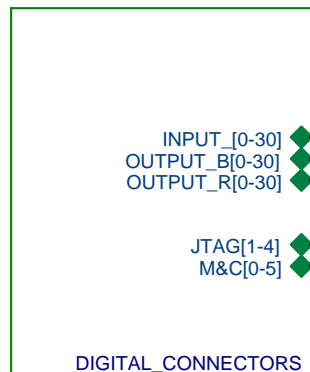
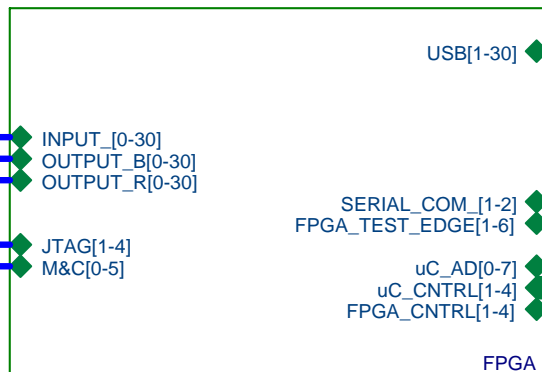


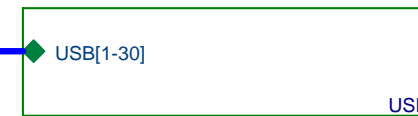
DIGITAL\_CONNECTORS



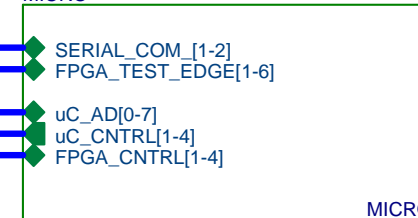
FPGA



USB



MICRO



POWER



INPUT\_[0-30]  
OUTPUT\_B[0-30]  
OUTPUT\_R[0-30]

JTAG[1-4]  
M&C[0-5]

INPUT\_[0-30]  
OUTPUT\_B[0-30]  
OUTPUT\_R[0-30]

JTAG[1-4]  
M&C[0-5]

SERIAL\_COM\_[1-2]  
FPGA\_TEST\_EDGE[1-6]

uC\_AD[0-7]  
uC\_CNTRL[1-4]  
FPGA\_CNTRL[1-4]

USB[1-30]

SERIAL\_COM\_[1-2]  
FPGA\_TEST\_EDGE[1-6]

uC\_AD[0-7]  
uC\_CNTRL[1-4]  
FPGA\_CNTRL[1-4]

USB[1-30]

SERIAL\_COM\_[1-2]  
FPGA\_TEST\_EDGE[1-6]

uC\_AD[0-7]  
uC\_CNTRL[1-4]  
FPGA\_CNTRL[1-4]

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| MAIN               | 1 | MICRO | 4 |
| DIGITAL_CONNECTORS | 2 | POWER | 5 |
| FPGA               | 3 | USB   | 6 |

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Title  
**COM 1400 / Main**

|           |                                  |          |
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|-----------|----------------------------------|----------|

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INPUT\_[0-30]

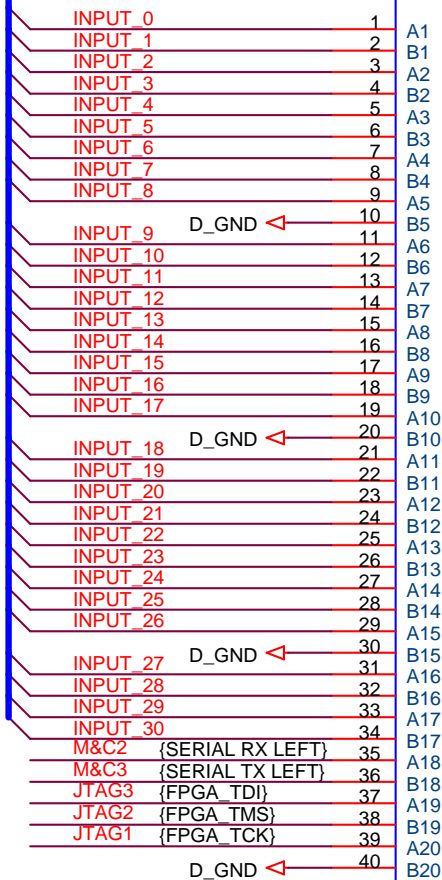
3 OUTPUT\_B[0-30]

