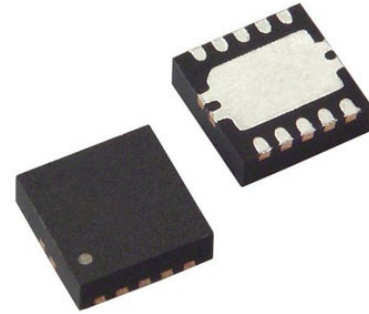


Ethernet ICs USB 2.0 Ethernet MAC PHY Auto-MDIX

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-56
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for LAN9500A-ABZJ-TR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

Microchip's LAN9500 and LAN9500A Hi-Speed USB 2.0 to 10/100 Ethernet controllers provide a high-performance, cost-competitive USB to Ethernet connectivity solution containing an integrated 10/100 Ethernet PHY, Hi-Speed USB 2.0 PHY, Hi-Speed USB 2.0 controller, 10/100 Ethernet MAC, TAP controller, EEPROM controller and FIFO controller in a compact 56-pin QFN package.

The LAN9500/9500A support $\pm 8\text{kV}$ HBM and $\pm 15\text{kV}$ air discharge ESD protection and require only a single 25MHz crystal, which helps to keep BOM costs for external components to a minimum. An external MII and Turbo MII interface provides support for Fast Ethernet, HomePlug® and HomePNA™ (HPNA) functionality.

These devices feature Microchip's proprietary NetDetach™ and UniClock™ technologies. NetDetach allows for up to a 25% reduction in system power by enabling the host CPU to enter a low-power state when Ethernet is inactive. UniClock simplifies the clocking scheme and reduces system BOM costs by using a single 25MHz crystal for both USB and Ethernet connectivity – without the need for additional components when adding USB hubs. Both devices are available in commercial (0° to 70°C) and industrial temperature range (-40° to 85°C) options. Additionally, 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.

For product comparison, please consider: LAN7850, LAN7800

Features

Highlights

Single-chip, Hi-Speed USB 2.0 to 10/100 Ethernet controller

Requires only a single 25MHz crystal

EEPROM-less design option helps to reduce BOM costs

Implements reduced power operating modes including enhanced energy detect power-down

Supports numerous power management features including Wake-On LAN, Magic Packet™ and Link Status Change

External MII and Turbo MII (available for speeds up to 200Mbps)

LAN9500A implements Microchip's proprietary NetDetach™ technology for lower hardware power consumption

LAN9500 and LAN9500A are drop-in compatible

8x8mm, 56-pin QFN package well-suited for compact designs

Industrial temperature range options available (LAN9500i/9500Ai)

Target Applications

PC Docking Stations

Netbooks and Ultra-mobile PCs (UMPCs)

Mobile Internet Devices (MIDs)

Digital TVs/Video Recorders/Set-top Boxes

Network Printers

Gaming Consoles

Stand-alone USB to Ethernet Dongles

Embedded Systems

Industrial Applications

Related Products



[LAN8740A-EN](#)

Microchip Technology, Inc
QFN-32



[LAN8700C-AEZG-TR](#)

Microchip Technology, Inc
VQFN-36



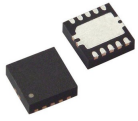
[LAN8700C-AEZG](#)

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VQFN-36



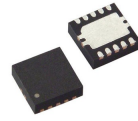
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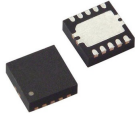
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VQFN-56



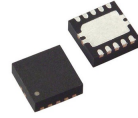
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