MCS7715

USB to Combo Serial & Printer Port

MOSCHiP
SEMICONDUCTOR

Features

- Single 3.3V – 5.0V operation
- Low power
- Full compliance with the USB V1.1 specification
- Standard 16C450/550 compatible UART
- Supports 920kbps data rate
- Programmable baud rate generator
- Modem control signals
- 5, 6, 7, 8-bit character selection
- Even, odd, no parity, or force parity generations
- Status report capability
- Single IEEE-1284 compatible printer port
- Fast data rates up to 1.5M Bps
- 16-byte FIFO
- Software programmable printer mode selects
- Microsoft compatible
- Available in 48-pin LQFP package

Applications

- High-speed modems
- Monitoring equipment
- Serial networking
- Printer server
- Portable backup units
- Printer interface

Application Note

- AN-7715

Evaluation Board

- MCS7715-EVB

General Description

The MCS7715 controller provides bridging between the Universal Serial Bus (USB) input an enhanced UART port and an IEEE-1284 bi-directional printer port. This device contains all the necessary logic to communicate with the host computer via the USB bus.

In addition, the MCS7715 contains a 3.3V regulator and operates in bus-powered mode.

The MCS7715 has a reduced frequency (6MHz) crystal oscillator. This combination of features allows significant cost savings in system design along with straightforward implementation of serial port functionality into PC peripherals using the host's USB port.

Ordering Information

Commercial Grade (0° C to +70° C)		
MCS7715CQ	48-LQFP	Standard
MCS7715CQ-GR	48-LQFP	RoHS

MCS7715 Pin Assignment

MCS7715CQ

Top pins (48 to 37): VOUT (48), GND (47), nRI (46), nDTR (45), nCTS (44), 3.3V (43), nSTROBE (42), nAUTOFDX (41), PD0 (40), GND (39), nFAULT (38), PD1 (37)

Left pins (1 to 12): 5V (1), 3.3V (2), XTAL1 (3), XTAL2 (4), GND (5), TSTPLL (6), TSTMODE (7), GND (8), DM (9), DP (10), 3.3V (11), RESET (12)

Right pins (36 to 25): INIT (36), PD2 (35), nSLCTIN (34), PD3 (33), PD4 (32), 3.3V (31), GND (30), PD5 (29), TX (28), PD6 (27), PD7 (26), nACK (25)

Bottom pins (13 to 24): GND (13), GND (14), nCD (15), 3.3V (16), GND (17), nDSR (18), RX (19), nRTS (20), GND (21), SLCT (22), PE (23), BUSY (24)