



iSR6250

Enterprise-Class Connectivity, Routing, and Services

Features

- TrueFlex™ architecture provides any-to-any protocol flexibility and connectivity
- Open fabric interoperability supports existing networks, storage area networks (SANs), and wide area networks (WANs)
- Enterprise-class high availability (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 Internet small computer interface (iSCSI) ports deliver up to 2.4 gigabytes per second (GBps) throughput and 240K input/output operations per second (IOPS)
- Massive storage consolidation for 1024 virtual machines using 2048 iSCSI initiator support and 8,192 logical unit number (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 simplifies ongoing management
- Advanced installation and configuration wizards allow setup in fewer than 25 minutes
- Power efficient: uses as little as 210W for a fully-loaded configuration



Benefits

iSR6250 Fabric Routing Platform. The QLogic Intelligent Storage Router, iSR6250, based on our dual-blade TrueFlex architecture, is an intelligent, HA fabric routing and application hosting platform that enables multi-protocol routing, SAN-over-WAN extension, and data migration. The Initiator Virtualization technology deployed in the iSR6250 provides storage consolidation for a large number of servers and virtual machines. The iSR6250 has a unique, dual-blade, HA architecture that provides best-in-class price, performance, and flexibility available for saving time, money, and management resources.

Fabric routing platform details include the following:

- **iSCSI Host Connectivity for Fibre Channel Arrays and Devices.** The iSR6250 provides multi-protocol iSCSI connectivity to Fibre Channel SAN devices for higher storage consolidation and better utilization of 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. The iSR6250 with 10GbE ports 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 from a single device. A simple graphical user interface (GUI) allows IT managers to establish and configure connections for any operational mode.

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6200 Configurations

iSR6250 Configuration SKUs

- 6250-C12-B (Chassis):
 - Includes one 6250 Blade, rail kit, two North America power cords, one RJ-45 to RS-232 adapter, and two 8Gb Fibre Channel SR SFP+
 - 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+

Interface Specification per 6250 Blade

Gigabit Ethernet

- Two ports: 10GBASE optical (iSCSI, FCoE¹)
 - Full duplex, SR/SW 10G Ethernet, 850nm
- Two ports: copper 1000 Base-T, RJ-45
 - Full duplex, auto negotiating 100/1000 Mbps

Fibre Channel

- Two optical ports, full duplex
- Auto negotiation: 8/4/2 Gbps
- 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: 1.2 GBps (2.4 GBps aggregated over two blades) using 10GbE ports
- FCIP: 2 Gbps (4 Gbps aggregated over two blades) using two 1 GbE ports
- 140K IOPS (280K aggregated over two blades)
- 1 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 ports¹
- Compression 1.5Gbps
- Up to 250 ms roundtrip delays

Supported Small Form Factor Pluggable (SFP) Types

- Shortwave (optical)
- Longwave (optical) for 10GbE

Interoperability

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

iSCSI Initiator Support

- Microsoft: Windows 2000/2003/2008
- Solaris: SPARC 2.6, 8, 9, 10 x86
- Linux: Red Hat AS 3, 4, 5 and SUSE Enterprise Server 8, 9, 10
- VMware: ESX Server v3.0.x, v3.5x
- AIX: AIXL 5
- HP-UX: versions 9, 10
- QLogic: 4010, 4050, 4052, 4060, 4062
- Apple: OS X (with ATTO driver)

Device Management

Management Methods

- Wizard-based configuration tools
- Command line interface (CLI)
- Simple network management protocol (SNMP) and storage management initiative specification (SMI-S)¹

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

- Light-emitting diode (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: 12.7 kg (27.9 lbs)

Power Supply

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

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/Safety²

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), VCCI 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 21 CFR(J) and IEC 680825
- Environmental: RoHS, WEEE

¹ Future product release.

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



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