



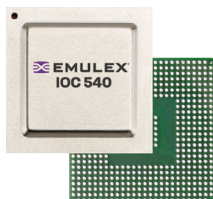
DATASHEET

CONNECTIVITY

Emulex IOC 540

Embedded Storage Controllers

SIMPLIFIED
NETWORKING,
MAXIMUM
PERFORMANCE
AND INCREASED
BUSINESS
AGILITY



Complete Embedded Flexibility

The Emulex IOC 540 is the industry's first dual-channel 8Gb Fibre Channel (8GFC) controller designed for storage system providers that want flexibility in their storage controller designs. The Emulex IOC 540 provides the necessary performance to simultaneously support target and initiator modes, while also enabling the data integrity and scalability features enterprise-class storage systems require. The Emulex SLI technology allows storage system providers to leverage designs to many different applications to reduce development efforts and time to market. Emulex delivers complete embedded flexibility to storage system providers.

Product and Feature Description

The Emulex IOC 540 provides storage system providers with the following key features:

- **8, 4 or 2GFC IOC**—industry's first dual-channel FC controller delivering up to 1600MB/s full-duplex bandwidth per channel.
- **Dual and single FC controllers**—offers storage system providers flexibility in their storage controller designs by delivering simultaneous target and initiator functions for FC.

Embedded Storage Controllers

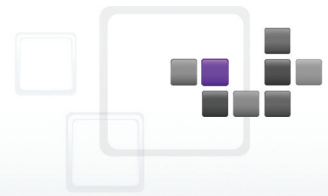
- **Emulex SLI technology**—enables driver compatibility while delivering a very high level of compatibility across multiple protocols, such as Fibre Channel and SAS/SATA. Allows firmware to be upgraded independently of drivers, providing for an increased return on investment and investment protection.
- **Emulex BlockGuard**—Emulex designed block data integrity, based on ANSI T10-PI standard, providing enhanced reliable delivery of data across storage networks for end-to-end data protection.
- **PCI-Express support**—host interface connections for 2.5GHz eight lane connections, or 5.0GHz four lane connections.

Key Benefits

- 8, 4 or 2GFC IOC
- Simultaneous support of target and initiator modes
- Compatible with Emulex's SLI™ (Service Level Interface) technology
- Emulex BlockGuard® for data integrity
- PCI Express Generation 2 support

Emulex IOC 540

Embedded Storage Controllers



SPECIFICATIONS

Fibre Channel Standards

- FC-PH-1, 2, 3 FC Physical and Signaling Interface Standards
- FC-PI FC Physical Interfaces
- FC-MJS FC Methodologies for Jitter Specification
- FC-AL-2 FC Arbitrated Loop Standards
- FCP FC Protocol for SCSI Standard
- FCP-2 FC Protocol for SCSI, Second Version
- FC-FS FC Framing and Signaling Interface

Fibre Channel Ports

- 2

Fibre Channel Speeds

- 8, 4, 2GFC

Package Size

- 27mm x 27mm FCBGA

Integrated Host Bus Interfaces

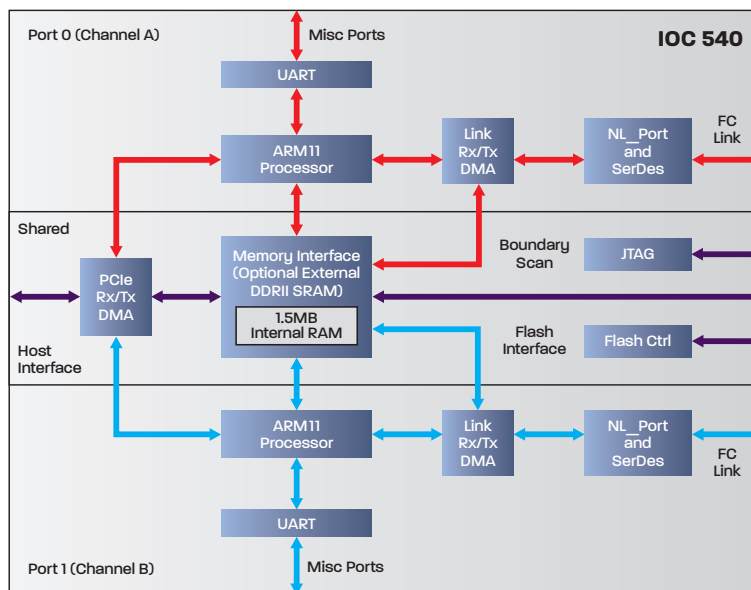
- PCI Express 2.0

Emulex SLI Technology

- API to driver

Ordering Part Numbers

- **IOC-540-01-01 (single channel)**
 - Single Channel I/O Controller, 1 port FC
- **IOC-540-02-01 (dual channel)**
 - Dual Channel I/O Controller, 2 ports FC



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