

EVS

2000

Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (Comet Lake)
Fanless AI Computing System with Compact NVIDIA® or AMD MXM Graphics



- LGA 1200 Socket Type 10-Core 10th Gen Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (Comet Lake-S) with Intel® W480E Chipset
- Dual 260-pin SO-DIMM support up to 64GB DDR4 Memory
- Compact NVIDIA® Quadro®/GeForce® MXM graphics card delivers leading AI computing productivity by advanced NVIDIA® CUDA® cores
- Fanless, -25°C to 55°C Operation Temperature
- Nano SIM Sockets for 5G/WiFi 6/4G/3G/LTE/GPRS/UMTS
- Expansion : 1 PCI/PCIe, 1 M.2 Key B, 1 M.2 Key E, 1 Mini PCIe, optional SUMIT A, B
- Storage : 2 2.5" SSD Tray, 1 Micro SD Card, 1 M.2 Key M, 1 M.2 Key B
- 9V to 50V wide range DC Power Input with 80V Surge Protection
- Supports Configurable Software Ignition Power Control and TPM 2.0
- Optional VHub One-Stop AIoT Solution Service supports OpenVINO based AI accelerator and advanced Edge AI applications

Workstation-grade AI Platform | Compact Integration
Industrial-grade Reliability | Flexible Expansions

The EVS-2000 Series Fanless AI Computing System features workstation-grade 10th generation Intel® Xeon®/Core™ i9/i7/i5/i3 processors and a compact NVIDIA® or AMD MXM graphics engine with support for NVIDIA® CUDA cores. It supports up to 8 display interfaces and offers an all-in-one integrated design with multiple I/O connections, including 2 SIM sockets for exceptional mobile availability. The system includes a PCI/PCIe slot, 6 USB 3.2 ports, isolated DIO, smart manageability, and a 9V to 50V power input with 80V surge protection and ignition control. This versatile system is ideal for applications in Facial Recognition, Factory Automation, Smart Retail, Machine Vision, and any AI-oriented embedded solutions.



Specifications

System

Processor	LGA 1200 Socket supports 10th Gen Intel® Xeon®/Core™ i9/i7/i5/i3 Processor (Comet Lake-S)
Chipset	Intel® W480E
BIOS	AMI
SIO	IT8786E
Memory	2 DDR4 2933MHz Memory, up to 64GB (ECC/Non-ECC)
OS	Windows 10, Linux

I/O Interface

Serial	3 COM RS-232/422/485 (ESD 8kV)
USB	6 USB 3.2 (External)
Isolated DIO	32 Isolated DIO : 16 DI, 16 DO
LED	Power, HDD
SIM Card	2 External Nano SIM Card Socket
SD Card	1 External Micro SD Card Socket

Expansion

Mini PCIe	1 Mini PCIe Socket for PCIe/USB/SIM Card/mSATA
PCI/PCIe	1 PCI/PCIe x4 Slot
M.2	- 1 M.2 Key B Socket (3042/3052, PCIe x2/USB3(Default)/USB2) - 1 M.2 Key B Socket (2280, PCIe x2/USB3(Default)/USB2) - 1 M.2 Key E Socket (2280, PCIe/USB)
SUMIT A, B	2 SUMIT Slot (Optional)

Graphics

Graphics Processor	Intel® UHD Graphics 630 Independent MXM Graphics : By request
Interface	Up to 7 independent displays : - 1 VGA : Up to 1920 x 1200 @60Hz - 1 DVI-D : Up to 1920 x 1200 @60Hz - 2 DisplayPort : Up to 4096 x 2304 @60Hz - 4 DisplayPort : Up to 7680 x 4320 @60Hz (By requested MXM)

Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
M.2	1 M.2 Key M socket (2280, PCIe x4)
Storage Device	- 1 Micro SD Card Socket, Push-in/Push-out Ejector - 2 Front-access 2.5" SSD/HDD Tray

Audio

Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN 1	Intel® I219LM GigE LAN supports iAMT 14.0
LAN 2	Intel® I210 GigE LAN

