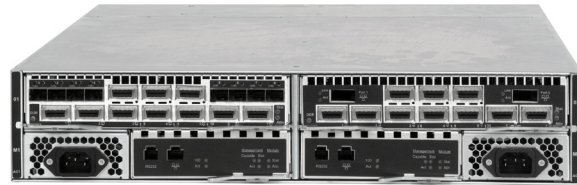




SilverStorm™ 9020 ECA

10 Gb/s SDR and 20 Gb/s DDR Switching with Integrated Virtual I/O Controllers



The SilverStorm 9020 Enterprise Cluster Accelerator (ECA) is the smallest member of the powerful 9000 family of Multi-Protocol Fabric Directors. The 9020 ECA is an ideal solution for customers who need the performance and scalability of InfiniBand and require connectivity to Ethernet or Fibre Channel Networks.

Platform for Enterprise Database Clusters Using Oracle RAC 10g. The 9020 ECA is a cost-effective InfiniBand solution that powers Oracle clusters up to six times faster than Ethernet systems. Unlike competing InfiniBand products, SilverStorm delivers an Oracle-certified solution comparable in performance to larger SMP solutions at a fraction of the cost. The 9020 ECA meets the largest demands from Oracle today – and can grow when needed to meet the demands of tomorrow.

Virtual I/O Integration. The 9020 ECA incorporates the innovative Virtual I/O Controller (VIC) technology. VIC modules installed in a 9020 ECA enable hosts on InfiniBand fabrics to transparently access either Fibre Channel or Ethernet networks or both. VIC modules utilize Virtual HBA and Virtual NIC technology creating a virtual pool of network and storage resource connectivity. VIC technology eliminates the cost and complexity of running multiple server physical connections for storage, network, and inter-processor communications, and allows each virtual network type to scale independently over a “single wire” connection.

Fabric Scalability. The 9020 ECA is a cost-effective solution that bridges Enterprise networks with the performance of InfiniBand. Unlike competing IB products, SilverStorm delivers a cost-effective, Director-class platform capable of bridging existing Enterprise Networks such as 4G Fibre Channel and 10G Ethernet. The 9020 ECA is also flexible enough to grow with the customer as requirements demand.

Benefits

- Comparable performance to SMP when running Oracle 10g at a fraction of the cost.
- Faster deployment of clusters for Enterprise.
- High Availability configurations meets Enterprise standards for uptime.
- Hot swappable components eliminates maintenance downtime.
- Gateway connectivity to either 4G Fibre Channel or 10G Ethernet Networks simplifies management of networks.
- Oracle RAC Certified means Oracle support.
- Significantly improves cluster computing application performance.
- Eliminates the need for separate physical server connections to storage and network resources.
- Pool and share I/O between servers.
- Simplifies data center design and reduces operating costs.
- Requires up to 1/3 less power and space than competitive solutions.

Key Features

- Up to 480 Gb/s of switching capacity in a single system.
- 4x single data rate (SDR)/double data rate (DDR) InfiniBand (IB), 1/2/4Gb/s Fibre Channel and 10Gb/s Ethernet Virtual I/O interface options.
- Fully-redundant power supplies, fans and logic components.
- Up to 22 Infiniband ports in a single chassis.
- Up to 4 10Gb/s Ethernet ports in a single chassis.
- Up to 16 4Gb/s Fibre Channel ports in a single chassis.

SilverStorm 9020 ECA SDR and DDR Switching with Integrated Virtual I/O Controllers

Switch Specifications

9020 System Model Options

- 4Gb Fibre Channel (9020-Base-FC)
 - 10 4x DDR IB and 8 4Gb/s FC ports
 - Expansion room for 1 IB Leaf
 - 2 power supplies and fan trays for redundancy
 - 1 Management module (expandable to 2)
- 10Gb Ethernet (9020-Base-Eth)
 - 10 4x DDR IB and 2 10Gb/s Ethernet ports
 - Expansion room for 1 IB Leaf
 - 2 power supplies and fan trays for redundancy
 - 1 Management module (expandable to 2)

Leaf Module Options

- 4x SDR IB: 12 4x IB ports
- 4x DDR IB: 12 4x IB ports
- 1/2/4 Gb/s FC VIC: 10 4x DDR IB ports, 8 VIC ports
- 10 Gb/s Ethernet VIC: 10 4x DDR IB ports, 2 VIC ports

InfiniBand Switch Components

- Virtual Lanes: 8 plus 1 management
- MTU size: up to 4096
- Unicast table: 48K entries
- Multicast table: 1024 entries

Fiber Channel VIC Module

- Supports up to 128 Virtual HBA ports per module
- Automatic sensing of port type: 1/2/4 Gb/s
- Automatic port and module fail-over
- Supports load balancing
- LUN mapping and masking features
- SCSI-SRP, SCSI-FCP, and FC-PH-3 compliant

Ethernet VIC Module

- Supports up to 250 Virtual NIC ports per module
- Automatic port and module fail-over
- TCP/UDP and IP header checksum offload
- Jumbo frames supported
- 802.1Q VLAN support
- 802.1p Priority Queuing/Scheduling (802.1p)

Interoperability

- IBTA 1.0a, 1.1 and 1.2

Physical Specifications

Model H x W x D + Weight

- 3.5 in x 17.32 in x 25.5 in 32 lbs

Environment and Equipment Specifications

Power consumption

- 100-240VAC (50/60 Hz), IEC320-C14 power connectors

Temperature

- 5° to 45°C (operating)
- -35° to 65°C (non-operating)

Humidity

- 5 to 85% (operating)
- 5 to 90% (non-operating)

Agency Approvals

Safety

- UL/CSA/EN

EMI

- FCC/VCCI/EN

Marking

- UL/GS/VCCI/CE /RoHS

Tools and Utilities

Management

- Optional redundant chassis management processor
- Optional embedded Fabric Management (SM, PM, and BM) available via Virtual I/O modules (EVIC and FVIC)
- Optional server-based InfiniBand compliant Subnet Manager
- SNMP management support

Ordering Information

9020 Enterprise Cluster Accelerator

- Each 9020 ships in an individually-packed box per specific customer configuration.



QLOGIC



Corporate Headquarters QLogic Corporation 26650 Aliso Viejo Parkway Aliso Viejo, CA 92656 949.389.6000

www.qlogic.com

Europe Headquarters QLogic (UK) LTD. Surrey Technology Centre 40 Occam Road Guildford Surrey GU2 7YG UK +44 (0)1483 295825