

Ethernet CTLR Single Chip 10Mbps/100Mbps 3.3V 64-Pin QFN EP Tray

Manufacturer: Microchip Technology, Inc

Package/Case: QFN64

Product Type: Communication & Networking ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

Microchip's LAN9514/LAN9514i are the industry's first fully-integrated, Hi-Speed USB 2.0 hub and high-performance 10/100 Ethernet controllers. The LAN9514/LAN9514i are specifically designed to provide system architects with a low-cost, power-efficient, small-footprint USB to Ethernet and multi-port USB connectivity solution in a single package.

The LAN9514/LAN9514i contain a Hi-Speed USB 2.0 hub with four fully-integrated downstream USB 2.0 PHYs, an integrated upstream USB 2.0 PHY, a 10/100 Ethernet MAC/PHY controller, and an EEPROM controller. It offers Microchip's highest level of USB 2.0 and 10/100 Ethernet compliance and interoperability. Additionally, the LAN9514/LAN9514i devices simplify system design by leveraging the existing USB stack and reducing the PCB footprint by up to 65% compared to discrete competitive solutions. USB-based networking technology offers a cost-effective and smart design alternative to traditional PCI/PCI-Express networking solutions due to the flexibility of routing and placement of Ethernet and USB connectivity ports.

Microchip's complimentary and confidential LANCheck® and USBCheck™ online design review services are 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.

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Key Features

Built-in ±8kV/15kV contact/air discharge ESD protection on both USB and Ethernet PHYs

24MHz Clock out provided to connect additional USB hubs

Integrated 10/100 Ethernet MAC with full-duplex support

Integrated 10/100 Ethernet PHY with HP Auto-MDIX

Implements reduced power operating modes

Integrated USB termination pull-up/pull-down resistors

Internal short-circuit protection of USB differential signal pins

Full- and half-duplex support with flow control

Supports bus-powered and self-powered operation

Automatic payload padding and pad removal

Recommended For You

LAN7500-ABZJ

Microchip Technology, Inc

QFN56

LAN7800/Y9X

Microchip Technology, Inc

VQFN-48

LAN9513i-JZX

Microchip Technology, Inc

QFN64

LAN7850-I/8JX

Microchip Technology, Inc

VQFN56

LAN7800-I/VSX

Microchip Technology, Inc

VQFN48

LAN9514i-JZX

Microchip Technology, Inc

QFN64

LAN7500i-ABZJ

Microchip Technology, Inc

QFN56

LAN7500I-ABZJ-TR

Microchip Technology, Inc

QFN-56

LAN9512i-JZX

Microchip Technology, Inc

QFN64

LAN7800-I/Y9X

Microchip Technology, Inc

VQFN48

LAN7500-ABZJ-TR

Microchip Technology, Inc

QFN56

LAN9730-ABZJ

Microchip Technology, Inc

QFN56

LAN9512-JZX

Microchip Technology, Inc

QFN64

LAN7800/VSX

Microchip Technology, Inc

VQFN48

LAN9514-JZX-TR

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QFN-64