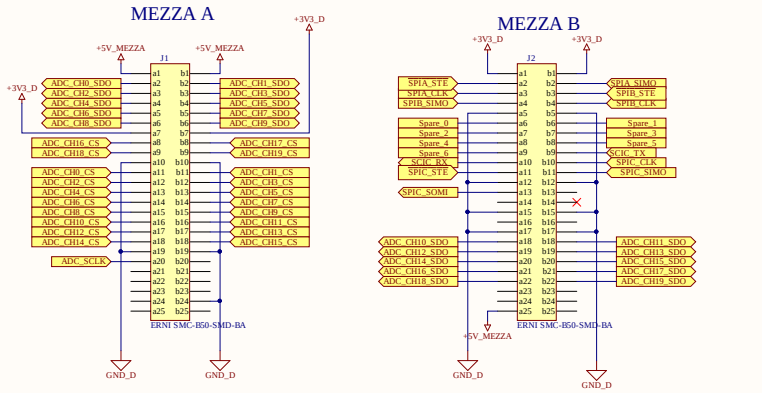
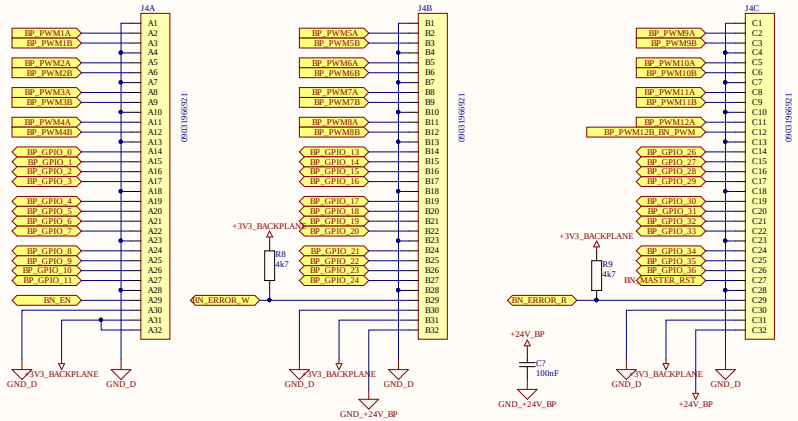
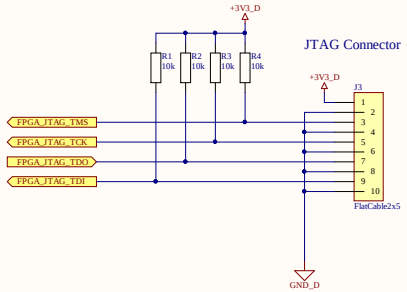
TO/FROM MEZZANINE BOARD



TO/FROM BACKPLANE



FPGA JTAG



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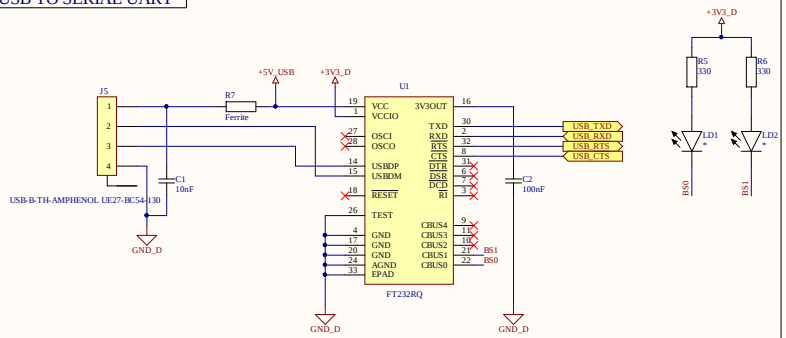

