

Preliminary

iEPF-9500S-EW7

Expandable Edge AIoT Platform



KEY FEATURES

- Intel® Core™ Processors (Series 2) with R680E Chipset
- 4 x 288-pin DDR5 U-DIMM up to 192GB (48GB per DIMM)
- 1 x PCIe x16 (PCIe Gen5) or 2 x PCIe x8 (PCIe Gen5),
1 x PCIe x4 (PCIe Gen4), 4 x PCIe x1 (Gen4)
- 2 x M.2 Key M, 2 x M.2 Key B, 1 x M.2 Key E
- 6 x USB 3.2 Gen2x1
- 4 x COM, 4 x SATA3, 8 x DI, 8 x DO
- 3 x Intel 2.5G LAN (LAN1 support vPro)
- 1 x Displayport, 1 x HDMI 2.0b, 1 x VGA
- Optional Kit: 10BASE-T15 function card, 8DIO card
(w/ Isolation Protection), 4COM card (w/ Isolation Protection), OOB function card
- Powerful Edge AI acceleration enabled by the most flexible mechanical, thermal, and power design, with support for 75mm x 360 mm x 194 mm (W x D x H) max. for one 600W graphic card and 58mm x 360 mm x 194 mm (W x D x H) max. for dual 600W graphic card

SPECIFICATIONS

Processor System

CPU	Intel® Core™ Processors (Series 2)
Chipset	Intel® R680E
Socket	LGA 1700

Memory

Technology	Dual Channel DDR5 5600MHz (ECC memory supported by R680E + Selected CPU)
Capacity	192 GB (48GB per DIMM)
Socket	4 x 288-pin U-DIMM

Graphics

Controller	Intel® UHD Graphics
DisplayPort	DisplayPort 1.4a, DP++ Max resolution up to 4096x2304@60Hz
HDMI	HDMI 2.0b Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz

Audio

Interface	Realtek ALC897, High Definition Audio
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Expansion Slot

PCIe	1 x PCIe Gen5 x16 (single x16 or dual x8), 1 x PCIe Gen5 x8 (shared with dual x8) 1 x PCIe Gen4 x4 4 x PCIe Gen4 x1
RF& Antenna	8 x SMA connector hole reserved
M.2	1 x M.2 (Key E, 2230) with CNVI/PCIe Gen3 x1 and USB 2.0 for Wi-Fi/BT module 1 x M.2 (Key B1, 2280/3042/3052) with PCIe Gen3 x1 / USB3.2 Gen1x1 and USB 2.0 for 4G / 5G 1 x M.2 (Key B2, 3042/3052) with PCIe Gen3 x1 / USB3.2 Gen1x1 and USB 2.0 for 4G / 5G
SIM Socket	2 x Nano SIM Card slots (2 connected to M.2 Key B)

Ethernet

Controller/ Speed	3 x Intel® i226-IT (LAN1 vPro Support)
Connector	3 x RJ45

Storage

M.2	1 x M.2 (Key M1, 2242/2260/2280/22110/25110) with Gen4 x4 for NVMe SSD 1 x M.2 (Key M2, 2242/2260/2280) with Gen4 x4 for NVMe SSD
SATA	4 x SATA3 (6Gb/s), support RAID 0/1/5/10 4 x 2.5" HDD/SSD Tray (Default 1 piece)

Front I/O

DisplayPort	1
HDMI	1
VGA	1
Ethernet	3 x Intel 2.5G LAN1~ LAN3
USB	6 x USB 3.2 Gen2x1
Audio	1 x Mic-in, 1 x Line-out
COM	2 x RS232, 2 x RS232/422/485
DIO	8DI/8DOs

Watchdog Timer

Output Interval	From Super I/O to drag RESETCON# 256 Segments, 0, 1, 2, ...255sec
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Power Requirements

Input PWR	9V-36V DC
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Environment

Operating Temperature (w/ FAN inside) (w/ airflow 0.5~0.8 m/s)	45W CPU w/ dual 600W GPU: -40°C ~ 55°C (-40°F ~ 131°F) 65W CPU w/ dual 600W GPU: -40°C ~ 50°C (-40°F ~ 122°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Humidity	~95% @ 40°C (non-condensing)
Shock	MIL-STD-810H, Method 516.8, Procedure I
Vibration	MIL-STD-810H, Method 514.8
ESD	Contact +/-4kV, Air +/-8kV
EMC	EN61000-6-4/-2, CE & FCC Class A
Safety	LVD

Mechanical

Construction	Aluminum heatsink + Metal chassis
Mounting	Desk Mount
Dimensions	288mm (W) x 450.3mm (D) x 250mm (H) (11.34" x 17.73" x 9.84")
Net Weight	13kg

Others

OS Support	Windows 11 & Windows 10 & Linux
TPM	TPM 2.0
Real-Time Enablement	TSN, TCC support under YOCTO