



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: $\pm 15\text{kV}$ Air, $\pm 8\text{kV}$ contact
IEC 61000-4-3 RS: 80M~1000MHz, 3V/m(rms),
80% AM (1kHz) IEC 61000-4-4 EFT: Power port
 $\pm 1\text{kV}$, Data port $\pm 0.5\text{kV}$ IEC 61000-4-5 Surge:
Power port L-L $\pm 1\text{kV}$, L-G $\pm 4\text{kV}$, Data port $\pm 4\text{kV}$
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