X11SPG-TF

GPU Serverboard

Key Features

2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP

Intel® C621 Chipset

Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots

3 PCIe 3.0 x16

2x M.2 NGFF connectors

M.2 Interface: PCIe 3.0 x4

Form Factor: 2280

Key: M-Key

2 10GbE LAN ports

6 SATA (6Gbps)

2 SuperDOM with built-in power

I/O: 1 VGA, 1 COM, TPM header

5 USB 3.0 (2 rear, 1 Type-A, 2 via header), 4 USB 2.0 (2 rear, 2 via headers)

Optimized Servers

SYS-1019GP-TT

SYS-5019GP-TT

Specifications

Product SKUs
MBD-X11SPG-TF

Physical Stats
Form Factor
Proprietary
Dimension
7.71" x 16.64" (19.58cm x 42.27cm)

Processor
CPU
2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors

Single Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 205W TDP
Core
Up to 28 cores
Note
BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP

System Memory
Memory Capacity
6 DIMM slots

Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz
Memory Type
2933/2666/2400/2133 MT/s ECC DDR4 LRDIMM (3DS), RDIMM (3DS)
DIMM Sizes
LRDIMM: 32GB, 64GB, 128GB

RDIMM: 8GB, 16GB, 32GB, 64GB
Memory Voltage
1.2V
Error Detection
Corrects single-bit errors

On-Board Devices
Chipset
Intel® C621
SATA
Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
IPMI
ASPEED AST2500
Graphics
1 ASPEED AST2500 BMC port(s)
Network Controllers
Dual LAN with 10GBase-T with Intel® X550

Input / Output
SATA
6 SATA3 (6Gbps) port(s)
LAN
2 RJ45 10GBase-T ports
USB
3 USB 3 port(s) (1 Type A; 2 via header)

4 USB 2.0 port(s) (2 rear; 2 via header)

2 USB 3.0 port(s) (2 rear)
Video Output
1 VGA port(s)
Serial Port
1 COM Port(s) (1 header)
DOM
2 SATA DOM (Disk on Module) power connector support
TPM
1 TPM Header

Expansion Slots
PCIe
1 PCIe 3.0 x16 Center Right Hand Slot,

1 PCIe 3.0 x16 Left Riser Slot,

1 PCIe 3.0 x16 Right Riser Slot
M.2
M.2 Interface: PCIe 3.0 x4

Form Factor: 2280

Key: M-Key

System BIOS
BIOS Type
AMI UEFI

BIOS Features
ACPI 6.0

RTC (Real Time Clock) Wakeup

SMBIOS 3.0 or later

Management
Software
SuperDoctor® 5, NMI, SUM, KVM with dedicated LAN, SPM, Intel® Node Manager, IPMI2.0, Watchdog
Power Configurations
Power-on mode for AC power recovery, ACPI Power Management

PC Health Monitoring
Voltage
VBAT, Supports system management utility, Monitors CPU voltages, Chassis intrusion header, 3.3V standby, +5V standby, +5V, +3.3V, +12V, +1.8V, 8 -fan status
LED
UID/Remote UID

Suspend static indicator LED

CPU / System Overheat LED
Temperature
CPU thermal trip support

PECI
FAN
8x 4-pin fan headers (up to 8 fans)

System level control

PWM fan speed control

Fan speed control

Overheat LED indication
Other Features
WOL, UID, RoHS, M.2 NGFF connector, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, ACPI power management

Operating Environment
Operating Temperature Range
0°C - 50°C (32°F - 122°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)

Parts List

Standard Parts (Bulk Package)

I/O Cables

Part Number	CBL-0044L • *e*Store
Qty	2
Description	57.5 cm SATA FLAT S-S PBF

Standard Parts (Retail Package)

I/O Cables

Part Number	CBL-0044L • *e*Store
Qty	6
Description	57.5 cm SATA FLAT S-S PBF

QRG

Part Number	MNL-1965-QRG
Qty	1
Description	Motherboard Quick Reference Guide

Optional Parts

TPM security module

Part Number	AOM-TPM-9671H	AOM-TPM-9670H	AOM-TPM-9671V	AOM-TPM-9670V
Qty	--	--	--	--
Description	SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor