# 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
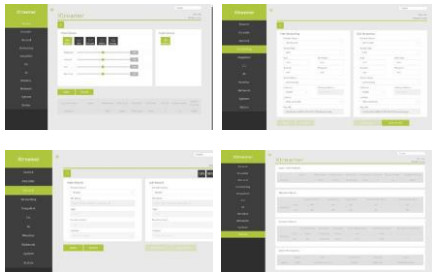- 1×USB3.2 Gen2
- 1×Mini DisplayPort

NVIDIA Partner

## 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 | 4×HDMI |

## 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 ) 1×4K60 \| 2×4K30 \| 5×1080p60 \| 11×1080p30 | | 1080p30 supported by 1-2 CPU cores | |
| Video Decode | 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 | |
|---|---|
| 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**<br>  Auto Signal Detection<br>  Deinterlace, OSD, Color Adjustment<br>  Image Snapshot<br>  Animation Transform Effect for PGM |  |
| | **Record**<br>  AV1, H.26X<br>  MP4, TS<br>  Multi-Stream Recording<br>  Schedule Recording | |
| | **Stream**<br>  Multi-Streams Stream Server<br>  RTSP, RTMP, HLS, SRT, TS, WebRTC, Full NDI (*), NDI-HX(*)<br>  * Separate License Required | |

## Mechanical

· Dimension: 90mm × 55mm

· Weight: 185g ( With SOM and Fan )