

SSE-G3748-SMIS SSE-G3748R-SMIS SSE-G3748D-SMIS SSE-G3748DR-SMIS

# **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 feature rich and well established Supermicro 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 and Enterprise 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.
- User friendly Web GUI setup option.

#### **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: SMIS OS (Supermicro OS)

# **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%

# **SMIS OS (Supermicro OS) Features**

#### Layers 2

- VLAN (4K VLANs)
- VLAN Trucking
- MAC Aging
- LLDP
- LACP
- GVRP
- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree Protocol
- 4096 VLANs
- MLAG
- Jumbo Frames
- IGMP v1/v2/v3 snooping
- Storm Control

#### Layers 3

- Static Routing
- RIPv2
- OSPF
- BGP
- VRRP

### **Management and Monitoring**

- SNMP MIBs
- Syslog
- Mirroring
- TACACS+

#### QoS

- 8 priority queues per port
- Strict priority queueing
- 802.1p based classification
- DSCP based classification and remarking
- Egress shaping / Weighted round robin (WRR)

#### **ACL**

- IP ACL permit/deny
- MAC ACLs
- Rate limiting

#### **Network Management**

- RS-232 Serial Console Port & GUI
- USB Port
- SNMP v1, v2, v3
- Telnet and SSHv2
- Syslog
- Industry Standard CLI & GUI
- System Logging
- Environment monitoring

#### **Utilities**

- NTP
- ZTP

# 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
- D3 LIN 3303.
- 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

<sup>\*</sup>more to follow