

# Complete Embedded Flexibility

## EMBEDDED STORAGE PROCESSORS

### Complete Embedded Flexibility

The Emulex IOP 502M is a single-chip Fibre Channel and SAS/SATA I/O Processor designed for storage system providers that want flexibility in their storage controller interface designs. The Emulex IOP 502M delivers the lowest cost of implementation on the market and is compatible with Emulex's Service Level Interface (SLI™). The Emulex SLI Technology allows storage system providers to leverage designs to many different applications to reduce development efforts and time to market. Only Emulex delivers complete embedded flexibility to storage system providers.

#### Dual Integrated XScale Processors

provides large L2 cache (512Kb) and up to 1.2 GHz processors for delivering high performance concurrent processing for protocol and application execution.

#### PCI-X and PCI-Express Interfaces

uses the same ASIC for either interface to deliver flexibility and performance for increased system concurrency.

**Emulex BlockGuard®** - Emulex designed block data integrity, based on the ANSI T10 DIF standard, providing enhanced reliable delivery and validation of data across storage networks for end-to-end data protection.



Available to OEMs only

#### Product and Feature Description

**Emulex SLI Technology** enables driver compatibility while delivering a very high level of compatibility across Fibre Channel and SAS/SATA solutions. Allows firmware to be upgraded independently of drivers, providing for an increased return on investment and investment protection.

#### KEY FEATURES:

- ◉ Delivers Lowest Cost of Implementation to the Market
- ◉ Single-Chip Fibre Channel and SAS/SATA Interfaces with Integrated I/O Processor
- ◉ Integrates Intel® 1.2 GHz XScale® Processor for High Performance
- ◉ Increased Investment Protection through Emulex's SLI™ Technology

# Specifications

## Key Features of the IOP 502M Embedded Storage Processors:

### Fibre Channel Standards

FC-PH-1, 2, 3 Fibre Channel Physical and Signaling Interface Standards

FC-PI Fibre Channel Physical Interfaces

FC-MJS Fibre Channel Methodologies for Jitter Specification

FC-AL-2 Fibre Channel Arbitrated Loop Standards

FCP Fibre Channel Protocol for SCSI Standard

FCP-2 Fibre Channel Protocol for SCSI, Second Version

FC-FS Fibre Channel Framing and Signaling Interface

### Memory Controller

Multi-ported DDR2 400/533 MHz with ECC

### Max Memory

2 GB

### Emulex SLI™ Technology

API to Driver

### Ordering Part Numbers

IOP 502M-2: 1.2GHz IOP with Dual 4Gb/s Fibre Channel Controller and Quad 3 SAS/SATA Controller

IOP 502M-3: 800MHz IOP with Dual 4Gb/s Fibre Channel Controller and Quad 3 Gb/s SAS/SATA Controller

### Fibre Channel Ports

2

### Fibre Channel Speeds

4 / 2 / 1Gb/s

### SAS/SATA Ports

4

### SAS/SATA Speeds

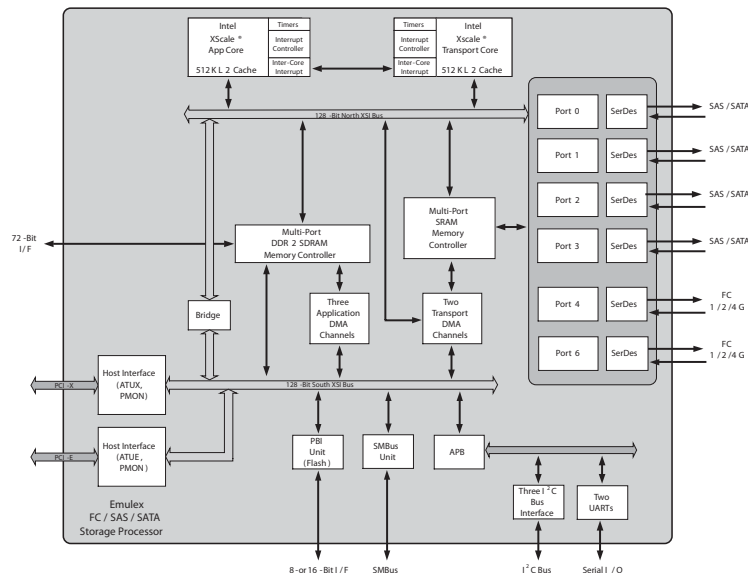
3 / 1.5Gb/s

### Package Size

37.5 mm x 37.5 mm FCBGA5

### Integrated Host Bus Interfaces

PCI Express 1.0a, PCI-X 2.0 both Concurrently



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