

AIR6N0-C-MB NX 4×HDMI

YUAN

Card Size AI Edge with Multi AIoT Expansion

Features

- Powered by NVIDIA® Jetson Orin™ 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



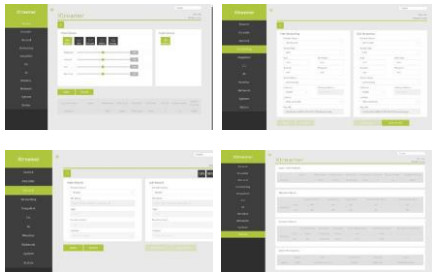
Specifications

| 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® 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 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) | | | |
| 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×RS232 (*) 1×I2C 2×6 Pin Header 3×GPIO 1×RS485 1×I2C * 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 | | | |

Key Points

| Video Feature | |
|---------------|--------|
| Input | 4xHDMI |

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) 1x4K60 3x4K30 6x1080p60 12x1080p30 | | 1080p30 supported by 1-2 CPU cores | |
| | H.265 (UHP) 1x4K60 3x4K30 6x1080p60 12x1080p30 | | | |
| | H.264 (UHP) 1x4K60 2x4K30 5x1080p60 11x1080p30 | | | |
| Video Decode | AV1 (Main Profile) 1x8K30 2x4K60 4x4K30 10x1080p60 20x1080p30 | | AV1 (Main Profile) 1x4K60 2x4K30 5x1080p60 10x1080p30 | |
| | H.265 (Main, Main10) 1x8K30 2x4K60 4x4K30 9x1080p60 18x1080p30 | | H.265 (Main, Main10) 1x4K60 2x4K30 5x1080p60 11x1080p30 | |
| | H.264 (Baseline, Main, High) 1x4K60 2x4K30 5x1080p60 11x1080p30 | | H.264 (Baseline, Main, High) 1x4K30 3x1080p60 7x1080p30 | |
| | VP9 (Profile 0, Profile 2) 1x4K60 3x4K30 7x1080p60 15x1080p30 | | VP9 (Profile 0, Profile 2) 1x4K60 2x4K30 5x1080p60 10x1080p30 | |
| 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 | | | | |

| 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
- Weight: 185g (With SOM and Fan)

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