Power

Power Input	9V to 50V, DC-in
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16-mode Software Ignition Control
Remote Switch	3-pin Terminal Block : On, Off, IGN
Surge Protection	Up to 80V/1ms Transient Power

Others

TPM	Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Mgmt.	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

Mechanical

Dimensions	EVS-2000 Series : 280.0mm x 215.0mm x 79.1mm (11.02" x 8.46" x 3.11") EVS-2000F Series : 280.0mm x 215.0mm x 86.5mm (11.02" x 8.46" x 3.41")
Weight	EVS-2000 Series : 4.9 kg (10.80 lbs) EVS-2000F Series : 5 kg (11.02 lbs)
Mounting	- Wallmount by mounting bracket - DIN Rail Mount (Optional) - 2U Rackmount (Optional)

Environment

Operating Temp.	35W TDP CPU : -25°C to 55°C (-13°F to 131°F) 65W TDP CPU : -25°C to 45°C (-13°F to 113°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @55°C
Shock	- IEC 60068-2-27 - SSD : 50G @wallmount, Half-sine, 11ms
Vibration	- IEC 60068-2-64 - SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE, FCC, EN50155, EN50121-3-2

*Environmental ratings for base system only.

Order Information

RS-05292024

Model	Graphics MXM TDP	GigE LAN	USB 3.2	PCIe x4	PCI	System Fan	Operating Temp.
EVS-2010	50W	2	6	1	-	N/A	-25°C to 55°C with 35W CPU
EVS-2001				-	1	N/A	
EVS-2010F	80W to 150W	2	6	1	-	Y	-25°C to 45°C with 65W CPU
EVS-2001F				-	1	Y	

CPU List

Series	CPU	GHz	TDP (W)	ECC RAM
Intel® Core™	i9-10900E	4.7	65	N/A
	i7-10700E	4.5	65	N/A
	i5-10500E	4.2	65	N/A
	i3-10100E	3.8	65	Y
	i9-10900TE	4.5	35	N/A
	i7-10700TE	4.4	35	N/A
Intel® Xeon®	i5-10500TE	3.7	35	N/A
	i3-10100TE	3.6	35	Y
	W-1290TE	4.5	35	Y
	W-1270TE	4.4	35	Y
	W-1250TE	3.8	35	Y

GPU List

GPU	Description	TDP (W)	System Fan Req.
MXMQT1000	CUDA 896, 4GB 128bit/GDDR6	50	N
MXMA2000-4G-35W	CUDA 2560, 4GB GDDR6	35	N
MXMA2000-8G-35W	CUDA 2560, 8GB GDDR6	35	N
MXMQRTX3000	CUDA 1920, 6GB 128bit/GDDR6	80	Y
MXMA2000-4G-60W	CUDA 2560, 4GB GDDR6	60	Y
MXMA2000-8G-60W	CUDA 2560, 8GB GDDR6	60	Y
MXMQRTX5000	CUDA 3072, 16GB 256bit/GDDR6	110	Y
MXMA4500-16GB-115W	CUDA 5120, 16GB GDDR6	115	Y
MXMA4500-16GB-80W	CUDA 5120, 16GB GDDR6	80	Y
MXMA4500-8GB-115W	CUDA 5120, 8GB GDDR6	115	Y
MXMA4500-8GB-80W	CUDA 5120, 8GB GDDR6	80	Y

Optional MXM Module

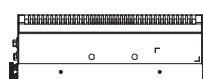
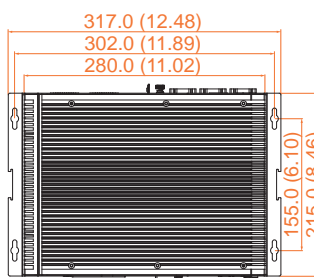
Supports 50W to 150W TDP MXM 3.1 Type A/B Form Factor MXM Module

*Please discuss with your regional Rugged Sales contact to find out ideal MXM module for your application.

Dimensions & Drawing

Unit : mm (inch)

EVS-2000



EVS-2000F

