

# ADM8513

USB1.1 to Ethernet LAN Controller



The ADM8513 provides a USB1.1 interface to connect to a PC or embedded system at a 12Mbps data transfer rate through an innovative "hot plug & play" function. Providing greater connectivity for a range of devices including desktop, notebook, handheld PC, web-PDA, Pocket PC and computer peripherals, the ADM8513 is the ideal connection solution for both Ethernet and home networks.

The ADM8513 also provides a serial interface for storing default values, such as vendor IDs and Product IDs, in the EEPROM using the EEPROM Access Program (EAP). The mass production time at the system board level is vastly reduced due to an innovative manufacturing test program (MFG), which is available for mass production.

Infineon fully supports the ADM8513 with NDIS 5, Linux and WinCE drivers, an EEPROM burn-in program and an MFG program. While the WinCE driver is adopted by embedded systems such as handheld PCs, Web PDAs and Pocket PCs.

## Applications

- Handheld PCs, PDAs & Pocket PCs
- Desktops & Notebooks
- Computer Peripherals

## Features

- Full-Speed USB 1.0 and 1.1 compliant
- Supports USB1.1 configuration and one interface
- Supports all USB standards and 2 vendor specific commands
- Supports 4 endpoints
- IEEE802.3 10BASE-T and IEEE802.3u 100BASE-TX compliant
- Supports IEEE 802.3x flow control
- Provides full-duplex operation in both 10Mbps and 100Mbps Ethernet modes

- IEEE802.3u Auto-Negotiation (NWAY) support for full/half duplex 10BASE-T and 100BASE-TX
- Supports Wake-on-LAN and remote wake-up (AMD Magic Packet, Link Change, and Microsoft Wake-up frame)
- Digital Decision Feedback Equalizer and Integrated Baseline Wander Correction
- Provides a serial interface for 93C46 EEPROM Read/Write functions
- Automatically loads device ID and vendor ID from the EEPROM after power-on is reset
- Provides 2 kinds of LED displays
- NDIS 5.0, Linux and WinCE drivers
- EEPROM Burn-in and MFG programs
- Supports 6 GPIO pins

## Physical Characteristics

- CSM CMOS, 0.25um
- 48-pin LQFP package
- 3.3V power supply with 5V/3.3V I/O tolerance

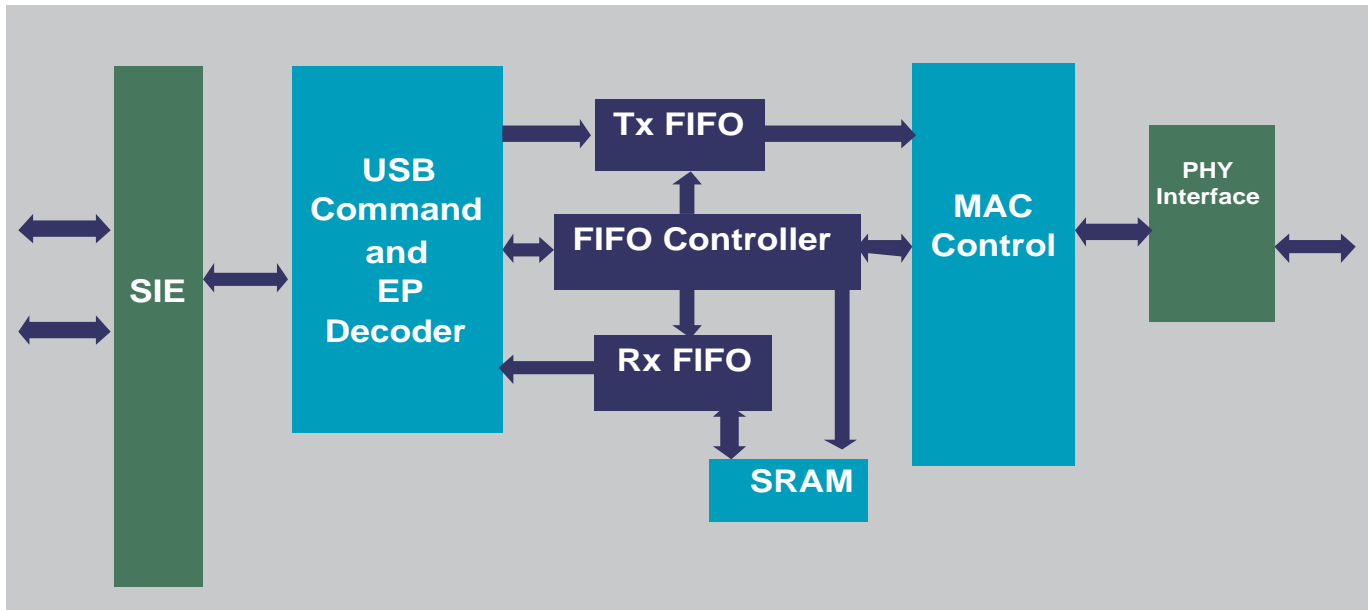
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Wireline Communications



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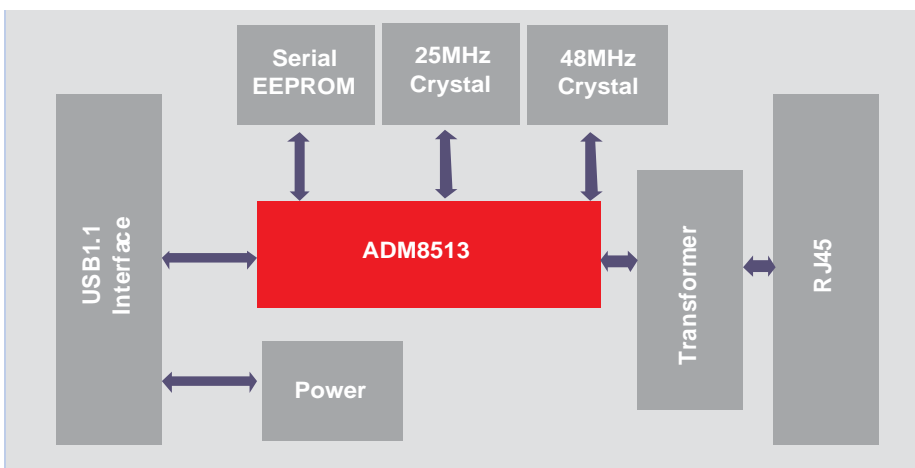
## ADM8513 Block Diagram



## Product Summary

ADM8513 IC

Product	Sales Code	Description	Package
ADM8513	ADM8513	USB to Ethernet Controller	LQFP-48



## ADM8513 USB to Ethernet Converter Application Example

How to reach us:

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