

SX1035

36-Port 40GbE Switch System – Server and Storage Connectivity

The SX1035 switch system provides the highest-performing fabric solution in a 1U form factor by delivering up to 2.88Tb/s of non-blocking throughput to high-performance computing, high frequency trading and Enterprise Data Centers, with ultra-low-latency.

The SX1035 is ideally suited as a top-of-rack access switch providing 10GbE connectivity to servers and 40GbE uplinks to the next level of aggregation switching.

The SX1035 is suitable for efficient server and storage connectivity with half the market latency and the lowest power (1.3 Watts per port).

World-Class Design

The SX1035 is an elegant top-of-rack design that is designed for performance, serviceability, energy savings and high-availability. The design is optimized for fitting into industry-standard racks and also for scale-out computing solutions from industry leaders. It supports reversible airflow making the design fit into data centers with different thermal designs. Redundant and hot swappable power supplies and fans provide high availability for both high-performance computing, cloud, Web 2.0 and data center applications. Status LEDs for fans and power supply units are placed on both sides of the system for easy status identification. Quick start guide, rack mount kit, AC power cord and RJ45 console cable are provided as part of the standard system providing an easy out-of-the-box experience.

End-to-End Solution

Mellanox is a leading supplier of end-to-end connectivity solutions. The SX1035, together with Mellanox cables and ConnectX[®] NICs, brings the networking industry's first end-to-end 40GbE solution to the market.



HIGHLIGHTS

BENEFITS

- Efficiency
 - *Simple configuration, no need for QoS (40GbE vs. 10GbE)*
- Easy Scale
 - *Configure and manage the data center from single location*
- Elasticity
 - *Low latency on any node*
- Arranged and Organized Data Center
 - *40GbE high density - 4x less cables*
 - *Easy deployment*
 - *Easy maintenance*
- Unprecedented Performance
 - *Storage and server applications run faster*

KEY FEATURES

- High Density
 - *36 40GbE ports in 1RU*
 - *Up to 64 10GbE ports*
- Lowest Latency
 - *230nsec for 40GbE*
 - *250nsec for 10GbE*
- Lowest Power
 - *Typical power consumption: 1.3 Watts per port*

SPECIFICATION

LAYER 2 FEATURE SET

- 48K L2 Forwarding Entries
- 802.1w Rapid Spanning Tree Protocol
- 802.1Qbb Priority Flow Control (PFC)
- Static MAC
- 802.3x Flow control
- VLAN aware
- 802.3ad Link Aggregation/LACP
 - 16 ports/channel
 - 32 groups per system
- 802.1Qaz Enhanced Transmission Selection (ETS)
- Jumbo Frames (9216 Bytes)

NETWORK MANAGEMENT

- RADIUS
- TACACS+
- LDAP
- SSHv2
- DHCP
- Familiar Industry Standard CLI
- Management over IPv6
- Management IP
- Telnet
- File download via SCP, FTP & TFTP client
- Simple Network Time Protocol (SNTP)
- Syslog
- Dual SW Image
- Auto Temperature Control
- System alarms
- Port Counters

POWER SPECIFICATIONS

- Typical Power consumption: 86W
- Max Power consumption: 100W
- Input Voltage Range: 100-240VAC

PHYSICAL CHARACTERISTICS

- Dimensions: 1.72"H x 16.84"W x 24.7"D
- Weight: 20.5 Lbs (9.3 Kgs)

IEEE COMPLIANCE

- 802.3ae 10GbE
- 802.3x Flow Control
- 802.1w RSTP
- 802.1Qbb PFC
- Non Operating 5% to 95%
- Altitude: Operating -60 to 2000m
- Non Operating -60 to 2000m

SUPPORTED MODULES AND CABLES

- QSFP – 40GbE module
- QSA - QSFP to SFP+ adapter
- QSFP to QSFP Cable – 1M, 3M
- QSFP splitter cables 40GbE to 4x10GbE

Ordering Part Number	Description
MSX1035B-1SFR	SwitchX® based 36-port QSFP 40GbE 1U Ethernet "Lite L2" Switch, 36 QSFP ports, 1 PS, Standard depth, PSU side to Connector side airflow, Rail Kit and RoHS6
MSX1035B-1BRR	SwitchX based 36-port QSFP 40GbE 1U Ethernet "Lite L2" Switch, 36 QSFP ports, 1 PS, Short depth, Connector side to PSU side airflow, Rail Kit and RoHS6



350 Oakmead Parkway, Suite 100, Sunnyvale, CA 94085
 Tel: 408-970-3400 • Fax: 408-970-3403
www.mellanox.com