data | | | | | | | |
| | AI Model Import and Export | N | | | | | | | | |
| | Face Recognition | | man man man war war war | | | | | | | |
| | Objects Detection | | and a second | | | | | | | |
| | Objects Segment | ♣ (%) (♣ 09) ● Mercy ♣ (%) ▲ 1150 | | | | | | | | |
| | Traffic | | | | | | | | | |
| | License Plate Recognition | | | | | | | | | |
| | Ŭ | | | | | | | | | |

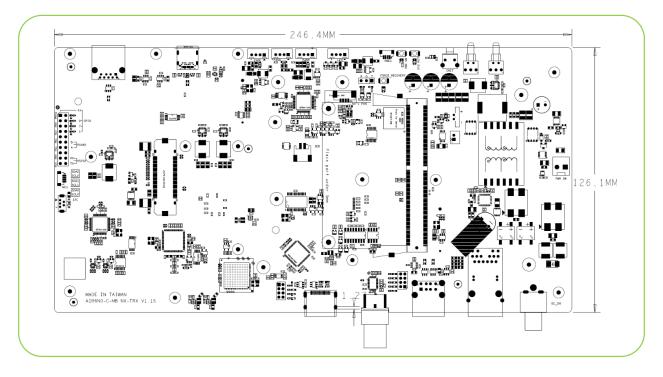




| | OSD Text and Image (PGN, JPG, GIF) Support size, font, color, position, border, transparency Marquee Hotkey / Preset | | | | | 🔹 🌀 EN 🗵 sána | | |
|--------------|--|---|--------------------|-------|---|---------------|----------------------------------|------------------------------|
| Xtreamer PRO | | | 46. 1 2 3 | Datch | Madel Harme Language translation Taiwan Halfs Person Face | Ja | ecription panosa rifection | छ दश छ दश छ दश छ दश |
| | Management Server Monitor/ Software Update/ AI Model Import PTZ | - | | • | | | | |
| | Visca over IP and Serial Port | | | | | | | |

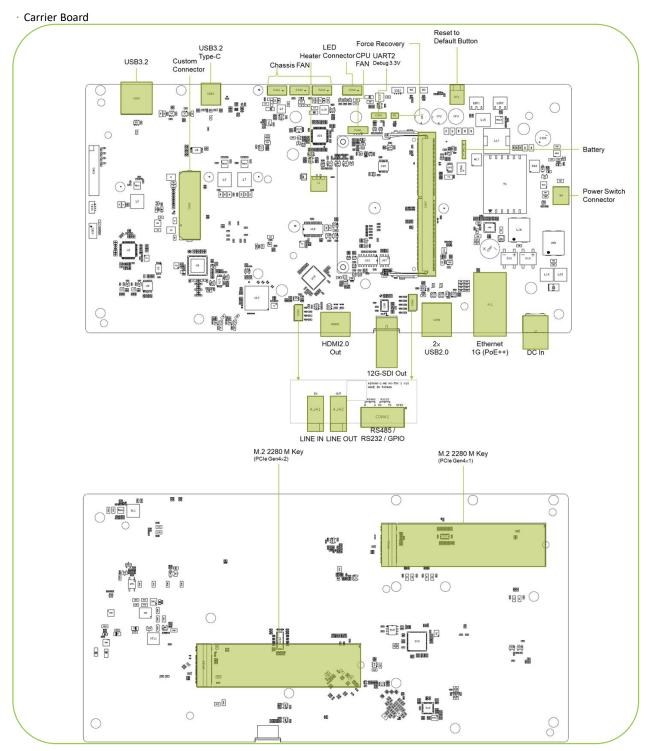
Mechanical

- · Dimension of PCB: 246.4mmx126.1mm
- Weight: TBA





I/O Layout



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