

Overview

The JL11x1 is a single port Fast Ethernet PHY transceiver. It is small form factor required for space sensitive applications in embedded systems.

The JL11x1 offers performance far exceeding the IEEE specifications, with superior interoperability and industry leading performance beyond 200 meters of Cat-V cable. The JL11x1 also offers Auto-MDIX to remove cabling complications. JL11x1 has superior ESD protection, greater than 8 KV Human Body Model, providing extremely high reliability and robust operation, ensuring a high-level performance in all applications.

The JL11x1 integrates an internal regulator to generate 1.2V. It can run off a single 3.3V supply to simplify design and reduce power consumption.

Based on a simplified yet advanced mixed-signal architecture, JL11x1 provides robust long range wired networking capacity at low cost and low power over a wide range of applications.

Features

- IEEE 802.3az-2010 (EEE) Compliant
- 100Base-TX IEEE 802.3u Compliant
- 10Base-T IEEE 802.3 Compliant
- Supports MII mode
- Supports RMII mode
- Full/half duplex operation
- Twisted pair or fiber mode output
- Supports Auto-Negotiation
- Supports power down mode
- Supports Link Down Power Saving
- Supports Base Line Wander (BLW) compensation
- Supports auto MDIX
- Supports Interrupt function
- Supports Wake-On-LAN (WOL)
- Adaptive Equalization
- Automatic Polarity Correction
- LEDs for Network Status
- Supports 25MHz external crystal or OSC
- Supports 50MHz external OSC Clock input
- Provides 50MHz clock source for MAC
- Single power supply 3.3V, internal/external 1.2V (Only JL1111 support external 1.2V)
- 32-pin QFN package

Typical Application

- Video surveillance
- Industrial controls and automation
- Power acquisition system
- Access control system