3 OUTPUT\_R[0-30]

J5

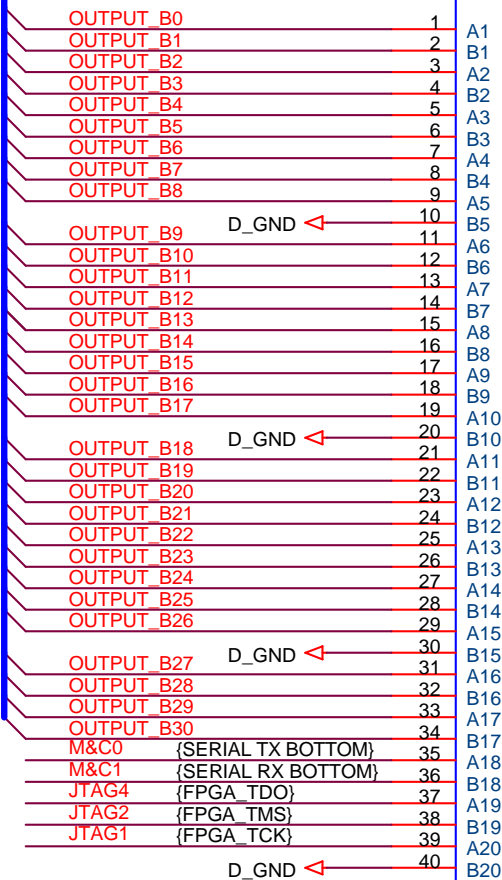
J9

J8



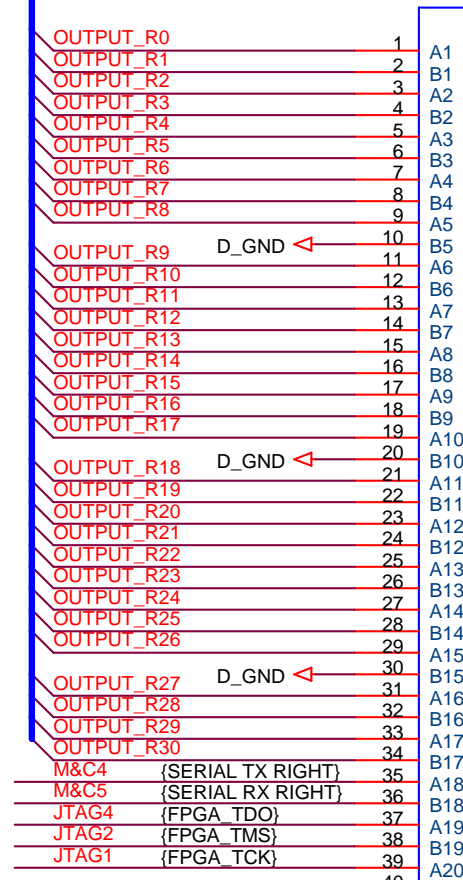
SQT-120-01-L-D-RA

DIGITAL INPUT  
LEFT  
CONNECTOR



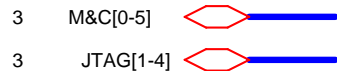
TMMH-120-01-L-D-RA

DIGITAL OUTPUT  
BOTTOM  
CONNECTOR

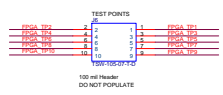
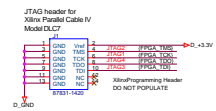


TMMH-120-01-L-D-RA

DIGITAL OUTPUT  
RIGHT  
CONNECTOR



|   |                                  |          |
|---|----------------------------------|----------|
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| Title<br><b>COM-1400 / DIGITAL CONNECTORS</b>                                 |                                  |          |
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**USB INTERFACE**



