QLOGIC®

iSR6200

Enterprise-class Connectivity, Routing and Services

Features

- TrueFlex™ architecture provides any-to-any protocol flexibility and connectivity.
- Open fabric interoperability supports existing networks, SANs, and WANs.
- 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 FCoE/iSCSI ports deliver up to 2.6GB/sec throughput and 200K IOPS.
- Advanced installation and configuration wizards allow set up in less than 25 minutes.
- Very power efficient: uses as little as 100W for a typical configuration and reduces power and cooling by 66% versus competitive products.

Benefits

- Optimizes BC and DR cost and performance.
- Maximizes WAN performance and reduces costs.
- Provides open, cost-effective storage consolidation.
- Unifies all networks: LAN, SAN, and WAN.
- Improves deployment for IT test and development.
- Improves storage utilization by enabling multi-protocol array connectivity.

iSR6200 Fabric Routing Platform. The QLogic iSR6200, based on our TrueFlex architecture, is an intelligent, HA fabric routing and application hosting platform that enables fabric services, including multi-protocol routing, SAN-over-WAN extension, data migration for storage consolidation, and multi-protocol fabric boot services. Its virtual server portability creates a multi-fabric routing platform with support for all leading storage and network applications. The iSR6200 has a unique, dual-blade, HA architecture that has the best price, performance, and flexibility available for hosting fabric services. Each router blade has a base configuration of two 8Gb Fibre Channel ports and two 1Gb iSCSI ports. Each blade has an expansion slot that supports two additional ports of either 1Gb iSCSI, 10Gb FCoE/iSCSI, or 8Gb FC. The iSR6200 will also support emerging protocols, such as InfiniBand, SAS and 16Gb FC.

1. **Multi-protocol Host Connectivity for Fibre Channel Arrays and Devices.** The iSR6200 provides multi-protocol iSCSI connectivity for SAN devices for better utilization and storage consolidation. By supporting up to 2,048 iSCSI initiators, virtual and physical machines can secure and manage their own storage partitions, significantly reducing connection costs.

2. **SAN Extension for Business Continuance and Disaster Recovery.** The iSR6200 features FCIP support for easy SAN-over-WAN connectivity. A cost-effective bridge for remote replication puts business continuance, disaster recovery, and regulatory compliance goals within the budget of any company.

3. **Data Migration & Storage Consolidation Data Mover for ILM.** The iSR6200 simplifies the management of data storage assets for redeployment or retirement. It enables IT managers to quickly, safely, and economically move data at the block level to bring new arrays into service and move aging data to older systems.

True Flexibility and Ease-of-Use. The iSR6200 can simultaneously provide all of the functionality described above 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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Interface Specification

Interfaces per router blade. The iSR6200 can support one or two installed blades.

Gigabit Ethernet
- Two ports: copper 1000 BaseT, RJ45
- 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
- Class 2, 3 connectionless

Management Ports
- Ethernet 10/100 BaseT with RJ45
- RS-232 serial port with RJ45

Expansion Configurations

One expansion card per router blade adds ports to the system
- 2 x 1Gb Ethernet module
- 2 x 10Gb Ethernet FCoE/iSCSI module (standard configuration)
- 2 x 20Gb Infiniband DDR*

Performance Features

Maximum Data Rates
- iSCSI: 2.6-Gbps aggregate (1.3 Gb per blade)
- FC: 12.8-Gbps aggregate (6.4Gb per blade)

Input/output Operations per Second (IOPS)
- 200K IOPS aggregate (100K per blade)

VLAN Support
- Up to 4 VLANs per 10GbE port

ISCSI Host Support
- 2,048 iSCSI Hosts (1,024 per router blade)

WAN Device Support
- 252 WWNNs (63 per FC port)
- Simultaneous target and initiator mode for FC ports

Supported SFP Types
- Shortwave (optical)
- Longwave (optical)

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

*Future product release

iSCSI Initiator Support
- Microsoft: Windows 2000/2003/2008
- Solaris: SPARC 2.6, 8, 9, 10: X86
- Linux: Red Hat AS 3, 4, 5; 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 (via ATTO driver)

Device Management

Management Methods
- Wizard-based configuration tools
- Command line interface (CLI)
- SNMP and SMI-S*

Access Methods
- Dedicated out-of-band Ethernet 10/100BaseT, RJ45 and RS-232 serial port

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

User Interface
- LED front panel indicators, CLI, and browser utilities

Mechanical

Enclosure Type
- 1U, full rack width, mounting rails included

Dimensions
- Width: 431.8mm (17.00")
- Height: 43.7mm (1.72")
- Depth: 631.4mm (24.9")

Power Supply
- 235W maximum (2 blades & 2 Exp cards)
- 106W typical (1 Blade, 2 power modules)
- 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

High Availability
- Hot-swap router blades and power supplies
- Router blade persistence: all zoning and addressing maintained in non-volatile memory.
- Fan modules powered by both power supplies.

Data Migration

Host/Application Status
- Online or offline migration

Transport Protocols
- Any-to-any protocol for: Fibre Channel, ISCSI, FCoE, and InfiniBand

Storage Topology
- Local
- Remote (license upgrade)

Performance
- Up to 10TB per hour (5TB/hr per blade)

Protocols
- iSCSI to FCP
- FCIP
- CHAP security and authentication
- IPv6 and IPv4

Environmental/Safety

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

Non-operating
- Temperature: -40C to +70C (-40F to158F)
- Humidity: 5% to 93% non-condensing
- Altitude: 0 to +50,000 ft
- Vibration: IEC 68-2, 5-500Hz, random, 2.09G rms, 10 minutes
- Shock: IEC 68-3, 30g, 292 ips, 3 repetitions, 3 axis

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 Ctick 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
- Harmonics: EN 61000-3-2
- Immunity: EN 55024:1998, EN55022:1998