

SuperChassis 745BTQ-R1K28B-SQ



▶ [Chassis Manual](#)
▶ [Optimization](#)

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

Key Features

1. 8x 3.5" SAS/SATA Backplane for Hot-Swappable Drives
 2. Whisper-Quiet (<27dB)
 3. Front HDD Door Lock & Side Panel Intrusion Switch
 4. Front I/O Ports: 2x USB 3.0
 5. 2x 8cm (2800 rpm) PWM Fans & 1x 9cm (2400 rpm) PWM Fans
 6. 4U / Full Tower Chassis Supports max. Motherboard, Sizes □ E-ATX 13.68" x 13"/ATX/Micro ATX
 7. 1280W (1 + 1) **Redundant Platinum Level** Certified High-Efficiency Power Supply
 8. 3x 5.25" External HDD Drive Bays & 8x 3.5" Hot-Swappable HDD Drives
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Specifications

Product SKUs

- CSE-745BTQ-R1K28B-SQ
- SuperChassis 745BTQ-R1K28B-SQ

Form Factor

- 4U tower chassis - supports maximum motherboard sizes up to E-ATX 13.68" x 13"

Processor Support

- Dual, single Intel® / AMD processors

Dimensions

- | | |
|-----------------------|--|
| Height | ■ 17.8" (452 mm) |
| Width | ■ 7" (178 mm) |
| Depth | ■ 25.5" (647 mm) |
| Net Weight | ■ 59 lbs (26.76 kg) |
| Gross Weight | ■ 62 lbs (28.12 kg) |
| Packaging (W x H x L) | ■ 14" (356 mm) x 24.6" (625 mm) x 31.3" (795 mm) |
| Available Color | ■ Black |

Expansion Slots

- 7 full-height & full-length expansion slot(s)

Drive Bays

- 8 x 3.5" hot-swap SAS/SATA drive bay with SGPIO

Backplane

- 743 SAS BACKPLANE W/AMI MG9072

Peripheral Drives

- 3 x standard 5.25" drive bay

Front Panel

- | | |
|---------|---|
| Buttons | ■ Power On/Off button
■ System Reset Button |
| LEDs | ■ 2 Network Activity LEDs
■ HDD activity LED
■ Power Status LED
■ Power Fail LED
■ System Information LED |
| Ports | ■ 2x USB 3.0 Port(s) |

Systems Cooling

- | | |
|------|--|
| Fans | ■ 2 x 2800 RPM fan(s)
■ 1 x 2700 RPM fan(s) |
|------|--|

System Monitoring

- Chassis intrusion switch

Operating Environment (System)

- | | |
|---------------------------------------|--------------------------------|
| Operating Temperature Range | ■ 5°C - 35°C (41°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) |

Power Supply

1U 1280W Redundant Platinum 95%+ Super Quiet Power Supply with PMbus

- | | |
|------------------------------|--|
| Power Efficiency | ■ 95% |
| Total Output Power and Input | ■ 1000W with Input 100 - 140Vac
■ 1280W with Input 180 - 240Vac |
| AC Input Frequency | ■ 50-60Hz |
| Dimensions (L x W x H) | ■ 336 x 76 x 40 mm |
| Output Type | ■ Backplanes (gold finger) |
| -12V | ■ Max: NAA |
| +12V | ■ Max: 83A / Min: 0.5A (100Vac - 140Vac)
■ Max: 106.7A / Min: 0.5A (180Vac - 240Vac) |
| +5Vsb | ■ Max: 4A / Min: 0A |
| +12Vsb | ■ Max: NAA |
| Power Distributor | ■ PDB-PT747-4648
■ O/P: 12/212
■ +5V Max: 30
■ +3.3V Max: 24
■ -12V Max: 0.6 |

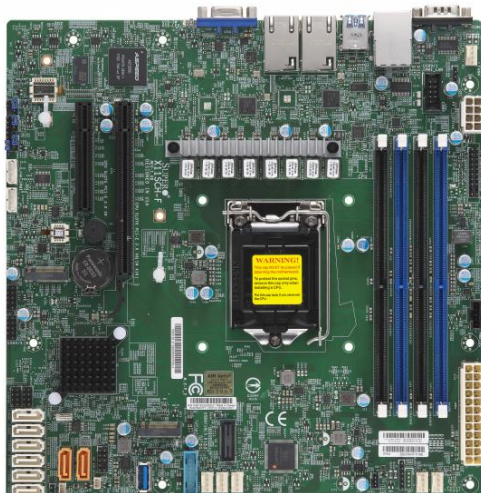
Certification

-  Platinum Certified

Regulatory (Power Supply)

