

Intel® LXT9761/81, LXT9762/82 and LXT9763

10/100BASE Hex/Octal Ethernet Transceivers

Product Overview

With the proliferation of PCs and other Internet appliances, the need for faster data transmission is becoming more and more of a necessity. Intel, a leader in Fast Ethernet technology, offers low-power, single-chip Hex/Octal 10BASE-T and 100BASE-TX/FX PHY products, bringing robust Cable Discharge Event (CDE) performance to networking systems such as switches and multi-port Network Interface Cards (NICs).

The five transceivers in this product family, LXT9761, LXT9781, LXT9762, LXT9782, and LXT9763, are advanced 6-port and 8-port PHY transceivers incorporating Intel's Optimal Signal Processing (OSP) architecture. OSP is an ideal combination of digital signal processing and analog design techniques developed to improve die size, power consumption, performance, reliability, and testability.

Through this architecture, an Intel Hex/Octal 10/100BASE PHY provides low-power copper and fiber optic Ethernet connectivity. Interfaces available in this product family include the standard Media Independent Interface (MII), Serial MII (SMII), and Reduced MII (RMII), allowing switch ASIC designs to take advantage of low pin-count PHY interfaces.

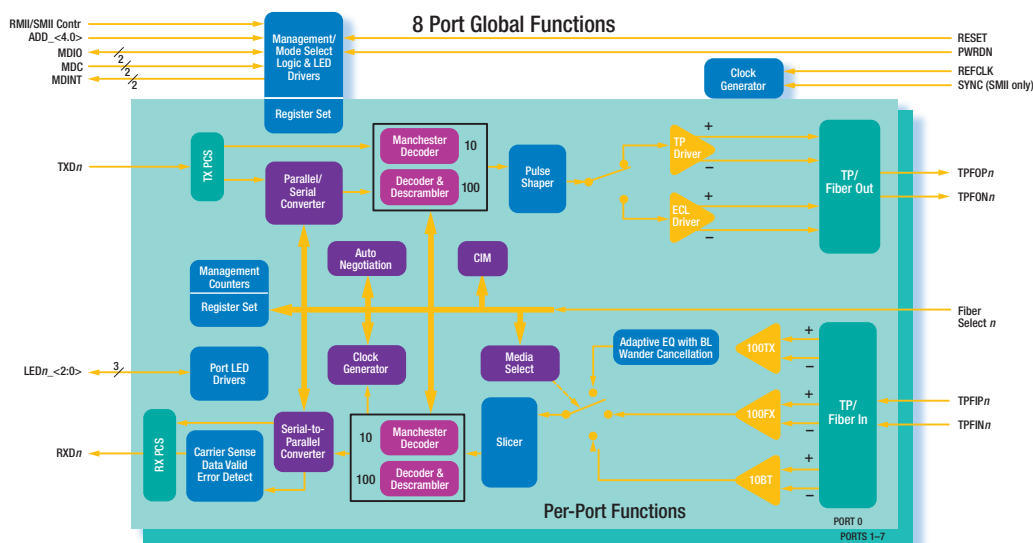


The Intel family of 10/100BASE Hex/Octal Ethernet transceivers can provide significant savings for high-density switch and router applications. With one of the broadest Ethernet product lines in the industry, Intel stands ready to deliver the 10Mbps, 100Mbps and 1000Mbps devices OEMs require to meet their customers' needs.

LXT976x/8x Family of Advanced Multi-Port Fast Ethernet Transceivers

Product	Ports	Interface	Package
LXT9761	6	RMII (3.3/2.5V)	208 PQFP
LXT9781	8	RMII (3.3/2.5V)	208 PQFP & 272 PBGA
LXT9762	6	SMII (3.3/2.5V)	208 PQFP
LXT9782	8	SMII (3.3/2.5V)	208 PQFP & 272 PBGA
LXT9763	6	MII (3.3/2.5V)	208 PQFP

LXT9761/81 LXT9762/82 and LXT9763 Block Diagram



Intel®
Internet Exchange
Architecture

[www.intel.com/
design/network](http://www.intel.com/design/network)

intel®

Features

- 6 or 8 independent 10/100 ports
- Low-cost standard PQFP Package
- Very low power
 - 3.3V operation
 - 2.5V interface option
- Multiple interfaces
 - Media Independent Interface (MII)
 - Reduced MII
 - Serial MII
- Baseline wander correction
- Auto negotiation/parallel detection
- PECL interface
- Extended register capability
- Configurable LED drivers
- 10/100Mbps full duplex operation

Benefits

- Helps simplify designs
 - Reduces board space
 - Reduces system cost
- Helps reduce manufacturing and system costs
- Helps reduce system cost and power
 - System design using only 3.3V
 - 3.3 and 2.5V interfaces available
- Provides system design flexibility
 - Legacy compliance
 - Lower pin count interface
 - Lowest pin count interface
- Offers consistent error-free performance
- Helps maximize line-operating conditions
- Utilizes 100BASE-FX fiber optic cable
- Provides added functionality
- Provides for per-port activity/collision indicator
- Enables simultaneous data transmit/receive

Intel® Internet Exchange Architecture

Intel® Internet Exchange Architecture (IXA) is an end-to-end family of high-performance, flexible and scalable hardware and software development building blocks designed to meet the growing performance requirements of today's networks. Based on programmable

silicon and software building blocks, Intel® IXA solutions enable faster development, more cost-effective deployment, and future upgradability of network and communications systems. Additional information can be found at www.intel.com/IXA.

Intel Access

Developer's Site	developer.intel.com
Intel Internet Exchange Architecture Home Page	www.intel.com/IXA
Networking Components Home Page	developer.intel.com/design/network
Other Intel Support: Intel Literature Center	developer.intel.com/design/litcentr (800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada) International locations please contact your local sales office.
General Information Hotline	(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST



Intel Corporation assumes no responsibility for the use of any circuitry other than circuitry embodied in an Intel product. No other circuit patent licenses are implied. Information contained herein supersedes previously published specifications on these devices from Intel.
*Other brands and names are the property of their respective owners.

For more information, visit the Intel Web site at: developer.intel.com

UNITED STATES AND CANADA
Intel Corporation
Robert Noyce Bldg.
2200 Mission College Blvd.
P.O. Box 58119
Santa Clara, CA 95052-8119
USA

EUROPE
Intel Corporation (UK) Ltd.
Pipers Way
Swindon
Wiltshire SN3 1RJ
UK

ASIA-PACIFIC
Intel Semiconductor Ltd.
32/F Two Pacific Place
88 Queensway, Central
Hong Kong, SAR

JAPAN
Intel Japan (Tsukuba HQ)
5-6
Tokodai Tsukuba-shi
300-2635
Ibaraki-ken
Japan

SOUTH AMERICA
Intel Semicondutores do Brasil LTDA
Rue Florida, 1703-2 and CJ22
04565-001 Sao Paulo-SP
Brazil