MCS-2080

2U 19" Media Cloud Server with Modular Compute and Switch Nodes

Features

- 16 systems (MCN-1500 compute node)
- Supports Intel® Quick Sync Video (GT4e graphics) with hardware assisted H.265/VP9 transcoding
- Dual redundant MXN-0410 Switch nodes, each providing 16x 1G internal links to Compute nodes MCN-1500 and 4x 10G uplinks
- 8x PCIe x8 slots to meet expansion requirements
- ADLINK MediaManager provides end-to-end video server prototype solution to speed up product development
- IPMI 2.0 with SOL and web-based managment interface
- Adaptive fan speed and intelligent power supply monitoring

Applications

- High-definition video streaming, video conferencing and online classrooms
- High-density video transcoder for HEVC/VP9 and 4K/UHD
- Video surveillance and intelligent video analytics
- WebRTC and subscription-based video services

Specifications

Compute Node

- **CPU / Chipset /Memory (per node)**
  MCN-1500 Form Factor compute node
  1/4-width, hot-pluggable compute node (2 systems per node)

  CPU
  Dual Intel® Xeon® Processor E3-1585 v5 (BGA)

  Chipset
  Intel® C236 Chipset

  Memory
  4x DDR4-2133 SODIMM, up to 64GB

  Graphics
  Intel® GT4e integrated graphics

- **BIOS**
  Chip
  AMI BIOS on SPI flash memory

  Features
  Intel® PXE pre-boot
  Remote Console via IPMI SOL
  ACPI 1.0/2.0 support
  UEFI

- **I/O Interfaces (per node)**
  MCN-1500 Ethernet
  4x 10/100/1000BASE-T Base Interface channels

  Storage
  Onboard: 2x mSATA slots, supports SSD modules up to 2x 512GB

  USB
  2x USB 2.0 ports on front panel (1 port per system)

  HDMI
  2x HDMI ports on front panel (1 port per system)

  Expansion
  1x PCIe x8 expansion slot to rear x86 system on each MCN-1500

MXN-0410 Switch Node

- **Chipset (per node)**
  Processor
  Broadcom 56150 Managed GbE Switch SoC

  CMM
  Chassis Management Module

- **I/O Interfaces (per node)**
  External
  4x10G SFP+ to front panel
  3x 1GbE to front panel
  1x RJ-45 Console port

  Internal
  16x 1G to backplane for MCN-1500 compute node
  1x 1G between 2 MXN-0410 switch nodes

Specifications

● Chassis Mechanical and Environmental

Form Factor: 2U 19" Rackmount System

Power Modules: 2x hot-swappable 2130W/1600W high-efficiency redundant power modules

Dimension: 438mm x 88mm x 900mm (W x H x D)

Fans: 6x fans with fan speed control on chassis

Operating Temp.
0˚C to +40˚C

Storage Temp.: 40˚C to +70˚C

Humidity
5% to 95%, non-condensing

Certification
CCC, CB

RoHS
RoHS compliant

● ADLINK Application Ready Intelligent Platform Software Supported Software

Intel® Media Server Studio: delivers fast, high-density video transcoding using Intel media hardware accelerators (for MCN-1500)

OpenCL API: enables customized and accelerated media pipeline

OpenStack: for building and managing cloud computing platforms for video content

Intel® Video Analytics Software Suite: for creating big-data based video analytics solutions

Intel® Collaboration Suite for WebRTC: for creating high-performance, reliable, and scalable web communication solutions

Ordering Information

- **MCS-2080**
  2U, 19" chassis with 2 redundant PSU

- **CMM-100**
  Chassis management module

- **MXN-0410**
  Switch Node: 4x 10G Managed GbE Switch

- **MCN-1500**
  Compute Node: Dual Intel® Xeon® Processor E3-1585 v5 (BGA)

Mechanical Layout

2x USB 2.0
2x HDMI
2x Power LEDs
2x Status LEDs
2x Power Buttons

Front View

2x 1GbE
Power Module
Switch Node
Reset Button
CMM Warning LED
4x 10G SFP+
CMM Manager Port
1x USB Serial Console Port
Top: CMM Active/Standby LED
Bottom: Power LED

Rear View

2x Switch Nodes
2x Power Modules
8x PCIe x8 slots
6x Fans
8x Compute Nodes (MCN-1500)

Top View