



12" x 10"

Key Features



3rd Gen Intel® Xeon® Scalable processors
Dual Socket LGA-4189 (Socket P+) supported, CPU TDP supports
Up to 185W TDP, 2 UPI up to 11.2 GT/s

Intel® C621A

Up to 2TB RDIMM, DDR4-3200MHz; Up to 2TB 3DS ECC LRDIMM,
DDR4-3200MHz, in 8 DIMM slots

4 PCI-E 4.0 x16
M.2 Interface: 2 PCI-E 4.0 x4
M.2 Form Factor: 2280/22110, 2280
M.2 Key: M-Key

Intel® C621A controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Dual LAN with Intel® i210 Gigabit Ethernet Controller

1 VGA port

Product SKUs	
MBD-X12DPL-i6	■ X12DPL-i6
Physical Stats	
Form Factor	■ ATX
Dimension	■ 12.23" x 10" (31.06cm x 25.4cm)
Processor	
CPU	■ 3rd Gen Intel® Xeon® Scalable processors ■ Dual Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 185W TDP, Dual UPI up to 11.2 GT/s
System Memory	
Memory Capacity	■ 8 DIMM slots ■ Up to 2TB 3DS ECC LRDIMM, DDR4-3200MHz; Up to 2TB ECC RDIMM, DDR4-3200MHz
Memory Type	■ 3200/2933/2666MHz ECC DDR4 LRDIMM (3DS), RDIMM
DIMM Sizes	■ 256GB ■ LRDIMM: 256GB ■ RDIMM: 256GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors ■ Detects double-bit errors (using ECC memory)
On-Board Devices	
Chipset	■ Intel® C621A
SATA	■ Intel® C621A controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10
IPMI	■ ASPEED AST2600 BMC
Graphics	■ ASPEED AST2600 BMC
Network Controllers	■ Dual LAN with Intel® i210 Gigabit Ethernet Controller
Input / Output	
LAN	■ 2 RJ45 Gigabit Ethernet LAN ports
USB	■ 5 USB 3.2 Gen1 port(s) (2 via header; 2 rear; 1 type A)
Video Output	■ 1 VGA port(s)
Serial Port	■ 1 COM Port(s) (1 header)
DOM	■ 2 SATA <u>DOM</u> (Disk on Module) power connector support
TPM	■ 1 TPM Header

Expansion Slots	
PCI-E	■ 4 PCI-E 4.0 x16
M.2	■ M.2 Interface: 1 PCI-E 4.0 x4; 1 PCI-E 4.0 x4 ■ Form Factor: 2280/22110, 2280 ■ Key: M-Key, M-Key
System BIOS	
BIOS Type	■ AMI UEFI
Management	
Software	■ SuperDoctor® 5, NMI, <u>SUM</u> , KVM with dedicated LAN, <u>SPM</u> , Intel® Node Manager, <u>SSM</u> , <u>IPMI2.0</u> , Watchdog
System Management Software	■ IPMICFG, IPMIView for Linux/Windows, SMCIPMITool
Power Configurations	■ ACPI Power Management
PC Health Monitoring	
Voltage	■ Supports system management utility, Monitors CPU voltages, Chassis intrusion header, 3.3V standby, +5V standby, +5V, +3.3V, +12V, 8 -fan status
LED	■ UID/Remote UID ■ BMC/IPMI Heartbeat LED
Temperature	■ CPU thermal trip support ■ PECI
FAN	■ 8x4-pin fan headers (up to 8 fans) ■ PWM fan speed control ■ Overheat LED indication
Other Features	■ UID, Node Manager Support, Dual Cooling Zones, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion header, Chassis intrusion detection, ATX Power connector, ACPI power management, RoT, NCSI header
Operating Environment	
Operating Temperature Range	■ 10°C - 35°C (50°F - 95°F)
Non-Operating Temperature Range	■ -40°C - 70°C (-40°F - 158°F)
Operating Relative Humidity Range	■ 8% - 90% (non-condensing)
Non Operating Relative Humidity Range	■ 5% - 95% (non-condensing)