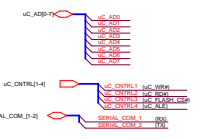
**40 PIN DIGITAL CONNECTORS**



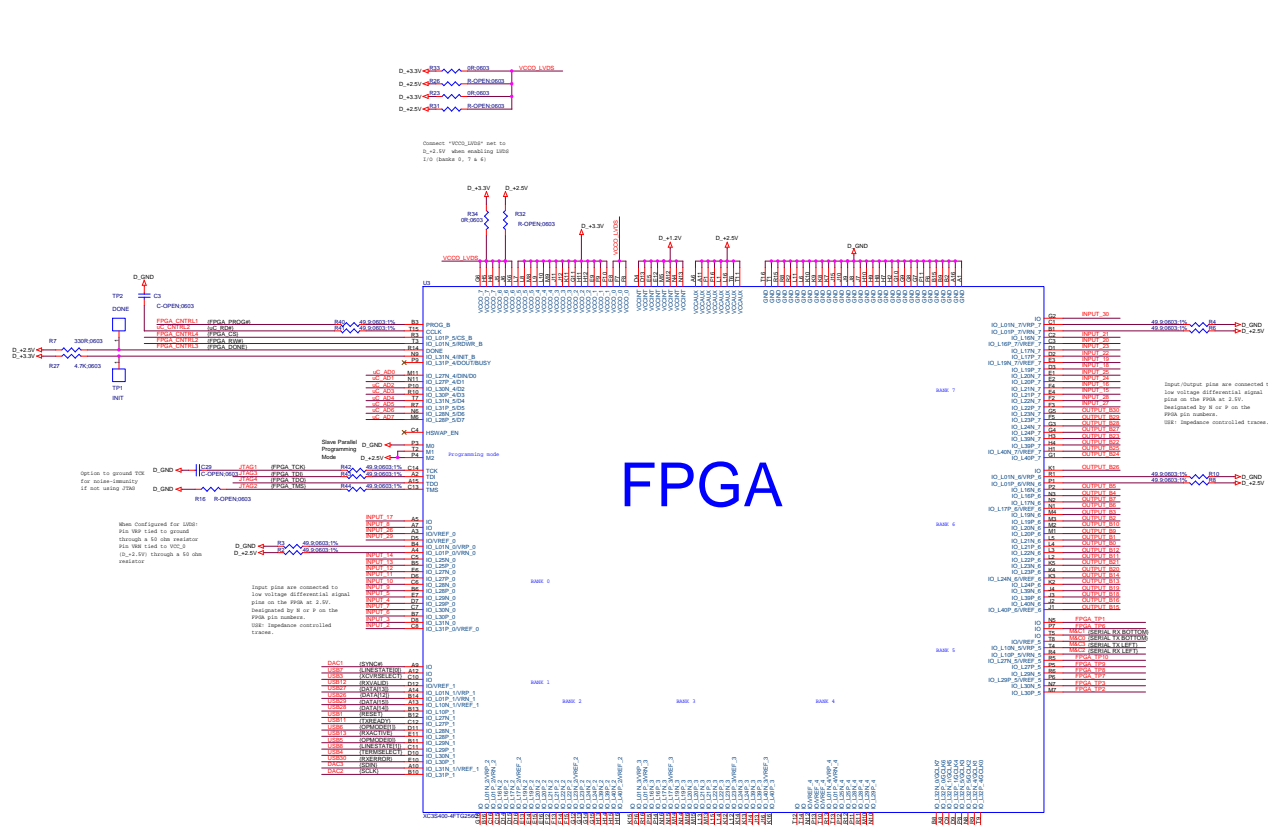
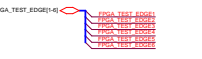
**FPGA CONFIGURATION**



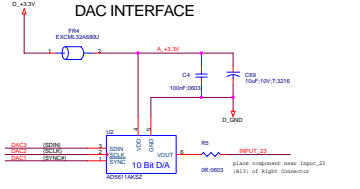
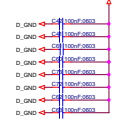
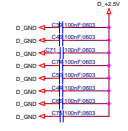
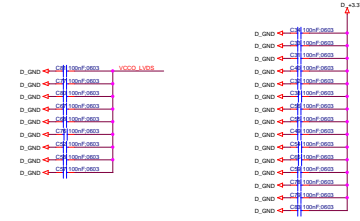
**uC INTERFACE**



**TEST POINTS**

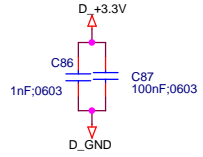
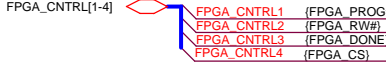
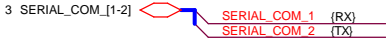
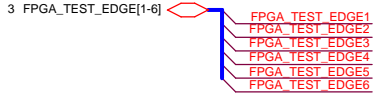


