

LXT905

Ethernet Twisted-Pair Media Attachment Unit

General Description

The LXT905 Ethernet Interface Adapter is designed for IEEE 802.3 physical layer applications. It provides, in a single CMOS device, all the active circuitry for interfacing most standard 802.3 controllers to 10BASE-T media.

LXT905 functions include Manchester encoding/decoding, receiver squelch and transmit pulse shaping, jabber, link integrity testing and reversed polarity detection/correction. The LXT905 drives the 10BASE-T twisted-pair cable with only a simple isolation transformer. Integrated filters simplify the design work required for FCC compliant EMI performance.

The LXT905 is fabricated with an advanced process and requires only a single 5 or 3.3 volt power supply.

Features

- Transparent 3.3 V or 5 V operation
- Integrated filters – Simplifies FCC compliance
- Integrated Manchester encoder/decoder
- 10BASE-T compliant transceiver
- Automatic polarity correction
- SQE enable/disable
- Four LED drivers
- Full duplex capability
- Power-down mode with tristate
- Available in 28-pin PLCC and 32-pin LQFP packages
- Commercial and Extended Temperature Range

Applications

- Hub/Switched Dedicated LANs for 10BASE-T
- Desktop 10BASE-T LAN adapter boards
- Laptop and Portable applications

LXT905 Block Diagram

