

Rugged Edge AI System

PE3000G (Preliminary)

Rugged Fanless MXM GPU Edge AI System supporting Intel Intel® 12th-Gen Core™ CPU (Alder Lake-P, H)



Features

- Rugged fanless design for varied industrial applications
- Up to 64GB DDR5 4800 SDRAM
- 4x DP 1.4 from MXM, 2x DP++, 2x HDMI
- 1x M.2 M key (NVMe), 1x M.2 B key (5G NR), 1x M.2 E key (WiFi6)
- 3x 2.5GbE and 1x GigE
- 8~48V wide-range DC-in w/ built-in Ignition power control
- Withstand 5 Grms vibration

Specifications

System Core	Processor	Intel Core i7-12800HE, i5-12600HE, i3-12300HE
	Graphics	Integrated Intel® Iris® Xe Graphics (i7/i5) Integrated Intel® UHD Graphics (i3)
	Memory	Up to 64 GB DDR5 4800 SDRAM (two SODIMM slots)
	AMT	Supports Intel vPro/ AMT
	TPM	Supports TPM 2.0
I/O Interface	Ethernet port	3x 2.5G Ethernet by I226-IT and 1x Gigabit Ethernet by I219 with screw-lock
	PoE+	IEEE 802.3at PoE+ PSE 100W total power budget (4 ports)
	USB 3.2	3x USB 3.2 Gen2x1 (10 Gbps) ports in type-A connectors with screw-lock
	USB 2.0	1x USB 2.0 port
	Video Port (Integrated Graphics)	2x HDMI, supporting 4096 x 2304 resolution 2x DisplayPort ++, supporting 4096 x 2304 resolution
	Video Port (MXM Graphics)	4x DisplayPort, supporting 4K @ 60Hz (based on MXM GPU Spec.)
	Serial Port	2x configureable RS-232/ 422/ 485 ports (COM1/ COM2)
	Audio	Mic-in and speaker-out

(Preliminary)

Storage Interface	SATA HDD	2x hot-swappable SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/ 1
	M.2 NVMe	1x M.2 2280 M key NVMe socket (PCIe Gen4x4) for NVMe SSD
Expansion Bus	MXM	PCIe x8 slot@Gen4, 8-lanes PCIe
	M.2	1x M.2 3042/3052 B key socket with SIM slot for M.2 5G/ 4G module 1x M.2 2242/ 2252 E key for selected WiFi module (WiFi5/ WiFi6)
	mPCIe	1x mPCIe (full-size)
Power Supply	DC Input	1x 3-pin pluggable terminal block for 8 to 48V DC input
	Ignition Control	Built-in ignition power control
	Button	1 x Power button 1 x Reset button
Mechanical	Dimension	Preliminary: 240 x 230 x 126 mm
	Weight	TBD
	Mounting	Wall-mounting / DT mounting
Environmental	Operating Temperature	Preliminary -20°C ~ 60°C (w/ 50W MXM, 45W CPU) -20°C ~ 70°C (w/o MXM)
	Storage Temperature	-40°C ~85°C
	Humidity	10%~90% , non-condensing
	Vibration	MIL-STD-810H, Method 514.6 , Category 4 & 5Grms, 5-500 Hz, 3 Axes
	Shock	MIL-STD-810H, Method 516.6, Procedure I & 20G or higher.
	EMC	EN 50155, CE/FCC Class A (or Class B, TBD), according to EN 55032 & EN 55035