Ethernet Controller, IEEE 802.3, IEEE 802.3u, 3.15 V, 3.45 V, PQFP, 128 Pins

Manufacturers	Microchip Technology, Inc
Package/Case	PQFP-128
Product Type	Communication & Networking ICs
RoHS	Green
Lifecycle	

Images are for reference only

Please submit RFQ for KSZ8995XA or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFQ

General Description

The KSZ8995MQX/RQX/FQX/ML is a highly-integrated, Layer 2 managed, five-port switch with numerous features designed to reduce system cost. Intended for cost sensitive 10/100Mbps five-port switch systems with low power consumption, on-chip termination, and internal core power controllers, it supports high-performance memory bandwidth and shared memory-based switch fabric with non-blocking configuration. Its extensive feature set includes power management, programmable rate limit and priority ratio, tag/port-based VLAN, packets filtering, four queue QoS prioritization, management interfaces, and MIB counters. The KSZ8995 family provides multiple CPU data interfaces to effectively address both current and emerging fast Ethernet applications when port 5 is configured to separate MAC5 with SW5-MII/RMII and PHY5 with P5-MII/RMII interfaces.The KSZ8995 family offers three configurations, providing the flexibility to meet different requirements:- KSZ8995MQX/ML has 5 10/100Base-T/TX transceivers, 1 SW5-MII and 1 P5-MII interface- KSZ8895RQX has 5 10/100Base-T/TX transceivers, 1 SW5-RMII and 1 P5-RMII interface- KSZ8995FQX has 4 10/100Base-T/TX transceivers on Ports 1, 2, 3 and 5 (port 3 can be set to the fiber mode). 1 100Base-FX transceivers on Port 4. 1 SW5-MII and 1 P5-MII interfaceAll registers of MACs and PHYs units can be managed by the SPI or the SMI interface. MIIM registers can be accessed through the MDC/MDIO interface. EEPROM can set all control registers for the unmanaged mode.KSZ8995MQX/RQX/FQX are 128-pin PQFP package. KSZ8995ML is 128-pin LQFP package.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 deviceKSZ8895,KSZ8795

Features

Consider KSZ8895 or KSZ8795 as a replacement

Advanced Switch Features

IEEE 802.1q VLAN support for up to 128 active VLAN groups (full-range 4096 of VLAN IDs)

Static MAC table supports up to 32 entries

VLAN ID tag/untag options, per port basis

Comprehensive Configuration Register Access

Serial management interface (MDC/MDIO) to all PHYs registers and SMI interface (MDC/MDIO) to all registers

High-speed SPI (up to 25MHz) and I2C master Interface to all internal registers

I/0 pins strapping and EEPROM to program selective registers in unmanaged switch mode

QoS/CoS Packet Prioritization Support

Per port, 802.1p and DiffServ-based

1/2/4-queue QoS prioritization selection

Programmable weighted fair queuing for ratio control

Integrated 5-Port 10/100 Ethernet Switch

5 integrated MACs and PHYs that are fully compliant with the IEEE 802.3u standard

Non-blocking switch fabric assures fast packet delivery by utilizing a 1K MAC address lookup table and a store-and-forward architecture

PHYs designed with patented enhanced mixed-signal technology

Switch Monitoring Features

Port mirroring/monitoring/sniffing: ingress and/or egress traffic to any port or MII/RMII

MIB counters for fully-compliant statistics gathering 34 MIB counters per port

Loop-back support for MAC, PHY, and remote diagnostic of failure
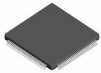
Low-Power Dissipation

Full-chip software power-down and per port software power down

Energy-detect mode support <100mW full-chip power consumption when all ports have no activity
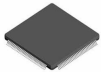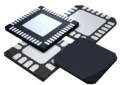
Related Products

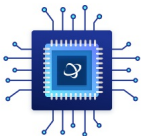**KSZ8995MI**

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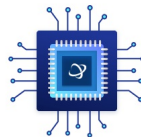
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