

Standard Top-of-Rack Ethernet Switches

Technical Specifications

Supermicro offers the latest in cost-effective Top-of-Rack Ethernet switching technology with a line of traditional fully-featured models incorporating both hardware and software in a complete solution. These standard switches provide connectivity for a range of computing and storage systems from 1 Gbps to 100 Gbps with support for the most popular industry-standard Layer 2 and 3 Ethernet switch features.

**10G RJ45 and
40G QSFP+**



**10G SFP+ and
40G QSFP+**



**10G SFP+ and 100G
QSFP28**



25G SFP28 and 100G QSFP28



	SSE-X3348T(R)	SSE-X3348S(R)	SSE-X3548S(R)	SSE-F3548S(R)
Port Specifications	<ul style="list-style-type: none"> 48 x Ten-Gigabit Ethernet ports 10GBASE-T RJ45 connectors 4 x Forty-Gigabit Ethernet ports QSFP+ Connectors 2 x One-Gigabit Ethernet ports RJ45 Connectors Out-of-band RS-232 Management port DB9 Connector 	<ul style="list-style-type: none"> 48 x Ten-Gigabit Ethernet ports SFP+ Connectors 4 x Forty-Gigabit Ethernet ports QSFP+ Connectors 2 x One-Gigabit Ethernet ports RJ45 Connectors Out-of-band RS-232 Management port DB9 Connector 	<ul style="list-style-type: none"> 48 x Ten-Gigabit Ethernet ports SFP+ Connectors 6 x Forty/One-Hundred-Gigabit Ethernet ports QSFP28 Connectors 2 x RJ45 Ports One-Gigabit Ethernet Management port RS-232 serial Console Port 	<ul style="list-style-type: none"> 48 x Ten/Twenty-Five-Gigabit Ethernet ports SFP28 Connectors 6 x Forty/One-Hundred-Gigabit Ethernet ports QSFP28 Connectors 2 x RJ45 Ports One-Gigabit Ethernet Management port RS-232 serial Console Port
Switching Capacity	1284 Gb/s	1284 Gb/s	2100 Gb/s	3600 Gb/s
RoCE/ Datacenter Bridging/ Storage Support	-	-	<ul style="list-style-type: none"> PFC/Per-Priority Flow Control (802.1Qbb) Enhanced Transmission Selection (802.1Qaz) Datacenter Bridging Extensions (DCBX) Explicit Congestion Notification (ECN)* 	<ul style="list-style-type: none"> PFC/Per-Priority Flow Control (802.1Qbb) Enhanced Transmission Selection (802.1Qaz) Datacenter Bridging Extensions (DCBX) Explicit Congestion Notification (ECN)*
Power and Cooling	<ul style="list-style-type: none"> 357W (Redundant Power Supplies) Reverse airflow model available 	<ul style="list-style-type: none"> 326W (Redundant Power Supplies) Reverse airflow model available 	<ul style="list-style-type: none"> 410W (Redundant Power Supplies) Reverse airflow model available 	<ul style="list-style-type: none"> 410W (Redundant Power Supplies) Reverse airflow model available
Weight	18.1 lbs / 8.2 kg	18.1 lbs / 8.2 kg	19.6 lbs / 8.9 kg	19.6 lbs / 8.9 kg
Dimensions (WxDxH)	438 x 473 x 43 mm (17.3" x 18.6" x 1.7")	438 x 473 x 43 mm (17.3" x 18.6" x 1.7")	445 x 510 x 44 mm (17.52" x 20.1" x 1.73")	445 x 510 x 44 mm (17.52" x 20.1" x 1.73")

Common Features

Availability	<ul style="list-style-type: none"> Virtual Redundant Routing Protocol (VRRP) 	<ul style="list-style-type: none"> Multichassis Link Aggregation (MLAG) 	<ul style="list-style-type: none"> Link Aggregation: 802.3ad with LACP-Up to 8 ports per group
VLAN	<ul style="list-style-type: none"> 802.1Q tagging, port and protocol based 	<ul style="list-style-type: none"> 4K Static VLANs 	<ul style="list-style-type: none"> Dynamic VLAN Support (GVRP)
Quality of Service and DiffServ	<ul style="list-style-type: none"> 8 priority queues per port Adjusted WRR and Strict Priority Scheduling 	<ul style="list-style-type: none"> Marking Metering / Rate limiting 	<ul style="list-style-type: none"> Layer 2, 3, 4 Prioritization
Security Features	<ul style="list-style-type: none"> Switch access password protection 	<ul style="list-style-type: none"> RADIUS and TACACS+ Authentication SSL Encryption 	<ul style="list-style-type: none"> Layer 2, 3, 4 Access Control Lists (256 rules)
Management	<ul style="list-style-type: none"> Management interfaces -HTTP/HTTPS -Telnet (up to 7 sessions) -SNMP -SSH 	<ul style="list-style-type: none"> Industry standard CLI with telnet, SSH, or local management port -Scripting capability -Command completion -Context-sensitive "Help" 	<ul style="list-style-type: none"> RESTCONF, REST client API, OpenConfig (SSE-F3548S(R) only)
Switch Features	<ul style="list-style-type: none"> Link Layer Discovery Protocol (802.1AB) Jumbo Frames up to 9KB 	<ul style="list-style-type: none"> Port Mirroring N to 1. Tx & Rx Configurable 	<ul style="list-style-type: none"> Spanning Tree (802.1D) Multiple Spanning Trees (802.1s) Rapid Spanning Tree (802.1w)
Routing Features	<ul style="list-style-type: none"> Static Routing, RIP v1/v2, RIPng, OSPF v1/v2/v3 and BGP IPv4 and IPv6 Routing [SSE-F3548S(R) and SSE-X3548S(R) do not support IPv6] 		
Multicast	<ul style="list-style-type: none"> IGMP Snooping v1, v2, v3 	<ul style="list-style-type: none"> IGMP v1, v2, v3 	<ul style="list-style-type: none"> PIM SM, PIM DM PIM SMv6
Operating Temperature	0° - 47° C		



