

CXB1585N, CXB1586R, CXB1586AR

Individual hard disks with capacities of 9 Gbytes are now available, and for the most advanced servers, it is now the data transfer rate from the mass storage devices that determines system performance.

Fibre Channel is an optimal technique for these ultra-high-speed data transfer applications.

The CXB1585N is a 1.06-Gbps repeater with an on-chip port bypass circuit that provides the best available cost-performance as a HUB for disk arrays and loop-type networks (FC-AL). The CXB1586R is a 1.06-Gbps transceiver for the 10-bit Interface Specifications that provides the best available cost-performance as an interface for large-capacity hard disks.

CXB1585N

- Repeater IC that conforms to the ANSI X3T11 Fibre Channel Standard (FC-0)
- On-chip clock recovery and port bypass circuits
- Transfer rate: 1.06 Gbps
- Single 3.3-V power supply, low power consumption (0.33 W typ.)

CXB1586R, CXB1586AR

- 1.06-Gbps transfer rate transceiver IC that conforms to the ANSI X3T11 Fibre Channel Standard (FC-0)
- Conforms to the 10-bit Interface Specification
- Single 3.3-V power supply, low power consumption (0.8 W typ.)

■ On-Chip Port Bypass Circuit: CXB1585N

The CXB1585N recovers the clock and data signals from a full-speed (1.06 Gbps) Fibre Channel signal and retransmits those signals. Since the CXB1585N includes an on-chip port bypass circuit (MUX), it allows the number of components required to construct either an FC-AL (Fibre Channel arbitrated loop) or RAID (disk array system) HUB to be reduced. The adoption of a 24-pin SSOP miniature plastic package with excellent heat dispersion characteristics makes high-density mounting easier.

■ Superlative Characteristics and a Rich Feature Set

The CXB1585N outputs low jitter data recovered with a high-performance PLL. To assure transmission reliability, the CXB1585N includes both a PLL lock detection function and a function for the PLL to automatically reference the reference clock when reception signal presence detection is used and the no-signal state is detected. It is also possible to use these functions to allow live-wire insertion and removal of reception data. Since the CXB1585N conforms to the ANSI X3T11 Fibre Channel Standard (FC-0), it can be used with confidence in a wide range of Fibre Channel applications.

■ Package and Pin Configuration Compatibility

The package size and pin configuration for ICs that conform to the 10-bit Interface Specification are, for all practical purposes, standardized. The CXB1586R package and pin configuration were designed to meet that standard. Inputs and outputs are TTL/ECL compatible. It was designed for low power consumption (0.8 W typ.) and operation from a single 3.3-V power supply to allow the adoption of a 64-pin plastic QFP package (with 14-mm sides). A version that retains the same pin configuration in an even smaller package (with 10-mm sides) is also available as the CXB1586AR.

V O I C E

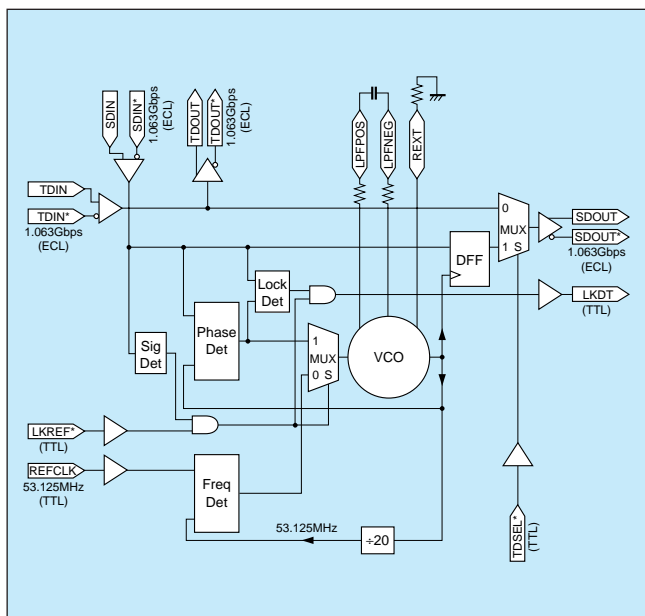
In the world of human networking, both correctly comprehending what others are saying and expressing what one is trying to say clearly are important. But these are difficult, and we don't always succeed. However, things are different in the world of information networks. Here, the CXB1585N and the CXB1586R send and receive data correctly. How about it? Why don't you try them?

