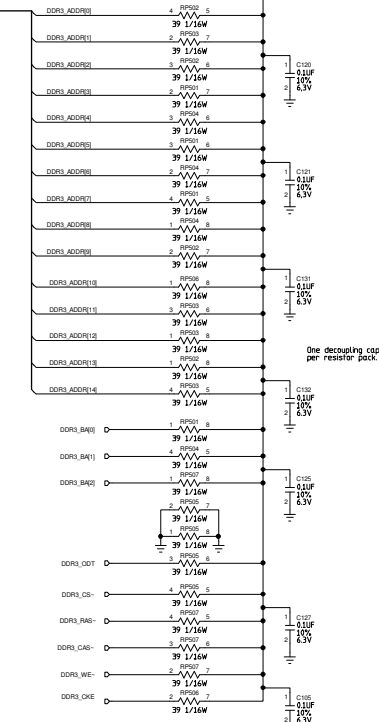
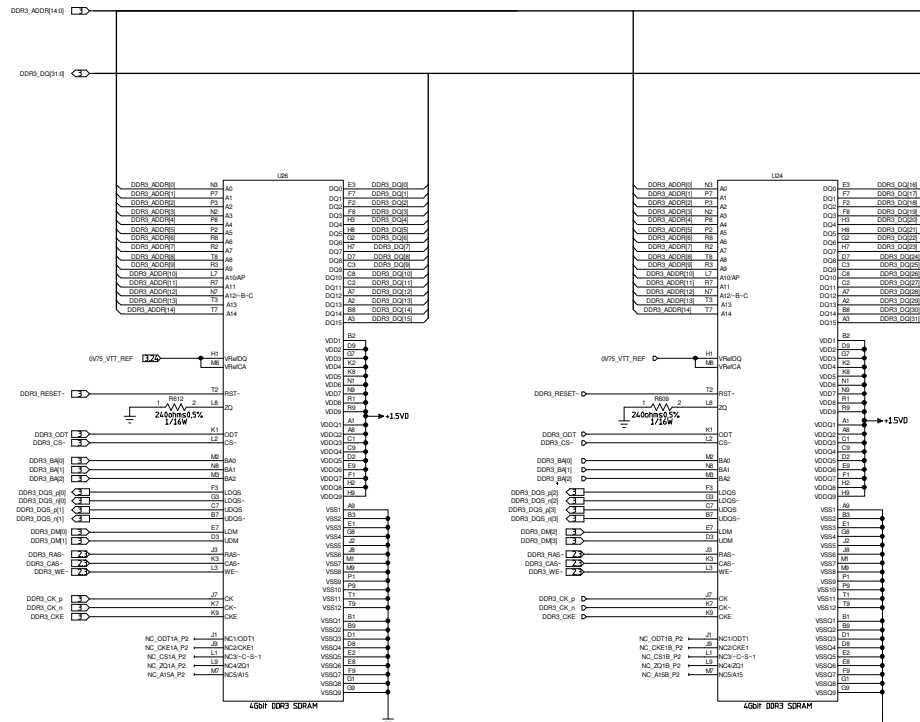


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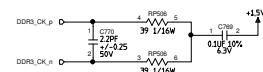
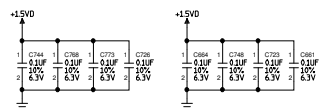
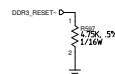
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Per JEDEC Standard No. 21C,  
Address lines should be terminated with 39 ohm loads to VTT.  
Layout note: resistor pack pin assignments can be swapped for more direct routing.



BANK 0: LOWER 16 BITS

BANK 1: UPPER 16 BITS



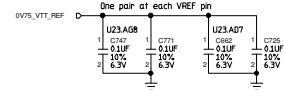
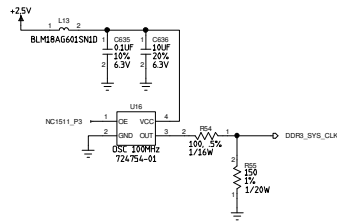
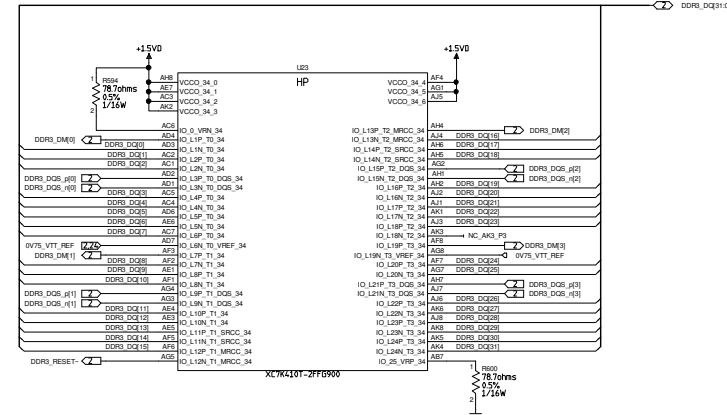
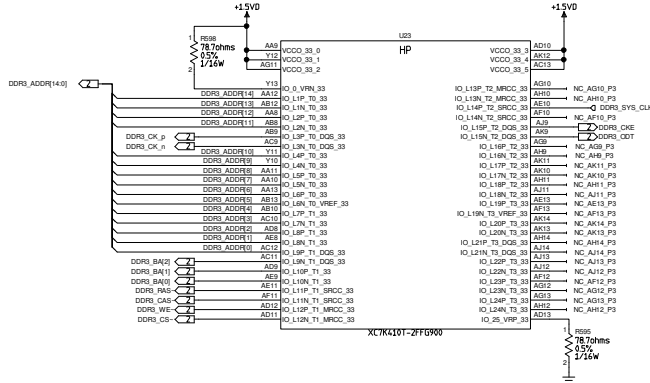
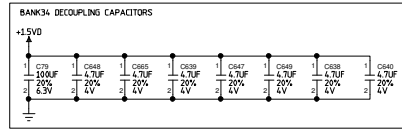
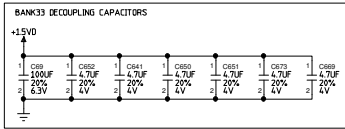
Per JEDEC Standard No. 21C, Pg. 4.2019-42,  
Clocking lines shall have differential RTT termination,  
decoupled to VDD (1.5V) via 0.1uF capacitor.  
Per JEDEC Standard No. 21C, Pg. 4.2019-42,  
Clocking lines shall have differential 2.2pF decoupling capacitor C<sub>dec</sub>  
immediately prior to first DRAM bank

DDR3 interface, DRAM side			
USRP X3X0			
SIZE	CODE IDENT NO	DRAWING NO	REV
C	7U296	154574E-01	1
SCALE: NONE		SHEET 02 OF 28	

