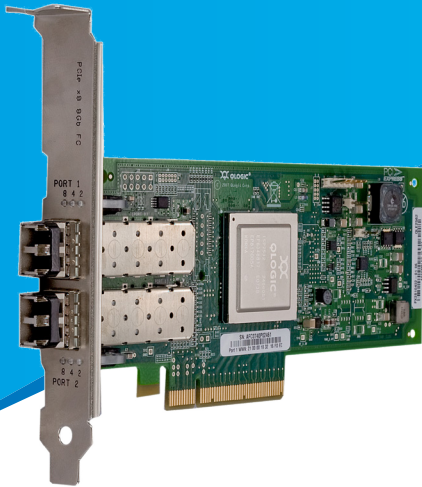


Overlapping Protection Domains (OPD)

Highest Data Reliability



QLogic 8Gb ASICs and HBAs from Cavium enhance Overlapping Protection Domain (OPD) to protect both the data path and the control path.

INDUSTRY CHALLENGE

Maintaining the highest level of data integrity is a challenge faced by enterprise IT managers. Providing accurate data in a timely manner gives business operations a competitive edge over their competition. In a Storage Area Network (SAN) infrastructure, Fibre Channel (FC) Host Bus Adapters (HBAs) provide critical data protection as data travels between the storage devices and the servers. To provide the highest level of data protection, IT professionals need FC HBAs that provide continuous data protection at all times.

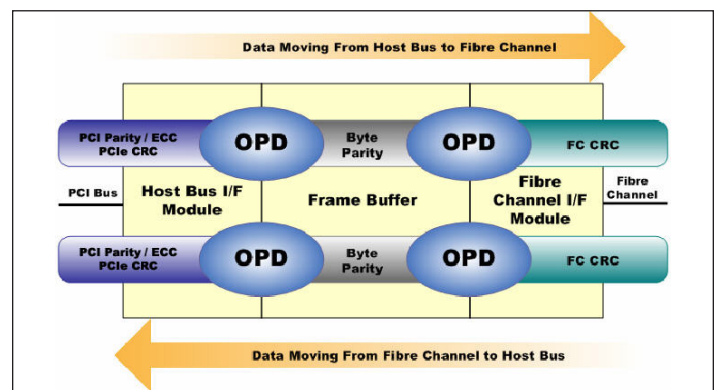
KEY BENEFIT

- **Highest Data Reliability**
Data and address paths are never unprotected, even for the smallest fraction of time.

THE QLOGIC OPD SOLUTION

The QLogic® Overlapping Protection Domain (OPD) technology from Cavium™ is a unique implementation for protecting the data and address paths as this information moves between the host bus interface and the FC interface within the FC controller (ASIC). OPD on the data path was first introduced with QLogic 4Gb ASICs and HBAs. With the introduction of QLogic 8Gb ASICs and HBAs, OPD has been enhanced to protect both the data path *and* the control path.

The QLogic OPD enhancement not only ensures that the correct data is written, but that the data is written to the correct location.



Overlapping Protection Domains

HOW THE QLOGIC OPD SOLUTION WORKS

Data received from the host bus is protected by PCI parity/ECC or PCIe CRC. Before data is put into the frame buffer, frame buffer byte parity is calculated on the data. Then PCI parity/ECC or PCIe CRC is checked; if its integrity is verified, it is stripped. Similarly, when data is put on the FC interface, FC CRC is calculated on the data. The data is checked against the frame buffer parity; if its integrity is verified, it is stripped.

KEY ADVANTAGES

The QLogic 2500 Series Fibre Channel Adapter from Cavium is the superior choice for the enterprise data center for the following reasons:

- **Proven Leadership.** According to Dell'Oro Group, QLogic Fibre Channel adapters have a double-digit lead over the nearest competitor. With more than 15 million ports deployed across multiple hardware platforms and operating systems, QLogic Fibre Channel Adapters have been field-tested in enterprise data centers.
- **Highest Data Reliability.** Powered by QLogic OPD technology, data and address paths are never unprotected, even at the smallest fraction of time.

- **Power Optimized.** QLogic StarPower™ technology allows the QLogic 2500 Series Fibre Channel Adapter from Cavium to operate at 4.9W.
- **Warranty.** Cavium delivers the most reliable adapter backed by the industry's only five-year warranty.
- **Manageability.** Cavium's QLogic QConvergeConsole® delivers a Web-based single-pane-of-glass management console for all generations of QLogic Fibre Channel Adapters from Cavium.

ABOUT CAVIUM

Cavium, Inc. (NASDAQ: CAVM), offers a broad portfolio of infrastructure solutions for compute, security, storage, switching, connectivity and baseband processing. Cavium's highly integrated multi-core SoC products deliver software compatible solutions across low to high performance points enabling secure and intelligent functionality in Enterprise, Data Center and Service Provider Equipment. Cavium processors and solutions are supported by an extensive ecosystem of operating systems, tools, application stacks, hardware reference designs and other products. Cavium is headquartered in San Jose, CA with design centers in California, Massachusetts, India, Israel, China and Taiwan.



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