



6149.00 EUR  
incl. 19% VAT, plus [shipping](#)

- Nvidia Orin NX SOM !
- 1TB SSD ! GPS !
- 4x GMSL2, 8x HMTD !
- 9-36V Input !

- Base on NVIDIA Jetson Orin NX 8G/16G DDR SOM module
- Provide M.2 M key 2280 slot with PCIe Gen3 x4 signal
- M12 X-coded Gigabit Ethernet port x 3
- CAN FD interface with isolation feature x 2
- Provide 7-channel Time sync output for external sensor
- GMSL2 camera FAKRA Z code interface with frame sync x 4
- HMTD Base-T1 Ethernet port for solid states 3D LiDAR x 4/8,Radar, and camera

|                |                                                                                                                           |
|----------------|---------------------------------------------------------------------------------------------------------------------------|
| Processor      | NVIDIA Jetson Orin NX 8G/16G DDR SOM module                                                                               |
| GPU capacity   | ONX16GB: 1024 NVIDIA CUDA cores, 32 Tensor cores, 918MHz ONX 8GB: 1024 NVIDIA CUDA cores, 32 Tensor cores, 765MHz         |
| CPU            | ONX 16GB: Eight-core Cortex A78AE ARMv8.2, 64-bit ONX 8GB: Six-core Cortex A78AE ARMv8.2, 64-bit                          |
| AI Performance | ONX 16GB: Up to 100(Sparse) INT8 TOPs and 50(Dense) INT8 TOPs ONX 8GB: Up to 70(Sparse) INT8 TOPs and 35(Dense) INT8 TOPs |

|                              |                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deep Learning Acceleration   | ONX 16G: 2x NVDLA, maximum frequency up to 614MHz, 20 TOPs (Sparse INT8) ONX 8G: 1x NVDLA, maximum frequency up to 610MHz, 20 TOPs (Sparse INT8)                                                                                                                                                                                                      |
| Internal Memory              | NX 16GB: 16GB 128-bit LPDDR5 DRAM, 102GB/s ONX 8GB: 8GB 128-bit LPDDR5 DRAM, 102GB/s                                                                                                                                                                                                                                                                  |
| M12X Coded                   | M12 X-coded GbE Ethernet ports x 3                                                                                                                                                                                                                                                                                                                    |
| HDMI interface               | HDMI 2.0a/b x 1                                                                                                                                                                                                                                                                                                                                       |
| USB Port                     | USB 3.2 Gen1 type A x 4                                                                                                                                                                                                                                                                                                                               |
| ANT 1/2                      | FAKRA C code connector for Wi-Fi x 2                                                                                                                                                                                                                                                                                                                  |
| 48pin CMC lockable connector | Multi-channel interface for robotic: 4pin 9-36VDC ignition power input, 1x ACC trigger input for power on Microphone input x1, Speaker output with 10W amplifier x1 PWM GPIO, 2x CAN H/L interface with isolation x3 FAN control output x 1, RS232(TXD/RXD/CTS/RTS) x 1 1x Recovery, 1x Reset, 1x PWR_BTN                                             |
| 32pin CMC lockable connector | PPS + ToD syncout for external sensor x7 12V/3.5A Power output for external sensor x2                                                                                                                                                                                                                                                                 |
| FAKRA Z code (left side)     | GMSL 2 camera FAKRA Z code interface with frame sync x 4                                                                                                                                                                                                                                                                                              |
| GSM radio 1/2/3              | Max. FAKRA D coded connector for 4G/5G x 3                                                                                                                                                                                                                                                                                                            |
| HMTD 1/2                     | 1G Base-T1 Ethernet ports x 8                                                                                                                                                                                                                                                                                                                         |
| OTG USB                      | micro-USB for recovery BSP x 1                                                                                                                                                                                                                                                                                                                        |
| Ignition Feature             | Power on delay: 10 sec (default) Power off delay: 3 min (default)                                                                                                                                                                                                                                                                                     |
| Input power range            | 9-36Vdc± 5%                                                                                                                                                                                                                                                                                                                                           |
| Power consumption            | 100W (full loading) ONX 8G/16G SOM module: default 20W Thermal dissipation: Passive (default), Active (Optional)                                                                                                                                                                                                                                      |
| Enclosure                    | IP40 design, Aluminum                                                                                                                                                                                                                                                                                                                                 |
| Dimension (mm)               | 186 x 140 x 86mm (7.32 x 5.51 x 3.385 inch)                                                                                                                                                                                                                                                                                                           |
| Mounting / Installation      | Wall mount                                                                                                                                                                                                                                                                                                                                            |
| Operating Temperature        | -20°C to 60°C (-4°F to 140°F)                                                                                                                                                                                                                                                                                                                         |
| Operating Humidity           | Approx. 95% @40 (non-condensing)                                                                                                                                                                                                                                                                                                                      |
| Storage Temperature          | -40 to 85°C (-40°F to 185°F)                                                                                                                                                                                                                                                                                                                          |
| Vibration                    | IEC 60068-2-64: 5Grms, 5-500Hz, 3 axes                                                                                                                                                                                                                                                                                                                |
| Shock                        | Operating: 3G, half sine, 11ms duration                                                                                                                                                                                                                                                                                                               |
| EMI                          | CE (EN 55032, EN 55035) & FCC class A (ANSI C63.4, 4a)                                                                                                                                                                                                                                                                                                |
| EMS (TBC)                    | IEC 61000-4-2 ESD: ± 15kV Air, ± 8kV contact IEC 61000-4-3 RS: 80M~1000MHz, 3V/m(rms), 80% AM (1kHz) IEC 61000-4-4 EFT: Power port ± 1KV, Data port ± 0.5kV IEC 61000-4-5 Surge: Power port L-L ± 1kV, L-G ± 4kV, Data port ± 4kV IEC 61000-4-6 CS: 0.15M~10MHz 3Vrms, 10M~30MHz 3-1Vrms, 30M~80M 1Vrms 80% AM 1kHz IEC 61000-4-8 PFMF: 50/60Hz, 1A/m |