**FPGA**

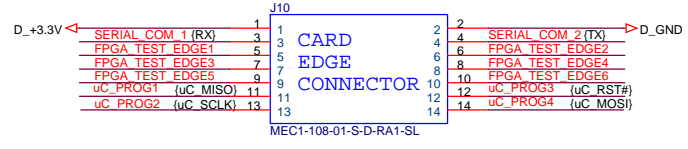
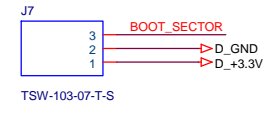
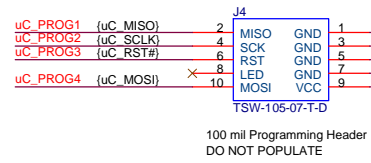
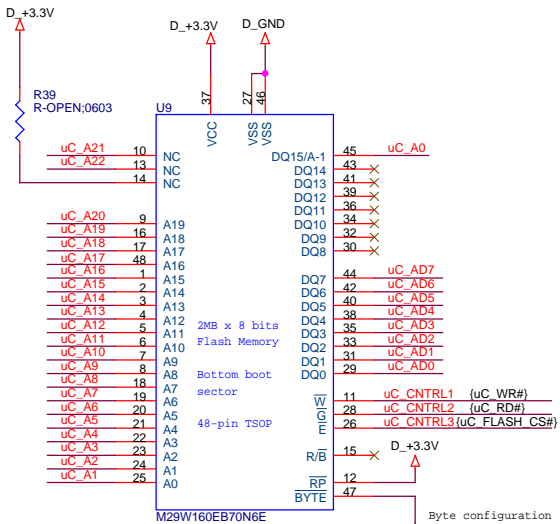
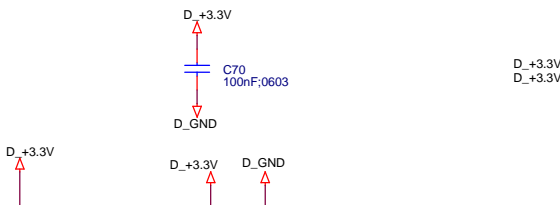
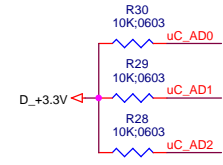
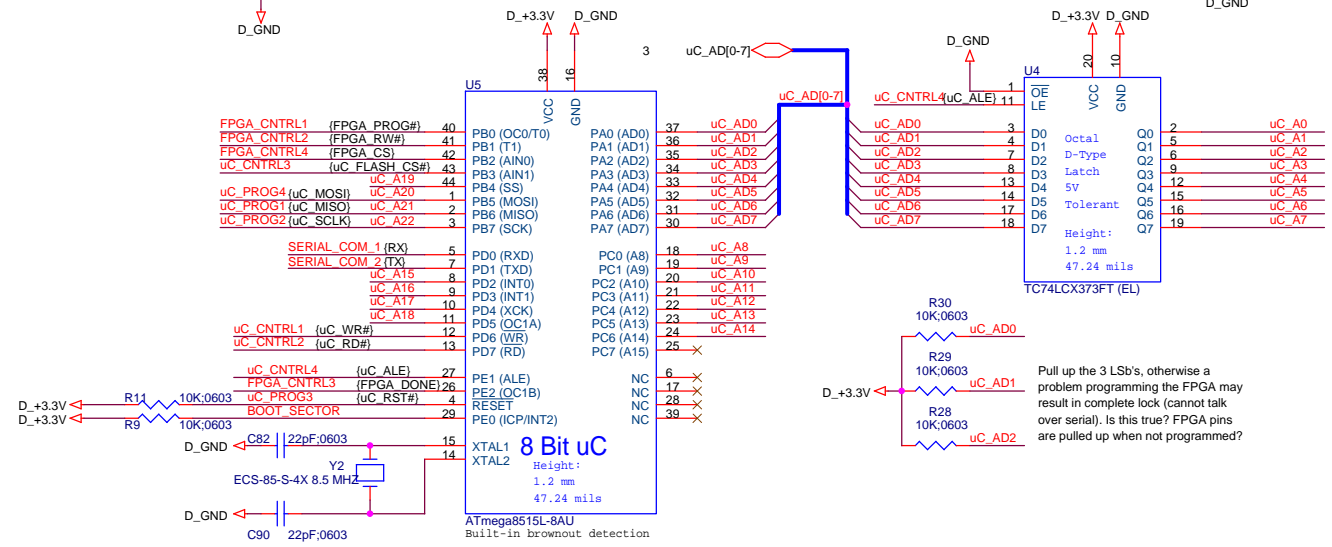
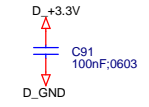


|  |                |
|--|----------------|
| Xilinx<br>Model: Xilinx Parallel Cable IV<br>Model: Xilinx Parallel Cable IV<br>Model: Xilinx Parallel Cable IV<br>Model: Xilinx Parallel Cable IV |                |
| Part   | COM-1400/ FPGA |
| Rev  | Y05001         |
| Date   | 05/05/2008     |

