SSE-F3548S and SSE-F3548SR:

Layer 2 10G/25G/100G Ethernet Switch (Standalone)

Datacenter Ethernet networks are rapidly shifting from 10 Gigabits per second (10Gbps) to 25Gbps to take advantage of technology advancements in compute and storage technology. Newer applications demand higher network throughput – as well as lower latency in order to complete jobs more rapidly.

The economic advantages of an investment in 25G technology are numerous. There is essentially no price premium for a 25Gbps infrastructure when compared to 10Gbps. And when other cost of ownership issues are considered (power consumption, space and cable requirements, ease of migration, etc.) the choice becomes compelling.

All of the 25Gbps ports on the Supermicro **SSE-F3548S** are backward compatible with 10GbE. This offers great deployment flexibility for businesses to invest in a 25GbE networking infrastructure by multiple phases. Customers can install these new switches today and operate with existing 10Gbps Ethernet infrastructure; when the time to upgrade to 25Gbps Ethernet comes, it is merely a configuration update – no need for any prolonged downtime.

The Supermicro **SSE-F3548S** (and its companion reverse airflow model, the SSE-F3548SR) are Layer 2+ Ethernet switches offering forty-eight 25Gbps SFP28 ports which allow datacenter optimized connectivity to server systems. The SFP28 port can also run at 10Gbps - or even at 1Gbps, thus accommodating requirements for connectivity with legacy low-speed network devices. The **SSE-F3548S/R** also offer six QSFP28 ports running at 100Gbps for connections to high-speed backbone networks or storage systems. Each of the QSFP28 ports can also operate at 40Gbps – or can be split into four SFP28 ports using a breakout cable to operate at 25Gbps or 10Gpbs per port.

The 1U rackmount form factor enables optimized deployments in standalone or top-of-rack environments. An optional rail kit facilitates rack-mounting installations. The SSE-F3548SR model provides a datacenter friendly reverse air-flow for improved cooling when installed in the rear of a rack.

A comprehensive protocol software suite ensures optimal performance in even 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 datacenters.

Supermicro SuperSwitch Solution Benefit Highlights

- **48 x 25Gbps Ethernet SFP28 ports**
  All 25Gbps ports are backward compatible with 10Gbps
- **6 x 100Gbps QSFP28 ports**
  All 100Gbps ports can alternatively operate at 40Gbps
- **100Gbps ports can further split to 4x 25Gbps each**
  Ports configured for 40Gbps can be split into 4x10Gbps each
- **Switching Capacity: 3.6 Tb**
- **1:1 Non-blocking connectivity**
- **Datacenter Friendly**
  - Redundant, Hot-Swappable power supplies
  - Regular and Reverse Airflow models
- **Cost-Effective Solution for Migration from 10G**

Specifications

Ports
- 48x 25-Gigabit Ethernet ports - SFP28
- 6x 100-Gigabit Ethernet ports - QSFP28
- RJ-45 (for console cable)
- RJ-45 1GbE Ethernet Management Port
- USB

Switching
- 3.6 Tbps switching capacity
- 1:1 Non-blocking connectivity

General
- Mounting Rails (optional)

Power
- Redundant hot-swap 500W power supplies
- AC Input: 100-127/200-240 V, 50/60 Hz
- Power Consumption: 305 Watts

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)

MKT-0001-04/2018 Rev 1.0