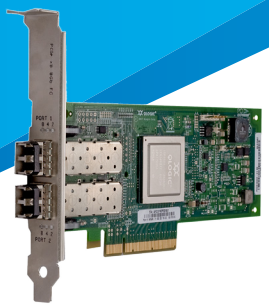
Overlapping Protection Domains (OPD)

Highest Data Reliability



With the introduction of QLogic's 8Gb ASICs and HBAs, OPD has been enhanced 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.

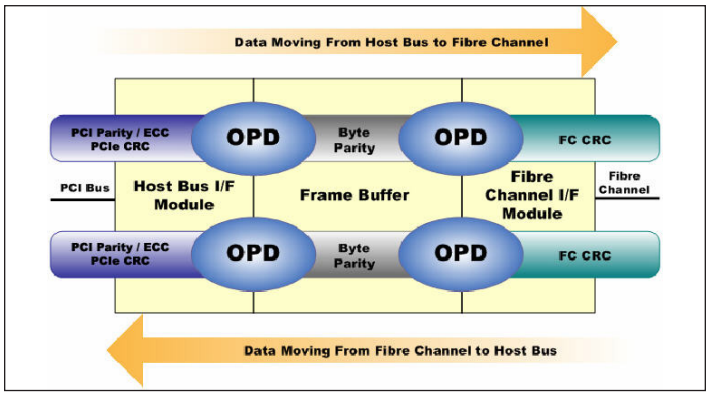
KEY BENEFIT

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

QLOGIC'S OPD SOLUTION

OPD is QLogic's 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's 4Gb ASICs and HBAs. With the introduction of QLogic's 8Gb ASICs and HBAs, OPD has been enhanced to protect both the data path *and* the control path.

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



Overlapping Protection Domains

HOW QLOGIC'S 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 is the superior choice for the enterprise data center. The reasons include the following:

Proven Leadership. According to Dell'Oro Group, QLogic is the market leader, with 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. Data and address paths are never unprotected, even for the smallest fraction of time. Powered by QLogic OPD technology.

Power Optimized. QLogic StarPower™ technology allows the QLogic 2500 Series Fibre Channel Adapter to operate at 4.9W.

Warranty. QLogic delivers the most reliable adapter backed by the industry's only five-year warranty.

Manageability. QLogic's QConvergeConsole® delivers a Web-based single-pane-of-glass management console for all generations of QLogic Fibre Channel Adapters.

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