MilPons 4000 Fanless Sealed NVIDIA GPU Computer

14th Gen Intel Core i9/i7/i5/i3 Processor (Raptor Lake-S Refresh)
Up to 24 Physical Cores for Mission Critical Computing

Feature Highlights

- Intel® Core™ i9/i7/i5/i3 Processor (14th Gen, Raptor Lake-S Refresh), up to 24 cores
- NVIDIA Ampere A2000 GPU, 2560 CUDA, 8GB GDDR6, 35W TDP
- 2 x DDR5 SO-DIMM RAM slots, up to 96GB total
- IP65-rated fanless enclosure, -33°C to 55°C Operating Temperature
- 2x 2.5G LAN (D38999)
- 2 SATA III (6Gbps) support S/W RAID 0, 1
- 18V to 32V DC-in, Nominal 28VDC
- Supports TPM 2.0, CAN Bus 2.0B Dual Isolated (D38999 Connector)
- 4 x USB 2.0, Up to 3x Serial Ports (D38999 Connector)
- 1 HDMI Output

Sealed for Harsh Environments | Mission-Ready Computing
Fanless Thermal Design | Secure, Hardened Storage

The MilPons 4000 is a military-grade, sealed fanless embedded computer engineered for naval, vehicle, and tactical deployments. Designed to meet IP65 enclosure standards and applicable MIL-STD environmental requirements, it delivers dependable performance in high-shock, high-vibration, and EMI-sensitive conditions. Powered by up to a 14th Gen Intel® Core™ processor with up to 24 cores, the system supports up to 96GB of DDR5 memory, dual 2.5" SATA solid-state drives with secure erase capability, and optional NVIDIA GPU acceleration for edge AI, signal processing, and advanced control applications.

Rugged MIL-DTL-38999 circular connectors provide secure I/O, including dual 2.5G Ethernet, dual-isolated CAN Bus 2.0B, USB, and serial interfaces to support defense and industrial integration requirements. A wide 18–32V DC input range ensures compatibility with MIL-STD-1275 and MIL-STD-704 electrical environments, while the fully sealed, conduction-cooled chassis enables silent, maintenance-free operation from -33°C to +55°C. Expansion options allow configuration flexibility for mission-specific deployments.

Specifications

System

Processor	24-core Intel® Core™ i9/i7/i5/i3 Processor (14th Gen, Raptor Lake-S Refresh)
GPU (Optional)	NVIDIA Ampere A2000 GPU, 2560 CUDA, 8GB GDDR6, 35W TDP
Chipset	Intel® R680E
BIOS	AMI
SIO	IT8786E
Memory	2x DDR5 SO-DIMM slots, up to 96GB (ECC/Non-ECC)
OS	Windows 11, Linux

I/O Interface

Serial	3x COM (D38999/20WD35SB)
USB	4x USB 2.0 (D38999/20WD35SB)
LED	Power
RTC Battery	Panasonic BR2032 190mAh lithium battery

Expansion

Mini PCIe	1x PCIe x8 Gen 4
M.2	1x M.2 Dual Isolated CAN Bus card 1x M.2 Key E Socket (2230, PCIe/USB)

Graphics

Graphics Processor	Intel® UHD Graphics 770/730 driven by Intel® Xe Architecture
Interface	2x HDMI 2.1 : Up to 4096 x 2304 @60Hz 1x DP : Up to 3840 x 2160 @60Hz 4x DP : Up to 7680 x 4320 @60Hz (By requested MXM)

Storage

SATA	2 x SATA III (6Gbps)
M.2	1x M.2 Key M Socket (2280, PCIe x4)

Ethernet

LAN 1	2.5G LAN (J4: D38999/20WD35SB)
LAN 2	2.5G LAN (J4: D38999/20WD35SB)

Power

Power Input	DC 18V to 32V
Power Interface	Circular MIL Spec Connector with 3 positions (MS3112E8-3P)
Ignition Control	16-mode Software Ignition Control

Others

TPM	Infineon SLB9670, TPM 2.0, SPI 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	13.3" x 13" x 3.2"
Weight	18 lbs
Mounting	- Wallmount by mounting bracket - DIN Rail Mount - 2U Rackmount (Optional)

Environment

Operating Temp.	-33°C to 55°C (-27.4°F to 131°F), Fanless
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95%, non-condensing
Relative Humidity	95%
Shock	Designed to meet MIL-S-901D, Grade A
Vibration	Designed to meet MIL-STD-167-1A, 4–33Hz
EMC	Designed to meet MIL-STD-461F (CE101, CE102, CS101, CS106, CS114, CS116, RE101, RE102, RS101, RS103)

*Environmental ratings for base system only.

CPU List

Series	CPU	CORES	GHz	TDP (W)	ECC RAM
Intel® Core™	I9-14900T	24	5.5	35	Y
Intel® Core™	I7-14700T	20	5.2	35	Y
Intel® Core™	I5-14500T	14	4.8	35	Y
Intel® Core™	I3-14100T	4	4.4	35	Y

Dimensions & Drawing

Unit : inch