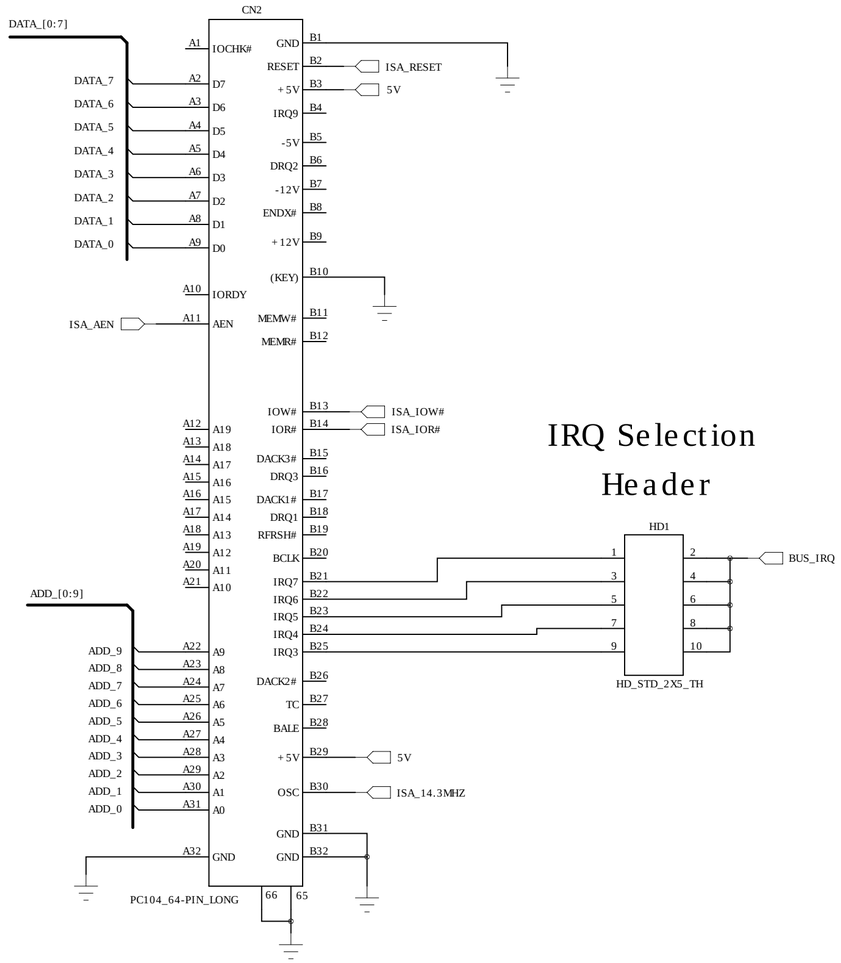
# PC/104 Bus



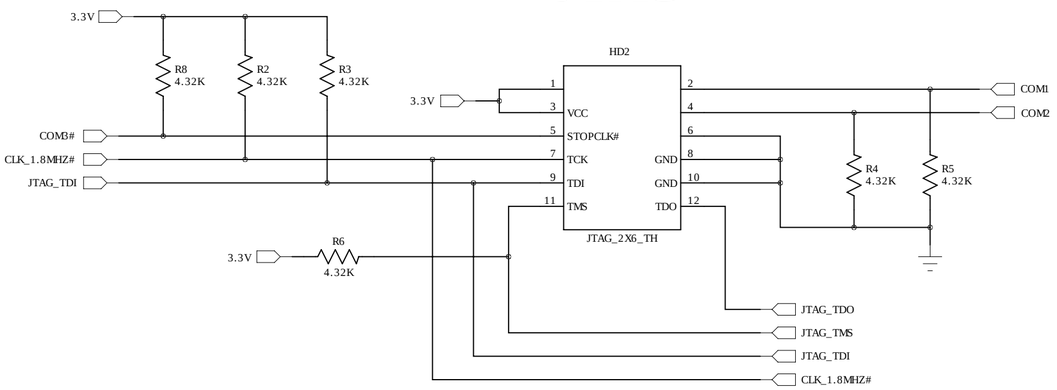

## IRQ Selection Header



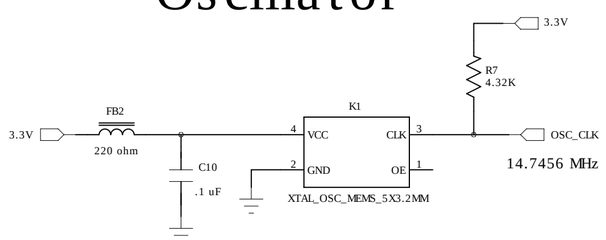


COM4 selected with
Jumpers COM1 and COM3

# JTAG

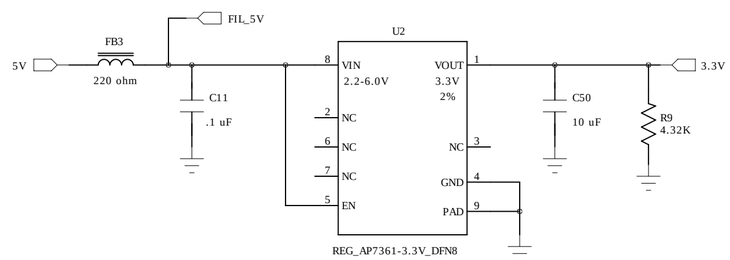



