

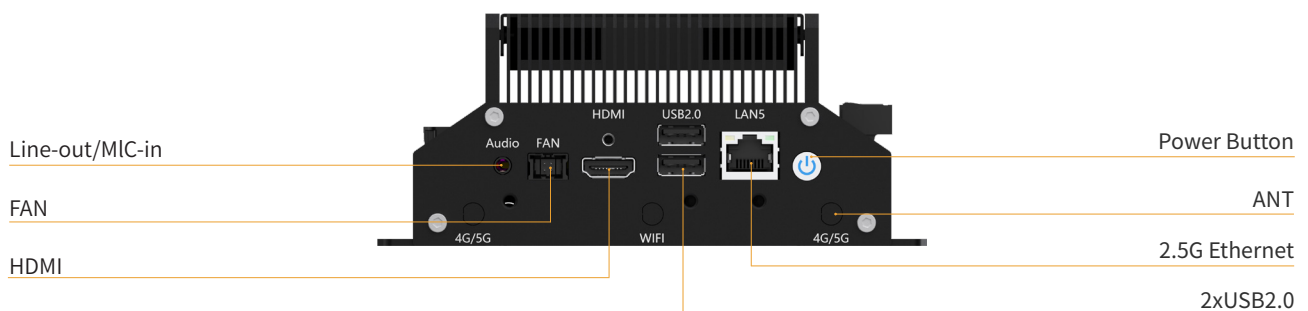
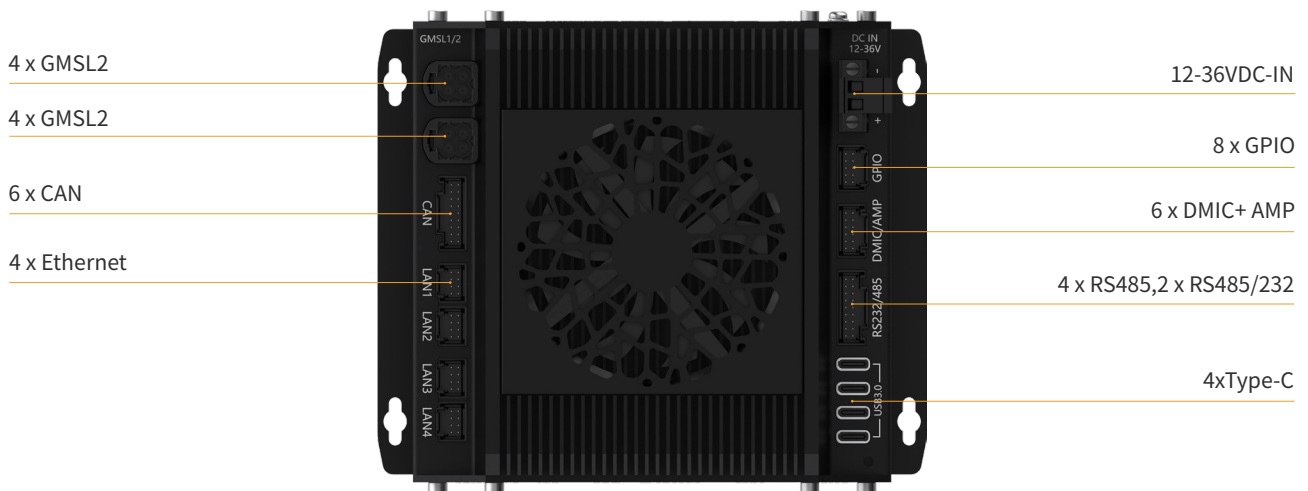
eBOX-NNZ-AI

Ultra Panther Lake

01 Feature

- Intel® Core Ultra Panther Lake Processors up to 16 cores(18MB Cache,1.9GHz/4.8GHz), TDP 25W up to 65W
- Integrated NPU up to 50 TOPS for AI computing power
- Intel® Arc Graphics (up to 12 Xe cores, 122 TOPS)
- Dual channel up to 96GB LPDDR5X on board
- 5 x Giga-bit Ethernet(4 ports support EtherCAT , 1 ports support 2.5Gbps)
- 8 x GMSL2 , support 8 channels of depth cameras
- Support 1xHDMI,6 x CAN ,4 x Type-C,2 x USB2.0,4 x RS485,2 x RS485/232,8 x GPIO
- 1 x Microphone Array, support DMIC/AMP,1 x 3.5mm Combo Jack
- 1 x M.2-2242/2280 M Key slot ,1 x M.2-3052 slot with nano-SIM card socket
- 12-36V power input, lockable DC-IN phoenix terminal block
- Supports ROS2 or Ubuntu 22.04 with roboRTS