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Revision : SchematicRevision	Sheet * of *	Date : SchematicDate
		Design by : SchematicDesigner
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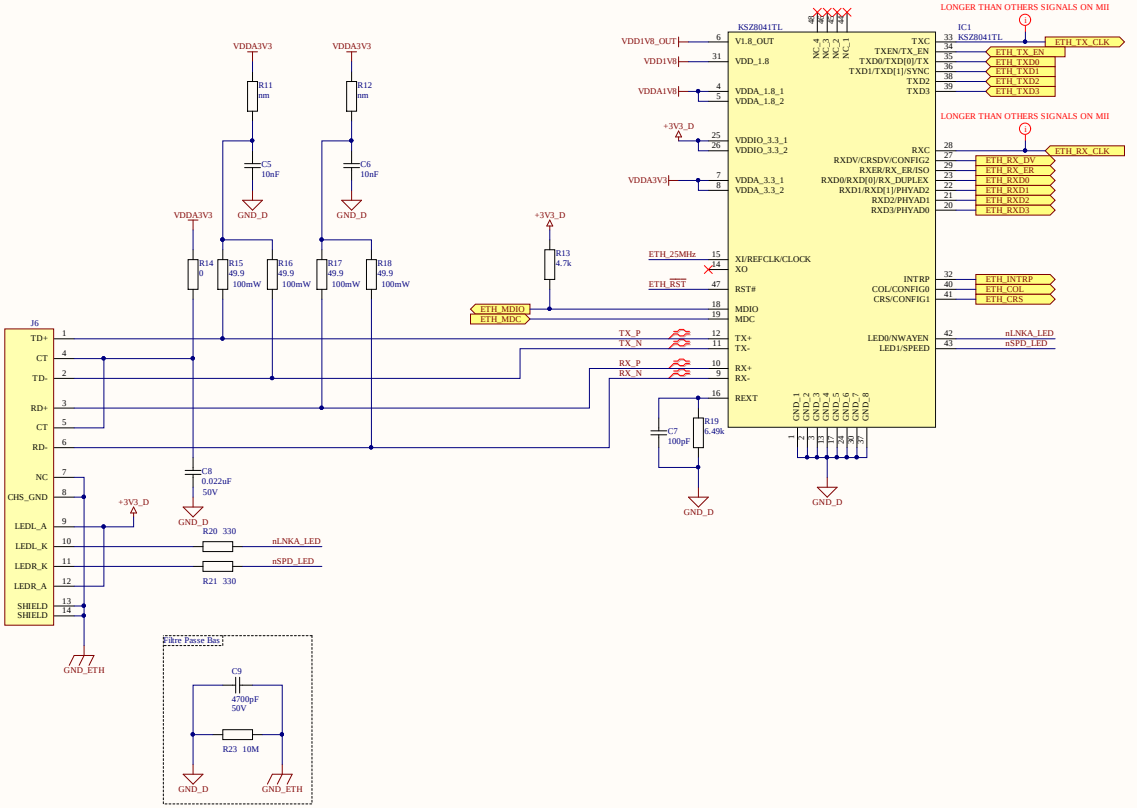
RJ45 & ETHERNET PHY KSZ8041TL



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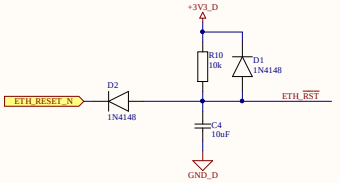
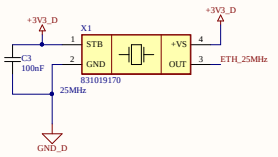
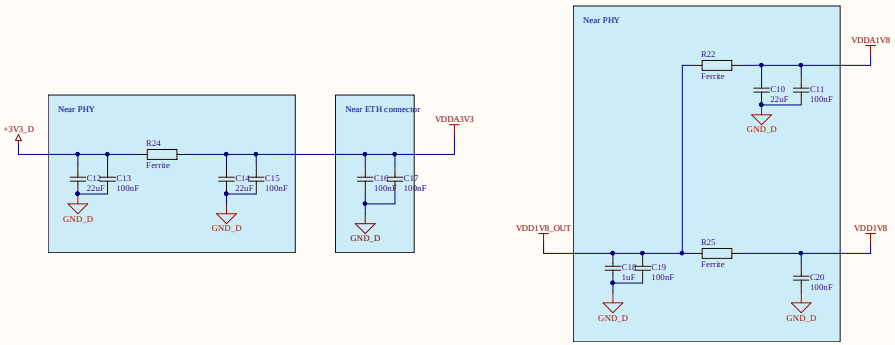


