

## Motorcomm YT8522 Product Brief

YT8522 is a low power single-port 10/100 Mbps Ethernet PHY.

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### Overview

YT8522 provides all physical layer functions needed to transmit and receive data over both standard twisted pair cables transceiver or Fiber PECL interface to an external 100Base-FX optical transceiver module. Additionally, YT8522 provides flexibility to connect to a MAC through a standard MII and RMII interface.

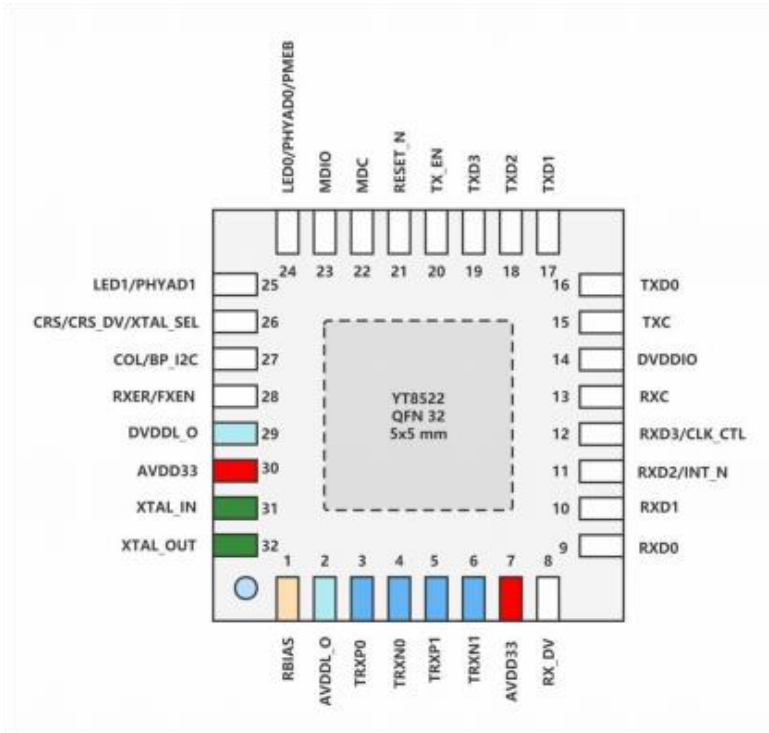
YT8522 uses mixed-signal processing to perform equalization, data recovery, and error correction to achieve robust operation over CAT5 twisted-pair cable or 100Base-FX optical transceiver module.

YT8522 offers integrated built-in self-test and loopback capabilities for ease of use.

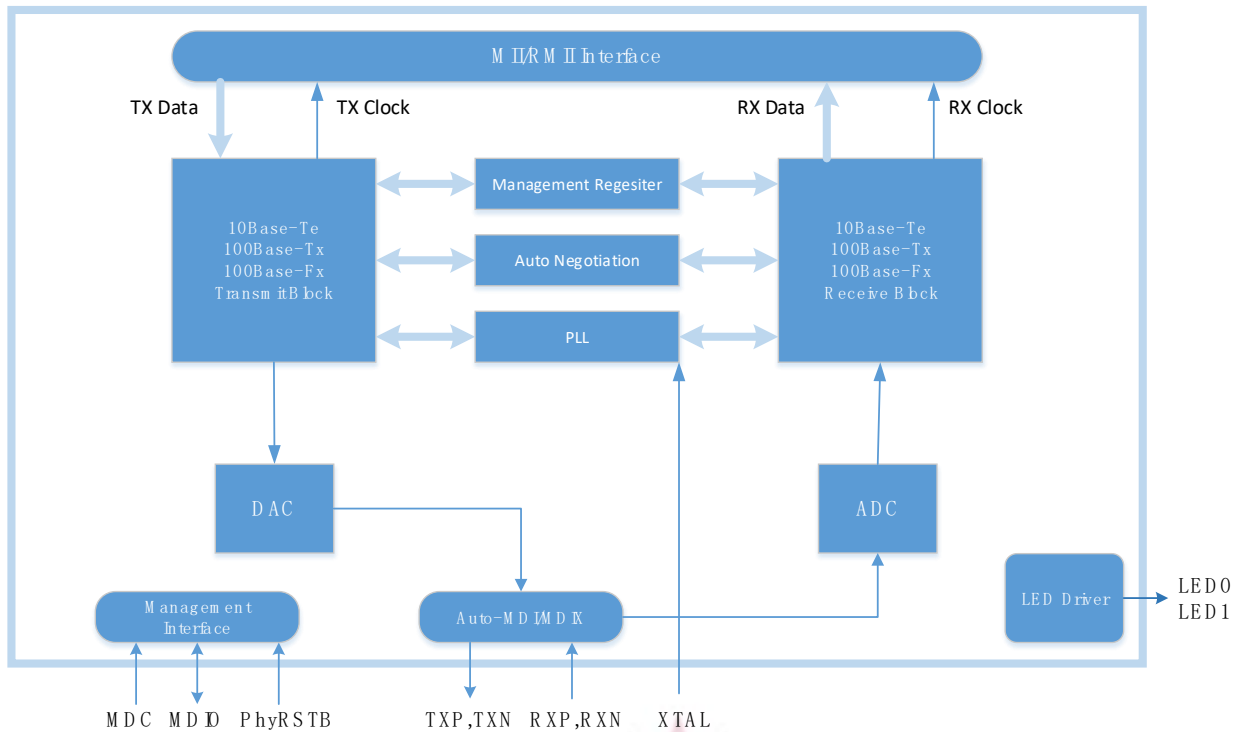
YT8522 offers innovative and robust approach for reducing power consumption through EEE, WoL and other programmable energy savings modes.

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# Pin Assignment



## Block Diagram



## Application Diagram



## Key Features

- Supports IEEE 802.3az (Energy Efficient Ethernet)
- 100Base-TX IEEE 802.3u Compliant
- 10Base-Te IEEE 802.3 Compliant
- Supports MII mode
- Supports RMII mode
- Supports I/O 1.5V/1.8V/2.5V/3.3V (except for Crystal)
- Full/Half duplex operation
- 100BASE-FX support (share with MDI pins)
- Twisted pair or fiber mode output
- Supports Auto-negotiation
- Supports Power down mode
- Supports Base Line Wander (BLW) compensation
- Supports Auto MDIX
- Supports Interrupt function
- Supports WOL, Wake on Lan
- Automatic Polarity correction
- 2 sets LED indicator
- 25MHz crystal or external OSC
- 50MHz external OSC input
- Provide 50Mhz clock source for MAC
- Single Power supply, internal LDO
- Package QFN 32, 5x5mm

## Target Applications

- Ethernet Switch
- DTV (Digital TV)
- Communication and Network Riser
- Routers, PON Equipment
- Printer and Office Machine
- MAU(Media Access Unit)