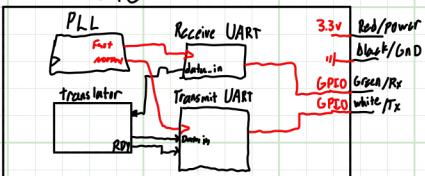


DE-10 Lite



PLL: receives C_{lk} then slows down **PClk**

To-do: determine C_{lk} speed
determine 1 or 2 PLL's for Rx & Tx

Translator: Receives data from Rx UART and determines what to send back

inputs: 8 bit vector (data_in)
C_{lk}

outputs: 8 bit vector (data_out)

Receive UART: Receives 8 data bits, One start bit, One end bit (10 bits). must be oversampled by 8

inputs: 1 bit Rx gpio (Rx)
PClk

outputs: 8 bit vector (data_in)

Transmit UART: Receives translated data and sends it back to computer

inputs: 8 bit vector (data_out)
PClk

1 bit start bit (start)

output: 1 bit Tx gpio (Tx)