eBOX630B NEW
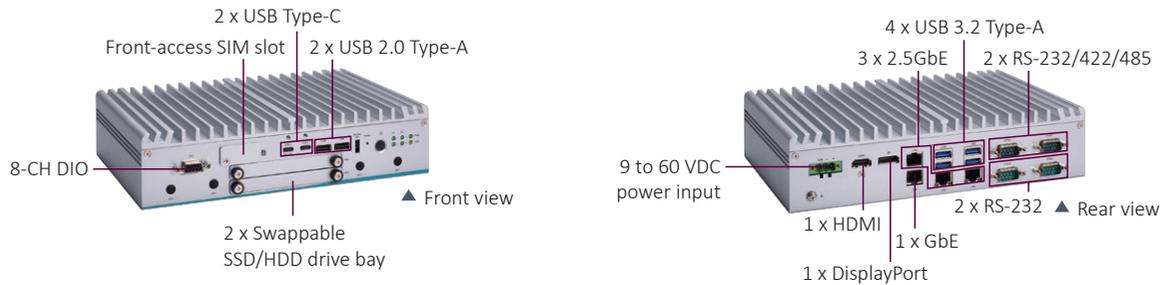
Fanless Embedded AI System with Intel® Core™ Ultra Processor, HDMI/DisplayPort, 4 LAN, 4 COM, 6 USB, 2 USB Type-C, and 9 to 60 VDC

2 x USB Type-C
Front-access SIM slot
2 x USB 2.0 Type-A
8-CH DIO
▲ Front view
2 x Swappable SSD/HDD drive bay

4 x USB 3.2 Type-A
3 x 2.5GbE
2 x RS-232/422/485
9 to 60 VDC power input
2 x RS-232
▲ Rear view
1 x HDMI
1 x GbE
1 x DisplayPort

Fanless | Wide Temp. | IP40 | DDR5 | 9 to 60 VDC | Quad-View | USB 3.2 | USB Type-C

Features

- Intel® Core™ Ultra processor (Meteor Lake-H)
- Multiple compute engines : CPU , GPU (Intel® Arc GPU by H SKU) and NPU (Intel® AI Boost)
- Dual-channel DDR5-5600 SO-DIMM, up to 96GB
- 6 USB and 2 USB Type-C with DisplayPort support
- Supports multiple display interfaces with 1 HDMI 1.4b and 3 x DisplayPort (2 ports via USB Type-C)
- Three 2.5GbE LAN with TSN and 1 GbE
- Two 2.5" front-access swappable HDD/SSD and one M.2 Key M 2280
- Wide operating temperature range from -40°C to +60°C
- Wide power input range from 9 to 60 VDC
- Supports the OpenVINO™ toolkit for AI computing

Specifications

Standard Color	Silver
Construction	Aluminum extrusion and heavy-duty steel, IP40
CPU	Intel® Core™ Ultra 7 processor 155H (16 cores, 28W TDP) Intel® Core™ Ultra 5 processor 125H (14 cores, 28W TDP)
System Memory	2 x 262-pin DDR5 5600 MHz SO-DIMM, non-ECC, up to 96GB total
Chipset	SoC integrated
BIOS	AMI

Specifications

System I/O Outlet	**Front side** 2 x USB 2.0 (Type-A) 1 x USB Type-C (DisplayPort/USB 10Gbps support) 1 x USB Type-C (DisplayPort/USB 10Gbs with 30W power delivery support) 1 x 8-CH TTL DIO with DB9 female connector (4-in/4-out) 1 x Phoenix-type VDC power input connector 1 x ATX power switch 1 x remote power switch 1 x reset switch connector 1 x front-access SIM slot 2 x antenna opening	**Rear side** 3 x 10/100/1000/2500 Mbps Ethernet (Intel® I226-IT) 1 x 10/100/1000 Mbps Ethernet (Intel® I210-IT) 2 x RS-232/422/485 with auto flow (COM1/2) 2 x RS-232 with auto flow (COM3/4) 1 x HDMI 1.4b (lockable) 1 x DisplayPort 1.4a 2 x USB 3.2 Gen 1 (Type-A) 2 x USB 3.2 Gen 2 (Type-A) 2 x antenna opening
Watchdog Timer	255 levels, 1 to 255 sec.	
Storage	2 x 2.5" swappable SSD/HDD drive bay (up to 9.5 mm height & RAID 0, 1) 1 x M.2 2280 M key socket (PCIe x4) for NVMe SSD	
Expansion Interface	1 x full-size PCI Express Mini Card (USB + PCIe signal) 1 x M.2 Key E 2230 slot for Wi-Fi (USB 2.0 + PCIe signal) 1 x M.2 Key M 2280 slot for NVMe storage (PCIe x4 signal only)	
TPM	TPM 2.0	
System Indicator	1 x green LED for system power-on 1 x orange LED for HDD/SSD active	
Power Input	9 to 60 VDC	
Operating Temperature	-40°C to +60°C (-40°F to +140°F) with 0.7 m/s airflow (CPU: 28W TDP) (with W.T. DRAM and SSD)	
Relative Humidity	10% to 95% relative humidity, non-condensing	
Shock Vibration (Operation)	IEC 60068-2-27 2008 Table A.1 (with SSD: 50G, half-sine, and 11 ms duration) MIL-STD-810H, Method 516.8, and Procedure I (with SSD: 40G, TP sawtooth, and 11 ms duration)	
Vibration Endurance (Operation)	IEC 60068-2-64 2019 (with SSD: 3Grm STD, random, 5 to 500 Hz, and 0.5 hr/axis) MIL-STD-810H, Method 514.8, Category 20, and Figure 514.8C-2	
Package Vibration (Non-Operation)	IEC 60068-2-64 (with SSD: 2.25 Grms STD, random, 5 to 500 Hz, and 1 hr/axis)	
Dimensions (W x D x H)	250 x 170 x 60 mm (9.84" x 6.69" x 2.36")	
Weight (net/gross)	2.4 kg (5.29 lb)/3.2 kg (7.0 lb)	
Certifications	CE, FCC Class A, and UKCA	
EOS Support	Win 11 IoT, Linux	

*W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

Ordering Information

Standard

eBOX630B-U5-125H (P/N: E360630B00)	Fanless embedded AI system with Intel® 125H, HDMI/DisplayPort, 4 LAN, 4 COM, 6 USB, 2 USB Type-C, and 9 to 60VDC
eBOX630B-U7-155H (P/N: E360630B01)	Fanless embedded AI system with Intel® 155H, HDMI/DisplayPort, 4 LAN, 4 COM, 6 USB, 2 USB Type-C, and 9 to 60VDC

Optional

2.5" SATA HDD	256GB or above
2.5" SATA SSD	100GB or above
DDR5 SO-DIMM	8GB to 96GB
E29R129103	Wall mount kit
E29R129115	DIN-rail kit
509000001500	24V 120W power adapter
	Power cord
	Wi-Fi/LTE module

*Specifications and certifications may vary based on different requirements.

Packing List

1 x remote power switch cable
1 x 3-pin terminal block connector
4 x foot pad
1 x DRAM thermal kit (included bracket & thermal pad)
1 x M.2 thermal kit (included bracket & thermal pad)
1 x screw pack
3 x lockable cable tie

Power Protection

DC Version
OVP (over voltage protection)
UVP (under voltage protection)
SCP (short circuit protection)
OCP (over current protection)
Reverse protection

Dimensions