# FPGA TEST POINTS



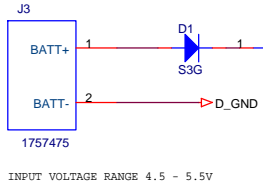
## ADDRESS LATCH [A0 - A7]



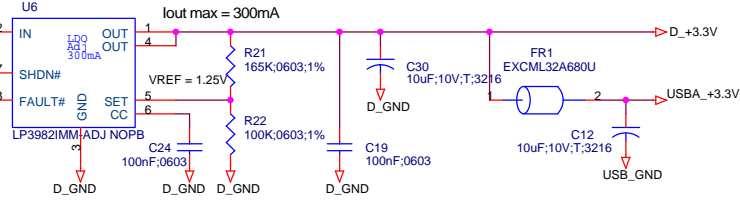
Please note:  
Serial link is LVTTTL, NOT RS232.

|  |                                  |          |
|--|----------------------------------|----------|
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| Title<br><b>COM-1400/ MICROCONTROLLER</b>  |                                  |          |
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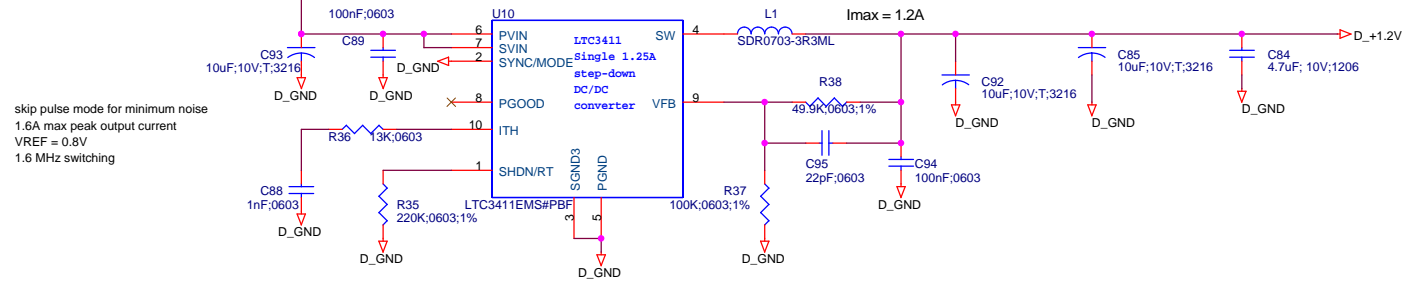
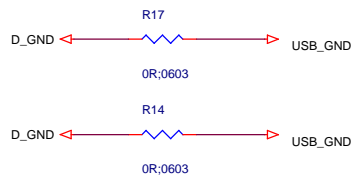
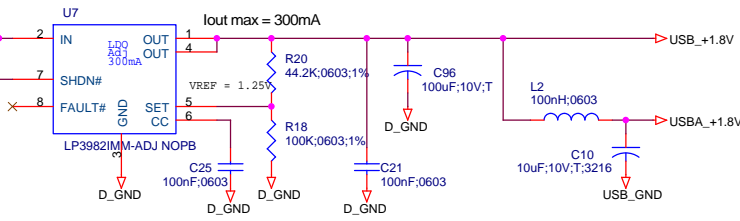
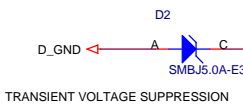
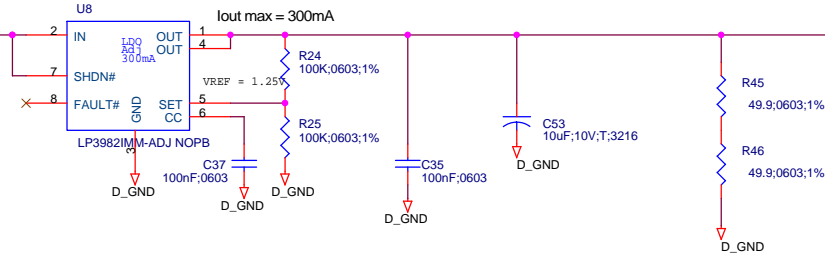
# +5 V Supply



