EMULEX®

SR-1216

Complete Embedded Flexibility

SILICON STORAGE ROUTER

Available to OEMs only

An integrated, state-of-the-art FC to SATA router, Emulex's SR-1216 provides transparent emulation of FC enclosures, scaling, diagnostic, fault isolation, and path failover features, in a high-performance, low-cost, versatile solution for the midrange enterprise storage market.

16 low-cost ATA HDDs can attach to the SR-1216. Each connection is managed as an independent point-to-point link. Presented to the RAID controller as a group of FC HDDs, they are perceived as 16 FCP targets emulating FC HDDs. This transparent solution requires little or no modification to storage system firmware.

A maximum of 125 ATA HDDs can be attached to a FC-AL in Transparent Mode. Advanced modes allow a maximum of 2,000 HDDs per loop. The SR-1216 enables ATA and FC HDD shelves to be mixed in one storage system. In a FC switch topology, scaling ATA drives is virtually limitless, providing a cost-effective solution impractical with FC switch-to-FC drive configurations.

One requirement for high-availability applications is path failover, in which no single point of failure exists. The SR-1216 uses the Available-ATA Path Controller Card, a static ATA switch with dual-port access to the natively single-ported ATA HDDs. In a HA configuration, if one attached SR-1216 goes down, another attached SR-1216 takes over.

KEY FEATURES:

- ⊙ "Transparent" Emulation of FC Enclosures with Serial ATA (SATA) Drives
- ⊙ Scalable up to 2,000 SATA Drives per FC Loop
- ⊙ State-of-the-art Diagnostic and Fault Isolation
- ⊙ High-availability and Fault Tolerance
- ⊙ Advanced Data Integrity

Specifications

Key Features of the SR-1216 Silicon Storage Router Family:

Fibre Channel Port Features

Dual Fibre Channel L/N ports

1 and 2Gb/s full-duplex operation

Class 3

Hard and soft addressing
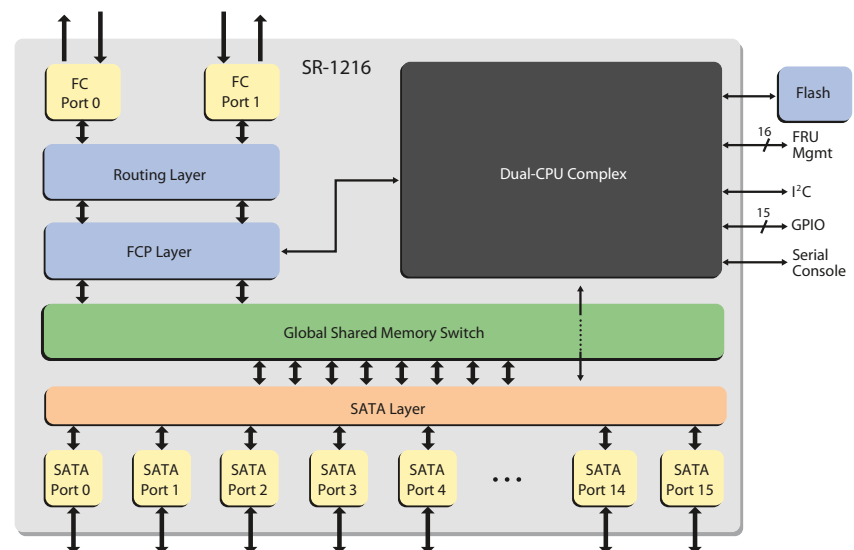
Integrated SerDes

Serial ATA Port Features

16 serial ATA ports

1.5Gb/s operation

Integrated SerDes

Hot-plug capability

Additional Features

Embedded dual RISC processors

External flash interface

2Gb/s non-blocking embedded switch

A single chip solution, which means that a flash IC is the only external memory device needed for normal operation

Downloadable customized firmware

General Chip Specifications

0.18 μm CMOS technology

8.76 W maximum power dissipation

1.8 / 3.3 V power requirements

75 MHz and 106.25 MHz reference clock requirements

788 EPBGA-T package

Full scan

1149.1 JTAG

RoHS
2002/95/EC
COMPLIANT