Motorcomm YT8512 Product Brief
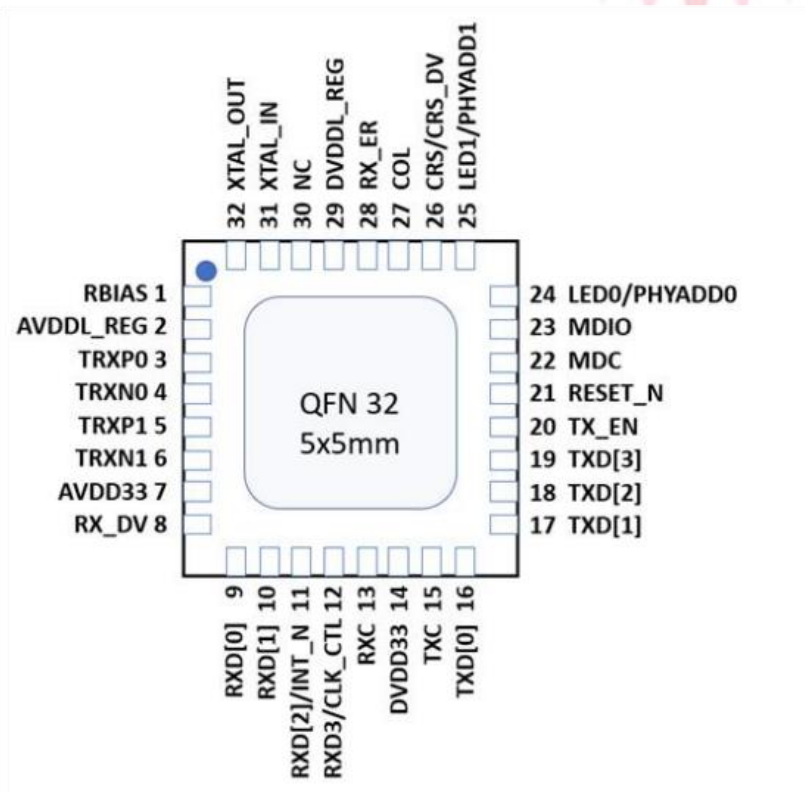
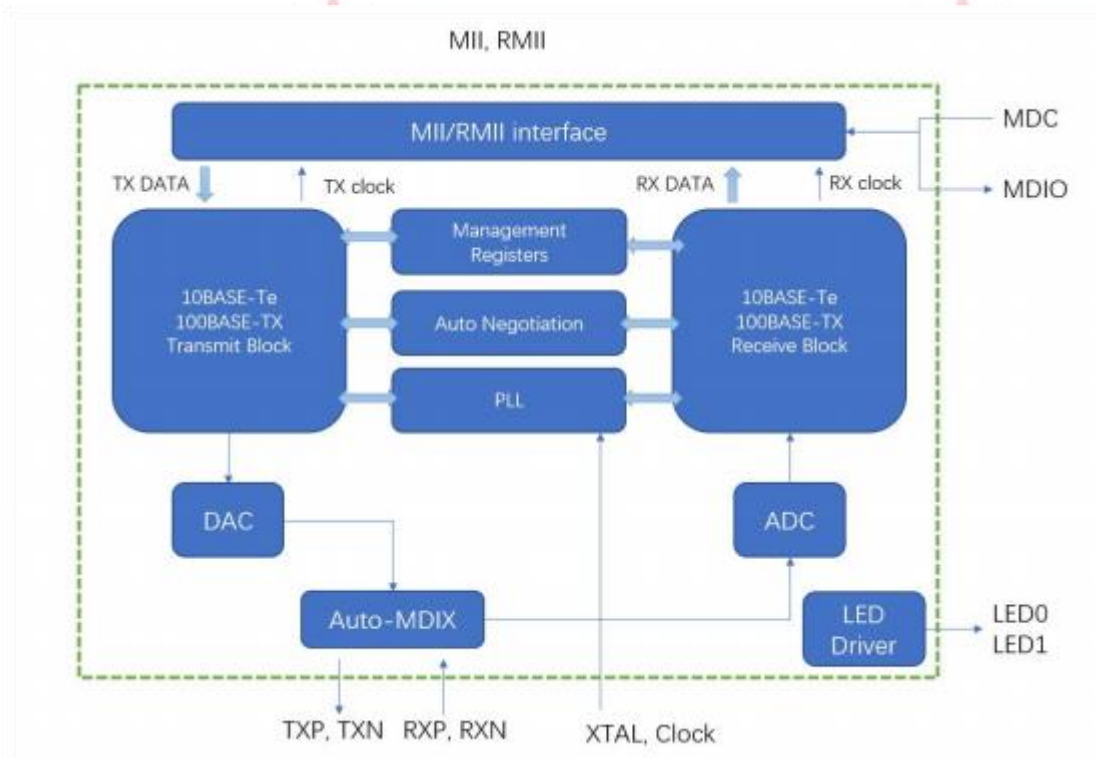The YT8512 is a low power single-port 10/100 Mbps Ethernet PHY.

Overview

YT8512 provides all physical layer functions needed to transmit and receive data over both standard twisted pair cables transceiver. Additionally, the YT8512provides flexibility to connect to a MAC through a standard MII and RMII interface.

YT8512 uses mixed-signal processing to perform equalization, data recovery, and error correction to achieve robust operation over CAT5 twisted-pair cable. The YT8512 offers integrated built-in self-test and loopback capabilities for ease of use. The YT8512 offers innovative and robust approach for reducing power consumption through EEE, WoL and other programmable energy savings modes.
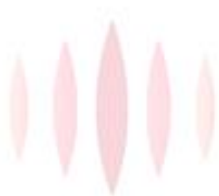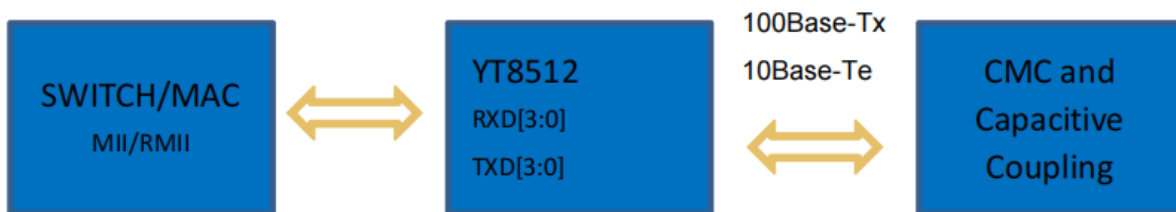
Pin Assignment

Block Diagram

Application Diagram

Key Features

- EEE 802.3az, EEE
- 100Base-TX
- 0Base-Te
- MII mode
- RMII mode
- Full/Half duplex
- Auto-negotiation
- Power down mode
- Base Line Wander (BLW) compensation

- Auto MDIX
- Interrupt function
- WOL, Wake on Lan
- Automatic Polarity correction
- 2 sets LED indicator
- 25 MHz crystal or OSC
- Provide 50Mhz clock source for MAC
- Single Power supply, internal LDO
- Package QFN 32, 5x 5mm

Target Applications

- General Embedded Applications
- Video Surveillance
- Industrial Controls
- Factory Automation