

EXAR**XR-T6000/T6010**

High Speed Digital Loop Tranceivers

PRELIMINARY DATA SHEET

GENERAL DESCRIPTION

The XR-T6000/T6010 are high speed data transceivers. They provide 256 KBits/s duplex data communication over 26 AWG twisted pair cable up to 10K feet in distance.

Intended primarily for use in digital subscriber voice/data telephone systems, they can also be used in limited distance base band modem, remote data acquisitions, and control systems.

FEATURES

- Loop Back Mode
- Single 5 Volt Supply
- 256 KBits/s Transmission Capability
- Adaptive Equalization
- Variable Data Clock Rate
- Bipolar Line Coding
- Automatic Detection Threshold Adjustment for Optimum Performance Over Varying Signal Attenuations

APPLICATIONS

- ISDN Reference Point S and T Interface
- 2 Wire TCM / Digital Subscriber Loop Interface
- 4 Wire Full Duplex Base Band Modems

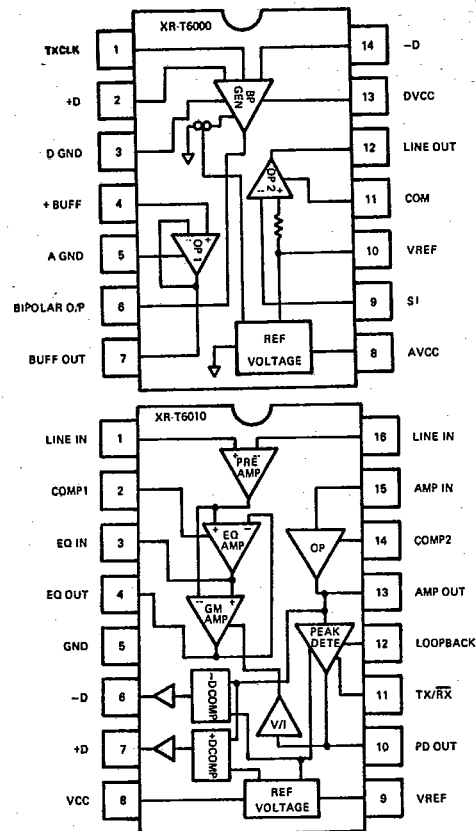
ABSOLUTE MAXIMUM RATINGS

Storage Temperature	-65°C to 150°C
Operating Temperature	0°C to 70°C
Supply Voltage (VCC)	7 Volts
Input Voltages	GND to VCC

ORDERING INFORMATION

Part Number	Package	Operating Temperature
XR-T6000CN	Ceramic	0°C to 70°C
XR-T6010CN	Ceramic	0°C to 70°C
XR-T6000CP	Plastic	0°C to 70°C
XR-T6010CP	Plastic	0°C to 70°C

FUNCTIONAL BLOCK DIAGRAMS



SYSTEM DESCRIPTION

The XR-T6000 Line Driver and the XR-T6010 Line Receiver are line termination circuits for Burst Mode (also referred to as ping pong transmission) or Bidirectional 4 wire digital loop subscriber.

The XR-T6000/T6010 are intended primarily for digital subscriber line interface or local office application at the customer's premises interfacing with the terminal or the local exchange equipment.

The XR-T6010 Line Receiver, capable of operating from 4 KBits/s to 256 KBits/s transmission rates, contains most of the active circuits necessary for differential to single ended conversion, adaptive equalization, and signal demodulation functions with minimal external components.