# Oscillator




OSC = ASFLMB-14.7456MHZ

# 3.3V Reg.




| | | |
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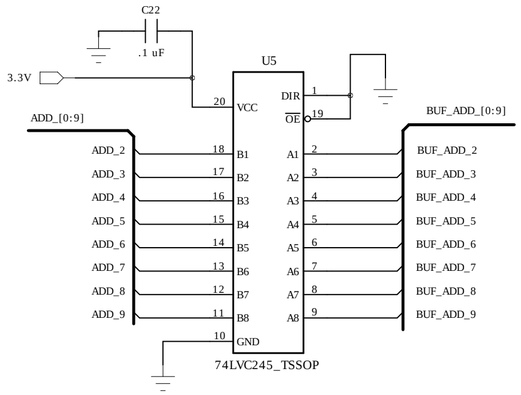
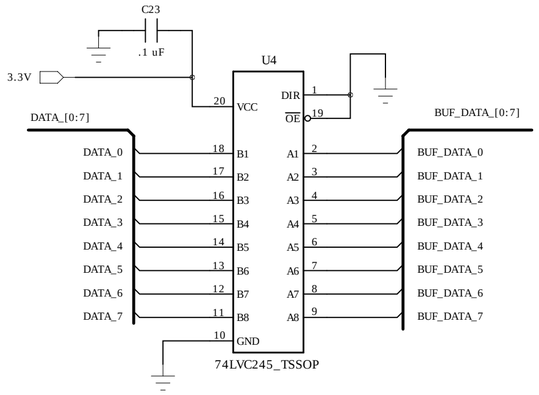
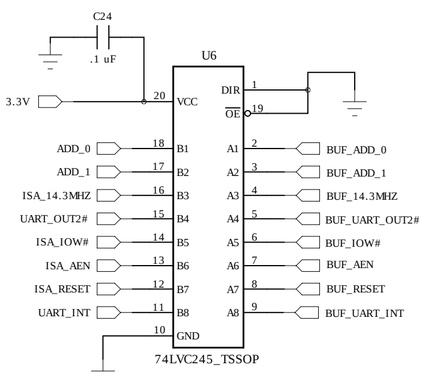
# Level shifters

