

EAR-100T

Robotic Controller with NVIDIA® Jetson Thor™
Module



Features

- Accelerated by NVIDIA® Jetson T5000™
- Up to 2070 FP4 TFLOPS of AI compute and 128 GB of memory
- 12 x GMSL2 camera FAKRA Z code interface with frame sync
- 2 x 5 GbE LAN, 2 x CAN-FD
- 4 x USB 3.2, 1 x Audio
- Power input 19 ~ 36 VDC

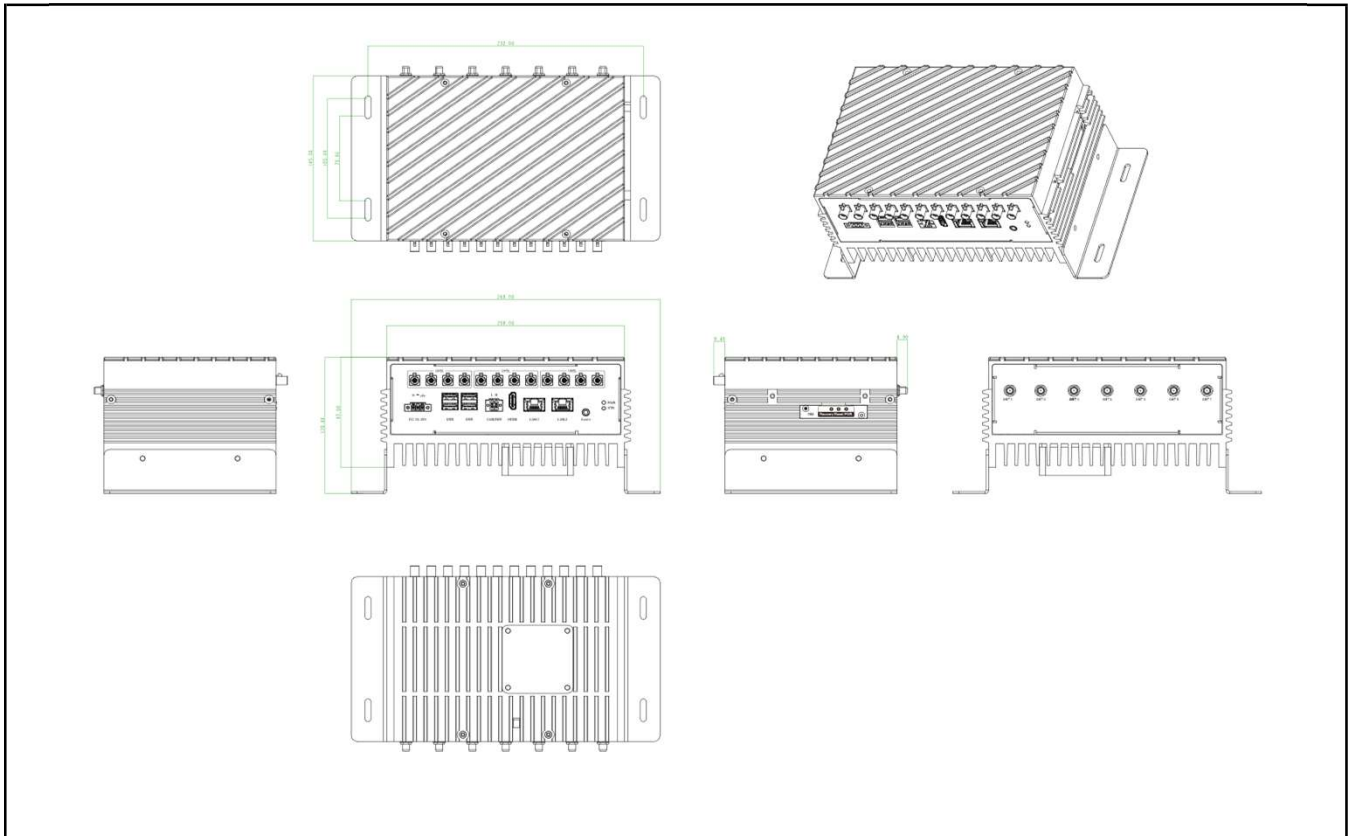
Specifications

System	
CPU/GPU	NVIDIA Jetson T5000 Blackwell GPU + Arm Neoverse V3AE CPU
Memory	128 GB (8 x 16 GB) memory with 256-bit LPDDR5X DRAM
Storage	1 x M.2 M-Key 2280, support NVMe
Real time clock	Yes
Indicators	2 x LED indicator (Power/Storage)
Wireless	1 x M.2 E-Key 2230, Wi-Fi/BT 1 x M.2 B-Key 3052, 4G/5G
Operating System	NVIDIA JetPack™ 7.0
Security	TPM 2.0
Power Supply	
Power Requirement	19 ~ 36 VDC
Power Consumption	TBD
MTBF (Hours)	--
Environmental and Mechanical	
Dimension	200 x 145 x 97 mm (7.87" x 5.7" x 3.82")
Weight	2.8kg
Mouting/Installation	Wall Mount
Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
Storage Temperature	-40 ~ 85 °C (-40 ~ 176 °F)
Operating Humidity	10% ~ 95% relative humidity, non-condensing
Certification	
Regulations	CE, FCC

Interface	
GMSL Camera	12 x FAKRA Z code with frame sync
CAN Bus	2 x CAN-FD
Ethernet	2 x 5 GbE LAN, RJ45
USB	4 x USB 3.2, Type-A
Audio	1 x speaker 1 x Mic in
Display	1 x HDMI 2.0-Out
Power Connector	3-pin Terminal Block
Debug Port	1 x USB type C