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DDR3 interface, FPGA side

USRP X3X0

SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	154574E-01	1

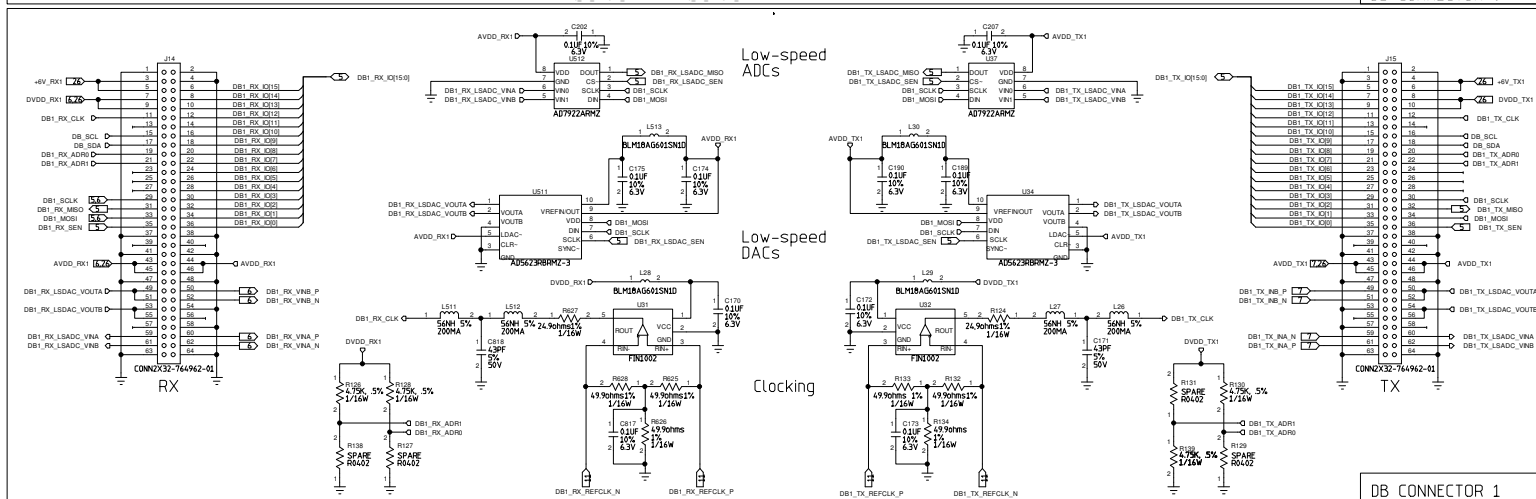
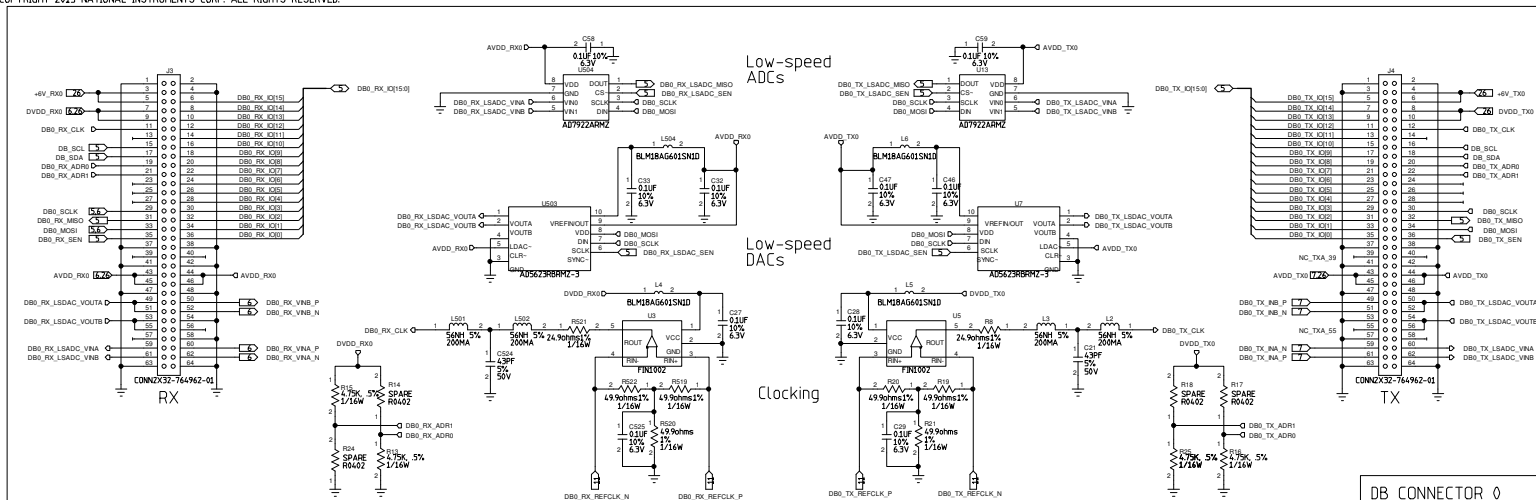
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SHEET 03 OF 28

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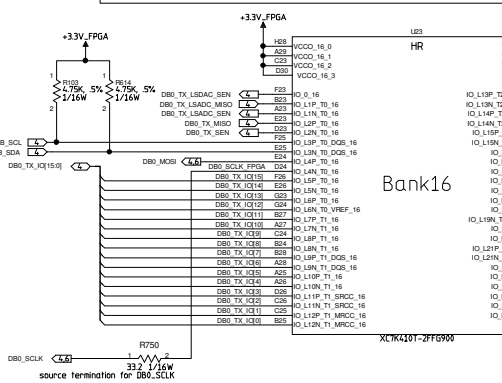
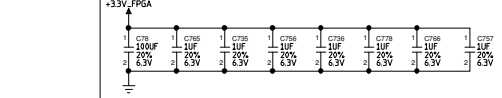
Daughterboard connectors and clocking			
USRP X3X0			
SIZE	CODE	IDENT NO.	DRAWING NO.
C	7U296	154574E-01	1
SCALE: NONE		SHEET 04 OF 28	

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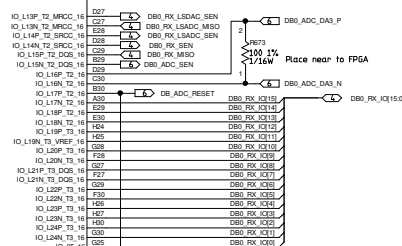
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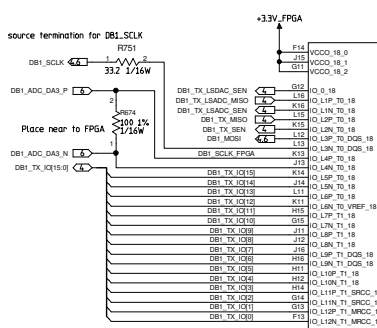
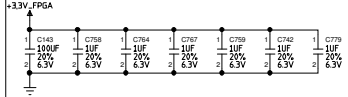
### BANK16 DECOUPLING CAPACITORS



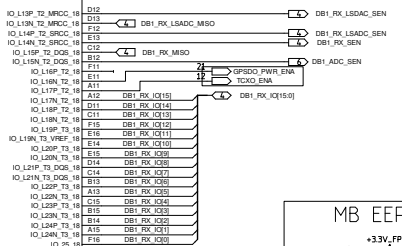
### Bank16



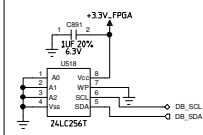
### BANK18 DECOUPLING CAPACITORS



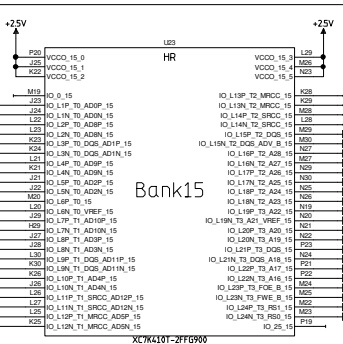
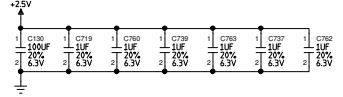
### Bank18