PHY OSCILLATOR



DECOUPLING & SUPPLY SPLIT



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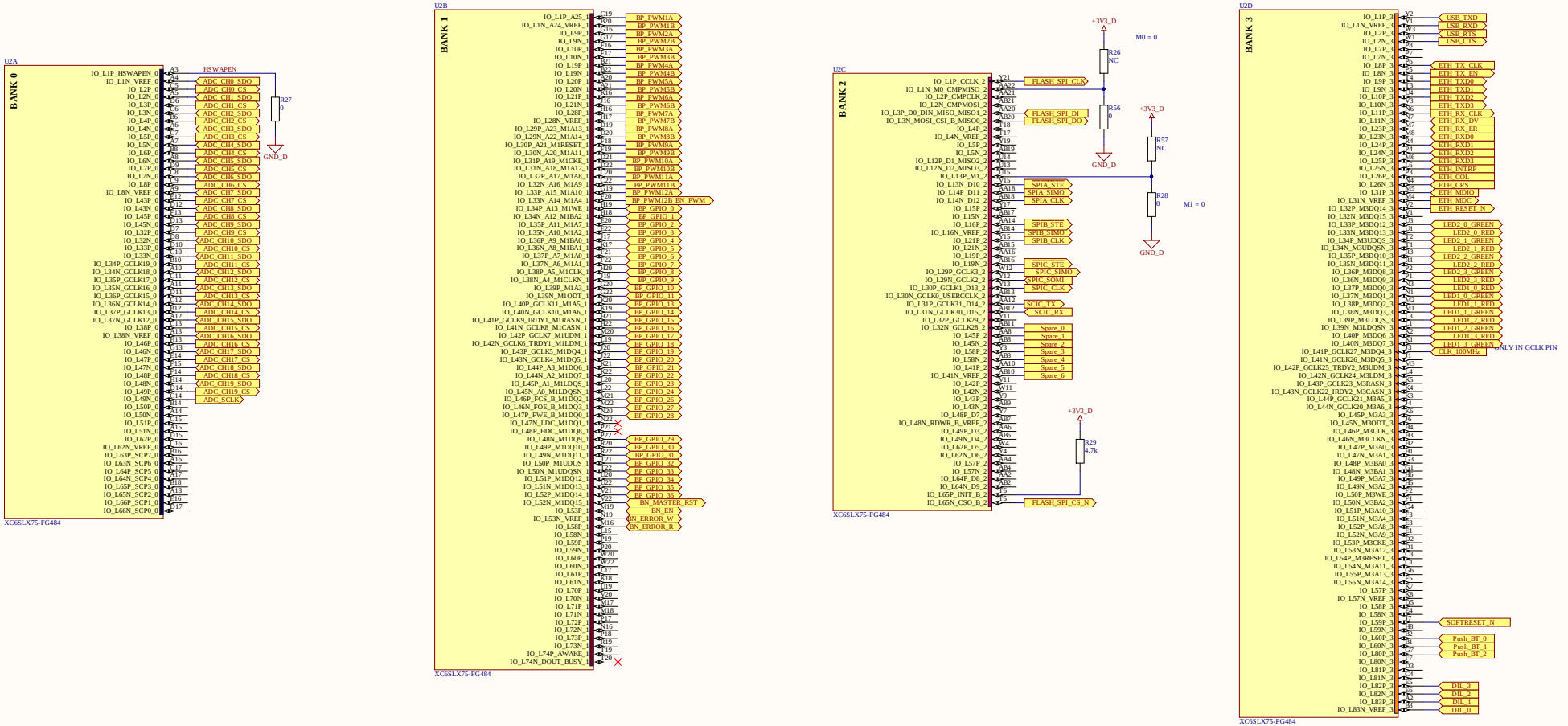

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FPGA_0.SchDoc

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Date : SchematicDate

Revision : SchematicRevision

Sheet * of *

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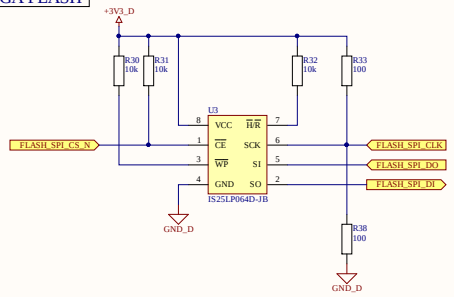
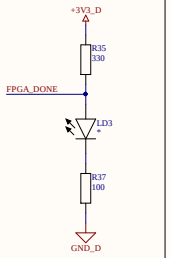
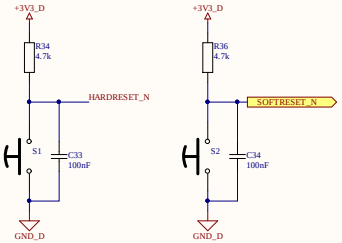
FPGA FLASH