SIM Slot	1 x Dual SIM Card Socket
Expansion Slot	1 x M.2 E-key (2230) for Wi-Fi/BT 1 x M.2 M-key (2280) for NVMe SSD 1 x M.2 B-key (3052) for 4G/5G
Other Interface	Build in IMU, GNSS

Dimension

Unit: mm / inch



Ordering Information

Packing List

1 x AI BOX

1 x 3-pin Terminal Block Connector

1 x 2x2-pin Terminal Block Connector

Part Number

2EAR-100T7-0800-01 EAR-100T7 Jetson T5000 RAM 125GB FAN 19-36VDC GMSLx12 Robotic Controller

Optional Accessories

Part Number / Item

39CC001T005	M.2 SSD.2280.1TB.PCie Gen3x4, M-Key, 3D TLC BiCS5, DRAM-less, PE: 3K, TCG OPAL, eDrive, Wide Temp.Transcend.TS1TMTE672AI-VS1
2TSMC-X670-MB01-01	TSMC.RIVR.timesync with XsensTi670 and Ublox ZED-F9P-15B
4710EM060KG5301	4G LTE, Quectel EM060K-GL, M.2 B-key 3042
4710RM520NG5301	5G LTE, Quectel RM520N-GL, M.2 3052
396B100T001	M.2 FN990A28 5G Module kits.EAR-100T.Rev.V1.0.ø1.13 L:200 5x Antenna (5G/GPS)
396B100T003	M.2 FN990B40 5G Module kits.EAR-100T.Rev.V1.0.L:250 5x Antenna (5G/GPS)
396B100T002	ENLI RTL8852BE Wi-Fi, BT module kits, L:200mm, 2x Antenna
4K02X00000020AR	Power Cord US
4125E100011	AC/DC Adapter.IN100-240Vac OUT24Vdc.218.4W.9.1A.3Y/C13 +/-/NC
396DZ100002	Sony ISX031, 63.9° , DC 6 ~ 12V/6V, IP 67/IP 69K.oToBrite.oToCAM223-H61M
396DZ100003	Sony ISX031, 120.6° , DC 6 ~ 12V/6V, IP 67/IP 69K.oToBrite.oToCAM223-C120M
396DZ100014	Sony ISX031, 195.9°, DC 6~12V/6V, IP67/ IP69K.oToBrite.oToCAM223-S195M