

Communications

XRT82L24

Quad E1 Line Transceiver with Clock Recovery and Jitter Attenuator

Features

- On-chip clock recovery circuit
- Receive input can be transformer, or capacitor coupled
- Tri-state transmit output capacity
- On-chip per channel driver failure monitoring circuit

Applications

- Digital Access Cross-Connects (DACs)
- Channel banks
- High-speed data transmission line cards
- E1 multiplexer
- Public switching systems and PBX interfaces

Demand for greater transmission capacity has propelled telecommunications, and networking system companies to develop more E1 (2.048 Mbps) solutions. As more companies standardize on Wide Area Network (WAN) based, E1 transmission rates, or higher, companies are increasingly seeking off-the-shelf industry-proven components. Exar's four-channel LIU and Framer are ideally suited for this growing E1 market.

These devices are primarily targeted at single-channel and multi-channel E1 applications such as telecommunications equipment, network multiplexers, central office switches and digital cross connects. In instances where clock recovery and jitter attenuation functions have moved from the ASIC to the transceiver, these new four-channel parts are ideal.

The XRT82L24 is a fully-integrated, four-channel, short-haul line interface transceiver for 75 Ohm, or 120 Ohm applications. Each channel consists of a receiver, and a transmitter which accepts a single, or dual-rail digital input for signal transmission. It also includes a crystal-less jitter attenuator which can be selected in the transmit, or receive path through the host, or hardware mode.

In addition, the device has high immunity to receiver interference, a per-channel transmit power shut-down capability, and meets or exceeds industry specifications: ITU G.703, G.775, G.736 and G.823, and ETSI 300-166.