

XEF - M1

☰ 1U 19" Edge Server with Intel® Xeon® D Processor

☰ Suitable for 5G MEC deployment



☰ Integrated Software Features

- Openshift 4.5
- IPFS 0.13.2
- XENIRO Snapscale 2.0.4
 - Consortium Blockchain
 - Privacy trade via ring signature
 - Dual type consensus (1) DpoS + pBFT (2) pBFT
 - China security compliance SM2/3/4

Blockchain Features

- 0.005s response time
- 99.99% success rate

☰ Hardware 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 interfaces 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
- 2x IEEE 1588 v2 1PPS/TOD RJ-45 port and 4x 1PPS SMA input/output

☰ 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

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Operating Systems

- Microsoft Windows Server 2012/2016
- CentOS Linux 7.2/7.6
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)

Storage

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

Software Support

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

Expansion

Option 1

- 2x PCIe x16 Gen3 single-slot FHFL interfaces
Passive cooling, up to 110W each

Option 2

- 1x PCIe x16 Gen3 single-slot FHFL interface
Passive cooling, up to 250W

Option 3

- 1x PCIe x16 Gen3 single-slot FHFL interfaces, up to 110W +
- 1x PCIe x8 Gen3 single-slot FHFL interfaces, up to 110W +
- 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

Mechanical

Form Factor

- 1U 19" rackmount 438mm x 44mm x 420mm (WxHxD)

Cooling

- 6x adaptive speed fans

Power

- 450W 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 (Note: HDDs and PCIe cards not included)
- Storage: -40 °C to +70 °C, 5-90% RH, non-condensing

Vibration

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