### MB EEPROM

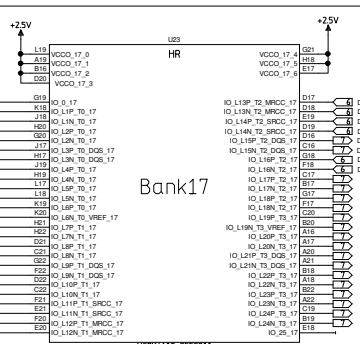
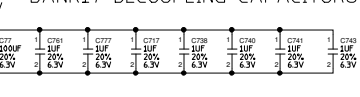


### BANK15 DECOUPLING CAPACITORS



### Bank15

### BANK17 DECOUPLING CAPACITORS



### Bank17

### Daughterboard interface, FPGA side

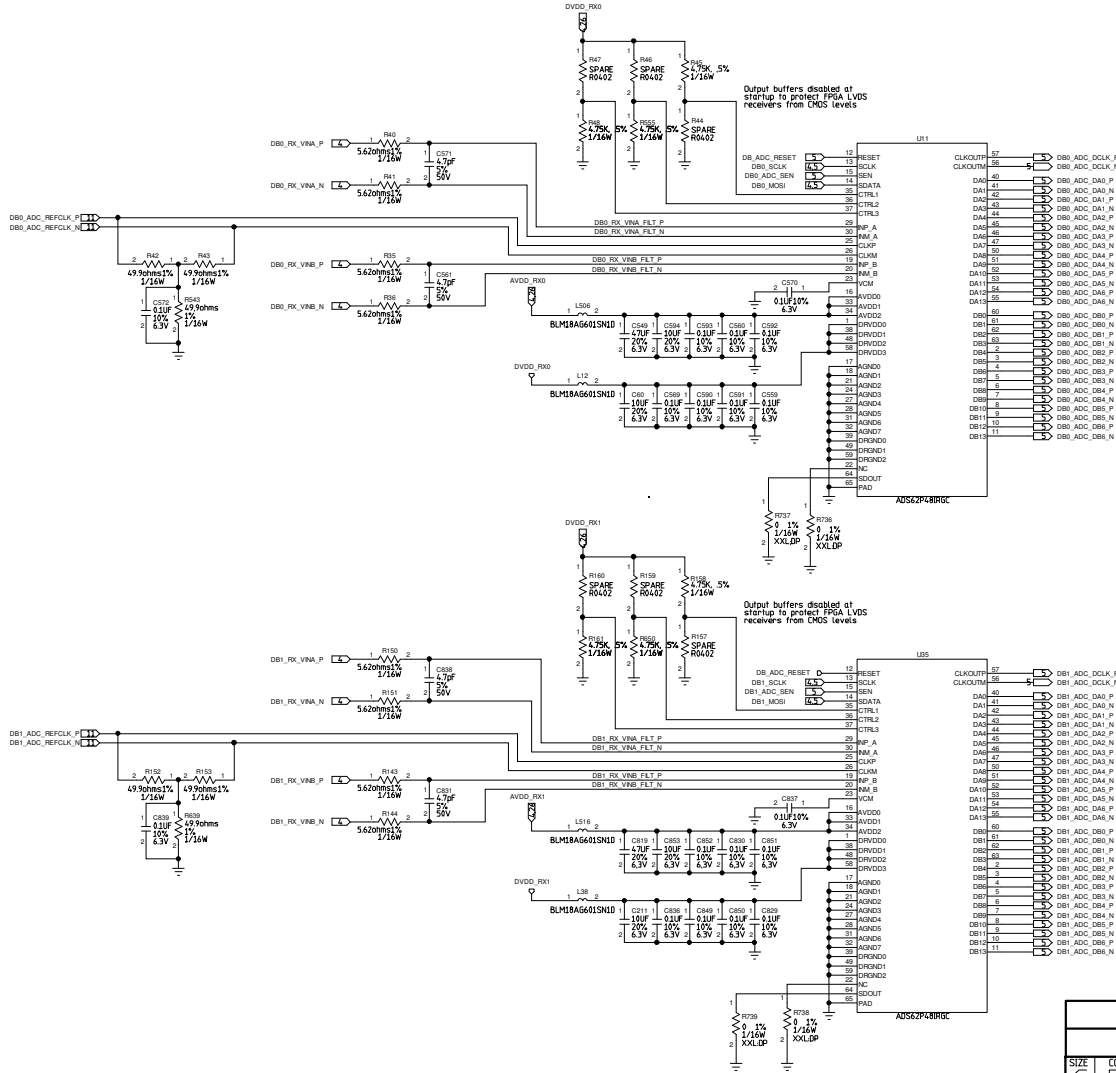
### USRP X3X0

SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	154574E-01	1
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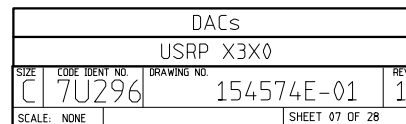
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ADCs			
USRP X3X0			
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C	7U296	154574E-01	1
SCALE: NONE		SHEET 06 OF 28	

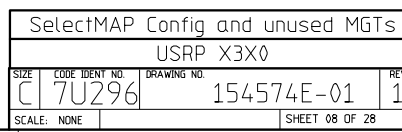
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Unused MGTs

