PC/104 Bus

OSC = ASFLMB-14.7456MHz

COM3 selected with Jumpers COM1 and COM2

JTAG

3.3V Reg.

Technologic Systems  Date Nov. 19, 2012
Title: TS-Multi_104  PC/104 Bus
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Level shifters
5V → 3.3V

CPLD

JTAG

UART Base Address

COM1 = 3F8
COM2 = 2F8
COM3 = 3E8
COM4 = 2E8
COM5 = 3A8
COM6 = 2A8

Address (Base + 7) can be used as write only register for CPLD control register

UART_CLK = 1.84 MHz (Jumper ON)
UART_CLK = 14.7 MHz (Jumper OFF)

1.84 MHz is standard UART clock

If using PC104 14.3 MHz

14.318 MHz x 4/31 = 1.8475 MHz

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Date Nov. 19, 2012
16C550 or 16C850

UART

Inputs (TXD) are always TTL compatible
Outputs (RXD) swing CMOS levels
This means 0-5V if 5V powered

DTR and RTS are active low true inputs

Multitech Modem

NXP has SC16C550BIB48 in same package with 32 byte FIFOs
NXP has exact same pin-out -- Exar is pin compatible

TL16C550CIPT max UART_CLK = 16 MHz
UART_CLK min logic high = 3.3V

$3

XR16C850IM is pin-out same
and has 128 byte FIFOs
and UART_CLK up to 33 MHz
UART_CLK min high = 3.0V

$10

TL16C550C1PT max UART_CLK = 16 MHz
UART_CLK min logic high = 3.0V

$3