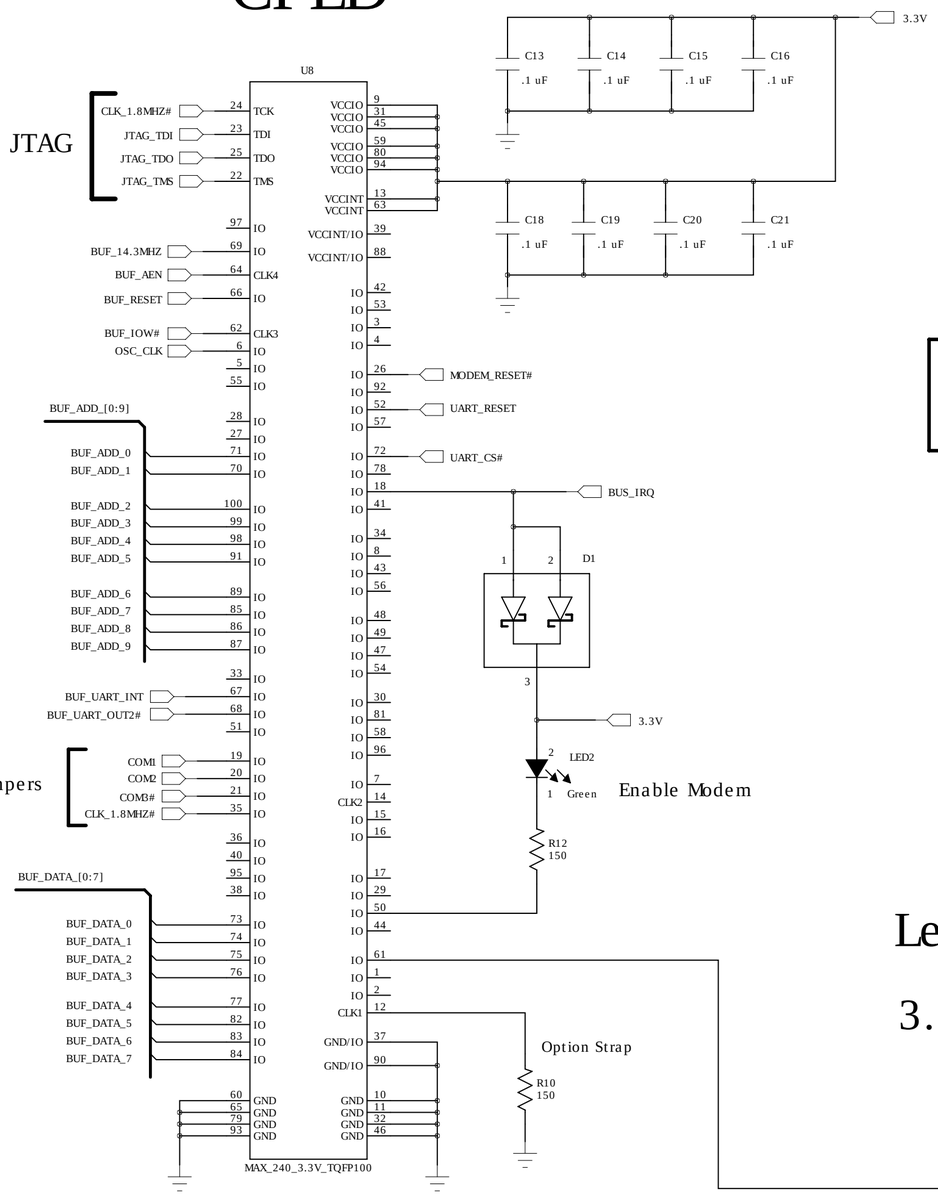
5V → 3.3V




# CPLD




MAX240

## 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

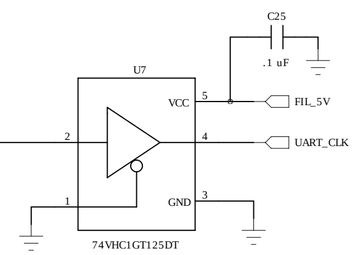
UART_CLK = 1.84 MHz (Jumper ON)

UART_CLK = 14.7 MHz (Jumper OFF)

