

**Features**

- USB-2.0 Device Controller
- On-Chip USB-2.0 PHY
- On-Chip Voltage Regulators
- Two 16c450/16c550 compatible UARTs
- Supports SIR IrDA Mode on any/all ports
- Supports RS-232, RS-485 and RS-422 Serial Ports
- 5, 6, 7 and 8-bit Serial Data support
- Hardware and Software Flow Control
- Serial Port speeds from 50 bps to 6 Mbps
- Custom BAUD Rates supported through external clock and/or by programming the internal PLL
- On-Chip 512-Byte FIFOs for upstream and downstream data transfers for each Serial Port
- Supports Remote Wakeup and Power Management features
- Serial Port Transceiver Shut-Down support
- Two-Wire I<sup>2</sup>C Interface for EEPROM
- EEPROM read/write through USB
- iSerial feature support with EEPROM
- One Bi-directional multi-function GPIO
- On-Chip buffers for Serial Port signals to operate without external Transceivers over short cable lengths
- Bus-Powered Device

**General Description**

The MCS7820 is a USB-2.0 to Dual-Serial Port device. It has been developed to connect a wide range of standard serial devices to a USB host.

The MCS7820 has a USB Device Controller connected to two (2) individual UARTs.

Support for the following serial communication programs is included:

HyperTerminal, PComm, Windows direct connection, Windows dial-up connection through modem, Networking over IrDA and Windows direct connection over IrDA, Minicom.

**Applications**

- Serial Attached Devices
- Modems, Serial Mouse, Generic Serial Devices
- Serial-Port Server
- Data Acquisition System
- POS Terminal and Industrial PC

**Application Note**

- AN-7820

**Evaluation Board**

- MCS7820-EVB

**Package**

- 48-pin LQFP Package

**Driver Support**

- Windows (98SE / ME / 2000 / XP / 2003 Server)
- Linux Kernel 2.6.5 and above
- MAC 10.2 and above
- Windows CE5.0
- Windows Vista

**Utility Support**

- Windows based EEPROM Tool
- Mass Production Utility

Ordering Information		
Commercial Grade (0 °C to +70 °C)		
MCS7820CV	48-LQFP	RoHS

# MCS7820

USB-2.0 to Two Serial Ports



## Block Diagram

