Jetson Orin Platform

**Feature:**

* Support nVidia Jetson Orin NX/NANO series
* HDMI® 2.1 (NX)/1.4 (NANO)
* 2 x MISI CSI connector
* 1 x GbE (POE opt.) & 1 x 2.5GbE (POE opt.)
* 1x M.2 Key-M & 1 x M.2 Key-E & 1 x M.2 Key-B
* 4 x 3.2 USB type A
* 1 x RS232/CAN & 1 x RS232/422/485
* Linux, JetPack 6.2



**Specification:**

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| **Model Name** | **AI-NONXS** |
| **nVidia Module** | **Jetson Orin NX 16GB** | **Jetson Orin NX 8GB** | **Jetson Orin Nano 8GB** | **Jetson Orin Nano 4GB** |
| **AI Performance** | 100 TOPS | 70 TOPS | 40 TOPS | 20 TOPS |
| **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 |
| **CPU** | 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU | 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU | 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU |
| **Memory** | 16GB 128-bit LPDDR5 102.4GB/s | 8GB 128-bit LPDDR5 102.4GB/s | 8GB 128-bit LPDDR5 68GB/s | 4GB 64-bit LPDDR5 34GB/s |
| **HDMI®** | 2.1 | 1.4 |
| **Audio** | 1 x 3.5mm Headset jack with Line-out/MIC-In1 x digital MIC pin header, 1 x speaker out pin header |
| **MIPI Camera** |

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|  2 x 4-lane MIPI CSI with 22-pin connector |

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| **Ethernet** |  1 x GbE (POE opt.), 1 x 2.5GbE (POE opt.) |
| **USB** | 4 x USB 3.2 type A & 1 x Micro USB (for OS flash) |
| **Storage** | 1 x M.2 Key-M PCIe Gen.4 x4 2242/2260/2280 NVMe SSD  | 1 x M.2 Key-M PCIe Gen.3 x4 2242/2260/2280 NVMe SSD  |
| **Expansion** | 1 x M.2 Key-E for 2230 Wi-Fi & BT module1 x M.2 Key-B for 3042/3052 4G LTE/5G module1 x Nano SIM slot |
| **Serial Port** | 1 x RS232/CAN & 1 x RS232/422/485 |
| **(Expansion I/O** | 1 x 14-pin header: SPI, I2C, GND, 3.3V, 5V |
| **Others** | 1 x 12-pin header: LED, 5V, UART, LATCH (AT/ATX mode switch), GND, RST, RCV, PWR |
| **Fan** | 1 x 4-pin header |
| **RTC** | 1 x 2pin header |
| **Security (Opt.)** | TPM 2.0  |
| **Button** | 1 x Power On button , 1 x Recovery button, 1 x Reset button |
| **Power Input****Connector** | 1 x DC Power Jack for 12V~20V1 x 2-pin internal power connector |
| **Dimension** | 130mm x 100mm |
| **Operation Temp.** | -20~60 $℃$ |
| **OS** | Linux, JetPack 6.2Support Jetson Orin NX/Nano modules (Super Mode-enabled) |

**Jetson Orin module with Super mode performance:**

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**I/O Information:**