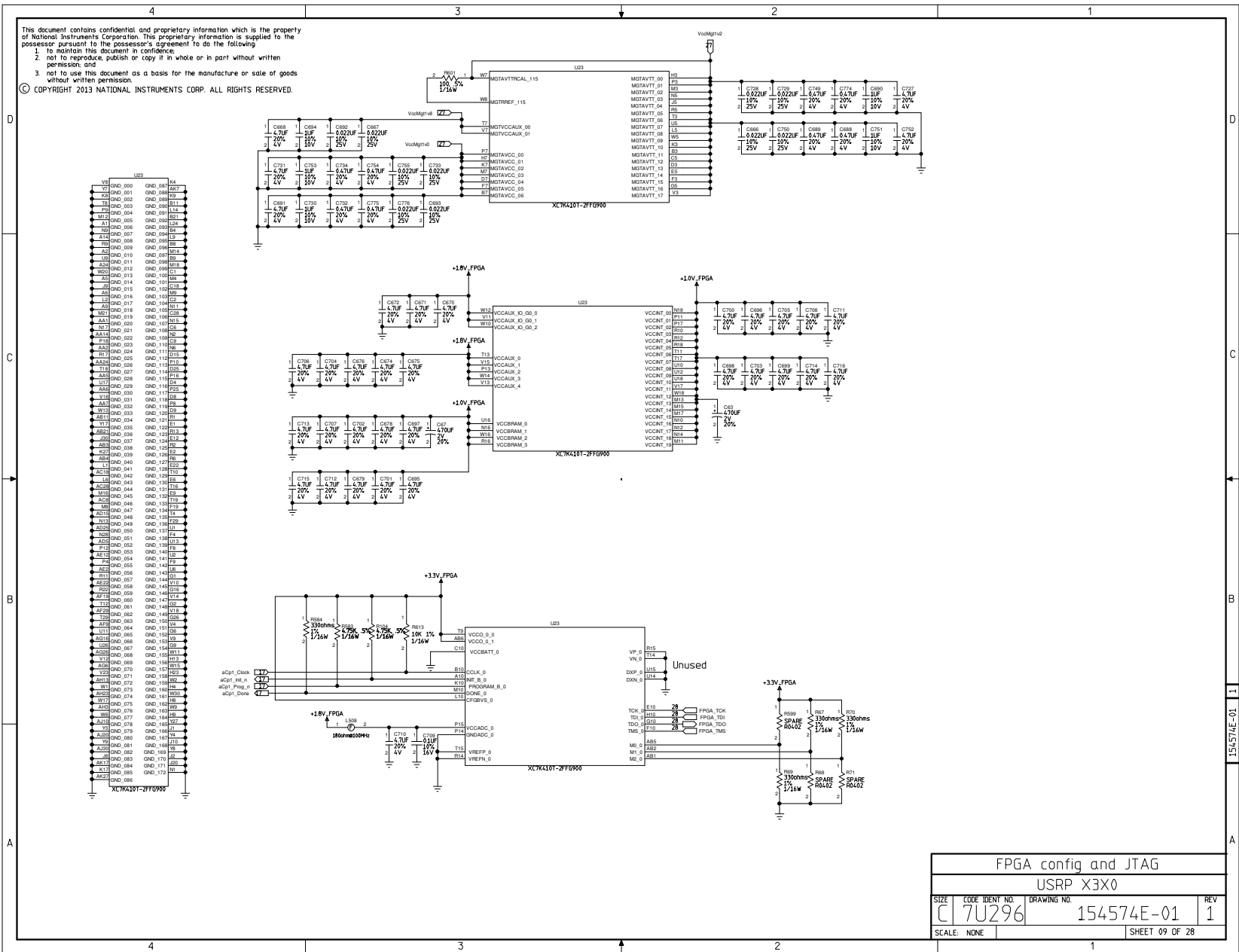




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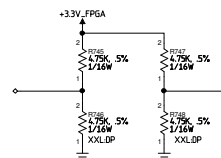
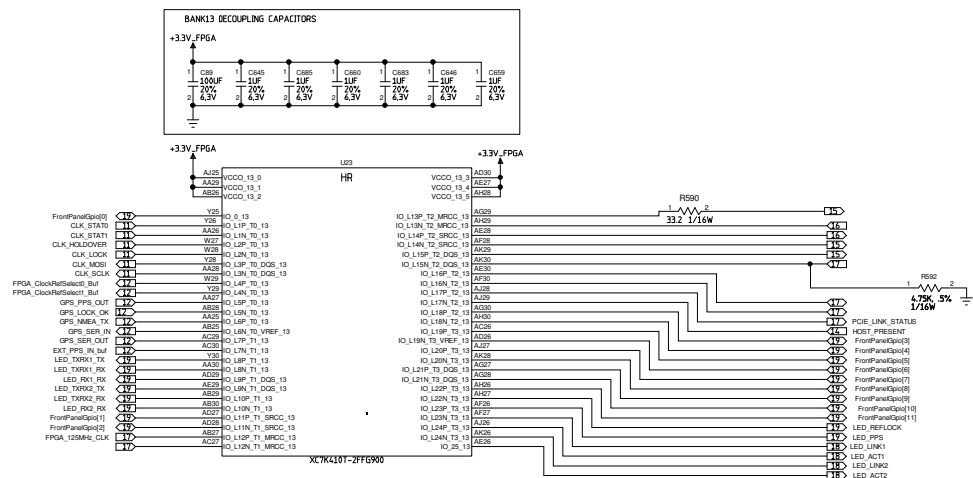


