4-Port 4.25 Gbit/s FC-AL Cut-Through Switch and Retimer

TEST AND CONTROL

- Supports optional 2-pin serial management interface using selectable Two-Wire Interface (TWI) protocol for configuration and diagnostic access.
- For retimer mode of operation, a management interface is not required.
- External control pins can be overridden by registers.
- Digital Loss of Link (DLOLB) detect outputs for monitoring individual or multiple links. DLOLB can be programmed to indicate excessive 8B/10B code error rate, loss of synchronization, loss of signal, CRC32 errors, or comma density.

- Interrupt output to flag changes in bypass state and DLOLB error conditions.
- Supports built-in self-test (BIST) via internal Fibre Channel pattern generation and checking.
- Supports internal serial loop back modes for each port for testing and debugging.
- Provides a standard 5-signal IEEE 1149.1 JTAG test port for boundary scan board testing purposes.

PHYSICAL

- 0.13 µm (1.2 V Core and 3.3 V I/O supply) CMOS technology.
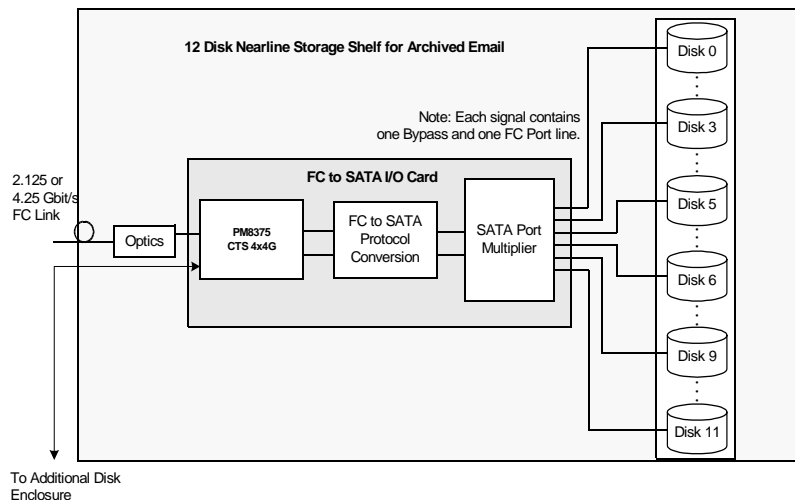- 15 mm x 15 mm footprint, 196-pin CABGA with 1 mm ball pitch.

- Pin compatible with PM8372 PBC 4x2G and PM8377 PBC 4x4G.
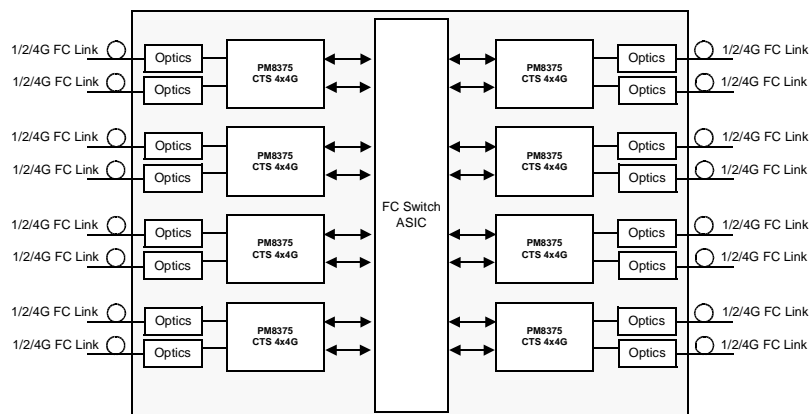- Ultra-low operating power.

APPLICATIONS

- FC to SATA Storage Systems.
- 1.0625, 2.125, and 4.25 Gbit/s Backplanes.
- FC Switches
- SBOD Storage Systems.
- MBOD Storage Systems.
- RAID Storage Systems.
- JBOD Storage Systems.
- FC-AL Nodes.
- Fibre Channel Hubs.

TYPICAL APPLICATIONS

FC to SATA Nearline Storage

Entry Level Small Medium Enterprise Fibre Channel Switch