SuperServer 5019GP-TT

1U Single Processor (Intel) 2 GPU System

Integrated Board

X11SPG-TF

Views: | Angled View | Top View |
| Front View | Rear View |

| Drivers & Utilities | BIOS | IPMI | Tested Memory | Drive Options |
| Tested M.2 List | Manuals | OS Certification Matrix |
| Compatible GPU List |

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Specifications

Key Applications

- Edge Computing
- Micro Data Center
- AI/ML, Deep Learning Training and Inference
- Virtualization
- Cloud Computing

Key Features

1. Supports up to 2 Active/Passive Cooling NVIDIA® GPUs in 1U

2. Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor (Cascade Lake/Skylake)‡

3. 6 DIMMs; up to 1.5TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM††

4. 2 PCI-E 3.0 x16 slots (support double-width GPU), 1 PCI-E 3.0 x16 low-profile slot (center left)

5. 3 Hot-swap 3.5" SAS/SATA drive bays, 1 slim DVD-ROM drive bay

6. 2x 10GBase-T LAN ports via Intel X550

7. 2 M.2 form factor 2280, supports both M.2 NVMe and SATA SSD

8. 8 Heavy duty 4cm counter-rotating 4cm fans with air shroud & optimal fan speed control

9. 1400W High-efficiency Power Supply **Platinum Level (94%+)**

Product SKUs

SYS-5019GP-TT
SuperServer 5019GP-TT

Motherboard

Super X11SPG-TF

Processor

CPU
Single Socket P (LGA 3647)
2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors‡
Support CPU TDP 70-205W
Cores
Up to 28 Cores
Note
‡ BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

GPU

Supported GPUs
2 Double-Width/Single-Width PCI-E 3.0 x16 Card (Full Height Full Length)
NVIDIA V100, M10, T4, Quadro RTX
Supports both active and passive cooled GPUs

Compatible GPU list
CPU-GPU Interconnect
PCI-E Gen 3 x16 Switch CPU-GPU Interconnect

System Memory

Memory Capacity
6 DIMM slots
Up to 1.5TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM
Supports Intel® Optane™ DCPMM††
Memory Type
2933†/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note
† 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro
†† Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

Chipset
Intel® C621 chipset
SATA
SATA3 (6Gbps) with RAID 0, 1, 5, 10
Network Connectivity
Intel® X550 Dual Port 10GBase-T
Virtual Machine Device Queues reduce I/O overhead
Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
IPMI
Support for Intelligent Platform Management Interface v.2.0
IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics
ASPEED AST2500

Input / Output

SATA
6 SATA3 (6Gbps) ports

Chassis

Form Factor
1U Rackmount
Model
CSE-818GTS-1K43BP2

Dimensions

Height
1.7" (43mm)
Width
17.2" (437mm)
Depth
28.2" (716mm)
Weight
Net Weight: 28 lbs (12.70 kg)
Gross Weight: 36 lbs (16.33 kg)
Available Color
Black

Front Panel

Buttons
Power On/Off button
System Reset button
LEDs
Power LED
Hard drive activity LED
Network activity LEDs
System Overheat LED / Fan fail LED

Expansion Slots

PCI-Express
2 PCI-E 3.0 x16 (FHFL) slots - supporting up to 2 GPUs
1 PCI-E 3.0 x16 slot (left riser)

Drive Bays / Storage

Hot-swap
3 Hot-swap 3.5" SAS/SATA drive bays
M.2
Supports 2 M.2 form factor 2280
Supports both M.2 NVMe and SATA SSD
Peripheral Bay(s)
1 slim DVD-ROM drive bay or 1 USB + COM port tray

System Cooling

Fans
8 heavy duty counter-rotating 4cm fans with air shroud and optimal fan speed control

Power Supply

1400W High-efficiency AC power supply with Digital Switching Control & PMBus 1.2
AC Voltage
1200W: 100-140 V, 14.7-10.5A, 50-60 Hz
1400W: 180-240 V, 10.5-8.0A, 50-60 Hz
+5V standby
6 Amp
+12V
100 Amp/115 Vac
117 Amp/230 Vac

LAN
2 RJ45 10GBase-T ports
1 RJ45 Dedicated IPMI LAN port
USB
2 USB 3.0 ports (rear)
2 USB 2.0 ports (rear)
Video
1 VGA port
Serial Port
1 Fast UART 16550 header
DOM
2 DOM (Disk on Module) power connectors

System BIOS

BIOS Type
AMI 32Mb SPI Flash ROM

Management

Software
Intel® Node Manager
IPMI 2.0
KVM with dedicated LAN
NMI
SPM, SUM
SuperDoctor® 5
Watch Dog
Power Configurations
ACPI / APM Power Management

PC Health Monitoring

CPU
Monitors for CPU Cores, Chipset Voltages, Memory.
4+1 Phase-switching voltage regulator
FAN
Fans with tachometer monitoring
Status monitor for speed control
Pulse Width Modulated (PWM) fan connectors
Temperature
Monitoring for CPU and chassis environment
Thermal Control for fan connectors

Parts List

With Power Distributor
+5V: 14 Amp
Certification

Platinum Certified

Operating Environment

RoHS
RoHS Compliant
Environmental Spec.
Operating Temperature:
  10°C ~ 35°C (50°F ~ 95°F)
Non-operating Temperature:
  -40°C to 60°C (-40°F to 140°F)
Operating Relative Humidity:
  8% to 90% (non-condensing)
Non-operating Relative Humidity:
  5% to 95% (non-condensing)