



SANbox[®] 3050

Switch

8 port
Fibre Channel Switch
2Gb Solution



The Easiest, Low-Cost Way to Switch

Now get the power of SANs without breaking your budget! Introducing the QLogic[®] SANbox 3050, the new entry-level switch with all the performance and management capabilities of the more expensive competitive products, and none of the hidden costs or headaches. With eight 2Gb ports, and easy-to-use graphical-user interface (GUI) wizards, installation and configuration is a breeze. Whether you are just beginning SAN development or need an advanced feature set at a compelling price, the SANbox 3050 will manage your fabric. It's that simple.

- 8 auto detecting 2Gb/1Gb user device ports
- Configuration wizards to simplify switch installation and fabric scaling
- Interoperable with all FC-SW-2 compliant Fibre Channel switches
- Full-fabric, public-loop or switch-to-switch connectivity on all ports
- Auto-sensing, self-configuring ports
- Non-blocking full-bandwidth architecture
- I/O StreamGuard for RSCN Suppression
- "No-Wait" routing – guaranteed maximum performance independent of data traffic
- Industry's lowest latency for maximum performance
- SFP (small form-factor pluggable) connectivity
- In-band, out-of-band, Telnet and SNMP management access
- Designed for seamless operation with higher-level third-party management applications
- ASIC-embedded memory – faster, more scalable and more reliable than shared memory architecture

BREAKTHROUGH EASE OF USE. The first Fibre Channel switches to be configured with simple wizards. Point-and-click wizards help you install, configure, monitor, diagnose and upgrade your QLogic switches and HBAs – it's that simple!

INCREDIBLY LOW COST. At eight ports, the SANbox 3050 switch offers an entry point affordable to the smallest business. And unlike competing products, there are no hidden or extra costs for software features like GUIs and an advanced feature set. In addition,

PERVASIVE INTEROPERABILITY. Interoperable with popular servers, storage and networking products from major manufacturers including ADIC, Brocade, Cisco, Computer Associates, Dell, EMC, Emulex, HDS, HP, IBM, LSI, McDATA, Microsoft, Quantum, StorageTek, Sun, VERITAS, and many others.

Now ESM-listed
for both the
EMC AX100
and **CX300**
storage platforms

SANbox 3050

Switch

2
Gb

SANbox 3050 Fibre Channel Switches

- Physical & Signaling Interface Rev. 4.3 (FC-PH)
- Physical & Signaling Interface-2 (FC-PH-2)
- Physical & Signaling Interface-3 (FC-PH-3)
- Fabric Generic Requirements (FC-FG)
- Generic Services (FC-GS)
- Generic Services-2 (FC-GS-2)
- Generic Services-3 (FC-GS-3)
- Switch Fabric (FC-SW-2)
- Arbitrated Loop Rev. 4.6 (FC-AL)
- Arbitrated Loop-2 Rev. 7(FC-AL-2)
- Fibre Loop Attachment (FC-FLA)
- Tape Technical Report (FC-Tape)
- Virtual Interface Architecture Mapping (FC-VI)
- Fibre Channel Element MIB RFC 2837
- Fibre Alliance MIB Version 4.0

Fibre Channel Classes of Service

- Classes 2, 3 connectionless

Modes of Operation

- Fabric
- Public loop

Performance Features

Fabric Port Speed

- 2 Gb/s, Full-Duplex, auto-negotiating for compatibility with existing 1Gb devices

Fabric Latency

- Less than 0.4 μ s (best case, no contention)
- Cut-through routing

Fabric Point-to-Point Bandwidth

- 206 MB/s Full-Duplex on 2 Gb ports

Fabric Aggregate Bandwidth

- Up to 1648 MB/s (full-duplex) end-to-end
- Non-blocking architecture

Maximum Frame Sizes

- 2148 bytes (2112 byte payload)

Per-port Buffering

- ASIC-embedded memory (non-shared)
- Each port has a guaranteed 16-credit zero wait state buffer for full performance up to 10km @ 2Gb

