ADLINK
LEADING EDGE COMPUTING

1U 19" EDGE SERVER WITH INTEL® XEON® D PROCESSOR FOR COMMUNICATIONS AND 5G MEC INFRASTRUCTURE DEPLOYMENT

MECS-6110/6111

Datasheet

intel SELECT SOLUTIONS

Features

- 1x Intel® Xeon® D-2100 family processor
- 4x DDR4-2666 RDIMM ECC REG up to 256GB
- 2x 2.5" SATA bays (MECS-6110 only) 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 interface
- 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 MMCX input/output
  Note: Please contact your ADLINK representative for detailed information on clock synchronization.
- EMC grade: Class B
- PSUs front accessible for small footprint deployment (MECS-6110 only)
- Verified Intel® Select Solution for uCPE on CentOS

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) Note: For other processor SKUs, please contact your ADLINK representative.
	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 7.2/7.6 SuSE Linux Enterprise Server 11/12 Note: 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)

Specifications (cont'd)

I/O Interfaces		1x VGA rear 1x COM (internal) 4x 1PPS MMCX input/output (internal) Note: verified with the following SFP+ modules; Finisar FTLX8574D3BCL 850nm, Finisar FTLX8571D3BCL 850nm, Finisar FTLX1471D3BCL 1310nm, Finisar FTLX1471D3BCV 1310nm, Finisar FTLX8571D3BCV 850nm, Intel FTLX8571D3BCVIT1 850nm
Expansion	Option 1	2x PCIe x16 Gen3 single-slot FHFL interfaces Passive cooling, up to 110W each
	Option 2	1x PCIe x16 Gen3 dual-slot FHFL interface Passive cooling, up to 250W
	Option 3	1x PCIe x16 Gen3 single-slot FHFL interfaces, passive cooling up to 110W + 1x PCIe x8 Gen3 single-slot FHFL interfaces, passive cooling 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
Storage		2x 2.5" hot-swappable SATA 6Gb/s (MECS-6110 only) 2x onboard M.2 SATA/NVMe sockets, 2242/2280 M Key (Supports software RAID 0, 1, 5, 10 by 4 SATA interfaces)
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/CE/CCC class B, UL, CB, and RoHS compliant Note: Certifications were passed with 450W AC-DC/DC-DC PSU installed (MECS-6110 only).
Software Support		Validated with DPDK, provides high throughput for data plane packet processing
Thermal Reference for PCIe Card Design		The suggested PCIe bracket air inlet ratio is at least 30%, under which case, the airflow is 11.3 CFM. Note: Please contact your ADLINK representative for detailed information on thermal issue.
Mechanical	Form Factor	1U 19'' rackmount 438mm x 44mm x 420mm (WxHxD)
Carton Dimension		572mm x 277mm x 761mm (WxHxD)
Weight		Net Weight: 7Kg Gross Weight: 11Kg Note: System weights are measured with 2 memory modules and 1 SATA drive installed, and without any OCP or PCIe cards.
Cooling		6x adaptive speed fans
Power		450W/600W 1+1 redundant PSUs 100V to 240V AC @50-60Hz -36V to -72V DC

Specifications (cont'd)

Environmental (PCIe card dependent)	Operating: -5 °C to +55 °C, 5% - 95%RH, non-condensing Note: Not including HDD and PCIe cards. Storage: -40 °C to +70 °C, 5% - 95% 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 Note: Shock and vibration tests were passed with dual-slot graphics card installed.

Mechanical Overview

MECS-6110

MECS-6111

Front View

Rear View