MECS-6110

1U 19" Edge Server with Intel® Xeon® D Processor for Communication and Edge Computing Infrastructure Deployment

Features

- 1x Intel® Xeon® D-2100 family processor
- 4x DDR4-2666 1DPC RDIMM ECC REG up to 256GB
- 2x 2.5" SATA bays and 2x M.2 M Key interfaces
- 2x PCIe x16 Gen3 single-slot FHFL interface or 1x PCIe x16 Gen3 dual-slot FHFL interface
- 1x PCIe x8 Gen3 OCP NIC
- 420mm depth 1U 19" rackmount form factor
- Built-in Intel® QAT support
- TPM 1.2/2.0 module
- IEEE 1588 v2 and 4x 1PPS SMA input/output

Preliminary

Specifications

● CPU / Chipset / Memory

CPU
Intel® Xeon® D-2177NT Processor 1.90GHz (14C/28T, 105W)
Intel® Xeon® D-2183IT Processor 2.20GHz (16C/32T, 100W)
Intel® Xeon® D-2187NT Processor 2.00GHz (16C/32T, 110W)

Chipset
Integrated on Intel® Xeon® D SoC

Memory
4x DDR4-2666 1DPC RDIMM sockets, ECC, REG, up to 256GB

● BIOS
AMI BIOS on SPI flash memory

● Operating Systems
Microsoft Windows Server 2012/2016
CentOS Linux 7.2/7.2
SuSE Linux Enterprise Server 11/12
*No OS installed by default

● I/O Interfaces
2x RJ-45 100/1000BASE-T Ethernet port (front)
4x 10G SFP+ Ethernet port (front)
2x RJ-45 1PPS+ TOD port (front)
1x RJ-45 console port (front)
2x USB 3.0 (front) and 1x USB 2.0 (internal)
1x VGA rear
1x COM (internal)
4x 1PPS SMA input/output (internal)

● Expansion
2x PCIe x16 Gen3 passive cooling SWFHFL cards up to 110W for each
or
1x PCIe x16 Gen3 passive cooling DWFHFL card up to 250W

1x PCIe x8 Gen3 OCP NIC v2

● Control Buttons (front access)
Power, reset, UID

● Chassis Management
IPMI v2.0 compliant with iKVM and SoL support

Specifications

- **Storage**
  2x 2.5" hot-swappable SATA 6Gb/s
  1x onboard M.2 NVME socket, 2242 M Key
  1x onboard M.2 NVME socket, 2280 M Key

- **LEDs (front)**
  Power, alert, drive activity, BMC heartbeat, UID

- **TPM**
  TPM1.2/2.0 module (SKU dependent)

- **Hardware Acceleration**
  Intel® QuickAssist Technology (SKU dependent)

- **Regulatory**
  FCC Class A, CE emissions, UL, CB, CCC and RoHS compliant

- **MTBF**
  150,000 hours

- **Software Support**
  Validated with DPDK, provides high throughput for data plane packet processing

- **Mechanical**
  Form Factor
  1U 19'' rackmount 438mm x 44mm x 420mm (WxHxD)

  Cooling
  6x adaptive speed fans

  Power
  600W 1+1 redundant PSUs
  100V to 240V AC@50~60Hz
  -36V to -72V DC

  Environmental (PCIe card dependent)
  Operating: -5 °C to +55 °C, 10-85% RH @40 °C, non-condensing
  Storage: -40 °C to +70 °C, 5-90% RH, non-condensing

  Shock
  Operating: Half-sine 2G, 11ms pulse, 100 pulses in each direction
  Non-operating: Trapezoidal, 25G, 170 inches/sec delta V, three drops in each direction

  Vibration
  Non-operating Vibration: 2.2Grms, 10 minutes per axis in each direction

  Acoustic
  Sound pressure: < 75 dBA @1m with all fans at maximum speed

Mechanical Overview

Front View

Rear View