FPGA config and JTAG			
USRP X3X0			
SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	154574E-01	1
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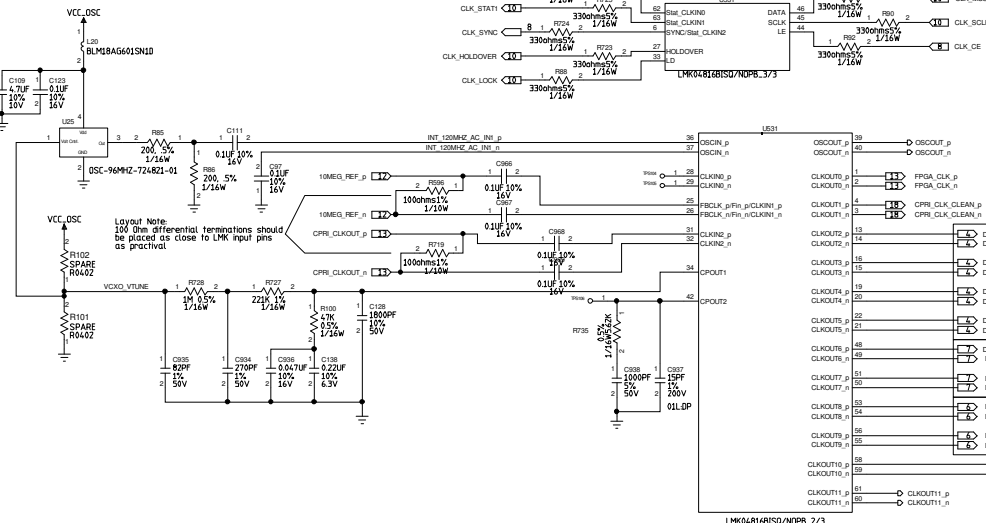
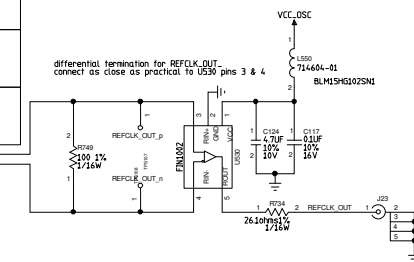
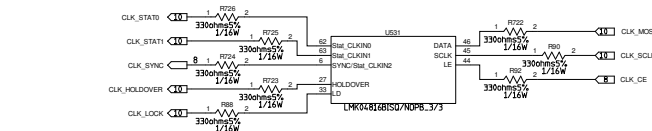
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FPGA misc GPIO, LEDs			
USRP X3X0			
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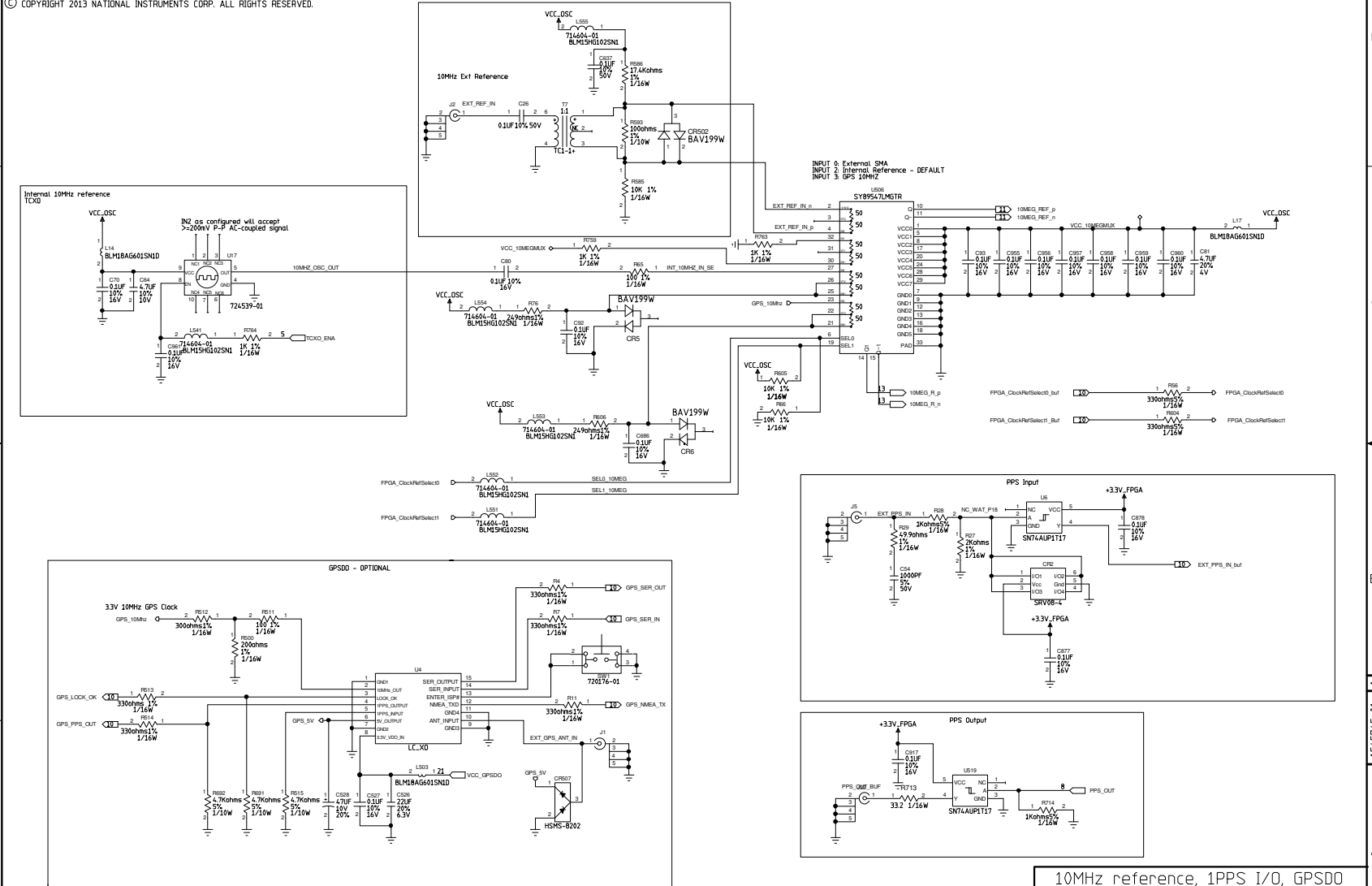


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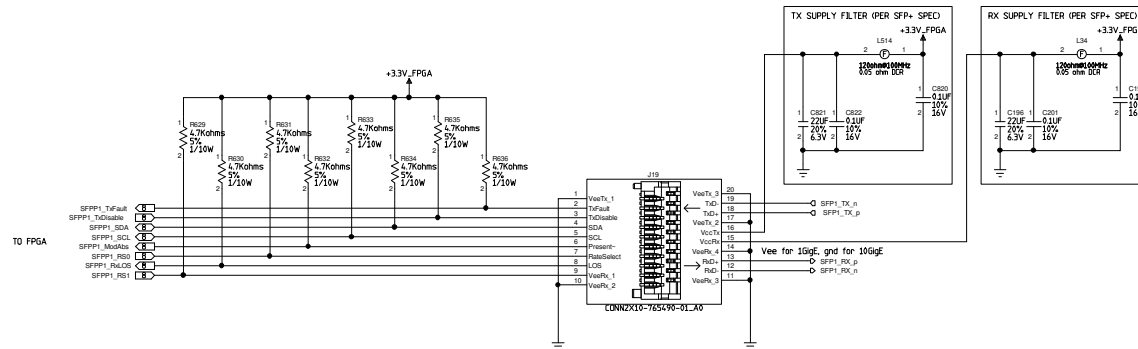


