

# Complete Embedded Flexibility

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Designed for storage system providers who want a versatile, high-performance solution for creating enterprise-class tiered storage, the BRG 436 is a turnkey board-level bridging solution that enables low-cost SATA drives to be used transparently within existing FC enclosures while reducing the development time required to bring a FC-to-SATA tiered storage solution to market.

The BRG 436 is the only smart tailgate solution with the flexibility to seamlessly intermix FC and SATA disk drives in the same enclosure—allowing for improved data integrity, faster time-to-market, and SATA disk drive vendor-independence.



BRG 436 (with BR-2401 Embedded Storage Bridge)

Available to OEMs only

## Embedded Storage Bridge

### Major Features

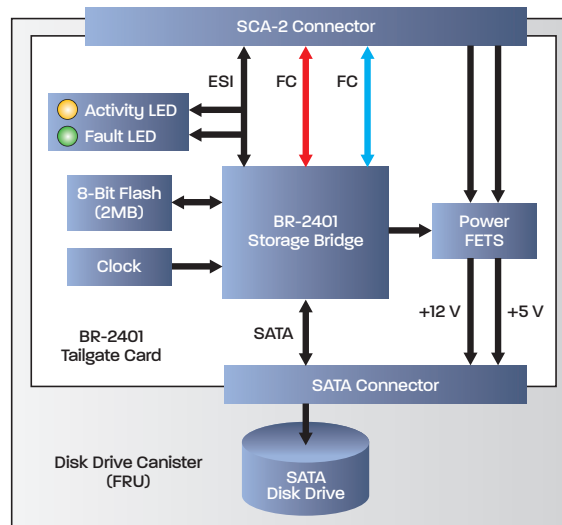
- ⦿ Canister-Level Emulation of Fibre Channel (FC) Disk Drives with Serial ATA (SATA) Disk Drives
- ⦿ Port Speed Agility of 4, 2 and 1Gb/s FC; 3.0 and 1.5 SATA
- ⦿ SATA II Compliant with Auto-Speed Negotiation and NCQ
- ⦿ State-of-the-Art Diagnostic and Fault Isolation
- ⦿ Integrated Data Path Memory
- ⦿ Advanced Data Integrity

# Specifications

**Figure 1: Key Features of the BRG 436 Embedded Storage Bridge**

<b>Fibre Channel Port Features</b>	Dual FC per port speed agility · 4, 2 and 1Gb/s full-duplex operation L/N port · Private/public loop support Class 3 · Hard and soft device addressing
<b>SATA-II Features</b>	One SATA port with auto-speed negotiation · 3 and 1.5Gb/s operation SATA-II Native Command Queuing (NCQ) · SATA Drive pin 11 Activity LED functionality (optional)
<b>Additional Features</b>	Embedded CPU complex (~175 MIPS) <b>Advanced data integrity:</b> Variable size sectors are supported · Data path is completely in hardware ANSI data protection model (T10 SBC-2) Standard SFF-8045 support · Hot plug capability SCSI command queue space for up to 128 commands · Configurable disk scrubbing operations Third party data verification (write and verify) · Serial Console Debugger interface
<b>General Chip Specifications* (for BR-2041 Embedded Storage Bridge)</b>	0.13 micron technology 1.6 watts maximum power dissipation in a single-drive canister application 1.2 V and 3.3 V power supplies required · 75 MHz and 106.25 MHz reference 196-pin mini Ball Grid Array (mBGA) · 170 MHz ARM 966 processor 1149.1 JTAG port · I <sup>2</sup> C interface 2MB 8-bit flash interface · 16 GPIOs (for power FET and LED control)

\* For more information, please refer to the BR-2401 Embedded Storage Bridge data sheet.



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