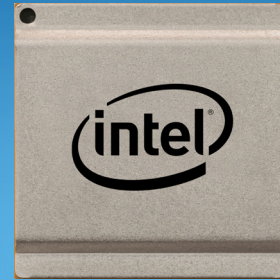


Intel® Ethernet Connection X557



10GBASE-T Connectivity Simplifies 10 Gb/s Ethernet Designs

Key Features

- Validated with Intel® Xeon® Processor D-based System-on-a-Chip (SoC) Product Family and Intel® Ethernet Controller XL710 family
- Single-port, dual-port, and quad-port 10GBASE-T PHY network interface
- Low power: 3.4 W/port
- Multi-speed: 100BASE-T, 1000BASE-T, and 10GBASE-T
- Designed to be used in conjunction with a triple-speed MAC interface. Interfaces supported: KR, XFI, KX, and SGMII
- IEEE 802.3az EEE (Energy Efficient Ethernet) Compliant
- On-die thermal sensor - Enables deployment in thermally constrained environments along with alarm and warning thresholds
- External SPI Flash interface
- Integrated MDI filter and advanced RFI cancellation
- 19 x 19 mm (single/dual port) or 25 x 25 mm (quad port) flip-chip BGA package

Overview

The Intel® Ethernet Connection X557 family is a 10 Gigabit Ethernet (GbE) copper networking Physical Layer (PHY) for workstation, server, and embedded designs that have critical space and power constraints. The Intel® Ethernet Connection X557 family offers three design options: X557-AT (single 10 GbE PHY), the X557-AT2 (dual 10 GbE PHY), and the X557-AT4 (quad 10 GbE PHY) that provides connectivity for Network Interface Cards (NICs) and LAN on Motherboard (LOM) applications that require 10GBASE-T capability.

Power Savings

Power efficiency is critical to IT specialists as energy consumption is a real OpEx concern:

Energy Efficient Ethernet (EEE) reduces power consumption during periods of low data activity. Energy is used to maintain the physical layer transmitters in a ready state to transmit data on the wire. During periods of low data traffic, EEE sends a low-power-idle signal to put the transmitters into a low power state saving power and cost. When data needs to be sent, EEE sends a normal idle signal to wake up the transmit system before data is due to be sent so there is no degradation of performance.

| FEATURES | DESCRIPTION |
|--|---|
| GENERAL | |
| IEEE 802.3 auto-negotiation | • Automatic link configuration for speed, duplex and flow control |
| IEEE 802.3az EEE (Energy Efficient Ethernet) Compliant | • Reduces power consumption during periods of low data activity |
| Independent port enabling and link speeds | • Each port can be configured and operated at different speeds and in different modes |
| Automatic cross-over detection function (MDI/MDI-A) | • The PHY automatically detects which application is being used and configures itself accordingly |
| Autonomous on-die thermal management | • Monitor on-die temperature and react when the temperature exceeds a pre-defined threshold |
| Intel® Lead-free technology and RoHS-compliant | • Complies with the European Union directive 2011/65/EU to reduce the use of hazardous materials |

INTEL® ETHERNET CONNECTION X557 PRODUCT CODES

| CONFIGURATION | PRODUCT CODE | PRODUCTION MM# | PRODUCTION S SPEC | MEDIA TYPE |
|---------------|--------------|----------------|-------------------|---------------|
| X557-AT | EZX557AT | 941979 | S LKW4 | Tray |
| X557-AT | EZX557AT | 942009 | S LKW5 | Tape and Reel |
| X557-AT2 | EZX557AT2 | 941974 | S LKVX | Tray |
| X557-AT2 | EZX557AT2 | 941994 | S LKVY | Tape and Reel |
| X557-AT4 | EZX557AT4 | 941975 | S LKVZ | Tray |
| X557-AT4 | EZX557AT4 | 941995 | S LKW3 | Tape and Reel |

SUPPORTED OPERATING SYSTEMS

For a complete list of supported network operating systems for Intel® Ethernet 500 Series Adapters visit: intel.com/support/EthernetOS

INTEL® ETHERNET ACCESSORIES

Intel® Ethernet Optics and Cables are proven, reliable solutions for high-density Ethernet connections. Combine these accessories with Intel® Ethernet 700 Series and 500 Series Network Adapters for dependable interoperability and consistent performance across the network. Learn more at intel.com/ethernet

Warranty

Intel limited lifetime hardware warranty, 90-day money-back guarantee (U.S. and Canada) and worldwide support.

Product Information

For information about Intel® Ethernet Products, visit: intel.com/ethernet

Customer Support

For customer support options in North America visit: intel.com/content/www/us/en/support/contact-support.html

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