



YT8511C/YT8511H

Single-port Gigabit Ethernet physical layer transceiver

Product introduction

YT8511C/YT8511H is a highly integrated Ethernet transceiver that complies with 10BASE-Te, 100BASE-TX and 1000BASE-T1EEE802.3 standards. Provides the physical layer functions necessary to transmit and receive Ethernet packets over CAT5EUTP cables.

Based on advanced DSP technology, combined with adaptive equalizer, echo canceller, analog-to-digital conversion, phase-locked loop, line driver, codec and other circuits that support gigabit data rate, achieve robust performance, and meet the requirements of electromagnetic interference (EMI) and low power consumption in harsh environments such as vehicle.

The YT8511C/YT8511H is designed to comply with RGMII interface specifications and is compatible with standard Ethernet Media Access controllers (MAC) and switch controllers. The YT8511 supports multiple operating temperature ranges.

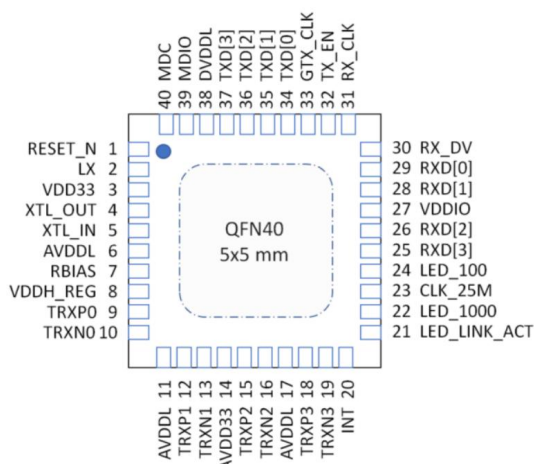
Commercial grade model :YT8511C

Industrial model :YT8511H

Application field

- Digital television
- Game machine
- IP camera
- Printer
- Splicing screen

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Main function

- 10BASE-T_e/100BASE-T_x/1000BASE-T IEEE 802.3 compliant
- Support LRE100-4
Long Reach Ethernet up to 400 meter @100Mbps by 4-pairs in the CAT.5E UTP cable
- Supports 1000 BASE-T PCS and auto negotiation with next page support
- Supports RGMII interface to MAC devices with a broad I/O voltage level options 2.5V and is compatible with 3.3V I/O.
- RGMII timing modes support internal delay and external delay on Rx path
- Error-free operation up to 120 meters of CAT5e cable.
- Supports Wake-on-LAN (WoL) to detect magic packet and notify the sleeping system to wake up
- Jumbo Frame support up to 10KB (full duplex)
- All digital baseline wander correction
- Automatic MDI/MDIX crossover
- Automatic polarity correction
- IEEE 802.3u compliant Auto-Negotiation
- Software programmable LED modes
- Multiple Loopback modes for diagnostics