1.84 MHz is standard UART clock

# Level shifter

3.3V → 5V




If using PC/104 14.3 MHz

14.318 MHz x 4/31 = 1.8475 MHz

| | | |
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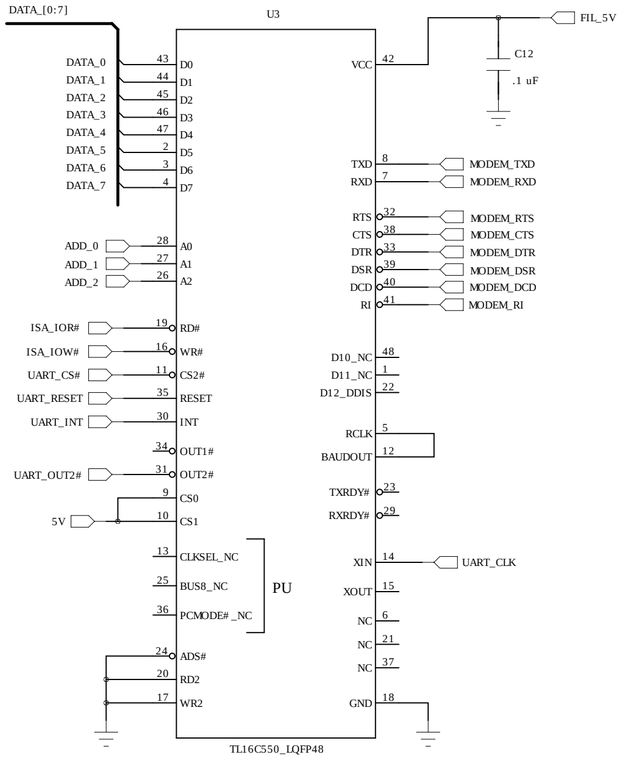
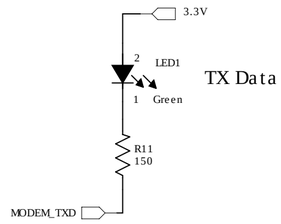
# UART and Multitech Modem

## 16C550 or 16C850 UART




TL16C550CIPT max UART_CLK = 16 MHz
UART_CLK min logic high = 3.6V

$3

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

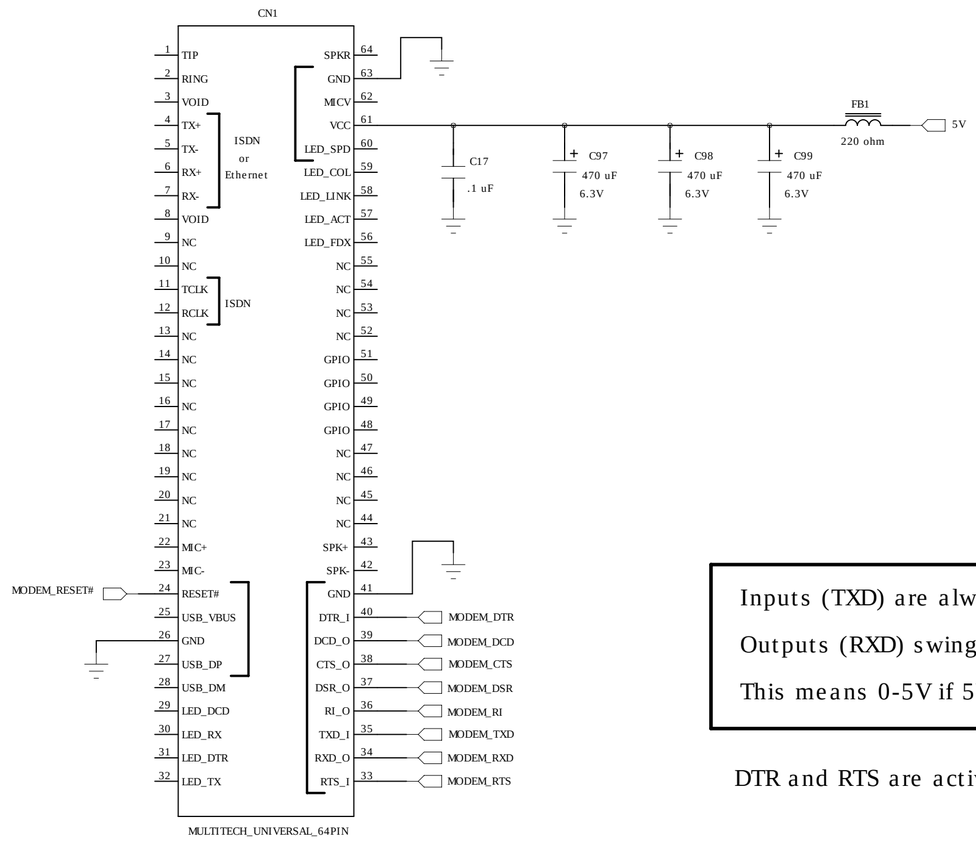
$10

NXP has SC16C650BIB48 in same
package with 32 byte FIFOs

$3

NXP has exact same pin-out -- Exar is pin compatible

## Multitech Modem




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

| | | |
|---|---|---|
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| Title: TS-Multi_104 Modem Socket | | |
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