

**Features****Product Brief**

- 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 I2C 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
- 48-Pin LQFP Package RoHS compliant
- Operating temperature range: 0°C to +70°C

**Product 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.

**Target Applications**

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

### Block Diagram

