

Features

- USB 2.0 Device Controller
 - Integrated USB 2.0 PHY
 - USB Specification 2.0 Compliant
 - Supports all USB Standard Commands
 - Supports Five Vendor Specific Commands
 - Supports USB Suspend/Resume Detection Logic
- 10/100 Mbps Ethernet Controller
 - Integrated MAC and PHY
 - IEEE 802.3 Compliant
 - Supports Full Duplex Operation in 10/100 Mbps Modes
 - Exhaustive MAC Status Reporting
 - Supports PAUSE Control Frames
- Support Low Power Mode / Remote Wakeup
- Serial Interface to Read/Write to 93LC46B EEPROM through USB
- On-Chip FIFO's for Upstream and Downstream Data Transfers
- WHQL Certified
- Configurable Vendor and Product ID's through EEPROM
- Supports iSerial Number and Locally Administered Network Address
- Supports MII interface for External Ethernet PHY (128-pin package only)

General Description

The USB to MAC Ethernet Controller is a unique solution to interface 10/100 Base-T Ethernet devices to the Universal Serial Bus (USB-2.0).

This device has been specifically designed to provide a simple solution to communicate with Ethernet applications. This is accomplished by its highly integrated functionality.

It is ideal for LAN (Local Area Network) applications. It provides internal buffering to enable parallel operations from USB ports on the host side, and MAC ports on the Ethernet side.

It also provides a serial interface for an EEPROM for storing the MAC-ID, VID, PID, and other configurable settings.

Applications

- Add-On 10/100 Dongle
- Instrumentation
- Embedded Applications

Application Note

- AN-7830-DA-128
- AN-7830-DA-80

Evaluation Board

- MCS7830CQ-BCD
- MCS7830-CV-BCD

Driver Support

- Windows 32-bit - 98/ME/2000/XP
- Windows XP 64-bit
- MAC 10.x
- Linux
- Win CE
- Windows Vista

Windows Utility Support

- EEPROM Utility
- Diagnostic Utility

Ordering Information		
Commercial Grade (0 °C to +70 °C)		
MCS7830CQ-DA	128-LQFP	RoHS
MCS7830CV-DA	80-TQFP	RoHS

MCS7830

USB-2.0 to Ethernet



Block Diagram