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High Speed Direct Attach Copper Cables

Part Number	Description
CBL-NTWK-0347	Twinax copper cable, 1.0M, 10GbE SFP+ TO SFP+
CBL-0456L	Twinax copper cable, 2.0M, 10GbE SFP+ TO SFP+
CBL-NTWK-0456	Twinax copper cable, 2.0M, 10GbE SFP+ TO SFP+
CBL-0348L	Twinax copper cable, 3.0M, 10GbE SFP+ TO SFP+
CBL-0349L	Twinax copper cable, 5.0M, 10GbE SFP+ TO SFP+
CBL-NTWK-0944-MS28C10M	Twinax copper cable, 1.0M 25GbE, SFP28 to SFP28
CBL-NTWK-0944-MS28C15M	Twinax copper cable, 1.5M 25GbE, SFP28 to SFP28
CBL-NTWK-0944-MS28C20M	Twinax copper cable, 2.0M 25GbE, SFP28 to SFP28
CBL-NTWK-0944-MS28C25M	Twinax copper cable, 2.5M 25GbE, SFP28 to SFP28
CBL-NTWK-0944-MS28C30M	Twinax copper cable, 3.0M 25GbE, SFP28 to SFP28
CBL-NTWK-0325-02	Twinax copper cable, 2.0M, 40 GbE QSFP+ to QSFP+
CBL-NTWK-0417-01	Twinax copper cable, 1.0M, 40 GbE QSFP+ to QSFP+
CBL-NTWK-0422-01	Twinax copper cable, 5.0M, 40 GbE QSFP+ to QSFP+
CBL-NTWK-0446-01	Twinax copper cable, 3.0M, 40 GbE QSFP+ to QSFP+
CBL-NTWK-0942-MQ28C05M	Twinax copper cable, 0.5M100GbE,QSFP28 to QSFP28
CBL-NTWK-0944-MS28C05M	Twinax copper cable, 0.5M100GbE,QSFP28 to QSFP28
CBL-NTWK-0942-MQ28C10M	Twinax copper cable, 1.0M100GbE,QSFP28 to QSFP28
CBL-NTWK-0943-SQ28C10M	Twinax copper cable, 1.0M100GbE,QSFP28 to QSFP28
CBL-NTWK-0942-MQ28C15M	Twinax copper cable, 1.5M100GbE,QSFP28 to QSFP28
CBL-NTWK-0942-MQ28C20M	Twinax copper cable, 2.0M100GbE,QSFP28 to QSFP28
CBL-NTWK-0942-MQ28C25M	Twinax copper cable, 2.5M100GbE,QSFP28 to QSFP28
CBL-NTWK-0942-MQ28C30M	Twinax copper cable, 3.0M100GbE,QSFP28 to QSFP28

Splitter Cables

Part Number	Description
CBL-NTWK-0719	Twinax copper cable, 1.0M,40GbE/QSFP+ to 4x 10GbE/ SFP+, 25AWG
CBL-NTWK-0720	Twinax copper cable, 3.0M,40GbE/QSFP+ to 4x 10GbE/ SFP+, 30AWG
CBL-NTWK-0721	Twinax copper cable, 5.0M,40GbE/QSFP+ to 4x 10GbE/ SFP+, 25AWG
CBL-NTWK-0988-Q28M1	Twinax copper cable,1.0M,100GbE/QSFP28 to 4x 25GbE/ SFP28, 30AWG
CBL-NTWK-0932-Q452M	Twinax copper cable, 2.0M,100GbE/QSFP28 to 4x 25GbE/ SFP28,25AWG
CBL-NTWK-0988-Q28M3	Twinax copper cable,3.0M,100GbE/QSFP28 to 4x 25GbE/ SFP28,30AWG
CBL-NTWK-0988-QS28C30M-2	Twinax copper cable,3.0M,100GbE/QSFP28 to 4x 25GbE/ SFP28,25AWG
CBL-NTWK-0988-Q28M5	Twinax copper cable,5.0M,100GbE/QSFP28 to 4x 25GbE/ SFP28,26AWG

Transceivers

Part Number	Description
AOC-E10GSFPSR	SFP+ Transceiver for use with 10GbE fiber cable connections, 850nm, MMF, LC
AOM-AQS-107-B0C2-CX	SFP+ to RJ45 Interface Converter
AOM-SFP28-25GbE-SR-1-MLN	SFP28 Transceiver for use with 25GbE fiber cable connections, 850nm, MMF, LC
AOM-TQSFP-79EQDZ-AVG	QSFP+ Transceiver for use with 40GbE fiber cable connections, 850nm, MMF, LC
TRX-100GbE-SR4-FIN	QSFP28 Transceiver for use with 100GbE fiber cable connections, 850nm, MMF, MPO

Optional Rail Kit

For Secure Rack-Mount of 10G Switches SSE-X3348S(R) and SSE-X3348T(R)
 • CSE-PT52L

The above lists of compatible cables and transceivers sold by Supermicro are accurate as of the time of this printing. The latest list can be found on our website: www.supermicro.com. In general, our Ethernet switches can operate with the appropriate cable or transceiver from any reputable supplier. If you require a particular one not on this list and would like for us to validate it before making a purchase, please advise your Supermicro sales representative. We will be happy to arrange compatibility testing.

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