■ The CXB1586R: Striving for Low Price

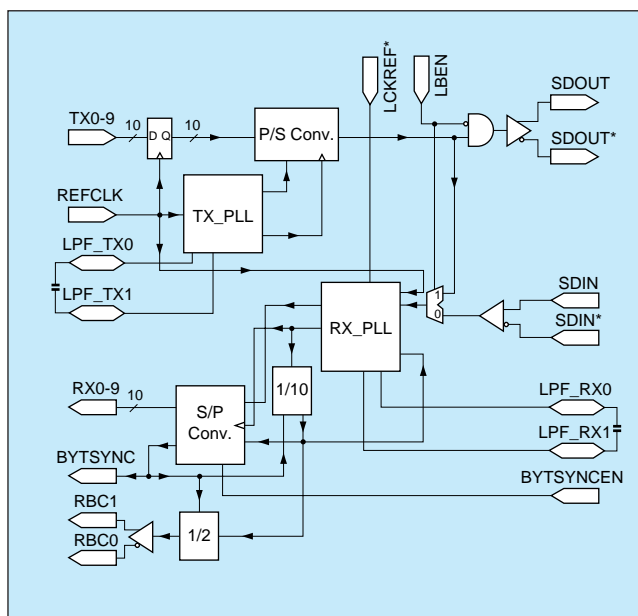
The CXB1586R is a 1.06-Gbps transmission rate transceiver IC (with on-chip parallel-to-serial and serial-to-parallel conversion) that conforms to the ANSI X3T11 Fibre Channel Standard (FC-0) and also conforms to the 10-bit Interface Specification. It provides lock detection functions for both the send and receive PLL circuits, a byte synchronization detection function (+ Comma detection), and an on-chip loopback function.



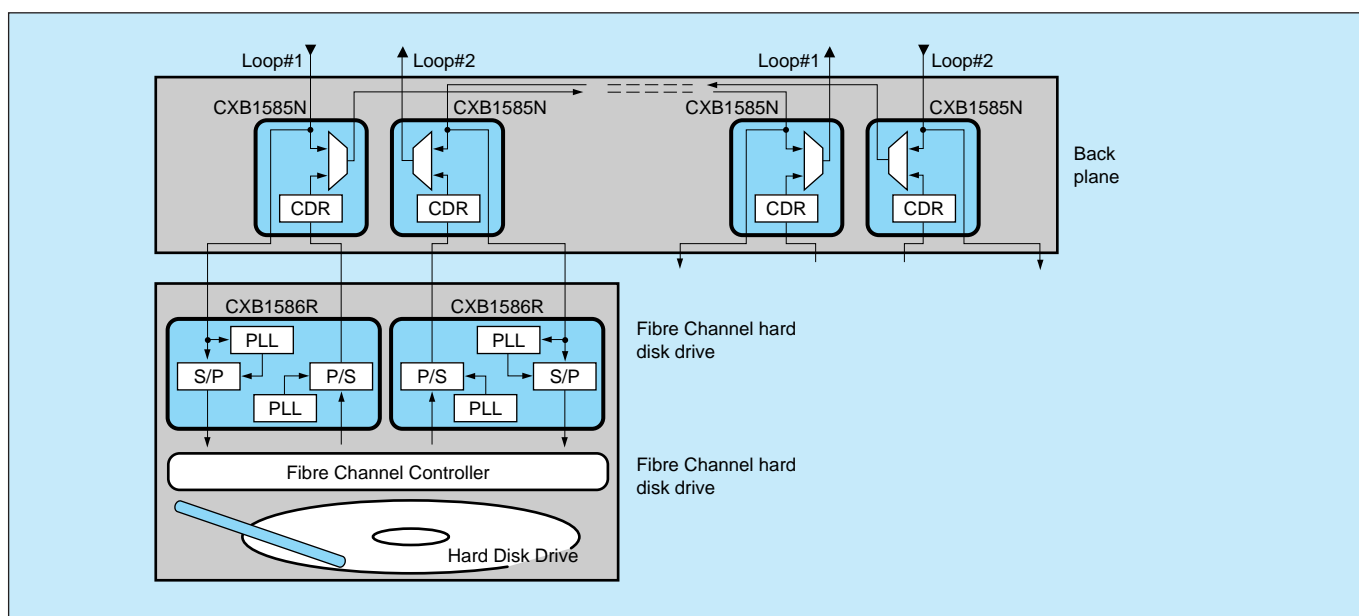
New Products



■ Figure 1 CXB1585N Block Diagram



■ Figure 2 CXB1586R and CXB1586AR Block Diagram



■ Figure 3 CXB1585N and CXB1586R Application Example (FC-AL hard disk unit)