

MXM AI accelerator Intel Edge Motherboard

Lambortech.

PEX-200



Intel 13th Generation Core i7 Processor with Nvidia RTX 2000 Ada

- Intel 13th Generation Core™ i7-113800HE Processor (Raptor Lake)
- Support NVIDIA RTX 2000 Ada (MXM)
- DDR5 5200MHz / 2 x 262pin DDR5 SO-DIMM
- 3x GbE LAN Ports (LAN 2/3 support 802.at with 30W PoE)
- 2 x RS-232/422/485 (5V/12V)
- 2 x USB 3.2 Gen 2x1, 2 x USB 2.0

SPECIFICATIONS

Platform	Intel CPU	Core i7-13800HE
	Cores (P+E+LPE)	14C (6P + 8E)
	Threads	20
	Max. Frequency	5GHz
	Cache	24MB
	CPU TDP	45W
	BIOS	AMI UEFI 256Mbit
AI Accelerator	AI Engine	NVIDIA RTX 2000 Ada
	Form Factor (Interface)	MXM graphics module version 3.1, Type A (PCIe Gen 4 x8)
	Cores	3072 x NVIDIA Ada Lovelace architecture-based CUDA Cores 96 x NVIDIA fourth-generation Tensor Cores 24 x NVIDIA third-generation RT Cores
	GPU memory	8GB GDDR6 (w/ECC)
Memory	Technology / Socket	DDR5 5200MHz / 2 x 262pin DDR5 SO-DIMM
	Max. Capacity	up to 64GB
Graphics	Controller	Intel Iris Xe Graphics architecture
	Graphic Engine	Hardware encode: 8K30 or 5K60 8b/10b 4:2:0 HEVC/VP9/SCC Hardware decode: 8K60 12b 4:2:0 HEVC/VP9/SCC; 8K30 10b 4:2:0 AV1
Displays	HDMI 2.1 (8K@60Hz)	1
Ethernet	LAN (Intel I226 2.5Gbps)	3x (LAN 2/3 support 802.at with 30W PoE)
Expansion Slots	M.2 2280 M Key	1 x (PCIe Gen 4 x4)
	M.2 2230 E Key	1 x (PCIe Gen 3 x1/USB 2.0)
	MXM Type A	1 x (PCIe Gen 4 x8)
External I/O	COM1	RS232/422/485 (5V/12V)
	COM2	RS232/422/485
	USB 3.2 Gen2x1 (10Gbps)	2
	USB 2.0	2
	Buttons	1 x Power (with LED)
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1
Internal I/O	SATA	1 x 2.5" SATA III SSD/HDD
Power	Power Input Voltage	DC 19V
	Power Connector Type	DC DIN 4pin Φ10/Φ12
Environment	Operating Temperature	-20°C~60°C
	Storage Temperature	-40°C~85°C
	Operating Humidity	5~90% Relative humidity, non-condensing
Watchdog Timer	Interval	Programmable from 1 to 255 Seconds
Regulation	Safety	CE / FCC / UKCA

OPTIONAL DISCRETE GPU

MXM Type A	Discrete GPU	Graphic Cores	Memory Type/ Size
	NVIDIA RTX A2000	3,328 x NVIDIA Ampere architecture-based CUDA Cores 104 x NVIDIA third-generation Tensor Cores 26 x NVIDIA second-generation RT Cores	GDDR6 / 16GB (W/ECC)
	NVIDIA RTX 2000 Ada	3,072 x NVIDIA Ada Lovelace architecture-based CUDA Cores 96 x NVIDIA fourth-generation Tensor Cores 24 x NVIDIA third-generation RT Cores	GDDR6 / 8GB (W/ECC)
	NVIDIA RTX 1000	2,304 x NVIDIA Ampere architecture-based CUDA Cores 72 x NVIDIA third-generation Tensor Cores 18 x NVIDIA second-generation RT Cores	GDDR6 / 8GB
	NVIDIA RTX A500	2,048 x NVIDIA Ampere architecture-based CUDA Cores 64 x NVIDIA Tensor Cores 16 x NVIDIA RT Cores	GDDR6 / 4GB
	NVIDIA Quadro T1000	896 x NVIDIA Turing architecture-based CUDA Cores	GDDR6 / 4GB