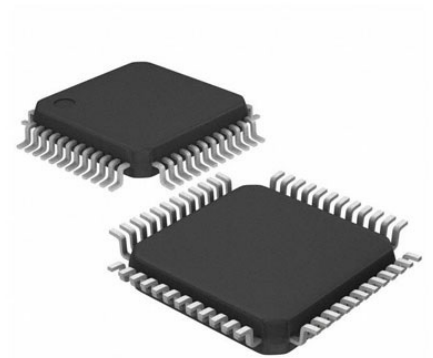


Ethernet Controller, 100 Mbps, IEEE 802.3, IEEE 802.3u, 1.71 V, 1.89 V, LQFP, 48 Pins

Manufacturers	Microchip Technology, Inc
Package/Case	LQFP-48
Product Type	Interface ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for KSZ8001LI-TR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The KSZ8001 is a 10BASE-T/100BASE-TX/100BASE-FX Physical Layer Transceiver, operating the core at 1.8 volts to meet low voltage and low power requirements. The solution provides MII/RMII/SMII interfaces to transmit and receive data. A unique mixed-signal design extends signaling distance while reducing power consumption. HP Auto MDI/MDI-X provides the most robust solution for eliminating the need to differentiate between crossover and straight-through cables. Featuring LinkMD cable diagnostics, which allows detection of common cabling plant problems such as open and short circuits, the KSZ8001 represents a new level of features and performance and is an ideal choice of physical layer transceiver for 100BASE-TX/10BASE-T/100BASE-FX applications. Microchip's complimentary and confidential LANCheck® online design review service is available for customers who have selected our products for their application design-in. The LANCheck online design review service is subject to Microchip's Program Terms and Conditions and requires a myMicrochip account.

Please consider this device KSZ8081, KSZ8091

Features

Single chip 100BASE-TX/100BASE-FX/10BASE-T physical layer solution

1.8V CMOS design, power consumption 250 mW

Robust (130m+) operation over standard cables

Supports Media Independent Interface (MII), Reduced MII (RMII), and Serial MII (SMII)

LinkMD feature to determine cable length and diagnose faulty cables up 200m with $\pm 2m$ accuracy

Configurable through MII serial management port or via external control pins

Programmable LED outputs for link, activity, full/half duplex, collision, and speed

On-chip built-in analog front end filtering for both 100BASE-TX and 10BASE-T

Supports HP MDI/MDI-X auto crossover

Supports power down mode and power saving mode

MDC/MDIO to 12.5 MHz for rapid configuration

Fully compliant to IEEE 802.3u standard

Supports auto-negotiation and manual selection for 10/100Mbps speed and full/half-duplex mode

Supports back-to-back, 100BASE-FX to 100BASE-TX for media converter applications

Single 3.3V power supply with built-in 1.8V regulator ('L' parts)

Available in 48-Pin LQFP and 48-Pin SSOP packages

Related Products



[KSZ8081MLXIA](#)

Microchip Technology, Inc
LQFP-48



[KSZ8721BT](#)

Microchip Technology, Inc
TQFP-48



[KSZ8721BLI-TR](#)

Microchip Technology, Inc
LQFP-48



[KSZ8091RNAIA-TR](#)

Microchip Technology, Inc
VQFN-24



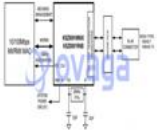
[KSZ8041NLI-TR](#)

Microchip Technology, Inc
VQFN-32



[KSZ8721B](#)

Microchip Technology, Inc
SSOP-48



[KSZ8091RNBCA](#)

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VQFN-32



[KSZ8061MNGW](#)

Microchip Technology, Inc
VQFN-48