

## MILEEDGE 2100 EMBEDDED SERVER



## ABOUT

The **MILEEDGE 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) applications such as Virtualization Server, Terminal Servers, On-Prem Private Hybrid Cloud, and Cyber Security IDS/IPS.

Equipped with a data center grade 16 Core Intel XEON D-1577 processor that supports 128GB DDR4 RAM, the **MILEEDGE 2100** brings the architectural innovations of the Intel® Xeon® Scalable platform to a system-on-a-chip (SoC) CPU for lower-power, high-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 **MILEEDGE 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)

The **MILEEDGE 2100** provides an additional 8x 1GbE ports, which supports virtualization and terminal server applications.

Flexible HCI storage requirements are supported with 4x SATA III SSD drive connections with user accessible thumbscrew 2.5" drive trays. The RAID Host Controller supports RAID 0,1,10 configurations.

The **MILEEDGE 2100** is the Embedded Server you are looking for to include in your next generation HCI application on the Edge.

## 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

## System

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

## I/O Interface

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

## Expansion

<b>Mini PCIe</b>	2x Mini-PCIe Sockets
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## Storage

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

## Graphics

<b>Processor</b>	AST 2400
<b>Interface</b>	1VGA: Up to 1920 x 1200 @ 60Hz

## Audio

<b>Audio Codec</b>	Realtek ALC892
<b>Audio Interface</b>	1 Mic-in, 1 Line-out

## Ethernet

<b>LAN 10G SFP+</b>	4x 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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<b>LAN 1 GbE SFP</b>	8x 10/100/1000 SFP Module
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<b>LAN Copper</b>	2x 10/100/1000 Copper Ports
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## Power

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

## Built-in Monitors

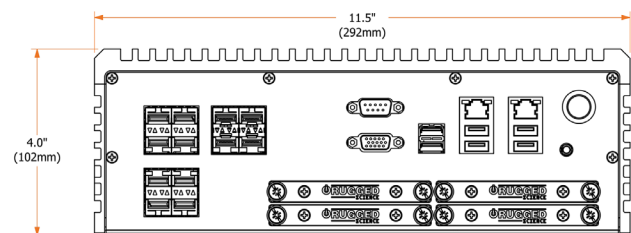
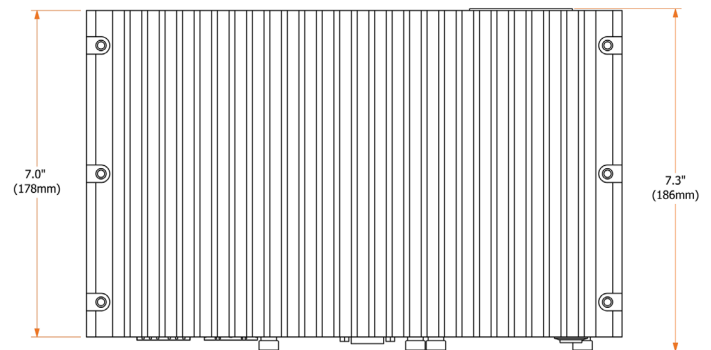
<b>TPM</b>	Infineon SLB9665, supports TPM 2.0, LPC Interface
<b>Watchdog Timer</b>	Reset: 1 to 255 sec./min. per step
<b>Smart Management</b>	iManager 2.0-CPU throttling, thermal shutdown (Intel PECI) (from EC ITE8528)
<b>HW Monitor</b>	Monitoring Temperature, voltages. Auto-throttling control when CPU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

## Mechanical

<b>Dimensions (LxWxH)</b>	292mm x 178mm x 102mm   11.5" x 7" x 4"
<b>Weight</b>	18 lbs (Average)
<b>Mouting</b>	- Wallmount by mounting bracket - 2U Rackmount (Optional)

## Environmentals

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



Intel® Xeon-D®  
16-Core CPU



Multi-Level  
CyberSecurity



High Speed  
Flexibility



Fanless,  
Solid-State  
Design



Embedded  
Expansion



RAID Host  
Controller

\*All specifications subject to change without notice