

iEPF-1 1000S Series

Expandable Edge AIoT Platform

ASRock®
— Industrial —

Preliminary



KEY FEATURES

- Support NVIDIA GPU (1~3pcs): RTX PRO 6000 Blackwell Workstation Edition (Build-To-Order)
- Support NVIDIA GPU (1~4pcs): RTX PRO 6000 Blackwell Max-Q Workstation Edition, RTX PRO 5000 72GB Blackwell, RTX PRO 5000 Blackwell, RTX PRO 4500 Blackwell Workstation Edition, RTX PRO 4000 Blackwell, RTX PRO 4000 Blackwell SFF Edition, or RTX PRO 2000 Blackwell
- Support Intel GPU (1~4pcs): Intel Arc™ Pro B70, Intel Arc™ Pro B65, Intel Arc™ Pro B60, Intel Arc™ Pro B50
- Support Intel GPU (1~3pcs): Intel Arc™ A770, or Intel Arc™ B580
- Support AMD GPU (1~4pcs): AMD Radeon™ AI PRO R9700
- Intel® Xeon® 600 Processors with W890 chipset
- 8 x 288-pin ECC RDIMM/RDIMM-3DS DDR5 5200 MHz, up to 2TB
- 6 x PCIe x16 (Gen5), 1 x PCIe x8 (Gen5), 4 x USB 3.2 Gen2, 6 x USB 3.2 Gen1, 3 x USB 2.0, 2 x M.2 Key M, 2 x COM, 8 x SATA3, 1 x VGA
- 2 x Intel 1 Gigabit LAN, 2 x Intel 10 Gigabit LAN option
- TPM 2.0 onboard IC
- Support Intel® vPro, VMD RAID 0/1/5/10
- ATX Power Supply 1600W or 2500W option
- Eight PCIe slots chassis to support up to 4pcs dual width graphic cards or 2pcs triple width graphic cards
- Out-Of-Band Remote Management features (optional module)

SPECIFICATIONS

Mechanical

Dimensions (D x W x H)	602.6 (D) x 175.0 (W) x 438.0 (H) mm. 4U tower and rackable, supports rack kit option: ear handle, slide rail, and CMA
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Processor System

CPU	Intel® Xeon® 600 Processors
Chipset	Intel® W890
Socket	LGA4710
BIOS	AMI SPI 256 Mbit

Memory

Technology	Quad Channel ECC DDR5 6400 MHz (1DPC), 5200 MHz (2DPC)
Capacity	2TB
Socket	8 x 288-pin RDIMM/RDIMM-3DS

MB Expansion Slot

PCIe	Chassis supports Eight PCIe slots. PCIe7: PCIe Gen5 x16 (Next to CPU) PCIe6: PCIe Gen5 x16 PCIe5: PCIe Gen5 x16 (supported by CPU Expert SKU) PCIe4: PCIe Gen5 x16 PCIe3: PCIe Gen5 x16 (supported by CPU Expert SKU) PCIe2: PCIe Gen5 x8 PCIe1: PCIe Gen5 x16
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Graphics

VGA	1 x VGA from Silicon Motion SM750 Max resolution up to 1920 x 1200@60Hz
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Front IO

USB	2 x USB 3.2 Gen1
Function	Power Button and LED, Reset Button, LAN1 LED, LAN2 LED, Storage LED, Line out

Rear I/O

Ethernet	LAN1: Intel® I210AT with 10/100/1000 Mbps LAN2: Intel® I219LM with 10/100/1000 Mbps, supports vPro (Optional LAN3 and LAN4) LAN3: Intel® E610-XAT2 with 10/100/1000/2500/5000/10000 Mbps LAN4: Intel® E610-XAT2 with 10/100/1000/2500/5000/10000 Mbps
USB	4 x USB 3.2 Gen2
Audio	3 (Line-In/Line-Out/Mic-In)
Serial Port	COM1(RS-232)
VGA	1

Internal Connector

USB	2 x USB 3.2 Gen1 (vertical con) 2 x USB 3.2 Gen1 (1 x USB 3.2 header) 3 x USB 2.0 (2 x 2.54 pitch header)
COM	COM2 (RS-232)
GPIO	4 x DI + 4 x DO
OOB Header	1 (Optional AI-M2-OOB module to support OOB function)

Storage

M.2	1 x M.2 (Key M, 2242/2280/3052/25110) with PCIe Gen5 x4 for SSD 1 x M.2 (Key M, 2242/2280) with PCIe Gen4 x4 for SSD
SATAIII	Default support 1*3.5" internal SATA HDD bay, or up to optional 8-Bay 2.5" SATA hot-swap module in two 5.25" area 8 x SATA3
RAID	Intel® VMD RAID 0/1/5/10 **supported by identical interface (PCIe or SATA) PCIe interface: M.2 Key M SATA interface: SATA port

Security

TPM	TPM 2.0 onboard IC
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Watchdog Timer

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

MB Input PWR	1 x 24-pin ATX PWR connector 2 x 8-pin 12V PWR connector 1 x 8-pin and 1 x (6+2)-pin 12V PWR connector for PCIe AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready
Power Supply Unit	1600W:Rated Output Power 1600W at 115-240V, Rated Output Power 1300W at 100-240V 2500W:Rated Output Power 2500W at 200-240V

Graphic Card option

NVIDIA Graphic Card	Description	QTY
RTX PRO 6000 Blackwell Workstation Edition	96GB GDDR7 with ECC, 600W	1~3pcs
RTX PRO 6000 Blackwell Max-Q Workstation Edition	96GB GDDR7 with ECC, 300W	1~4pcs
RTX PRO 5000 72GB Blackwell	72GB GDDR7 with ECC, 300W	1~4pcs
RTX PRO 5000 Blackwell	48GB GDDR7 with ECC, 300W	1~4pcs
RTX PRO 4500 Blackwell Workstation Edition	32GB GDDR7 with ECC, 200W	1~4pcs
RTX PRO 4000 Blackwell	24GB GDDR7 with ECC, 140W	1~4pcs
RTX PRO 4000 Blackwell SFF Edition	24GB GDDR7 with ECC, 70W	1~4pcs
RTX PRO 2000 Blackwell	16GB GDDR7 with ECC, 70W	1~4pcs
INTEL Graphic Card	Description	QTY
Intel Arc™ Pro B70 Creator 32GB	32GB GDDR6, 275W	1~4pcs
Intel Arc™ Pro B65 Creator 32GB	32GB GDDR6, 200W	1~4pcs
Intel Arc™ Pro B60 Creator 24GB	24GB GDDR6, 200W	1~4pcs
Intel Arc™ A770 Challenger SE 16GB OC	16GB GDDR6, 225W	1~3pcs
Intel Arc™ B580 Challenger 12GB OC	12GB GDDR6, 190W	1~3pcs
AMD Graphic Card	Description	QTY
AMD Radeon™ AI PRO R9700	32GB GDDR6, 300W	1~4pcs