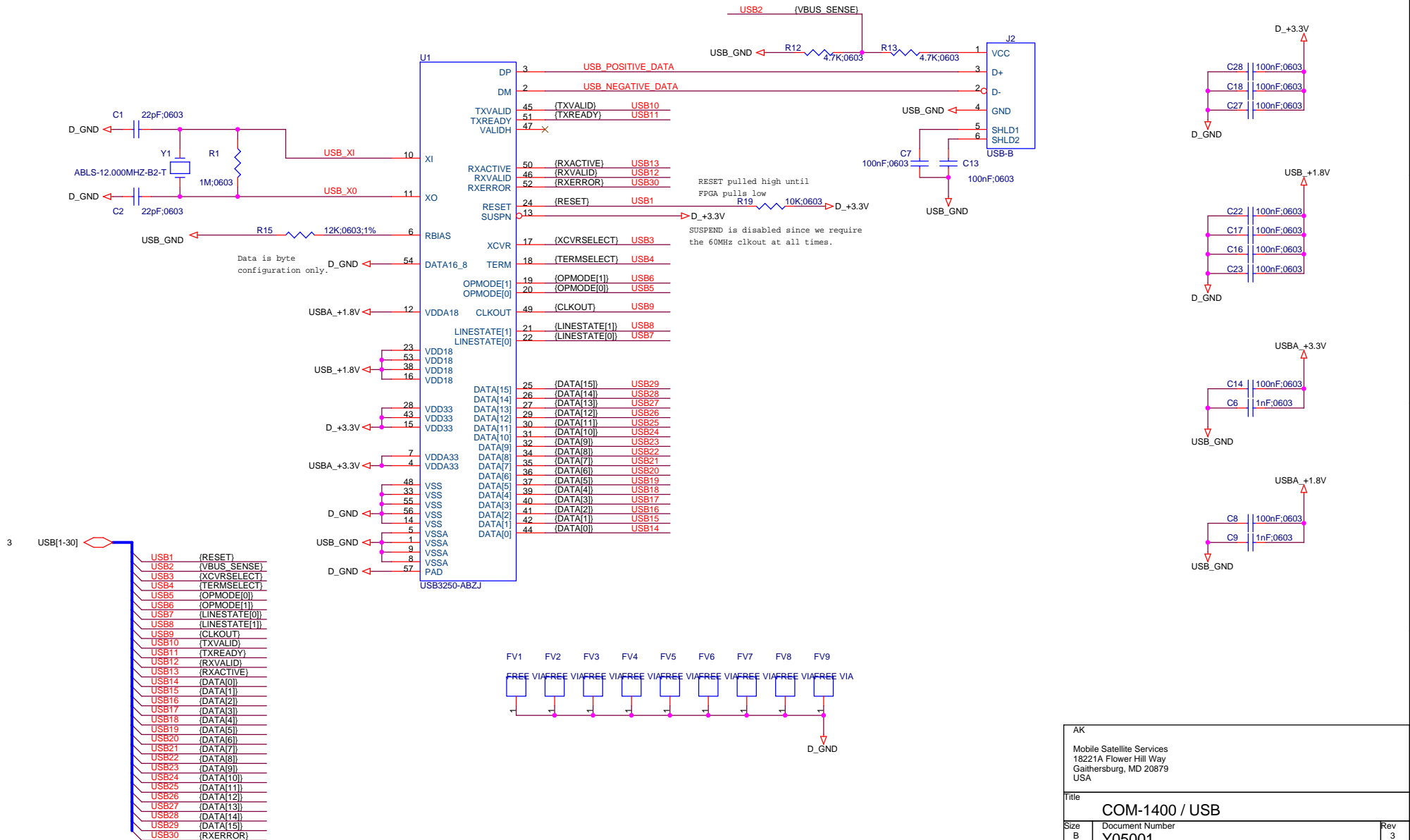
USB3250 max total power consumption: 185mW (HS mode)  
Thus linear regulators are sufficient



FPGA Vcc aux max power consumption: 50mW



|  |                                  |          |
|--|----------------------------------|----------|
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Title  
**COM-1400 / USB**

Size B Document Number  
**Y05001**

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