

MILEDGE 2100

EMBEDDED SERVER



OVERVIEW

The MilEdge 2100 is a small footprint, wide temperature (-10° to 55°C) server-grade embedded computer with no fans and no rotating media. The MilEdge is designed for rugged Hyper Converged Infrastructure (HCI) edge applications such as Virtualization Server, Terminal Servers, On-Prem Private Hybrid Cloud, and Cyber Security IDS/IPS.

The MilEdge 2100 is equipped with a data center grade 16 Core Intel XEON D-1577 processor what supports 128GB DDR4 RAM. This brings the architectural innovations of the Intel® Xeon® Scalable platform to a system-on-a-chip (SoC) CPU for lower power, higher density solutions, integrating essential network, security and acceleration capabilities for over one teraflop of compact computing.

To support the server clustering requirements of a tactical hybrid cloud on the edge, the MilEdge 2100 supports up to 4x 10GbE SFP+ ports (supporting both Copper/Fiber SFP + transceivers) and 2x GbE Copper ports (1x IPMI, 1x Wake On LAN PXE).

FEATURES

- Military Grade Embedded Server
- Featuring Xeon D-1577 Server Class CPU
- 16 Cores | TDP 45W | 14nm | 24MB Cache
- 128 GByte DDR4 4-slot RDIMM ECC DRAM
- Storage support for 4x SATA III | 1x CFAST
- 4x USB 3.0 | 2x USB 2.0 | 8x Digital I/O
- 2x Mini-PCIe Expansion Ports
- 4x SFP 10G Fiber or Copper Ethernet
- 8x SFP 10/100/1000 Fiber or Copper Ethernet
- 2x Copper GbE for BMC | PXE | Wake-on-LAN

MLEEDGE 2100

SPECIFICATIONS

System

Processor	Xeon D-1577/16 Cores/TDP 45W (24MB Cache)
Lithography	14nm Broadwell DE Lithography
BIOS	AMI EFI BIOS
Memory	4x DDR4 RDIMM slot (Registered DIMM) by dual channel up to 128 GByte ECC DRAM
OS	Windows Server Linux
IPMI/BMC Management	1x GbE port with IPMI 2.0 support & iKVM 2.0
Product Lifecycle Support	15 year Intel Embedded Roadmap Start Date: Q1 2016

I/O Interface

Serial	Support for 4x COM connected via LPC bus
USB	4x USB 3.0 (External) 2x USB 2.0 (External) 2x USB 2.0 (Internal)
Isolated DIO	8x Isolated DIO: 4 DI, 4 DO
Wake-on-LAN	1x GbE port for Wake-on-LAN and PXE

Expansion

Mini PCIe	2x Mini-Pcie Sockets
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Storage

SATA III	4x SATA Gen 3 (6.0 Gb/s)
CFast	1x CFast Ejector
RAID	RAID Host Controller support RAID 0, 1, 10

Graphics

Processor	AST 2400
Interface	1VGA: Up to 1920 x 1200 @ 60Hz

Audio

Audio Codec	Realtek ALC892
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN 10G SFP+	8x 10G SFP+ Ports for Fiber or Copper SFP+ Module (Note: All 4 ports can be configured to support 10/100/1000 transceivers in BIOS)
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LAN 1 GbE SFP	4x 10/100/1000 SFP Module
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LAN Copper	2x 10/100/1000 Copper Ports
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Power

Power Input	12V to 36V, DC-in
Power Interface	3-pin Terminal Block: V+, V-, Frame Ground

Built-in Monitors

TPM	Infineon SLB9665, supports TPM 2.0, LPC Interface
Watchdog Timer	Reset: 1 to 255 sec./min. per step
Smart Management	iManager 2.0-CPU throttling, thermal shutdown (Intel PECI) (from EC ITE8528)
HW Monitor	Monitoring Temperature, voltages. Auto-throttling control when CPU overheats.

Mechanical

Dimensions (LxWxH)	292mm x 178mm x 102mm 11.5" x 7" x 4"
Weight	18 lbs. (Average)
Mounting	- Wallmount by mounting bracket - 2U Rackmount (Optional)

Environmentals

Storage Temperature	-20°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Environmental	MIL-STD-810G (Pending)
Shock	MIL-STD-901D (Pending)
Vibration	MIL-STD-167-1 (Pending)
EMI	MIL-STD-461G

