

# EAI-I510

AI Inference System Powered by Intel® Core™ Ultra Processors (Series 2) (Arrow Lake H)



## Specifications

### Platform

CPU	Intel® Core™ Ultra 9/7/5 Processors (Series 2) (Arrow Lake H)
SOM TDP	Up to 45W/28W
Chipset	SoC
BIOS	AMI SPI Flash BIOS

### System Memory

Technology	DDR5 up to 6400Mhz, non-ECC SODIMM
Max. Capacity	96GB

### Ethernet

Interface	2x 2.5GbE RJ45 2x 10GbE RJ45
iAMT	i226-LM (LAN1)
Bypass	N/A

### I/O Interface

Reset Button	1
Serial	2x DB9 RS-232/422/485 (Console Only supported on COM1)
Display	2x DP 1.2 (1x DP++, 1x DP)
USB	1x USB 2.0, 1x USB 3.0, 2x USB 3.2 (Gen2) Type A
DIO	4x DI & 4x DO
Power Button	1x Power on/off Button 1x 2-pin terminal block (cabling control)
Audio	2x Phone Jack for Mic-in & Line-out
Antenna	6x SMA Antenna for Wifi/ LTE/ 5G modules

### Storage

HDD/SSD Support	2x 2.5" SSD
Onboard Slot	1x M.2 2280 M-Key (NvME)

## Features

- Intel® Core™ Ultra Processors Series 2, 14~16 Cores
- Integrated NPU and Intel® Arc™ Graphics (up to 77 TOPS Int8)
- DDR5 6400Mhz Memory Up to 96GB
- 2x 2.5GbE RJ45, 2x 10GbE RJ45
- 2x COM, 4x USB, 2x DP, 4x DIO
- 2x PCIe x8 FHHL slots for add-on PoE, industrial I/O, and video capture cards
- 1x M.2 2230 E-Key for WiFi, 1x M.2 3042/3052 B-Key for LTE/5G, Nano-SIM
- Operating temperature 0°C ~ 40°C

## Expansion

PCIe Slot	2x PCIe x8 Gen3 FHHL Slot
mini-PCIe/M.2	1x M.2 2230 E-Key for WiFi 6/6E w/BT 1x M.2 3042/3052 B-Key for LTE/5G
SIM Card Slot	1x Nano-SIM 1x eSIM (space reserved)

## Miscellaneous

Watchdog	Yes
Internal RTC with Li Battery	Yes
TPM	Onboard TPM 2.0

## Cooling

Processor	Passive CPU Heatsink
System	Fan

## Environmental Parameters

Temperature	0°C~40°C
Humidity (RH)	5~90% Operating 5~95% Non-Operating, non-condensing

## System Dimensions

WxDxH	270 x 188.5 x 119 mm
Weight	TBD
Mounting	Wall mount/VESA mount(optional)

