



**SSE-G3748-SONIC**  
**SSE-G3748R-SONIC**

**SSE-G3748D-SONIC**  
**SSE-G3748DR-SONIC**

## Supermicro SSE-G3748 1G Management Switch

The Super Micro Computer (SMC) SSE-G3748 series is an Out of Band (OOB) management switch with 48 1G RJ45 ports and 6 25G SFP28 ports in a fixed configuration. The SSE-G3748 enables the aggregation of high density 1RU rack servers, provide Cost-Effective network infrastructure solutions in Data center and Enterprise network. The SMC SSE-G3748 is an extremely compact 1RU form factor that increases the network radix for high density switching.

With emerging SONiC OS support on SSE-G3748 switch provides greater flexibility to applications. Supermicro provides user friendly enhancements to the OS that suits to the various data center applications.

SSE-G3748 offers user friendly options to choose from including normal and reverse air-flow models along with AC & DC Power supply options. From install point of view, this product can support both front side and rear side ear-mount, as well as rail kit facilitates rack-mounting installations.

## Supermicro SSE-G3748 Switch Benefit & Advantages

### Target Use Cases

Data Center/Enterprise OOB management switch applications

### Key Advantages

- Power Efficient
- Cost competitive
- Support both sides rack installation
- Support both ear mount and rail kit installation
- Support both AC, DC PSU options.

### Key Switch Specs

- Switch with embedded CPU solution
- Configurations: 48x1GbE+6\*25GbE
- Capacity: 396 Gbps
- Interfaces Speeds: 1, 10, 25 GbE
- Forwarding Rate: Unicast full wire speed at 64B packets. Multicast upto 510MPPS
- Form Factor: 1 RU
- Operating System: SONiC

## Hardware Specifications

### Physical Ports

- 48 x 1G RJ45 Ports
- 6 x 25G SFP28 Ports
- 1 x RJ45 Serial Console
- 1 x RJ45 100/1000BASE-T Management
- 1 x USB Type A Storage

### Onboard CPU Engine

- Embedded ARM CPU
- 4GB DDR4 DRAM with ECC
- 256Mb NOR Flash
- 32GB eMMC

### [Data Forwarding](#)

- 396Gbps aggregated switching capacity
- Non-Blocking, wire-speed

### [Power](#)

- Hot-pluggable power supply
- Redundant power supply
- AC Input Voltage:  
100-127 / 200-240VAC, 50/60Hz
- DC Input Voltage: -48~-60VDC

### [Physical and Environmental](#)

- 1RU, Mountable in 19" racks by front and rear ear-mount or rail kit
- Dimensions: (WxDxH) 445 x 356 x 43.5mm
- Weight: (Switch Unit) 8kg
- Front-to-Rear and Rear-to-Front airflow versions available
- Hot Swappable 1+1 redundant Fan Modules
- Temperature: Operating 0C to 45C
- Humidity: Operating: 5% to 95%

## SONIC OS Features

### [Layers 2](#)

VLAN  
VLAN Trunking  
MAC Aging

### [Layers 3](#)

IPv4 Routes- 26K  
BGP  
BGP Graceful Restart  
IPv6  
ECMP (member per group-64)  
Mgmt VRF  
Static Routing

### [Port](#)

LLDP  
LAG  
LACP Fallback  
MTU Settings

### [Management and Monitoring](#)

SNMP  
Syslog  
TCPDump

Mirroring  
TACACS+  
Sensor transceiver monitoring  
sFlow

### [QoS](#)

CoPP  
COS  
DSCP  
Egress Shapping  
WRED

### [ACL](#)

ACL permit/deny  
IPv6 ACL  
Dynamic ACL upgrade  
ACL Statistics

### [Utilities](#)

DHCP Relay Agent  
NTP  
ZTP  
Python 2/3 support

## Safety and Compliance

### [Safety](#)

EU:

- EN 60950-1
- IEC 60950-1
- EN 62368-1
- IEC 62368-1

North America:

- UL 60950-1
- CAN/CSA-C22.2 No. 60950
- UL 62368-1
- CAN/CSA-C22.2 No. 62368-1

Aus/Nz (ACMA):

- AS/NZS 60950-1
- AS/NZS 62368-1

Taiwan (BSMI):

- CNS15598-1

Korean (KCC):

- KC 62368-1

## Electromagnetic Compatibility

### EU:

- CISPR 32
- EN 55032
- BS EN 55032
- CISPR 35
- EN 55035
- BS EN 55035
- EN6100-3-2
- BS EN 6100-3-2
- EN6100-3-3
- BS EN 6100-3-3
- EN 300 386

### North America

- 47CFR Part 15(CFR 47) Class A
- ICES003 issue7 Class A

### Japan (VCCI)

- VCCI CISPR 32-1

### Aus/Nz (ACMA)

- AS/NZS CISPR 32

### Taiwan (BSMI)

- CNS 15936

### Korean (KCC)

- KN32 Class A
- KN35

## Environmental

EU (RoHS)

EU (REACH)

EU (WEEE)

Taiwan (RoHS)

China (RoHS)

## Optics & Cables Supported

Cable Model	Part Number	Description
SFP+ Cable	CBL-0347L	39.37" (100cm) 10GbE SFP+ TO SFP+, Twinax copper cable
SFP+ Cable	CBL-0456L	78.74" (200cm) 10GbE SFP+ TO SFP+, Twinax copper cable
SFP+ Cable	CBL-00348L	118.11" (300cm) 10GbE SFP+ TO SFP+, Twinax copper cable
SFP+ Cable	CBL-0349L	196.85" (500cm) 10GbE SFP+ TO SFP+, Twinax copper cable
SFP+ Transceiver	AOC-E10GSFPSR	SFP+ Transceiver for use with fiber cable connections
SFP+ Transceiver	TRX-10GSFP-RJ45	SFP+ Transceiver for RJ45 cable connection
SFP28 Copper Cable	CBL-NTWK-0944-SS28C05M	ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 0.5M, Molex
SFP28 Copper Cable	CBL-NTWK-0944-SS28C10M	ETHERNET, SFP28,25GbE, PASSIVE, 30 AWG, 1M, Molex
SFP28 Copper Cable	CBL-NTWK-0944-SS28C20M	ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 2M, Molex
SFP28 Copper Cable	CBL-NTWK-0944-SS28C30M	ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 3M, Molex
SFP28 Copper Cable	CBL-NTWK-0944-SS28C50M	ETHERNET, SFP28,25GbE, PASSIVE,26 AWG, 5M, Molex
SFP28 Transceiver Module	AOM-SFP28-25GbE-SR-1-MLN	SFP28 Transceiver module 25G, 850nm, MMF, LC
QSFP28 100G to SFP28 4x25G splitter	CBL-NTWK-0988-Q28M5	ETHERNET, 100GbE/QSFP28 to 4x 25GbE/SFP28, PASSIVE,30AWG, 5M, Molex