



LU3X51FT-J80 Single-Port 10/100 Ethernet Transceiver TX/FX

Overview

The LU3X51FT-J80 is a fully integrated 10/100 Mbit physical layer device with transceiver. This part was designed for 10/100 Mbit applications where board space, cost, and power are at a premium and stringent functional interoperability is a necessity. The LU3X51FT-J80 is a powerful device for the forward migration of legacy 10 Mbit products and non compliant 100 Mbit devices. The LU3X51FT-J80 was designed from the beginning to conform fully with all pertinent specifications, from the ISO/IEC 11801 and EIA/TIA 568 cabling guidelines to ANSI X3.263 TP-PMD to IEEE* 802.3 ethernet specifications.

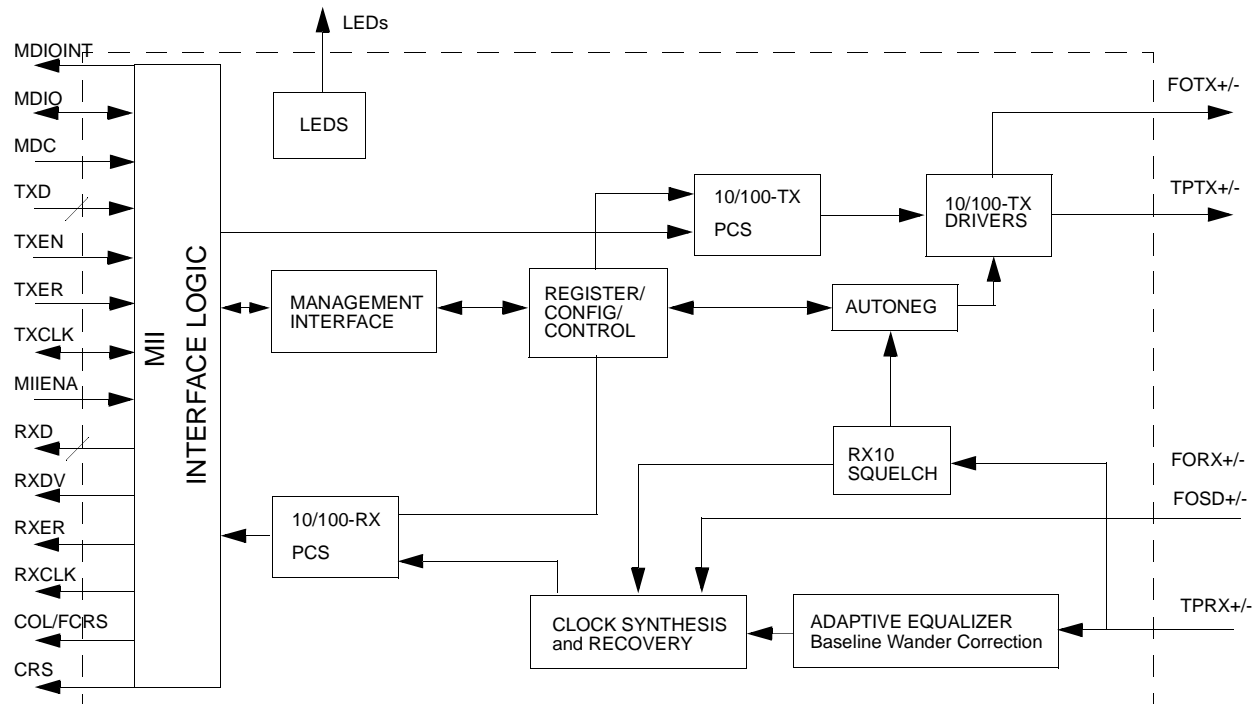
Features

- Single-chip integrated physical layer and transceiver for 10Base-T and/or 100Base-T functions
- IEEE* 802.3 compatible 10Base-T and 100Base-T physical layer interface and ANSI X3.263 TP-PMD compatible transceiver
- PECL interface for external FX transceiver
- Built-in analog 10 Mbit receive filter, removing the need for external filters
- Built-in 10 Mbit transmit filter

* IEEE is a registered trademark of The Institute of Electrical and Electronics Engineers, Inc.

- 10 Mbit PLL exceeding tolerances for both preamble and data jitter
- 100 Mbit PLL, combined with the digital adaptive equalizer, robustly handles variations in rise-fall time, excessive attenuation due to channel loss, duty-cycle distortion, cross talk, and baseline wander
- Transmit rise-fall time manipulated to provide lower emissions, amplitude fully compatible for proper interoperability
- Programmable scrambler seed for better FCC compliancy
- Selectable CIM, Class II support, and powerful MII drivers for repeater applications
- IEEE* 802.3u Clause 28 compliant auto negotiation for full 10M and 100M control
- Fully configurable via pins and management accesses
- Extended management support with interrupt capabilities
- PHY MIB support
- Symbol mode option
- Full LED support
- Low-power CMOS implementation
- 80-pin QFP package

LU3X51FT-J80 Block Diagram



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