

# SSE-X3548S and SSE-X3548SR:

Layer 2 & 3 10G/100G Ethernet Switch (Standalone)

10G Ethernet networking is still in high demand in enterprise data centers as those enterprises migrate to 25G and 50G. The Supermicro SSE-X3548 switch series is a low-cost option for data centers that wish to provide 10G connectivity in a cost-effective manner without compromising performance.

The Supermicro SSE-X3548S and the reverse airflow model, the SSE-X3548SR, come with comprehensive Layer 2 & Layer 3 feature sets running SMIS, Supermicro's own NOS. The list of such features include support for high availability features like MLAG, RoCE, Data Center Bridging, VRRP, and redundant, hot-swappable power supplies.

The SSE-X3548S/SR offer forty-eight 10Gbps Ethernet ports for server connectivity. These 48 ports are backward compatible with 1Gbps allowing connectivity to legacy low-speed networks. The SSE-X3548S/R also offers six QSFP28 ports. The QSFP28 can operate at 100Gbps for access to high-speed backbone networks or storage servers; alternatively, the 100G port can be split into 4x25G ports with a splitter cable. And the QSFP ports can operate at 40Gbps which can also be split into 4x10G with a splitter cable.

The 1U form factor gives users the ability to optimize deployment in standalone or rack-scale environments. A rail kit is included to facilitate rack-mounting installations. And the SSE-X3548SR model provides a data-center-friendly reverse air-flow for improved cooling when installed in the rear of a rack.

A comprehensive protocol software suite ensures optimal performance even in the most demanding enterprise-class networking environments such as large-scale cloud and virtualized environments. These switches are ideal for organizations with growing and consolidated data centers.



# **Supermicro 10G Switch Benefit & Advantages**

#### **1U ToR 10G Ethernet Switch**

#### 48x 10Gbps Ethernet SFP+ ports

• All 10Gbps ports are backward compatible with 1Gbps

## 6x 100Gbps QSFP28 ports

• All 100Gbps ports can alternatively operate at 40Gbps

## 100Gbps ports can further split to 4x25Gbps each

• Ports configured for 40Gbps can be split into 4x10Gbps each

## **Switching Capacity: 2.1 Tb**

• 1:1 Non-blocking connectivity

## **Data Center Friendly**

- Redundant, Hot-Swappable power supplies
- Regular and Reverse Airflow models

## **Cost-Effective Solution for 10G leaf connectivity**

Ordering Options	
Part Number	Description
PWS-FRU-F3548S	Spare Power Supply for SSE-X3548S- Standard airflow, RoHS
PWS-FRU-F3548SR	Spare Power Supply for SSE-3548SR- Reverse airflow, RoHS

# **Specifications**

#### Ports

- 48x Ten-Gigabit Ethernet ports SFP+
- 6x Hundred-Gigabit Ethernet ports QSFP28
- RJ-45 (for console cable)
- RJ-45 1G Ethernet Management Port
- USB

# **Switching**

- Switching Capacity: 2.1 Tb
- 1:1 Non-blocking connectivity

# Processor/Memory/Storage/OS::

- Intel Rangeley CPU
- 8G DRAM
- 16G SSD

# Layer 2 Features

- 4K VLANS
- Spanning Tree (802.1D)

- Rapid Spanning Tree (802.1w)
- Multiple Spanning Trees (802.1s)
- IEEE 802.IQ VLANs/ port-based VLANs
- IEEE 802.3ad with LACP
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

# **Advanced Layer 2 Features**

- Storm control
- Flow control
- Port mirroring
- Uplink Failure Detection (UFD)
- MLAG
- VXLAN Bridging
- RoCE / Data Center Bridging / Storage Support
- PFC/Per-Priority Flow Control (802.1Qbb)
- Enhanced Transmission Selection (802.1Qaz)
- Data Center Bridging Extensions (DCBX)

#### Multicast

IGMP Snooping

#### **Ethernet frame**

• Jumbo frames up to 9KB

#### Power

- Redundant Hot-pluggable 500W Power Supplies
- AC Input: 100-127/200-240 V, 50/60 Hz
- Power Consumption: 410 Watts
- Regular and Reverse Airflow Models

# Physical/Environmental

- 1U form factor for flexible installation
- Temperature: Operating 0°C to 40°C (32°F to 104°F)
- Humidity: Operating: 5% to 95% (non-condensing)

#### General

• Mounting Rails (included)