

# Specifications

## Product SKUs

- SYS-6029TP-HTR**
- SuperServer 6029TP-HTR (Black)

## Motherboard (Four per System)

[Super X11DPT-PS](#)

## Processor/Cache (per Node)

- CPU**
- Dual Socket P (LGA 3647)
  - Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
  - Support CPU TDP 70-165W\*

- Cores**
- Up to 28 Cores with Intel® HT Technology

**Note**

\* Please contact Supermicro Technical Support for supporting conditions of high power (TDP 150W and above) or high base frequency (3.0 GHz and above) processors.

## System Memory (per Node)

- Memory Capacity**
- 16 DIMM slots
  - Up to 2TB ECC 3DS LRDIMM, 2TB ECC RDIMM, DDR4 up to 2666MHz

- Memory Type**
- 2666/2400/2133MHz ECC DDR4 SDRAM

## On-Board Devices (per Node)

## Chassis

- Form Factor**
- 2U Rackmount

- Model**
- **CSE-827HQ+-R2K20BP2**

## Dimensions and Weight

- Width**
- 17.25" (438mm)

- Height**
- 3.47" (88mm)

- Depth**
- 30.5" (774mm)

- Weight**
- Gross Weight: 90 lbs (40.9kg)
  - Net Weight: 72 lbs (32.7 kg)

- Available Colors**
- Black

## Front Panel

- Buttons**
- Power On/Off button
  - UID button

- LEDs**
- Power status LED
  - HDD activity LED
  - Network activity LEDs
  - Universal Information (UID) LED

## Expansion Slots (per Node)

- PCI-Express**
- 2 PCI-E 3.0 x16 Low-profile slots
  - 1 SIOM card support

Note: Barebones and Complete System must bundle with Network Card

**Chipset** • Intel® C621 chipset

**SATA** • SATA3 (6Gbps); RAID 0, 1, 5, 10 support

**Network Controller s** • Barebones and Complete System must have at least one **SIOM** or **network** card **installed per node**

**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 BMC

#### Input / Output (per Node)

**SATA** • 3 SATA3 (6Gbps) ports

**LAN** • 1 RJ45 Dedicated IPMI LAN port

**USB** • 2 USB 3.0 ports total (rear)

**VGA** • 1 VGA port

**Serial Port / Header** • 1 Fast UART 16550 port / 1 Header (internal)

**Others** • 2 **SuperDOM** support on the motherboard  
• 1 NVMe or 2 SATA M.2 (22x80/60/42 mm) support with option part: AOC-SMG3-2H8M2  
• **M.2 and SuperDOM are for OS boot and they cannot coexist**

#### System BIOS

**BIOS Type** • AMI 32MB SPI Flash ROM

#### Management

**(With only one CPU installed, SXB2 M.2 and SXB4 riser card slots not function)**

#### Drive Bays (per Node)

**Hot-swap** • 3 Hot-swap 3.5" SATA3 HDD trays

#### System Cooling

**Fans** • 4 Heavy duty 8cm PWM fans with optimal fan speed control

#### Power Supply

2200W or 2000W Redundant Power Supplies with PMBus

**Total Output Power and Input** • 1200W with Input 100-127Vac  
• 1800W with Input 200-220Vac  
• 1980W with Input 220-230Vac  
• 2090W with Input 230-240Vac  
• 2200W with Input 220-240Vac (for UL/cUL use only)  
• 2090W with Input 230-240Vdc (for CCC only)

**AC Input Frequency** • 50-60Hz

**Dimension (W x H x L)** • 76 x 40 x 336 mm

**+12V** • Max: 100A / Min: 0A (100-127Vac)  
• Max: 150A / Min: 0A (200-220Vac)  
• Max: 165A / Min: 0A (220-230Vac)  
• Max: 174.17A / Min: 0A (230-240Vac)  
• Max: 183.3A / Min: 0A (220-240Vac)

**5VSB** • Max: 1A / Min: 0A

**Output Type** • Backplanes (gold finger)

## Software

- Intel® Node Manager
- [IPMI 2.0](#)
- KVM with dedicated LAN
- NMI
- [SSM](#), [SPM](#), [SUM](#)
- [SuperDoctor® 5](#)
- Watchdog

## Power Configurations

- ACPI Power Management

## PC Health Monitoring

### CPU

- Monitors for CPU Cores, Chipset Voltages, Memory.
- 5+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

### Omni-Path Fabric CPUs

- Do not support



## Certification

UL/cUL/CB/BSMI/CE/CCC  
**Titanium Level**  
**[ Cert. in progress ]**

## 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)