10MHz reference, 1PPS I/O, GPSDO			
USRP X3X0			
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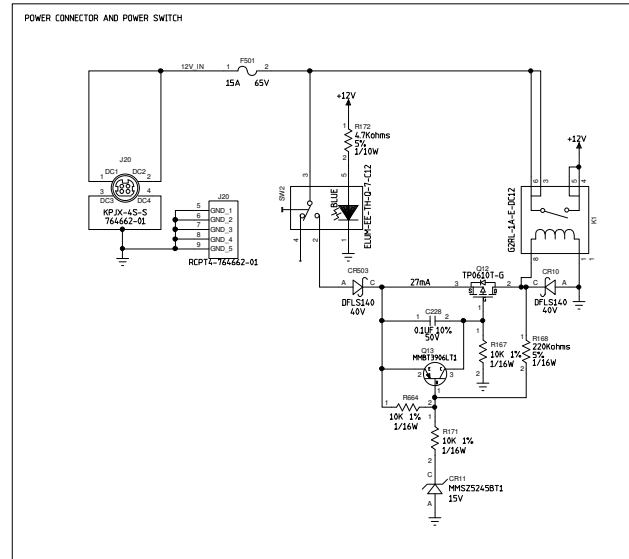
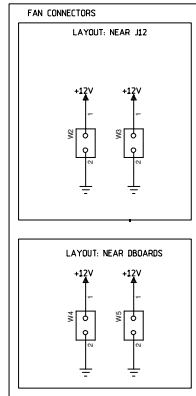
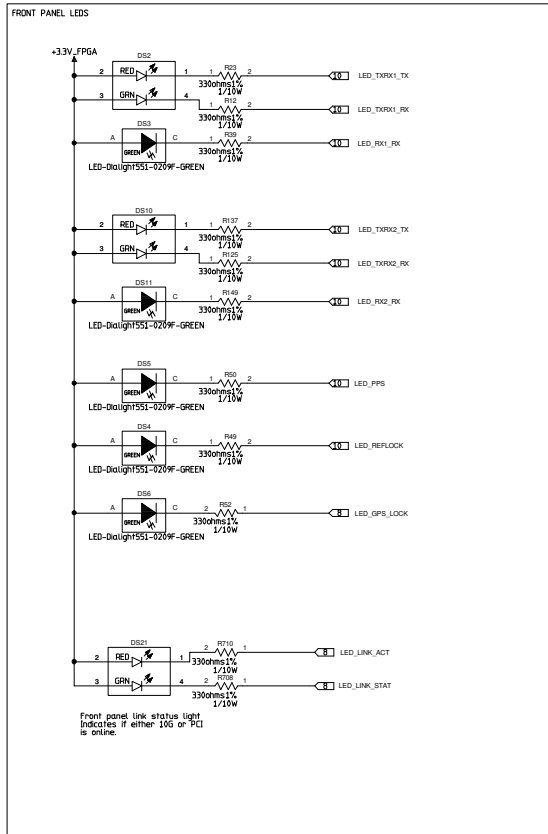
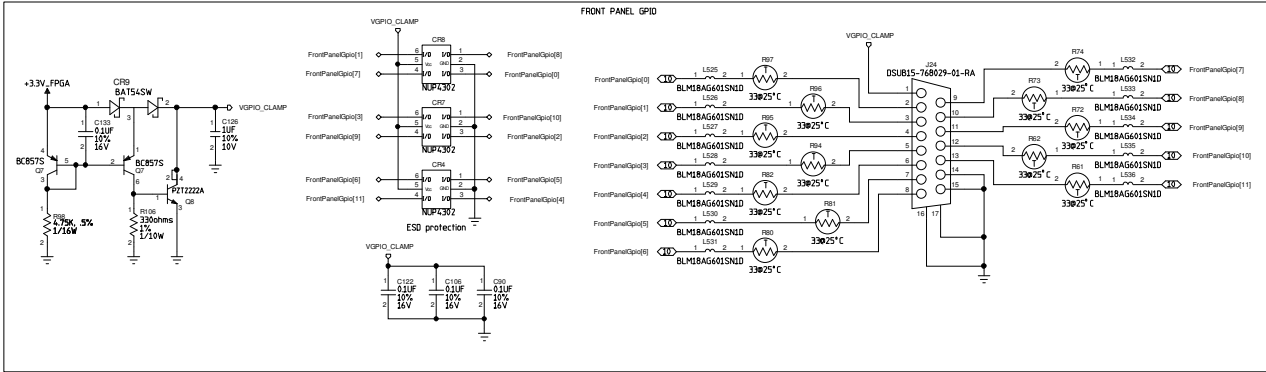
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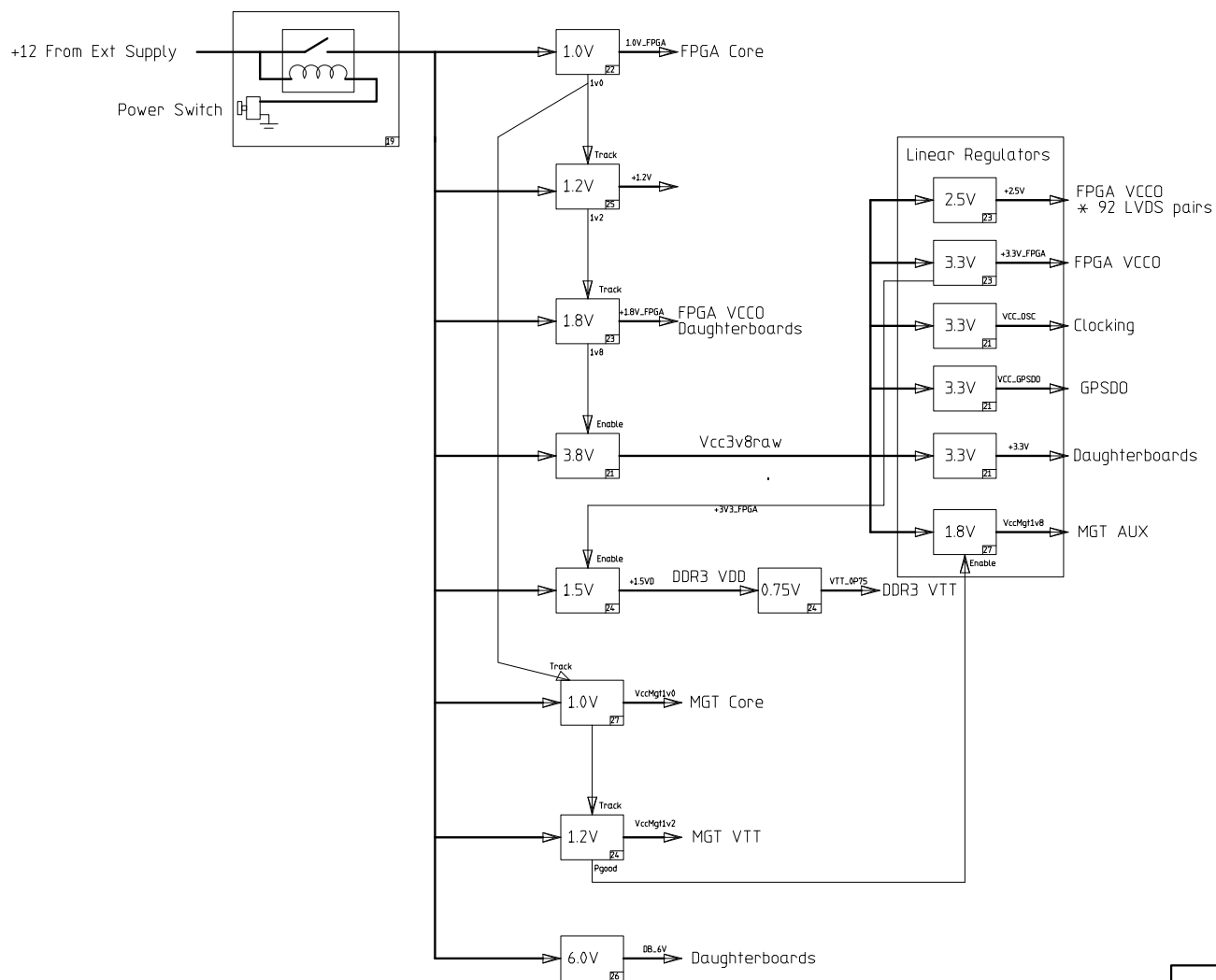


Front panel GPIO, LEDs, power switch			
USRP X3X0			
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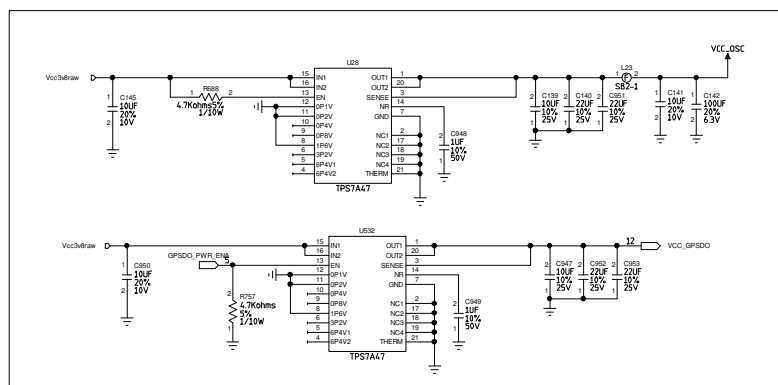
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Power supply diagram			
USRP X3X0			
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USRP X3X0

