QLOGIC®
The Ultimate in Performance

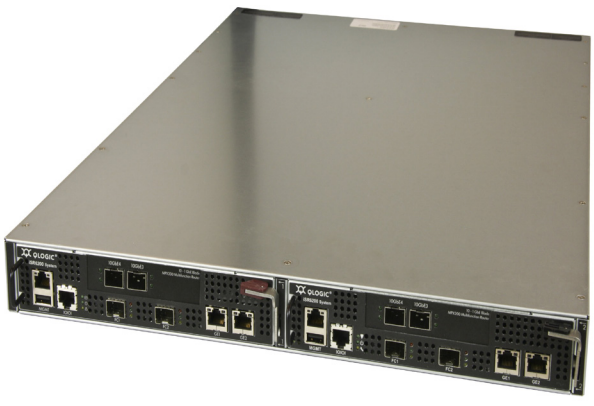
DATA SHEET

iSR6250

Enterprise-Class Connectivity, Routing, and Services

Overview

The QLogic® intelligent Storage Router, iSR6250, based on QLogic's dual-blade TrueFlex™ architecture, is an intelligent, high availability (HA), fabric-routing and application-hosting platform that enables multiprotocol routing, SAN-over-WAN extension, and data migration. The Initiator Virtualization technology deployed in the iSR6250 provides storage consolidation for multiple servers and virtual machines. The iSR6250 has a unique, dual-blade, HA architecture that provides best-in-class price, performance, and flexibility for saving time, money, and management resources.



Highlights

- TrueFlex architecture provides any-to-any protocol flexibility and connectivity.
- Open fabric interoperability supports existing networks, SANs, and WANs.
- Non-disruptive data migration solution for local, remote, and cloud IaaS requirements.
- High-performance data migration solution enables up to 8TB per hour migration.
- Fibre Channel over IP (FCIP) capability provides effective connectivity to support data migration and site replication with no distance limitations.
- Enterprise-class HA design provides dual hot-swap power supplies and router blades for no single point of failure.
- Future-proof modular design enables easy upgrades to more ports or new protocols.
- Unmatched performance: 8Gb Fibre Channel, 1Gb Ethernet, and 10Gb iSCSI ports deliver up to 2.4GBps throughput and 240K IOPS.
- Massive storage consolidation for 1,024 virtual machines using 2,048 iSCSI initiator support and 8,192 LUN support through dual-blade iSR6250 configuration.
- Simultaneous support for iSCSI connectivity and SAN-over-WAN connection lowers the cost of storage consolidation and distance connectivity for dynamic reconfiguration (DR), and also simplifies ongoing management.
- Advanced installation and configuration wizards allow efficient setup and deployment.
- Management interoperability with leading SAN management applications.
- Advanced installation and configuration wizards allow setup in under 25 minutes.
- Power efficient: Uses as little as 210W for a fully-loaded configuration.

Benefits

iSR6250 fabric routing platform details include the following:

- iSCSI Host Connectivity for Fibre Channel Arrays and Devices. The iSR6250 provides multiprotocol iSCSI connectivity to Fibre Channel SAN devices for higher storage consolidation and better utilization of the SAN, significantly reducing connection costs and simplifying storage management.
- Bandwidth Aggregation for Blade Server Deployments. Placing more servers into denser environments can push the infrastructure bandwidth to its limits. With 10GbE ports, the iSR6250 can aggregate native 1GbE server connectivity, which allows unimpeded server deployment through initiator virtualization, without major disruptions to the network or fabric.
- Branch Office Data Consolidation and Centralized Management. Data that reside in remote locations and branch offices create problems for backup, archiving, and regulatory compliance. Higher storage utilization and better return on investment (ROI) can be achieved by consolidating data in the data center. The file server at the remote office accesses SAN storage in the data center using both the iSCSI initiator in the file server host and the iSR6250.

True Flexibility and Ease-of-Use

The iSR6250 can simultaneously provide all of the functionality described in the preceding section from a single device. A simple GUI allows IT managers to establish and configure connections for any operational mode.

Heterogeneous Data Migration Licensing

Because data centers are different, your data migration solution must provide heterogeneous migration across arrays, applications, and operating systems. The iSR6250 with data migration licensing provides a solution that enables low-cost data migration across heterogeneous Fibre Channel and iSCSI SANs. In today's 24 × 7 environment, the QLogic data migration solution provides online migration capability, which allows the application server and storage array to remain online while the data migration occurs in the background.

The QLogic iSR6250 data migration solution reduces the cost of data migration. The iSR6250 solution sets a new price and performance benchmark, and offers a simple licensing model to meet the business and operational demands of every IT department.