02 I/O Layout

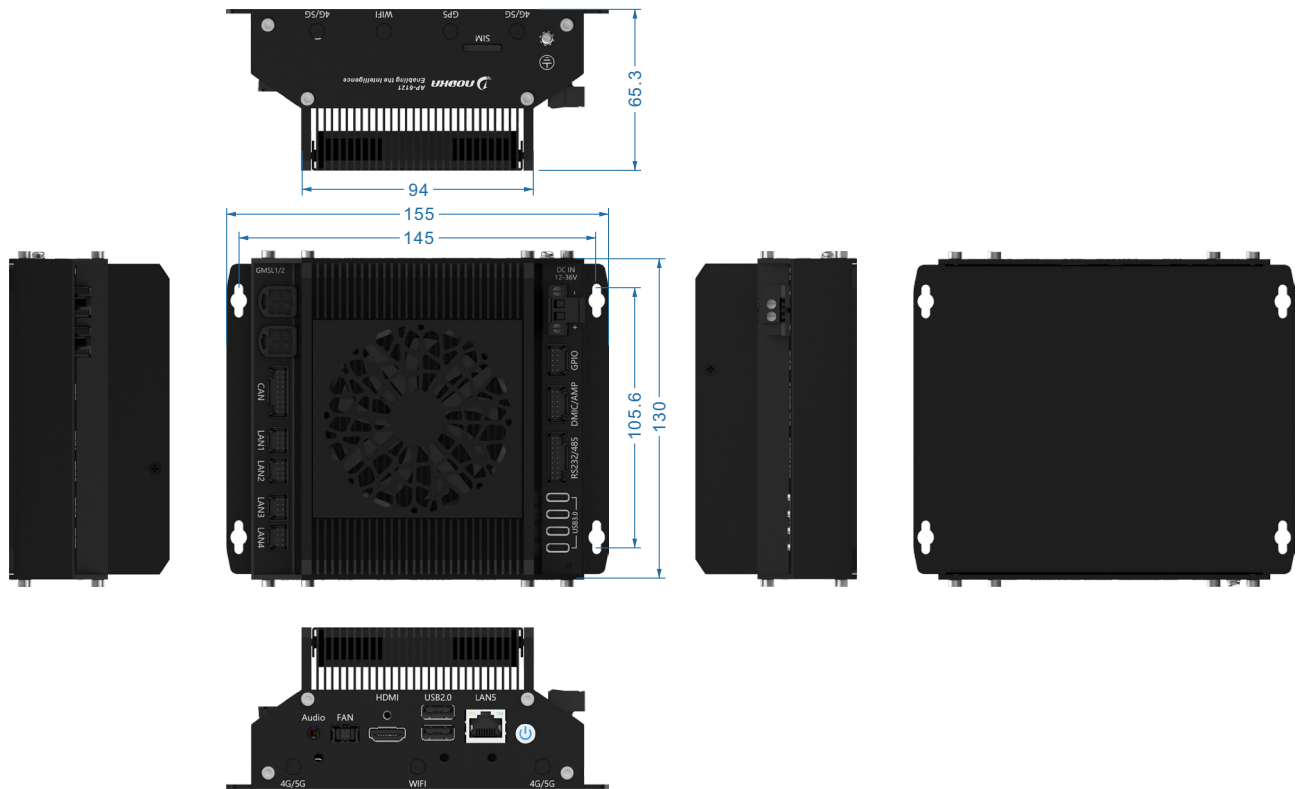


03 Specification

Items		Specifications
System	Processor	Intel® Core Ultra X7 358H Processor(18MB Cache,1.9GHz/4.8GHz), TDP 25W up to 65W
	GPU	Intel® Arc Graphics with up to 12 Xe cores(2.5GHz/122TOPS)
	NPU	Integrated NPU accelerator with up to 50 TOPS
	Memory	up to 96GB LPDDR5X (default 32GB,optional up to 96GB) dual channel on board,max.8533MHz
	Storage	1 x M.2-2242/2280 M Key Slot (NVME)
	OS	ROS2, Ubuntu 22.04
External I/O	Display	1 x HDMI, resolution to 4096 x 2160@30Hz (Support 2K)
	Ethernet	4 x Ethernet Wafer (2x4pin,Pitch=2.0mm), Intel i210AT controller
		1 x 2.5GbE (RJ45), Intel i226-V controller
	USB	4 x USB3.0 (Type-C), 2 x USB2.0 (Type-A)
	Serial Port	6 x COM wafer(2x9pin,Pitch=2.0mm,2 x RS485/232 + 4 x RS485)
	GMSL2	2*4 x GMSL2(2*2x2pin) (Real-Time Response)
	GPIO	8 X GPIO wafer(2x10pin, Pitch=2.0mm)
	CAN	6 x CAN wafer (2x9pin,Pitch=2.0mm)
	Microphone Array	1x Microphone Array (2x12pin,Pitch=2.0mm,4 x DMIC & 2 x AMP (2W) 1 x 3.5mm Combo Jack (Line-out/MIC-in)
	FAN	1 x Smart Fan wafer (2x2pin,Pitch=2.0mm)
	Power Button	1 x Power Button (White for power on,Blink for sleep mode,Off for power off)
	Power Input	1 x 2-Pin phoenix terminal block (1x2pin Pitch=5.08mm)
Internal I/O	Power output	1 x 5V/2A Power Output wafer (1x2pin pitch=2.0mm)
Expansion Slot	M.2 slot	1 x M.2-2230 E key slot for wifi module (PCIe/USB2.0 Signal)
		1 x M.2-3052 B Key slot with Nano-SIM socket for 4G/ 5G module (USB3.0/USB2.0 Signal)
Power	Power Input	12-36V DC input, +/-10% tolerance,Protection against overcurrent, overvoltage, reverse polarity
	Power Consumption	TBD
Environmental	OperatingTemp.	-20°C ~ 50°C (SSD, Non-freezing)
	Storage Temp.	-40°C ~ 85°C
	Relative Humidity	5% ~ 95%, Non-condensing
Mechanical	Housing	Aluminum Alloy
	Dimension	135*130*65.3mm
	Mounting dimension	145*105.6mm
	Mounting	Desk-mount
	Gross Weight	TBD

04 Mechanical Drawing

Unit: mm



05 Order Information

Model	Description
eBOX-NNZ-AI-358H-32G-SSD512G	Ultra X7 358H, 32GB LPDDR5x, 12-36VDC,, No adapter, no power cord

06 Pcking List

Part No.	Model	Description
Termianl Block	1	1*2-pin termianl block,pitch 5.08mm

07 Optional Accessories

Part No.	Model	Description
C3Z.0002.00.NDJ	CM-090W-HKA0	1.8m power cord (China standard), 84W adapter