## Power

Type/Watts	24VDC
Input	1x 2-pin Terminal Block +24VDC

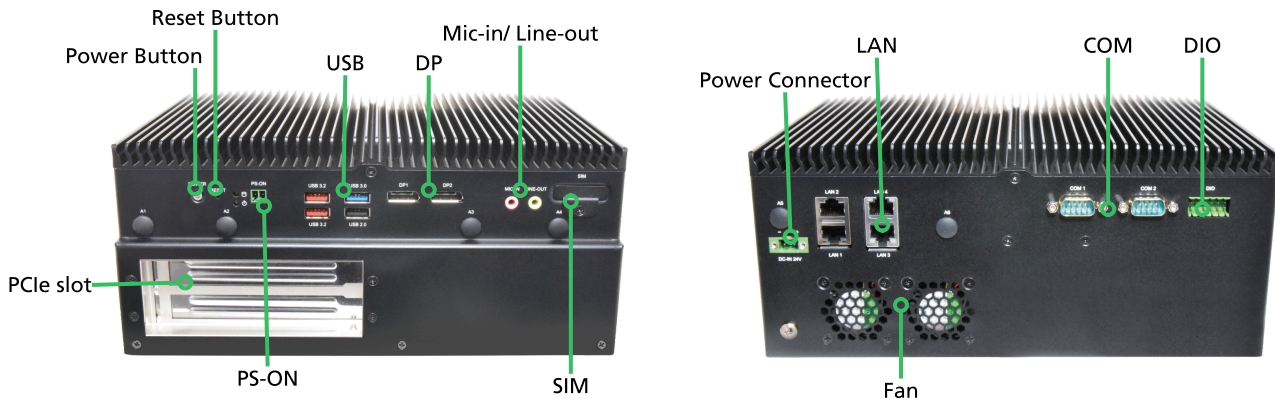
## OS Support

Linux	Ubuntu 24.04
Windows	Windows10 & 11 (LTSC)

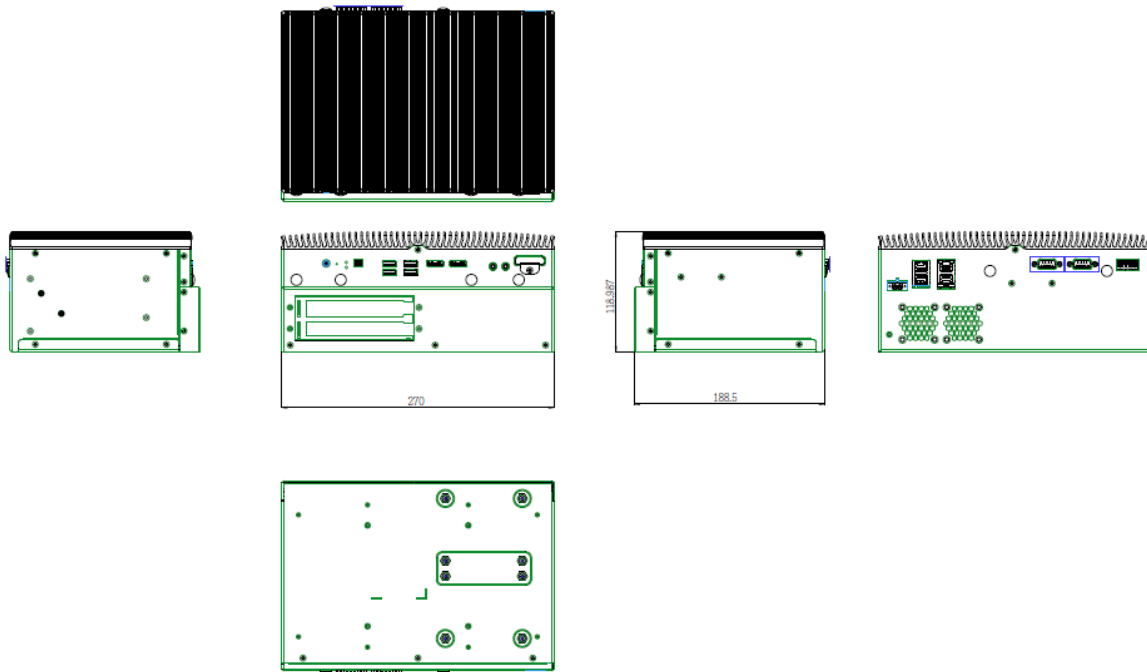
## Certification

EMC	CE/UKCA, FCC Class A, RoHS
Safety	UL+CB 62368-1

## Product I/O View



**Dimensions (WxDxH): 270 x 188.5 x 119 mm**



## Ordering Information

SKU	CPU	Memory	Ethernet	I/O	Storage	Power
EAI-I510A	Intel®Core™ Ultra 9, 285H, 16C, 45W (Series 2) (Arrow Lake H)					
EAI-I510B	Intel®Core™ Ultra 7, 265H, 16C, 28W (Series 2) (Arrow Lake H)	DDR5 6400Mhz, up to 96GB	2x 2.5GbE RJ45 2x 10GbE RJ45	2x DB9 RS-232/422/485 2x DP 1.2 4x USB Ports 4x DI & 4x DO Mic-in & Line-out	2x 2.5" SSD 1x M.2 2280 M-Key (NvME)	+24VDC
EAI-I510C	Intel®Core™ Ultra 7, 235H, 14C, 28W (Series 2) (Arrow Lake H)					