- Power
 - Supply
 - Safety / EMC
 - BSMI
 - CCC
 - CE/EMC
 - FCC class B
 - TUV/CB
 - UL/CUL
-

X11SCH-F



Key Features

1. 8th/9th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor., Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP
2. Intel® C246 chipset
3. Up to 128GB DDR4 2666MHz ECC UDIMM; 4 DIMM slots
4. Expansion slots: 1 PCI-E 3.0 x8 (in x16) and 1 PCI-E 3.0 x8 slots
5. Dual GbE LAN ports via Intel® i210
6. 8 SATA3 (6Gbps) via C246; RAID 0, 1, 5, 10
7. I/O: 1 VGA, 2 COM, TPM header
8. 2 SuperDOM with built-in power
9. 2 USB 3.1 Gen 2 (rear); 3 USB 3.1 Gen 1 (1 Type A, 2 via header(s)); 6 USB 2.0 (2 rear, 4 via header(s))
10. 2x M.2 NGFF connectors
M.2 Interface: PCI-E 3.0 x4
Form Factor: 2280, 22110
Key: M-Key
Double Height Connector

Links & Resources

[Tested Memory List](#)

[Tested HDD / SSD List](#)

[Tested M.2 List](#)

[Tested AOC List](#)

[Motherboard Manual](#)

[Quick Reference Guide](#)

[Update Your BIOS](#)

[BMC/IPMI Firmware](#)

[Download the Latest Drivers and Utilities](#)

[Download Driver CD](#)

[OS Compatibility](#)

[Optimization](#)

Specifications

Product SKUs

MBD-X11SCH-F	■ X11SCH-F
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Physical Stats

Form Factor	■ Micro-ATX
Dimensions	■ 9.6" x 9.6" (24.38cm x 24.38cm)

Processor/Cache

CPU	■ 8th/9th Generation Intel® Core® i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor. ■ Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP
Cores / Cache	■ 8 cores, 16 threads
Note	■ BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core® i3/Pentium®/Celeron® Processors

System Memory

Memory Capacity	■ Up to 128GB DDR4 ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
Memory Type	■ 2666/2400/2133MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	■ 4GB, 8GB, 16GB, 32GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors

On-Board Devices

Chipset	■ Intel® C246
SATA	■ Intel® C246 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
IPMI	■ ASPEED AST2500
Network Controllers	■ Dual LAN with Intel® Ethernet Controller I210
Graphics	■ Aspeed AST2500 BMC

Input / Output

USB	■ 6x USB 2.0 ports (2 rear, 4 via headers); 2x USB 3.1 Gen2 ports (rear); 3x USB 3.1 Gen1 ports (1 Type-A, 2 via header)
Video Output	■ 1 VGA port
Serial Port / Header	■ 2 COM Ports (1 rear, 1 header)
TPM	■ 1 TPM Header

Expansion Slots

PCI-E	■ 1 PCI-E 3.0 x8 (in x16 slot), ■ 1 PCI-E 3.0 x8
M.2	■ M.2 Interface: PCI-E 3.0 x4 ■ Form Factor: 2280, 22110 ■ Key: M-Key ■ Double Height Connector

System BIOS

BIOS Type	■ UEFI 256Mb
BIOS Features	■ ACPI 6.0 ■ SMBIOS 2.7 ■ Plug and Play (PnP) ■ RTC (Real Time Clock) Wakeup ■ UEFI 2.7 ■ USB Keyboard support ■ PCI 3.0

Management

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

PC Health Monitoring

Voltage	■ +12V, +3.3V, +5V, +5V standby, 6 -fan status, Chassis intrusion header, Chipset Voltage, Memory Voltages, Monitors CPU voltages, Supports system management utility, System level control, VBAT
FAN	■ 6x 4-pin fan headers (up to 6 fans), 6 fans with tachometer status monitoring, Fan speed control, Overheat LED indication, Thermal control tachometer fan connectors
Temperature	■ N/A
LED	■ CPU / System Overheat LED, UID/Remote UID
Other Features	■ ACPI power management, Chassis intrusion detection, Chassis intrusion header, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, Dual Cooling Zones, M.2 NGFF connector, Node Manager Support, UID, WOL

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)
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