

# Marvell® QLogic® EP2532

Dual Port 8-Gbps Fibre Channel to PCI Express Controller

- Virtualization optimized
- Power optimized
- Reliability, availability, serviceability (RAS) optimized
- Security optimized
- Management optimized
- Fibre Channel 8Gb to PCI Express x8
- 1600 MBps (full-duplex) per port
- 200,000 initiator and target IOPS per port
- Integrated SSRAM
- Small footprint (31mm x 31mm) package
- StarPower™ technology

## EP2532 Controller

The EP2532 is a PCI Express to 8Gb Fibre Channel controller. The EP2532 delivers 200,000 initiator and target IOPS and up to 1600-MBps (full-duplex) per port.

## Virtualization Optimized

The EP2532 delivers enhanced security, quality of service (QoS), and enables dynamic provisioning. The EP2532 allows multiple logical (virtual) connections to share the same physical port. Each logical connection has its own resources and the ability to be managed independently.

## Power Optimized

The EP2532 takes advantage of QLogic StarPower technology, ensuring power efficiency. QLogic StarPower technology offers dynamic and adaptive power management features such as power and bandwidth optimized intelligent PCI Express link training.

## RAS Optimized

The EP2532 ensures the highest level of reliability by offering overlapping protection domains (OPD) on both the data and control paths. In addition, the EP2532 enhanced hardware assist firmware tracing (EHAFT) feature provides a comprehensive debug tool to capture firmware and Fibre Channel traces.

## Security Optimized

The EP2532 enables SAN-level authentication (Fibre Channel Security Protocols), fabric-level isolation (N\_Port ID virtualization), and is capable of end-to-end data integrity (T10).

## Management Optimized

The EP2532 is backward compatible with 4Gb and 2Gb speeds. The EP2532's API compatibility with 4Gb products accelerates deployment while ensuring application compatibility.

## Investment Protection

For over 20 years, QLogic has been a technological leader with products that address the current needs of customers, yet provide strong investment protection to support emerging technologies and standards. QLogic stands alone in the industry with its product portfolio depth and experience in successfully delivering technological solutions that address the needs of today and tomorrow.

### Fibre Channel Specifications

#### Negotiation

- 8/4/2Gbps auto-negotiation

#### IOPS

- 200,000 initiator and target IOPS

#### Class of Service

- 2 and 3

#### Topology

- FC-AL, FC-AL2, point-to-point, switched fabric

#### Protocols

- FCP-3-SCSI
- FC-Tape (FCP-2)
- FICON (FC-SB-2)
- FC-VI

### PCI Express Interface

#### Compliance

- *PCI Express Base Specification rev. 2.0*
- *PCI Express Card Electromechanical Specification rev. 2.0*
- *PCI Bus Power Management Interface Specification rev. 1.2*
- *PCI Hot Plug Specification rev. 1.0*

#### Electrical

- PCIe x8 maximum Gen1 rate
- PCIe x4 maximum Gen2 rate

### Controller Specification

#### Ports

- Dual 8Gbps Fibre Channel

#### Memory

- Integrated 1-MB per port SSRAM

#### Input Voltages

- Core: 1.0V
- SerDes: 1.8V
- I/O: 3.3V

#### Temperature

- 110°C maximum junction temperature

### Controller Specification

#### Airflow

- System-design dependent

#### Power Consumption

- 4.0 Watts (typical)

#### Storage Temperature

- -45 to 125°C

#### RoHS Compliance

- RoHS 6

#### Packaging

- 31mm x 31mm
- 880-ball (FCBGA)
- Ball pitch 1.0mm

### Ordering Information

#### EP2532

- Ships with a minimum order quantity of 108 devices (27 devices per tray x 4 trays), and increments in a multiple of 27 (1 tray)

## Disclaimer

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To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

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