

CSA-7400

4U 19" Network Appliance

Features

- Based on Open Compute Carrier-grade Edge Reference Architecture (OCCERA)
- 4U high density platform powered by four dual Intel® Xeon® E5 or Scalable processors
- Dual switch modules providing 2x 50G internal Ethernet links to each compute node
- Independent control plane between compute nodes via GbE switch on both switch nodes
- 2x 400Gb/s Ethernet bandwidth, 2x 200Gb/s PCIe bandwidth, total 1.2Tb/s bandwidth
- Flexible IO combination via MXN board plus NIM card (MXN-3610: 20x 10G, MXN-4100: 4x 100G, NIM-1610: 16x10G, NIM-0440: 4x40G)
- Advanced chassis management
- Redundant AC/DC PSUs (N+1)



Specifications

Compute Node (MCN-2600T)

• CPU / Chipset / Memory

CPU

Intel® Xeon® processor E5-2620 v3 (6C/12T)
Intel® Xeon® processor E5-2630 v3 (8C/16T)
Intel® Xeon® processor E5-2628L v3 (10C/20T)
Intel® Xeon® processor E5-2658 v3 (12C/24T)
Intel® Xeon® processor E5-2680 v3 (12C/24T)
Intel® Xeon® processor E5-2699 v3 (18C/36T)
Intel® Xeon® processor E5-2628L v4 (12C/24T)
Intel® Xeon® processor E5-2680 v4 (14C/28T)

L2 Cache

15MB/20MB/25MB/30MB dependent on CPU

Chipset

Intel® C610 Chipset

Memory

12x DDR4-1600/1866/2133 DIMM socket, ECC, up to 192GB

• BIOS

Chip

AMI BIOS on SPI flash memory

• Operating System

Window 7 64-bit, Linux Kernel 2.6 and above

• I/O Interfaces

Expansion

2x RJ-45 10/100/1000BASE-T Ethernet ports

Console

1x RJ-45 serial port

USB

2x USB 3.0

Graphics

1x VGA port

Storage

External: 2x 2.5" Hot-swappable SATA drive bays

Internal: 2x M.2 SSD

Backplane

2x PCIe x8 Gen3 to switch nodes

2x GbE to switch nodes

• Control Buttons

Power

1x power button (front)

Reset

1x reset button (front)

powerBridge
Computer

Ehlbeek 15a
30938 Burgwedel
fon 05139-9980-0
fax 05139-9980-49

www.powerbridge.de
info@powerbridge.de

Specifications

Compute Node (MCN-2610T)

- **CPU / Chipset / Memory**

CPU

Intel® Xeon® Silver 4110 Processor 2.10Hz (8C/16T)
 Intel® Xeon® Silver 4114 Processor 2.20 GHz (10C/20T)
 Intel® Xeon® Gold 5120T Processor 2.20 GHz (14C/28T)
 Intel® Xeon® Gold 6130 Processor 2.10 GHz (16C/32T)
 Intel® Xeon® Gold 6138 Processor 2.00 GHz (20C/40T)

- **Chipset**

Intel® C621 Chipset

- **Memory**

12x DDR4-2400/2666 DIMM sockets, ECC, up to 384GB

- **BIOS**

Chip

AMI BIOS on SPI flash memory

- **Operating System**

Windows 7 64-bit, Windows 10 64-bit, Windows Server 2016, Linux Kernel 2.6 and above

- **I/O Interfaces**

Expansion

2x RJ-45 10/100/1000BASE-T Ethernet ports

Console

1x RJ-45 serial port

USB

2x USB 3.0

Graphics

1x VGA port

Storage

Internal: 2x 2.5" SATA drive bays; 1x M.2 SSD

Backplane

2x PCIe x8 Gen3 to switch nodes
 2x GbE to switch nodes

- **Control Buttons**

Power

1x power button (front)

Reset

1x reset button (front)

Switch Node (MXN-3610/MXN-4100SR)

- **Chipset**

Switch

Intel® Ethernet Multi-host Controller FM10840 with 600Mbps bandwidth & 4x PCIe x8 Gen3
 Microsemi® VSC7512 GbE switch to provide independent control plane between compute nodes

CMM

Chassis Management Module with AST1250

COMe

COMe module with Type 6 interface as local management (optional)
 Intel® Core i7-4700EQ 2.4GHz, 4cores/GT2
 Intel® Celeron 2002E 1.5GHz, 2cores/GT1
 2x SODIMM 1600/1333MHz DDR3, up to 16GB

- **I/O Interface**

SFP+/QSFP+/QSFP28

MXN-3610: Switch board with 20x 10G SFP+ ports

MXN-4100SR: Switch board with 4x 100GBASE-SR4/100GBASE-LR4 QSFP28 ports

NIM-1610: Switch I/O extension card with 16x10G SFP+ ports

NIM-0440: Switch I/O extension card with 4x40G QSFP+ ports

Ethernet

2x RJ-45 ports

USB

1x USB 2.0

1x USB console port

Storage

2x mSATA

Backplane

4x PCIe x8 Gen3 to CPU nodes

- **Control Buttons**

Reset

1x reset button (front)

Hot-swap

1x hot-swap button (front)

- **LEDs**

Power, Active/Standby, Alarm

- **Chassis Management**

Advanced Chassis Management for CPU nodes, fans, PSU via CLI and web interface, IPMI v2.0 compliant

- **Control Buttons**

Power

1x power button (front)

Reset

1x reset button (front)

Specifications

• Mechanical and Environmental

Form Factor: 4U 19" rackmount 440mm x 176mm x 600mm (W x H x D)
Fans: 3x fans, variable speed
Power: 3+1 redundant 850W, 100-240V AC @0-60Hz or -36V to -72V DC

Temperature

Operating: 0°C to +40°C
Storage: -40°C to +70°C
Short term operating: -5°C to +45°C, 5%-90% RH

Humidity

10%-85% RH@40°C, non-condensing
Non-operating: 5%-90% RH

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 maximum speed
Regulatory: FCC class A, CE emission, UL, CB, CCC and RoHS compliant
MTBF: 90,000 hours

• Software Support

ADLINK PacketManager includes Layer2/3 switch stacks, load balancing and advanced ACL features
Validated with DPDK, provides a high throughput for data plane packet processing

Ordering Information

• MCN-2600T-0001

CPU: 2x Intel® Xeon® E5-2680 v3
RAM: 12x 16GB DDR4
Storage: 2x 16GB M.2 SSD, 2x 2.5" 500GB SATA HDD

• MCN-2600T-0002

CPU: 2x Intel® Xeon® E5-2630 v3
RAM: 8x 8GB DDR4
Storage: 2x 8GB M.2 SSD, 2x 2.5" 1TB SATA HDD

• MCN-2610T-0001

CPU: 2x Intel® Xeon® Gold 5210
RAM: 12x 16GB DDR4
Storage: 1x 16GB M.2 SSD, 2x 2.5" 500GB SATA HDD

• MCN-2610T-0002

CPU: 2x Intel® Xeon® Silver 4114
RAM: 8x 8GB DDR4
Storage: 1x 8GB M.2 SSD, 2x 2.5" 1TB SATA HDD