

# Communications

## XRT6165

### Codirectional Digital Data Processor

#### Features

- Low Power CMOS Technology
- All Receiver and Transmitter Inputs and Outputs are TTL Compatible
- Transmitter Inhibits Bipolar Violation Insertion for Transmission of Alarm Conditions
- Alarm Output Indicates Loss of Received Bipolar Violations
- Up to 125ms Variance of Data Transfer Timing in Both Transmit and Receive Paths Allows Operation in Plesiochronous Networks
- Both Receiver and Transmitter Perform Byte Insertion or Deletion in Response to Local Clock Slips

#### Applications

- CCITT G.703 Compliant 64kbps Codirectional Interface
- Performs the Digital and Analog Functions for a Complete 64kbps Data Adaption Unit (DAU) When Used With the XRT6164

The XRT6165 is a CMOS device which contains the digital circuitry necessary to interface both directions of a 64kbps data stream to 2.048Mbps transmit and receive PCM time-slots. The XRT6165 and the companion XRT6164 line interface chip together form a CCITT G.703 compliant 64kbps codirectional interface.

The XRT6165 contains separate transmit and receive sections. The transmitter transforms 8-bit serial data from a 2.048Mbps time-slot into an encoded 64kbps data stream. The receiver, which performs the reverse operation, decodes the 64kbps data, extracts a clock signal, and then outputs the data to a 2.048Mbps time-slot. The XRT6165 provides features which allow the repetitions and deletions of both received and transmitted data as clock skews and transients occur.