FPGA DONE LED



RESET BUTTONS



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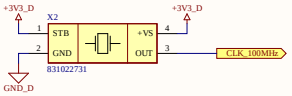
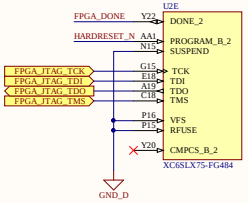
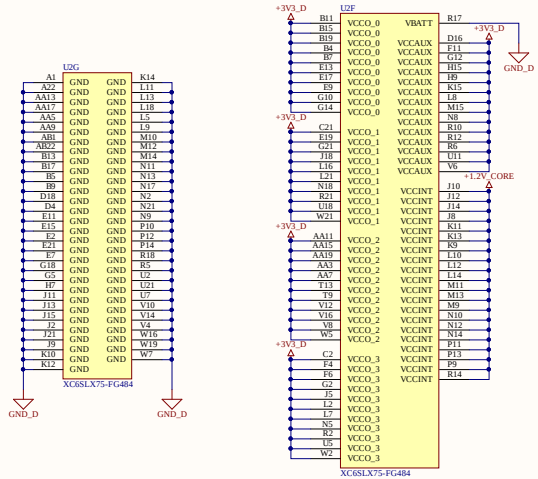


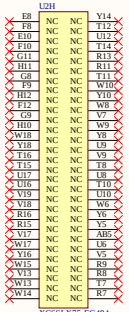
FPGA CONFIGURATION PINS



FPGA SUPPLY PINS



FPGA UNUSED PINS



FPGA DECOUPLING

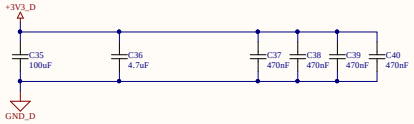
Table 2-2: **PCB Capacitor Specifications**

Ideal Value	Value Range[1]	Body Size[2]	Type	ESL Maximum	ESR Range[3]	Voltage Rating[4]	Suggested Part Number
100 µF	C > 100 µF	1210	2-Terminal Ceramic X7R or X5R	5 nH	10 mΩ < ESR < 60 mΩ	6.3V	GRM32ER60J107ME20L
4.7 µF	C > 4.7 µF	0805	2-Terminal Ceramic X7R or X5R	2 nH	10 mΩ < ESR < 60 mΩ	6.3V	
0.47 µF	C > 0.47 µF	0204 or 0402	2-Terminal Ceramic X7R or X5R	1.5 nH	10 mΩ < ESR < 60 mΩ	6.3V	

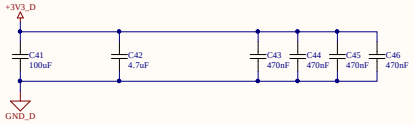
PCB Capacitor Substitution Rules:

1. Values can be larger than specified.
2. Body size can be smaller than specified.
3. ESR must be within the specified range.
4. Voltage rating can be higher than specified.

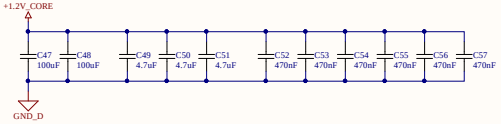
VCC0 Bank 0 Decoupling
LX75, LX100, LX150 -> 1x100uF / 1x4.7uF / 2x470nF



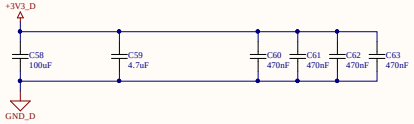
VCC0 Bank 1 Decoupling
LX75, LX100, LX150 -> 1x100uF / 1x4.7uF / 3x470nF



VCCINT Decoupling
LX75 -> 1x100uF / 2x4.7uF / 3x470nF
LX100 -> 1x100uF / 2x4.7uF / 4x470nF
LX150 -> 2x100uF / 3x4.7uF / 6x470nF



