

iEPF-10000S (Arrow Lake-S) Series

Expandable Edge AIoT Platform

Preliminary



KEY FEATURES

- Support NVIDIA GPU (1~2pcs): RTX PRO 6000 Blackwell Workstation Edition (Build-To-Order), 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 (1~2pcs): Intel Arc™ Pro B70, Intel Arc™ Pro B65, Intel Arc™ Pro B60, Intel Arc™ Pro B50, Intel Arc™ A770, or Intel Arc™ B580
- Support AMD GPU (1~2pcs): AMD Radeon™ AI PRO R9700
- Intel® Core™ Ultra Series 2 Processors (Arrow Lake-S), up to 125W
- 4 x 288-pin Long-DIMM DDR5, up to 256GB (64GB per DIMM)
- ATX Power Supply 1000W or 1600W 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™ Ultra Series 2 Processors (Arrow Lake-S), up to 125W
Chipset	Intel® Q870 or Intel® W880 SKU (Option)
Socket	LGA1851
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel ECC/non-ECC DDR5 6400/5600 MHz * 1DPC 6400MHz (Ultra 9/7/5K), 5600MHz (Ultra 5 non-K) / 2DPC 1R 5600MHz / 2DPC 2R 4400MHz * Only CU-DIMM can support up to 6400MHz * ECC feature only supported by W880
Capacity	256GB (64GB per DIMM)
Socket	4 x 288-pin Long-DIMM

CPU Graphics

Controller	Intel® Xe® LPG Graphics
HDMI	HDMI 2.1 TMDS Max resolution up to 7680x4320@60Hz
DisplayPort	DisplayPort 1.4a, DP++ Max resolution up to 4096x2160@60Hz
MultiDisplay	Quad display (Included 2 output from Type-C)

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/PCIe5: single at x16 (PCIe1); dual at x8 (PCIe1) / x8 (PCIe5)) 2x PCIe x4 (Gen4) for Q870 SKU or 3 x PCIe x4 (Gen4) for W880 SKU 2 x PCIe x1 (Gen4)
M.2	1 x M.2 (Key E, 2230) with PCIe Gen4 x1, USB 2.0 and CNVi for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe Gen4 x1, USB 2.0

Ethernet

Controller/ Speed	LAN1: Intel® I219LM with 10/100/1000 Mbps, supports vPro LAN2: Intel® I210AT with 10/100/1000 Mbps LAN3: Marvell AQC113 with 10/100/1000/2500/5000/10000 Mbps (Option for W880 SKU)
Connector	2 or 3 x RJ-45

MB Rear I/O

HDMI	2 x HDMI 2.1 TMDS
DisplayPort	1 x DP 1.4a++
Ethernet	2 x 1 Gigabit LAN 1 x 10 Gigabit LAN (Option for W880 SKU)
USB	5 x USB 3.2 Gen2 1 x USB4/Thunderbolt™4 (5V/3A, supports DP 2.1 display output) * For Thunderbolt support, please refer to support list.
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) 1 x USB 3.2 Gen2 vertical Con 2 x USB 2.0 (1 x USB2 header) 1 x USB4/Thunderbolt™4 (5V/3A, supports DP 2.1 display output) * For Thunderbolt support, please refer to support list
COM	COM3 (RS-232/TTL 5V/ccTalk, switch by Jumper setting) COM4, COM5, COM6 (RS-232)
Parallel	1 (shared with GPIO)
GPIO	8 x GPI, 8 x GPO (shared with LPT header)

Storage

M.2	1 x M.2 (Key M, 2242/2280/22110/25110) with PCIe Gen5 x4 for SSD 1 x M.2 (Key M, 2242/2280) with PCIe Gen4 x4 for SSD
SATAIII	2.5"/3.5" HDD bays x 4
RAID	Intel® VMD RAID 0/1/5/10 ***supported by identical interface (PCIe or SATA) PCIe interface: 2 x M.2 Key M SATA interface: SATA port

Security

TPM	TPM 2.0 onboard IC
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Power Requirements

Power Supply Unit	1000W: Rated Output Power Input Voltage 100-240V 1600W: Rated Output Power 1600W at 115-240V, Rated Output Power 1300W at 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 PRO 6000 Blackwell Workstation Edition	96GB GDDR7 with ECC, 600W	1~2pcs
RTX PRO 6000 Blackwell Max-Q Workstation Edition	96GB GDDR7 with ECC, 300W	1~2pcs
RTX PRO 5000 72GB Blackwell	72GB GDDR7 with ECC, 300W	1~2pcs
RTX PRO 5000 Blackwell	48GB GDDR7 with ECC, 300W	1~2pcs
RTX PRO 4500 Blackwell Workstation Edition	32GB GDDR7 with ECC, 200W	1~2pcs
RTX PRO 4000 Blackwell	24GB GDDR7 with ECC, 140W	1~2pcs
RTX PRO 4000 Blackwell SFF Edition	24GB GDDR7 with ECC, 70W	1~2pcs
RTX PRO 2000 Blackwell	16GB GDDR7 with ECC, 70W	1~2pcs
INTEL Graphic Card	Description	QTY
Intel Arc™ Pro B70 Creator 32GB	32GB GDDR6, 275W	1~2pcs
Intel Arc™ Pro B65 Creator 32GB	32GB GDDR6, 200W	1~2pcs
Intel Arc™ Pro B60 Creator 24GB	24GB GDDR6, 200W	1~2pcs
Intel Arc™ A770 Challenger SE 16GB OC	16GB GDDR6, 225W	1~2pcs
Intel Arc™ B580 Challenger 12GB OC	12GB GDDR6, 190W	1~2pcs
AMD Graphic Card	Description	QTY
AMD Radeon™ AI PRO R9700	32GB GDDR6, 300W	1~2pcs