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C	7U296	154574E-01	1
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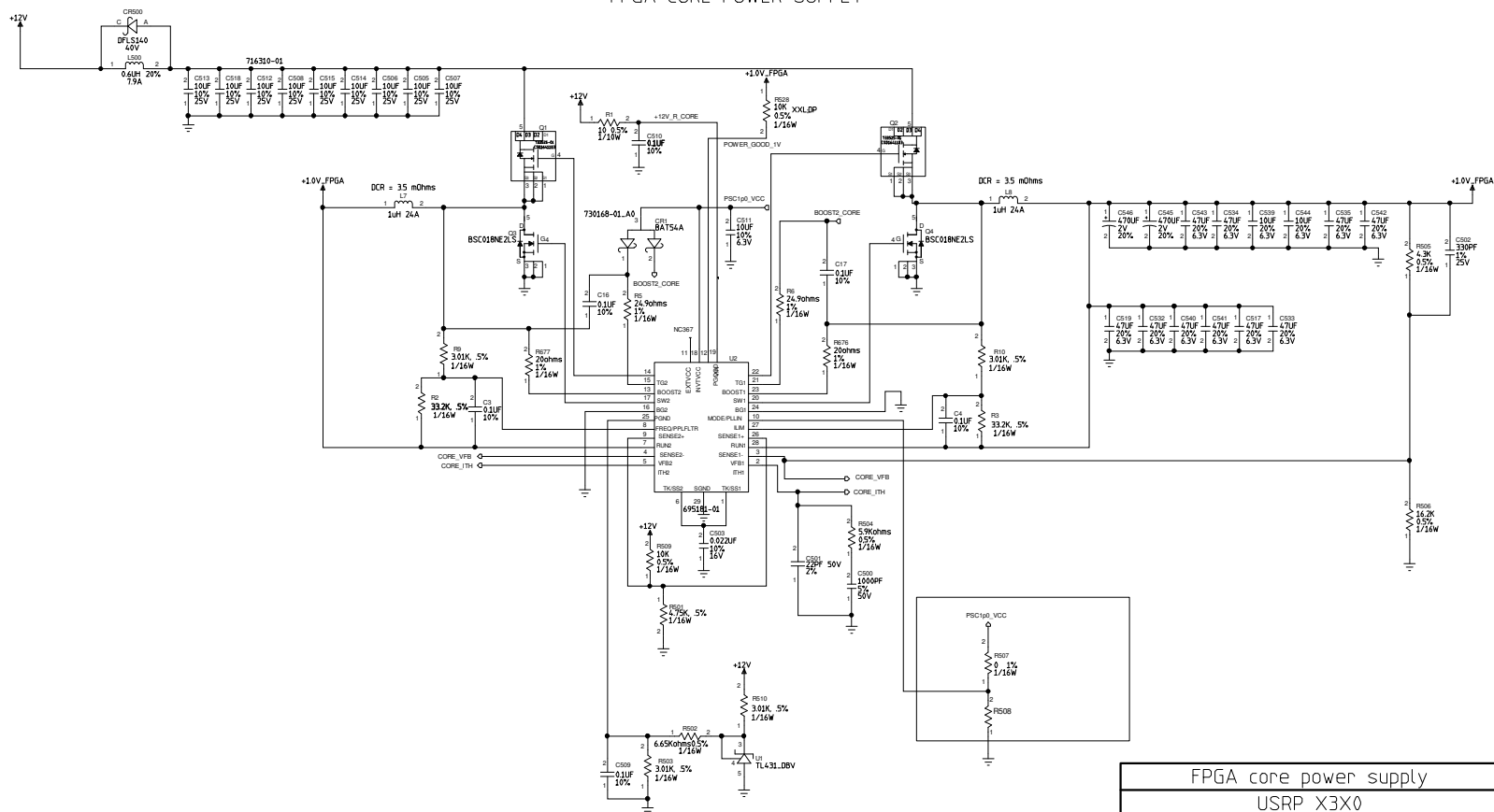


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# FPGA CORE POWER SUPPLY

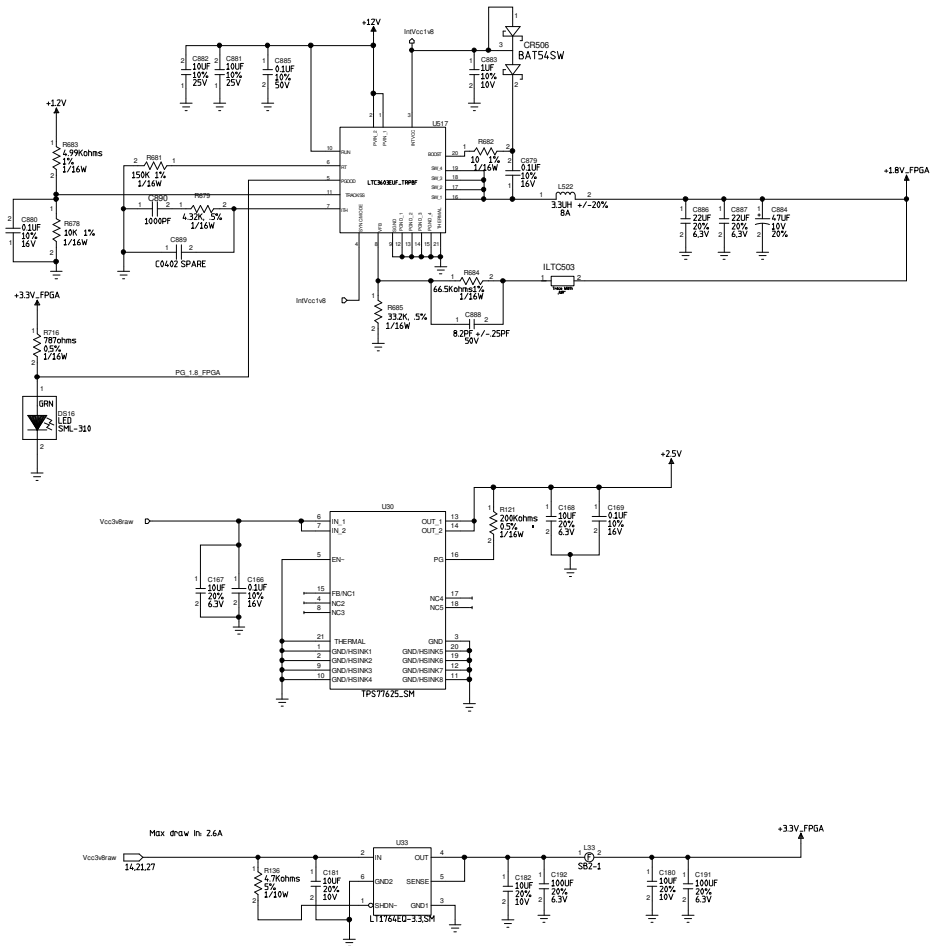


FPGA core power supply			
USRP X3X0			
SIZE	CODE IDENT NO.	DRAWING NO.	REV
C	7U296	154574E-01	1
SCALE: NONE		SHEET 22 OF 28	