6200 Configurations

6250-C12-B (Chassis)

- Includes one 6250 blade, one rail kit, two North America power cords, one RJ-45 to RS-232 adapter, and two 8Gb Fibre Channel SR SFP+ connectors
- Maximum two blades per chassis

6250-B10-N (Blade)

- Includes one 6250 blade, one RJ-45 to RS-232 adapter, and two 8Gb Fibre Channel SR SFP+ connectors

Interface Specification per 6250 Blade

Gigabit Ethernet

- Two ports: 10GBASE optical (iSCSI, FCoE)
  - Full duplex, SR/SW 10G Ethernet, up to 300m, 850nm
- Two ports: copper 1000 Base-T, RJ-45
  - Full duplex, auto-negotiating 100Mbps, 1000Mbps

Fibre Channel

- Two optical ports, full duplex
- Auto-negotiation: 8Gbps, 4Gbps, 2Gbps
- N_Ports, NL_Ports, F_Ports, FL_Ports, Transparent ports for Fibre Channel over IP (FCIP)
- Class 2, 3 connectionless

Management Ports

- Ethernet 10, 100, 1000 Base-T with RJ-45
- RS-232 serial port with RJ-45

Product Features per Blade

- iSCSI connectivity: 1.2GBps (2.4GBps aggregated over two blades) using 10GbE ports
- FCIP: 2Gbps (4Gbps aggregated over two blades) using two 1GbE ports and support for 10Gbps using 10GbE ports
- 140K IOPS (280K aggregated over two blades)
- One virtual LAN (VLAN) per Ethernet port
- 1,024 iSCSI hosts per blade
- 4,096 LUNs per blade
- 64 Fibre Channel target ports per blade

FCIP WAN Support

- Up to two FCIP routes per blade
- FCIP route through 1GbE or 10GbE ports
- Compression 1.5Gbps
- Up to 250ms round-trip delays

Supported SFP Types

- SR, shortwave (optical)
  - 300M, OM3 multimode fibre

Interoperability

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

iSCSI Initiator Support

- Microsoft® Windows® 2003, 2008
- Solaris® SPARC® versions 10, x86
- Linux® Red Hat® AS 4, 5 and SUSE® Enterprise Server 10, 11
- VMware® ESX Server versions 3.5*x*, VMware ESXi 4.1, VMware ESXi 5.0
- AIX®[1] AIXL 5
- HP-UX versions 11.11, 11.23, 11.31
- QLogic iSCSI 4010, 4050, 4052, 4060, 4062
- Apple® OS X (with ATTO® driver)

Device Management

Management Methods

- Wizard-based configuration tools
- CLI
- SNMP

FRU Management

- Dual-blade configuration enables replacing a failed blade with a new one without requiring any reconfiguration of SAN, LAN, or iSR6250

Access Methods

- Two dedicated out-of-band (OOB) Ethernet 10, 100, 1000 Base-T, RJ-45 and RS-232 serial ports per blade

Diagnostics

- Power-on self-test (POST) of all functions except media modules

User Interface

- LED front panel indicators, CLI, and browser utilities

Mechanical and Power

Enclosure Type

- 1U, full rack width, mounting rails included

Dimensions

- Width: 431.8mm (17.00")
- Height: 44.5mm (1.75")
- Depth: 631.4mm (24.9")
- Weight: 12.7kg (27.9 lbs)

Power Supply

- Dual, redundant, hot-swap power supplies
- 235W maximum, 200W typical
- 100VAC to 240VAC; 50Hz to 60Hz
- 1.9A at 100–125VAC; 1.02A at 200–240VAC

Cooling

- Six redundant fans with back-to-front airflow

Protocols

- iSCSI to Fibre Channel protocol (FCP)
- FCIP
- CHAP security and authentication
- IPv6 and IPv4

Environmental and Safety[2]

Operating

- Temperature: +5C to +40C (41F to 104F)
- Altitude: 0 to +10,000 feet

Non-Operating

- Temperature: –40C to +70C (40F to 158F)
- Altitude: 0 to +50,000 feet

Agencies

- Safety Standards: UL 60950 (USA), CSA 2.2 No. 60950 (Canada), EN 60950 (EC), CB Scheme-IEC 60950, FCC Class A, Industry Canada IECS-003 Class-A, CISPR22:1997 (3rd Edition, Class-A International), VVCI Approval to V.3 (Japan), ACA C-Tick Approval to AS/NZS 3548 (Australia, New Zealand), RPL Certification (Korea), Class 1 Laser Product per DHHS 21CFR(J) and IEC 680825
- Environmental: RoHS, WEEE

1 Future product release.

2 For more information, go to www.qlogic.com.

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