

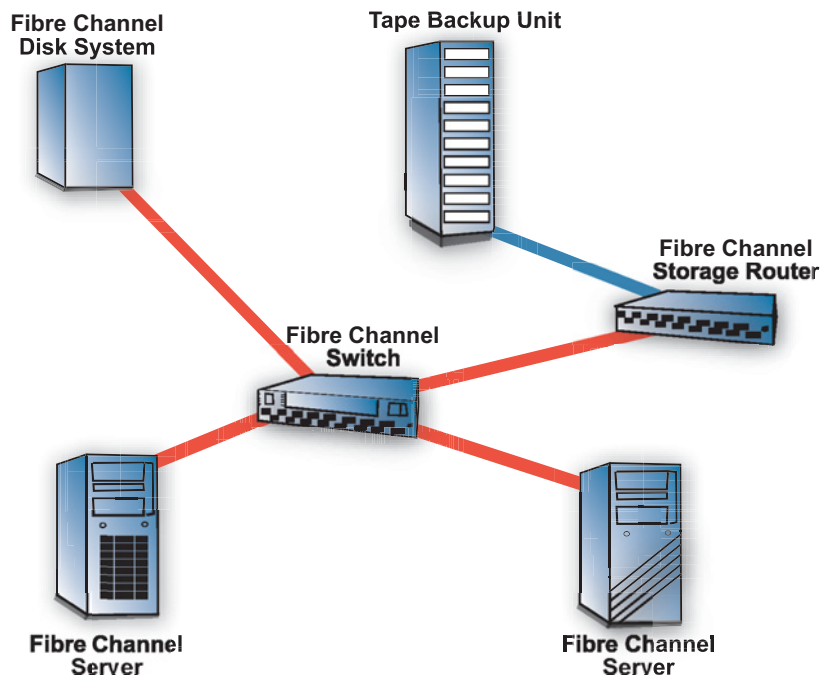
Silicon Image's SiI 2022 serializer/deserializer (SerDes) is capable of transmitting and receiving data at 1.0625 and 2.125 gigabits-per-second (Gbps). Targeted at Fibre Channel applications, the SiI 2022 SerDes is designed for power, performance and price. Making use of a robust, CMOS design that significantly reduces power dissipation and jitter, the SiI 2022 provides a low-cost solution for applications that require a high-performance Fibre Channel SerDes.

Available in a 64-pin, 14x14 mm MQFP package, the SiI 2022 supports selectable transmit and receive data rates for automatic speed negotiation and a narrow 10-bit SSTL\_2-compatible interface for parallel data input/output.

The SiI 2022 SerDes leverages much of the circuit innovation at the physical layer of Silicon Image's proprietary reduced overhead Multi-layer Serial Link (MSL™) architecture, pioneered and proven through the company's market-leading PanelLink® products. MSL technology is a multi-layer approach to providing robust, cost-effective, multi-gigabit semiconductor solutions on a single chip for high-bandwidth applications.

### Fibre Channel Applications

- Host Bus Adapters
- Hubs and Switches
- Disk Drives
- RAID Systems
- High-Speed Backplanes



## SiI 2022 Features Fibre Channel SerDes

### General

- Fibre Channel-compliant
- Multi-rate: 1.0625 Gbps and 2.125 Gbps

### Low Power

- Single 3.3V supply for core circuits and high-speed I/O
- Power dissipation: 450 mW

### Cost Effective

- Standard CMOS technology
- Compact 64-pin, 14x14mm MQFP (Metric Quad Flat Pack)

### Narrow Parallel I/O Interface

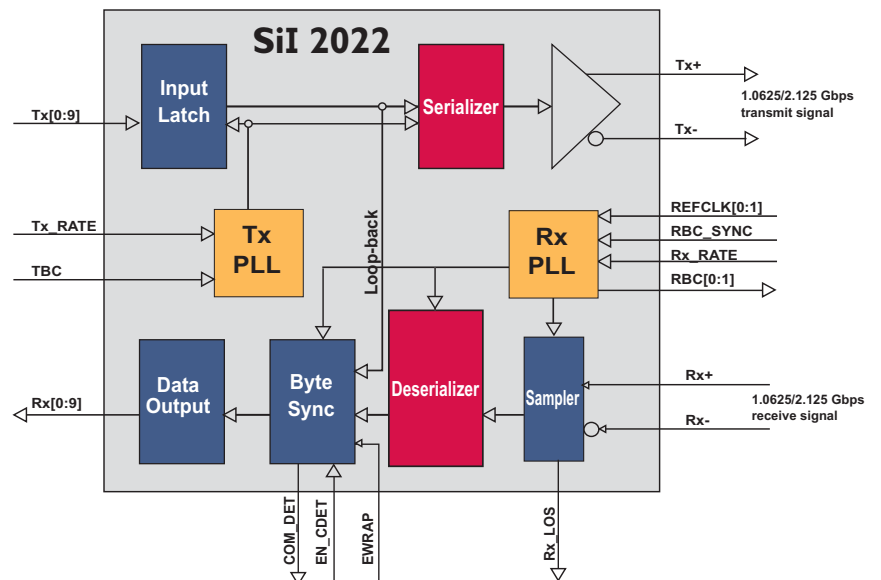
- 10-bit interface with DDR for 2.125 Gbps mode
- SSTL\_2 and High-Speed Parallel Interface (HSPI)-compliant
- Separate transmit byte clock (TBC) for latching parallel input data

### Highly Reliable Serial Interface

- Separately selectable Tx and Rx data rates
- Very-low-jitter PLL: 3.3 ps (random jitter), 32 ps (deterministic jitter)
- Variable pre-emphasis control
- Variable on-chip termination resistor
- Full ESD tolerance to 2 kV

### Proven Technology

- MSL™-based technology proven with Panellink® ICs for the PC and CE markets (2-5 Gbps, over 30M units shipped)
- Robust design for "noisy" environments



Part Number - SiI2022CM64