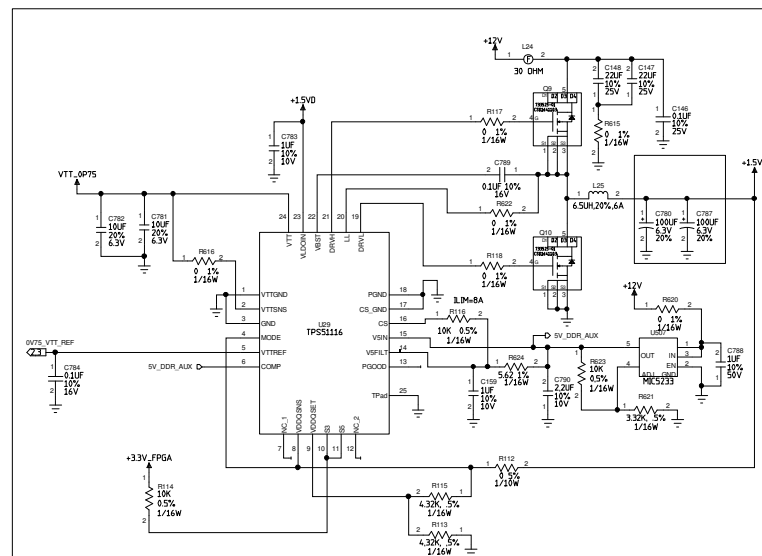
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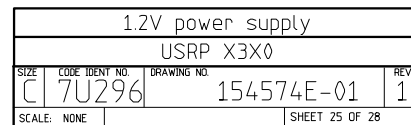
USRP X3X0

SIZE C	CODE IDENT NO. 7U296	DRAWING NO. 154574E-01	REV. 1
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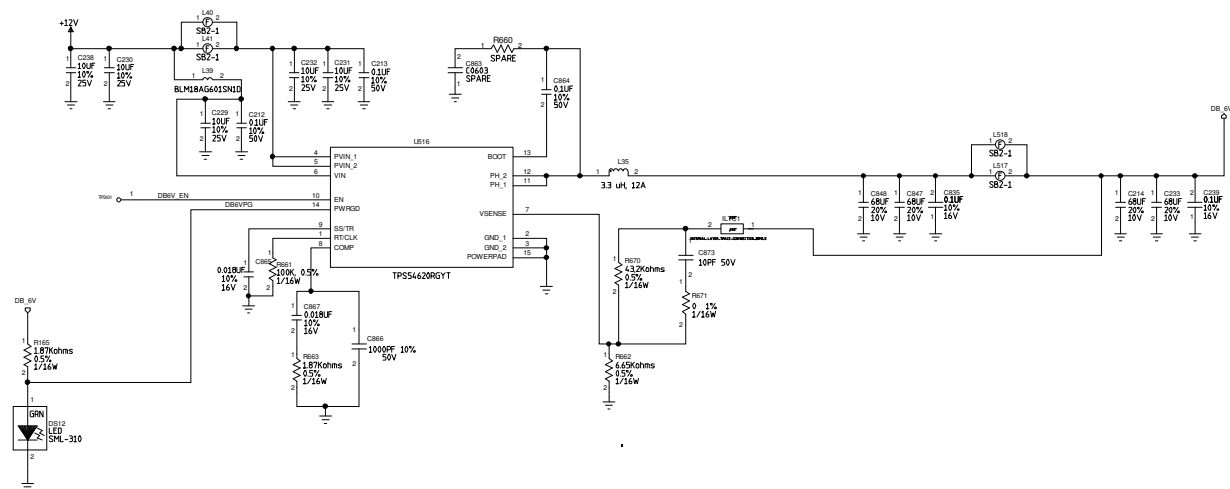
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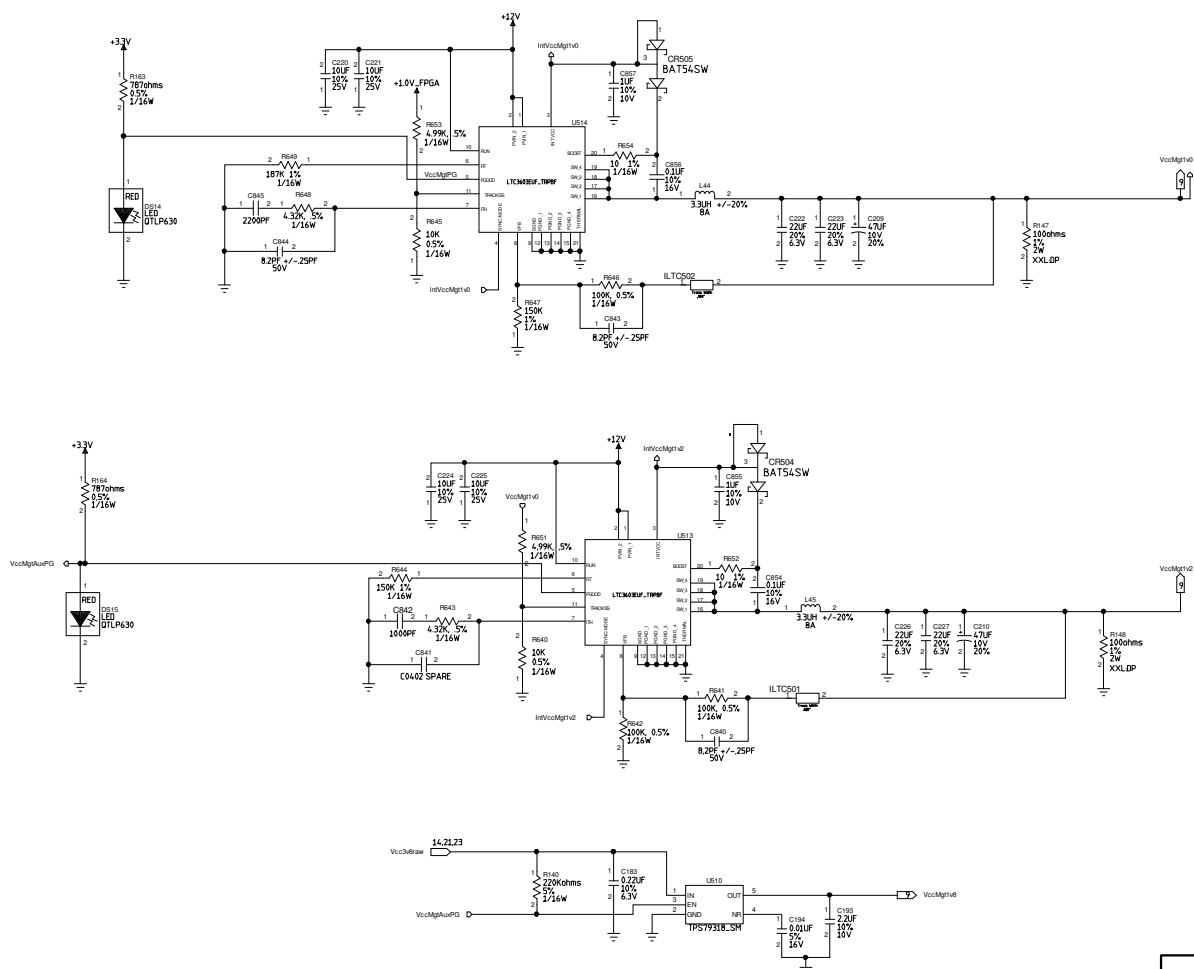
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