

Communications

XRT83L30

Single-Channel T1/E1/J1 Long-Haul, Short-Haul Line Interface Unit

Features

- On-Chip Frequency Multiplier
- Programmable Transmit Pulse Generator
- Supports Host or Hardware Modes
- Compliant With Leading Industry Standards
- Interfaces Seamlessly to Exar Framer Products

Applications

- Multi-Service Provisioning Platforms (MSPP)
- Integrated Access Devices
- Routers
- Frame Relay Access Devices
- Wireless Base Stations

Joining Exar's proven and extensive T1/E1 device family, the company adds three new products. A single-channel XRT83L30, a quad (four-channel) XRT83L34, and octal (eight-channel) XRT83L38. As demand for more bandwidth drives more communications applications – especially from the backbone or Core to the Metro Area Network. New applications need to transfer data over more than 655 feet, and this series extends the range to 6,000 feet. OEM products for this technology include Multi-Service Provisioning Platforms (MSPP), access devices, media gateways, routers frame relay access devices, and wireless base stations.

Product Highlights

The devices support a single bill-of-material for all T1/E1/J1 implementations, as well as all international (North America, Europe, or Japan) line impedances at 75, 100, 110, and 120-ohms, so that manufacturers can build hardware in advance and software configure the product for the particular application at the time of shipment. The family includes tri-state capability on both transmit and receive paths and matched impedance between the primary and back up receive paths. The tri-state capability can eliminate the need for relays in redundancy implementations. It also allows a back up receive channel to be simultaneously brought on-line in the event of a board power failure. A low jitter, on-chip frequency multiplier provides the necessary clocks to the chip. The master clock that feeds the multiplier can be T1, E1, or lower rates that are frequently available on a board such as 8, 16, 56, 64, 128 and 256kHz.