

MICREL SEMICONDUCTOR KSZ8463MLI Ethernet Controller, 100Mbps, IEEE 1588.2, LQFP, 64Pins

Manufacturers	Microchip Technology, Inc
Package/Case	LQFP-64
Product Type	Integrated Circuits (ICs)
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for KSZ8463MLI or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The KSZ8463 ETHERSYNCH™ product line consists of IEEE 1588v2 enabled Ethernet switches, providing integrated communications and synchronization for a range of Industrial Ethernet applications.

The KSZ8463 ETHERSYNCH product line enables distributed, daisy-chained topologies preferred for Industrial Ethernet networks. Conventional centralized (i.e., star-wired) topologies are also supported for dual-homed, fault-tolerant arrangements.

A flexible set of standard MAC interfaces is provided to interface to external host processors with embedded Ethernet MACs:

- KSZ8463ML: Media Independent Interface (MII) • KSZ8463RL: Reduced Media Independent Interface (RMII) • KSZ8463FML: MII, supports 100BASE-FX fiber in addition to 10/100BASE-TX copper • KSZ8463FRL: RMII, supports 100BASE-FX fiber in addition to 10/100BASE-TX copper
- The KSZ8463 devices incorporate the IEEE 1588v2 protocol. Sub-microsecond synchronization is available via the use of hardware-based time-stamping and transparent clocks making it the ideal solution for time synchronized Layer 2 communication in critical industrial applications.

Extensive general purpose I/O (GPIO) capabilities are available to use with the IEEE 1588v2 PTP to efficiently and accurately interface to locally connected devices.

Complementing the industry's most-integrated IEEE 1588v2 device is a precision timing protocol (PTP) v2 software stack that has been pre-qualified with the KSZ84xx product family. The PTP stack has been optimized around the KSZ84xx chip architecture, and is available in source code format along with Microchip's chip driver.

The KSZ8463 product line is built upon Microchip's industry-leading Ethernet technology, with features designed to offload host processing and streamline your overall design.

- Wire-speed Ethernet switching fabric with extensive filtering • Two integrated 10/100BASE-TX PHY transceivers, featuring the industry's lowest power consumption • Full-featured quality-of-service (QoS) support • Flexible management options that support common standard interfaces
- The wire-speed, store-and-forward switching fabric provides a full complement of QoS and congestion control features optimized for real-time Ethernet.

A robust assortment of power-management features including energy-efficient Ethernet (EEE) have been designed in to satisfy energy efficient

environments. 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.

Features

Management Capabilities

Robust PHY Ports

MAC Ports with MII/RMII Interface

Advanced Switch Capabilities

Comprehensive Configuration Registers Access

IEEE1588v2 PTP and Clock Synchronization

Power and Power Management

Related Products



[KSZ9563RNXI](#)

Microchip Technology, Inc
QFN-64



[KSZ9477STXI-TR](#)

Microchip Technology, Inc
TQFP-128



[KSZ8001L](#)

Microchip Technology, Inc
LQFP-48



[KSZ9896CTXI-TR](#)

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[KSZ9563RNXC](#)

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