ISSUE 7 May 1995

Features

- Full duplex transmission over a single twisted pair
- Selectable 80 or 160 kbit/s line rate
- Adaptive echo cancellation
- Up to 3km (8971B) and 4 km (8972B)
- ISDN compatible (2B+D) data format
- Transparent modem capability
- Frame synchronization and clock extraction
- MITEL ST-BUS compatible
- Low power (typically 50 mW), single 5V supply

Applications

- Digital subscriber lines
- High speed data transmission over twisted wires
- Digital PABX line cards and telephone sets
- 80 or 160 kbit/s single chip modem

Ordering Information

MT8971BE	22 Pin Plastic DIP
MT8972BE	22 Pin Plastic DIP
MT8972BC	22 Pin Ceramic DIP
MT8971BP	28 Pin PLCC
MT8972BP	28 Pin PLCC

-40°C to +85°C

Description

The MT8971B (DSIC) and MT8972B (DNIC) are multi-function devices capable of providing high speed, full duplex digital transmission up to 160 kbit/s over a twisted wire pair. They use adaptive echo-cancelling techniques and transfer data in (2B+D) format compatible to the ISDN basic rate. Several modes of operation allow an easy interface to digital telecommunication networks including use as a high speed limited distance modem with data rates up to 160 kbit/s. Both devices function identically but with the DSIC having a shorter maximum loop reach specification. The generic "DNIC" will be used to reference both devices unless otherwise noted.

The MT8971B/72B is fabricated in Mitel's ISO²-CMOS process.

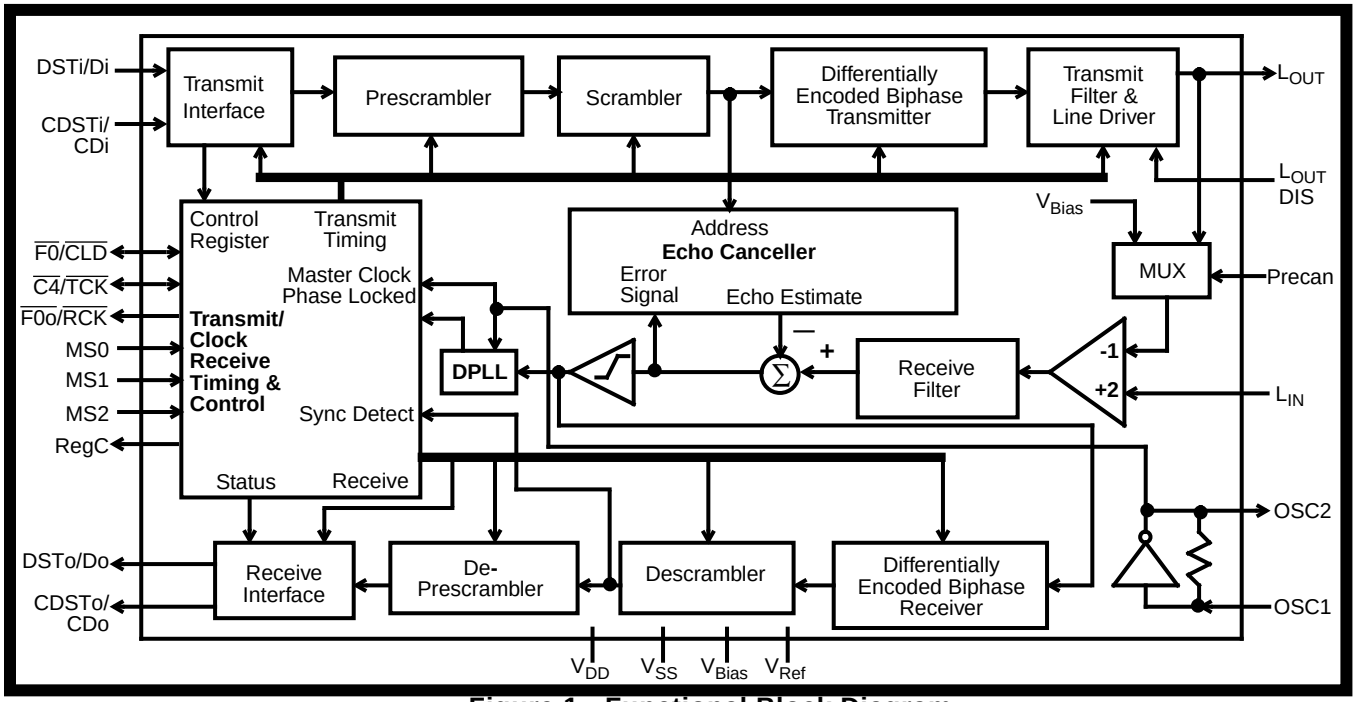

Figure 1 - Functional Block Diagram

Notes:

For more information about all Zarlink products visit our Web Site at

www.zarlink.com

TECHNICAL DOCUMENTATION - NOT FOR RESALE