VCC0 Bank 2 Decoupling
LX100, LX150 -> 1x100uF / 1x4.7uF / 3x470nF
LX75 -> 1x100uF / 1x4.7uF / 4x470nF



VCCAUX Decoupling
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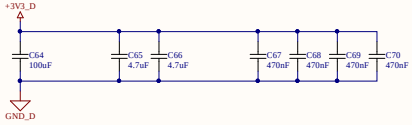
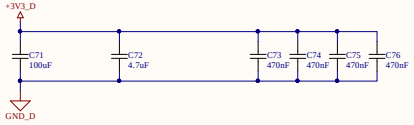


VCC0 Bank 3 Decoupling
LX75. LX100, LX150 -> 1x100uF / 1x4.7uF / 3x470nF



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Revision : SchematicRevision	Sheet * of *
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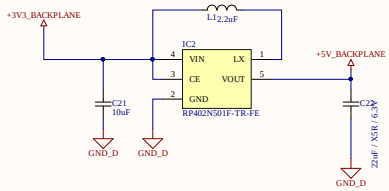
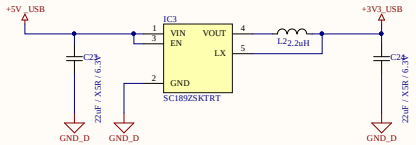
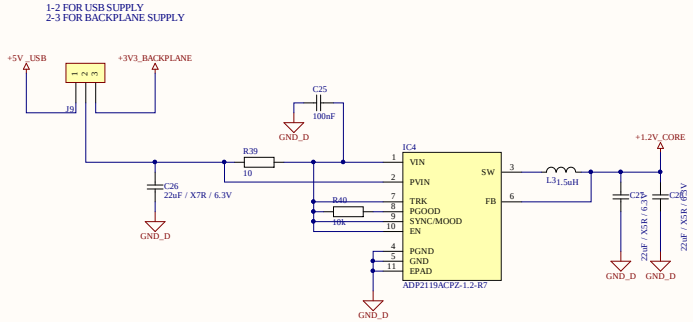
5V FROM 3V3 BACKPLANE



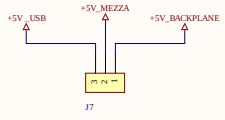
3V3 FROM 5V USB



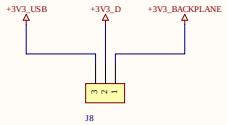
1V2 FPGA CORE SUPPLY



5V SUPPLY SELECTOR



3V3 SUPPLY SELECTOR



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Revision : SchematicRevision	Sheet * of *	Design by : SchematicDesigner
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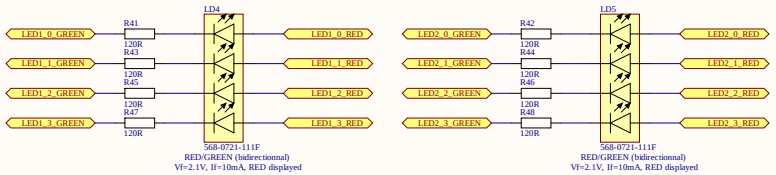
BI-COLOR LED



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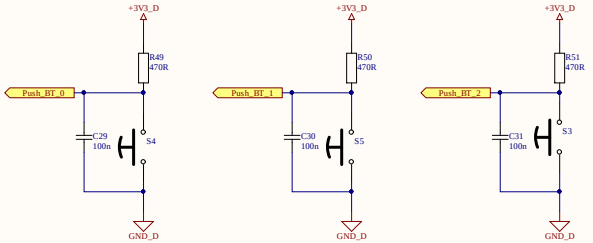

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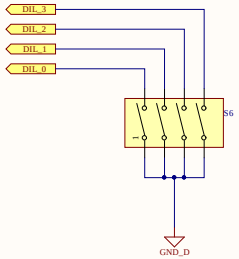

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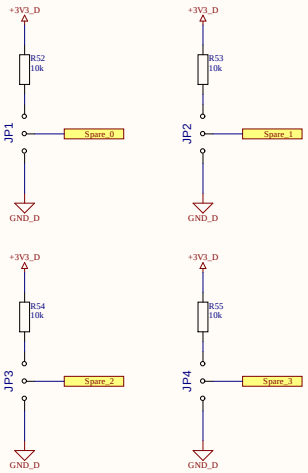

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