Scalability

Ports Per Chassis

- Eight (8) 2Gb / 1Gb ports

Multi-switch Fabrics

- Supports all topologies, including: stack, cascade, cascaded loop, mesh and Multi-stage™ with E_Port
- Supports multiple links between switches
- In-order delivery of frames in all Multi-switch and multi-link configurations

Fabric Port Types

- All ports can assume the following states:
 - F_port: Fabric
 - FL_port: Fabric loop (public loop)
 - E_port: Switch-to-switch
- Ports are auto-discovering, self-configuring

Media Type

- Hot-pluggable, industry-standard SFPs (Small Form Pluggable)

Supported SFP Types

- Shortwave (optical)
- Longwave (optical)

Media Transmission Ranges (2Gb Ports)

- Optical
- Shortwave: 500 m (1,640 ft.)
- Longwave: 10 km (6.2 mi.)

Cable Types (2Gb Ports)

- 50/62.5 micron multi-mode fiber optic
- 9 micron single-mode fiber optic

Interoperability

- Compatible with FC-SW-2 compliant switches
- Management interoperability with leading SAN management applications

Fabric Management

Management Processor

- Pentium class Processor

Management Methods

- SNMP, Telnet, GS-3

Access Methods

- In-band
- Ethernet 10/100 BaseT with RJ45
- RS-232 serial port with DB9

Diagnostics

- Power-up self-test of all functionality except media modules
- Field-selectable full self-test including media modules

Fabric Services

- Simple Name Server
- Fabric Zoning
 - Hardware-based
 - Access Control List (port)
 - Name Server (WWN)
 - Orphan Zoning
 - All zoning assigned on per-node basis, even across Multi-stage fabrics
- Registered State Change Notification (RSCN)
- I/O StreamGuard
- Multi-chassis in-order delivery
- Automatic path selection in Multi-stage configurations

User Interface

- LED indicators, command-line console, and web-based utilities

Mechanical

Enclosure Types and Options

- Mounting ears and rubber feet included
- Optional rail mounting kit

Dimensions

- Width: 432 mm (17") 19" rack mountable
- Height: 43.2 mm (1.70") (1U)
- Depth: 305 mm (12")

Weight

- 4.08 kg (9 lbs)

Power Supply/Cooling

- Integral Power Supply with industry-standard IEC connector
- Front-to-back air pattern

Environmental

Operating

- Temperature: +5°C to +40°C (41 to 104°F)
- Humidity: 5% to 90% non-condensing
- Altitude: 0 to +10,000 feet
- Vibration: IEC 68-2 5-500 Hz, random, 0.21 G rms, 10 minutes
- Shock: IEC 68-2 4g, 11ms, 20 repetitions

Non-Operating

- Temperature: -40°C to +70°C (-40 to 158°F)
- Humidity: 5% to 93% non-condensing
- Altitude: 0 to +50,000 feet
- Vibration: IEC 68-2 5 to 500 Hz, random, 2.09 G rms, 10 minutes
- Shock: IEC 68-2 30g, 292 ips, 3 repetitions, 3 axis

Electrical

Operating Voltage

- 100 to 240 VAC; 50 to 60Hz

Power Source Loading (Maximum)

- 0.5A at 120 VAC; 0.25A at 200-240 VAC

Heat Output

- 30W maximum (with full-optics configuration)

Regulatory

Safety Standards:

- UL 60950 (USA)
- CSA 22.2 No.60950 (Canada)
- EN60950 (EC)
- CB Scheme-IEC 60950

Emissions Standards

- FCC Part 15B Class A (USA)
- VCCI Class A ITE (Japan)
- ICES-03 Issue 3 (Canada)
- EN55022 Level A (EC)
- CISPR 22, Class A

Voltage Fluctuations

- EN 61000-3-3

Harmonics

- EN 61000-3-2

Immunity

- EN 55024:1998

Marking

- FCC Part 15
- UL (United States)
- TUV (United States)
- cUL (Canada)
- cTUV (Canada)
- TUV Europe (Germany)
- VCCI
- CE

For a list of authorized resellers, visit www.qlogic.com/buyqlogic/home_buy.asp



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