

iEPF-10000S Series

Expandable Edge AIoT Platform

ASRock
— Industrial —

Preliminary



KEY FEATURES

- Supported NVIDIA GPU (1~2pcs): RTX 6000 Ada, RTX 5000 Ada, RTX A4500 Ada, RTX 4000 Ada, RTX A4000 SFF Ada, RTX 2000 Ada
- Supported Intel GPU (1~2pcs): Arc A770, Arc B580, Intel Arc Pro B60, Intel Arc Pro B50
- Intel® Core™ Processor Series 2 (Bartlett Lake-S) or Intel® 14th/13th Core™ Processor, up to 125W
- 4 x 288-pin Long-DIMM DDR5, up to 192GB (48GB per DIMM)
- ATX Power Supply 850W or 1000W option
- Seven PCIe slots chassis to support up to 2pcs dual width graphic cards or 2pcs triple width graphic cards.

SPECIFICATIONS

Mechanical

Dimensions (D x W x H)	597mm (D) x 206mm (W) x 455.1mm (H)
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Processor System

CPU	Intel® Core™ Processor Series 2 (Bartlett Lake-S) or Intel® 14th/13th Core™ Processor, up to 125W
Chipset	Intel® Q670 or Intel® W680 (Option)
Socket	LGA1700
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel DDR5 4400/5600 MHz* *Actual memory frequency depends on the CPU types and DRAM modules, for more information refer to https://www.asrockind.com/en-gb/index.php?route=newsblog/faq&faq_id=90 technical FAQ *For DDR5 5600 support refer to memory support list ECC feature only supported by W680
Capacity	192GB (48GB per DIMM)
Socket	4 x 288-pin Long-DIMM

CPU Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 2.0b Max resolution up to 4096x2160@60Hz
DisplayPort	DisplayPort 1.4a, DP++ Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920 x 1200@60Hz
MultiDisplay	Triple Display

Audio

Interface	Realtek ALC897, High Definition Audio. Line-in, Line-out, Mic-in (Rear Side)
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MB Expansion Slot

PCIe	2 x PCIe Gen5 Slots (PCIe1/PCIe4; single at x16 (PCIe1); dual at x8 (PCIe1) / x8 (PCIe4)) 2 x PCIe x4 (Gen4), 3 x PCIe x1 (Gen3)
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe x1, USB3.2 Gen1, USB 2.0 and SIM for 4G/5G
SIM Socket	1 x SIM socket connected to M.2 Key B

Ethernet

Controller/ Speed	LAN1: Intel® I226V with 10/100/1000/2500 Mbps, supports PoE (IEEE 802.3at). LAN2: Intel® I226LM with 10/100/1000/2500 Mbps, supports vPro LAN3: Intel® I226V with 10/100/1000/2500 Mbps
Connector	3 x RJ-45

MB Rear I/O

HDMI	1 x HDMI 2.0b
DisplayPort	1 x DP 1.4a++
VGA	1
Ethernet	3 x 2.5 Gigabit LAN
USB	5 x USB 3.2 Gen2 1 x USB 3.2 Gen2x2 (Type-C, 5V/3A)
Audio	3 (Mic-in, Line-in, Line-out)
COM	COM1, COM2 (RS-232/422/485)

MB Internal Connector

USB	2 x USB 3.2 Gen1 (Chassis front side), 2 x USB 2.0 Type-A internal vertical connector), 2 x USB 2.0 (1 x 2.54 pitch header)
COM	COM3, COM4, COM5, COM6 (RS-232)
Parallel	1
GPIO	8 x GPl, 8 x GPO (shared with LPT header)
PS2	1 x PS2 header
Thunderbolt header	1

Storage

M.2	1 x M.2 2280 (Key M) PCIe Gen4 x4 SSD or 1 x M.2 2280 (Key M) PCIe Gen4 x4 SSD and 1 x M.2 2280 (Key M) PCIe Gen3 x4 SSD (Option)
SATAIII	2.5"/3.5" HDD bays x 5
RAID	Intel® VMD RAID 0/1/5/10 ***supported by identical interface (PCIe or SATA) PCIe interface: M.2 Key B + M.2 Key M x1 or x2 (Option) SATA interface: SATA port

Security

TPM	TPM 2.0 onboard IC
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Power Requirements

Power Supply Unit	Rated Output Power 850W(Default), Input Voltage 100-240V Rated Output Power 1000W, Input Voltage 100-240V
Power On	AT/ATX Support - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

Graphic Card option

NVIDIA Graphic Card	Description	QTY
RTX 6000 Ada	RTX 6000 Ada 48GB GDDR6, 300W	1~2pcs
RTX 5000 Ada	RTX 5000 Ada 32GB GDDR6, 250W	1~2pcs
RTX 4500 Ada	RTX4500 Ada 24GB GDDR6, 210W	1~2pcs
RTX 4000 Ada	RTX4000 Ada 20GB GDDR6, 130W	1~2pcs
RTX 4000 SFF Ada	RTX4000 SFF Ada 20GB GDDR6, 70W	1~2pcs
RTX 2000 Ada	RTX2000 Ada 16GB GDDR6, 70W	1~2pcs
Intel Graphic Card	Description	QTY
Arc A770	Arc A770, 16GB GDDR6, 225W	1~2pcs
Arc B580	Arc B580, 12GB GDDR6, 190W	1~2pcs
Arc Pro B60	Arc Pro B60, 24GB GDDR6, 200W	1~2pcs
Arc Pro B50	Arc Pro B50, 16GB GDDR6, 70W	1~2pcs