

Features

- Multiplexes eight 2.048 Mbit/s, ST-BUS links onto one serial high-speed 20.48 Mbit/s link
- 15.808 Mbit/s clear bandwidth transport
- Two 8 kbit/s and one 32 kbit/s oversampled signalling channels
- Embedded system timing and frame synchronization
- Frame buffer control signals generated on-chip
- Check-sum generated on multiplexed frame
- Remote synchronization indication
- Both master and slave timing mode operation
- On-chip reference generation for slave mode synchronization
- 4B/5B data encoding/decoding

Applications

- Fibre distributed systems
- Backplane concentrators
- Local Area Networks (LANs)

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Ordering Information	
MT90710AP	84 Pin PLCC
0 °C to +70 °C	

Description

The High-Speed Isochronous Multiplexer integrated circuit multiplexes up to eight Serial Telecom (ST-BUS) links onto a single 20 MHz loop to facilitate point-to-point data transport requirements. The MT90710 connects easily with standard Fiber Optic interfaces to form a complete electric to photonic conversion circuit. Optical transmission allows large bandwidth inter-shelf or, in distributed systems, inter-node communication by eliminating multiple data buses, cable inter-connect and attendant driver interfaces. The final result is a simple physical interface free of the radiated emissions and background noise susceptibility problems encountered in copper-wired environments.

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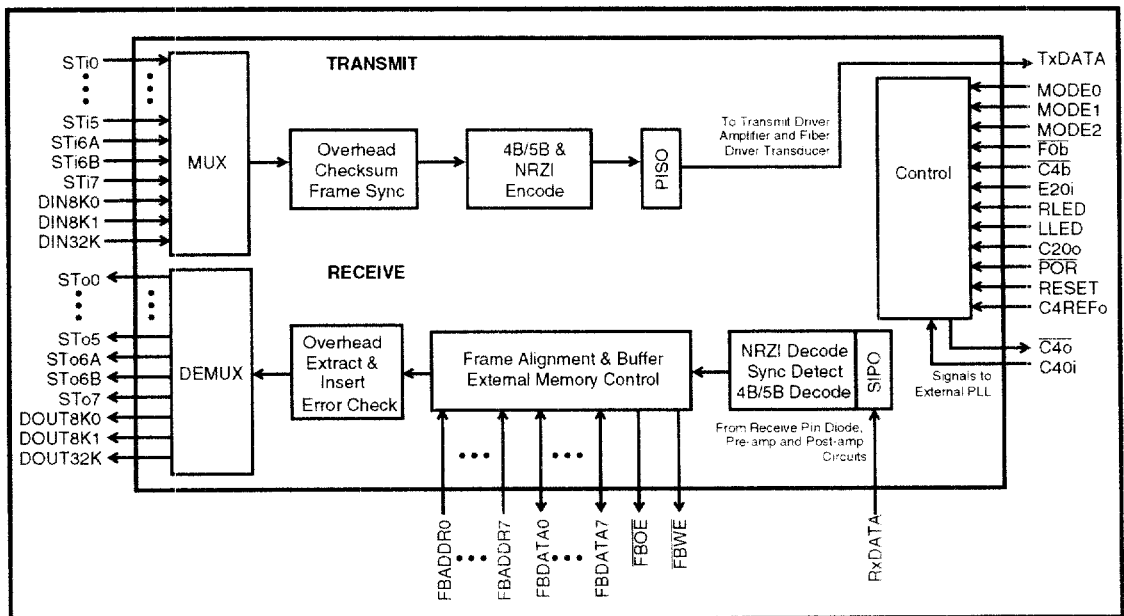


Figure 1 - Functional Block Diagram