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%

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**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

**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

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**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
- EN 6100-3-2
- BS EN 6100-3-2
- EN 6100-3-3
- BS EN 6100-3-3
- EN 300 386

**North America**
- 47CFR Part 15(CFR 47) Class A
- IEEE 802.3ab Issue 7 Class A

**Japan (VCCI)**
- VCCI CISPR 32-1

**Environmental**
- EU (RoHS)
- EU (REACH)
- EU (WEEE)
- Taiwan (RoHS)
- China (RoHS)

**Optics & Cables Supported**

<table>
<thead>
<tr>
<th>Cable Model</th>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>SFP+ Cable</td>
<td>CBL-0347L</td>
<td>39.37” (100cm) 10GbE SFP+ TO SFP+, Twinax copper cable</td>
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<tr>
<td>SFP+ Cable</td>
<td>CBL-0456L</td>
<td>78.74” (200cm) 10GbE SFP+ TO SFP+, Twinax copper cable</td>
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<td>SFP+ Cable</td>
<td>CBL-00348L</td>
<td>118.11” (300cm) 10GbE SFP+ TO SFP+, Twinax copper cable</td>
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<tr>
<td>SFP+ Cable</td>
<td>CBL-0349L</td>
<td>196.85” (500cm) 10GbE SFP+ TO SFP+, Twinax copper cable</td>
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<td>SFP+ Transceiver AOC</td>
<td>AOC-E10GSFPSPR</td>
<td>SFP+ Transceiver for use with fiber cable connections</td>
</tr>
<tr>
<td>SFP+ Transceiver TRX</td>
<td>TRX-10GSPF-RJ45</td>
<td>SFP+ Transceiver for RJ45 cable connection</td>
</tr>
<tr>
<td>SFP28 Copper Cable</td>
<td>CBL-NTWK-0944-SS28C05M</td>
<td>ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 0.5M, Molex</td>
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<tr>
<td>SFP28 Copper Cable</td>
<td>CBL-NTWK-0944-SS28C10M</td>
<td>ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 1M, Molex</td>
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<tr>
<td>SFP28 Copper Cable</td>
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<td>ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 2M, Molex</td>
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<tr>
<td>SFP28 Copper Cable</td>
<td>CBL-NTWK-0944-SS28C30M</td>
<td>ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 3M, Molex</td>
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<tr>
<td>SFP28 Copper Cable</td>
<td>CBL-NTWK-0944-SS28C50M</td>
<td>ETHERNET, SFP28,25GbE, PASSIVE,30 AWG, 5M, Molex</td>
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<tr>
<td>QSFP28 100G to SFP28 4x25G splitter</td>
<td>CBL-NTWK-0988-Q28MS</td>
<td>ETHERNET, 100GbE/QSFP28 to 4x 25GbE/SFP28, PASSIVE,30AWG, 5M, Molex</td>
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