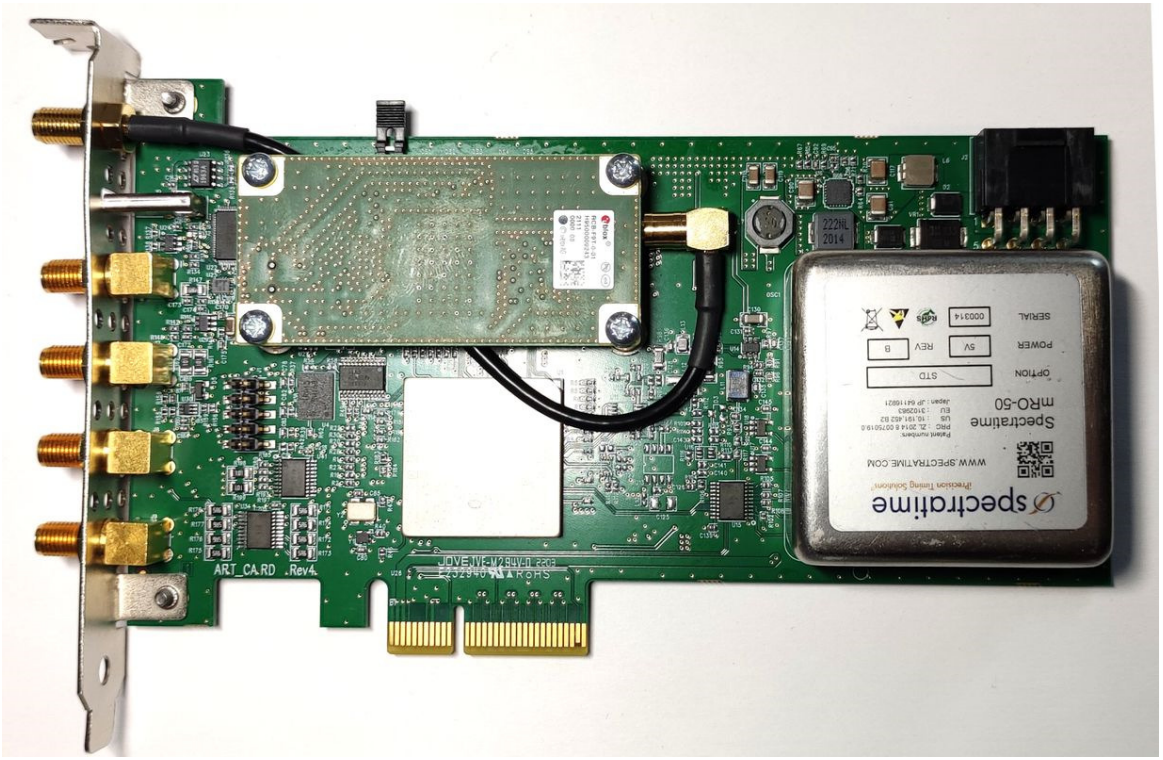

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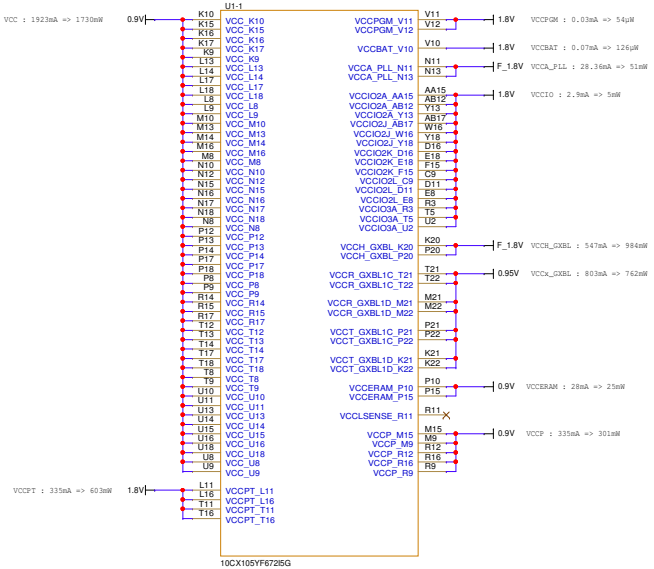
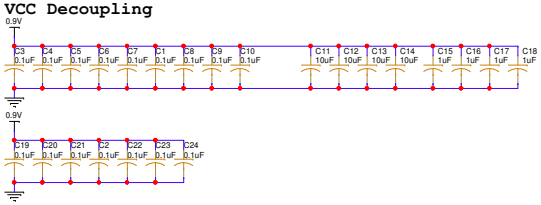
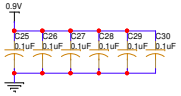
FPGA POWER SUPPLY



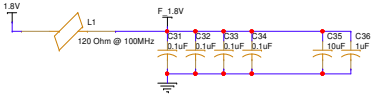
VCC Decoupling



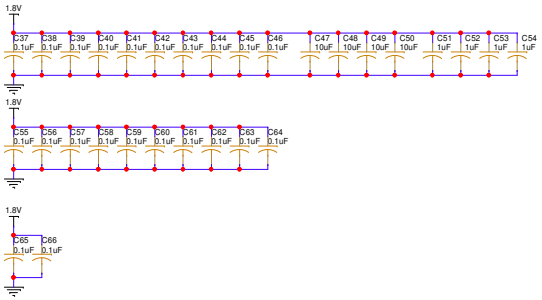
VCCP and VCCERAM Decoupling



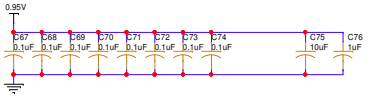
VCCA_PLL and VCCH_GXBL Decoupling

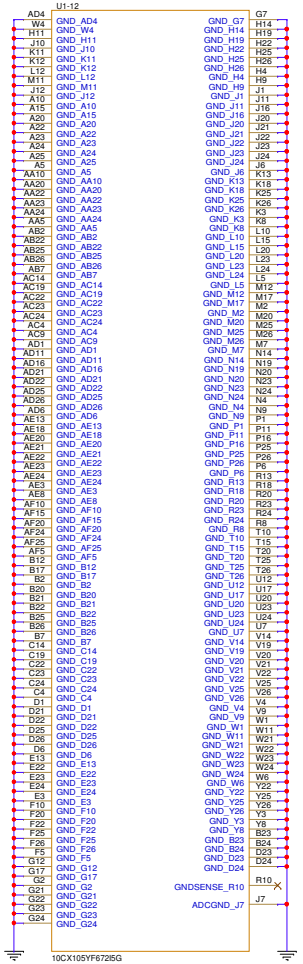


VCCPT, VCCPGM, VCCBAT and VCCIO Decoupling



VCCR/VCCT Decoupling





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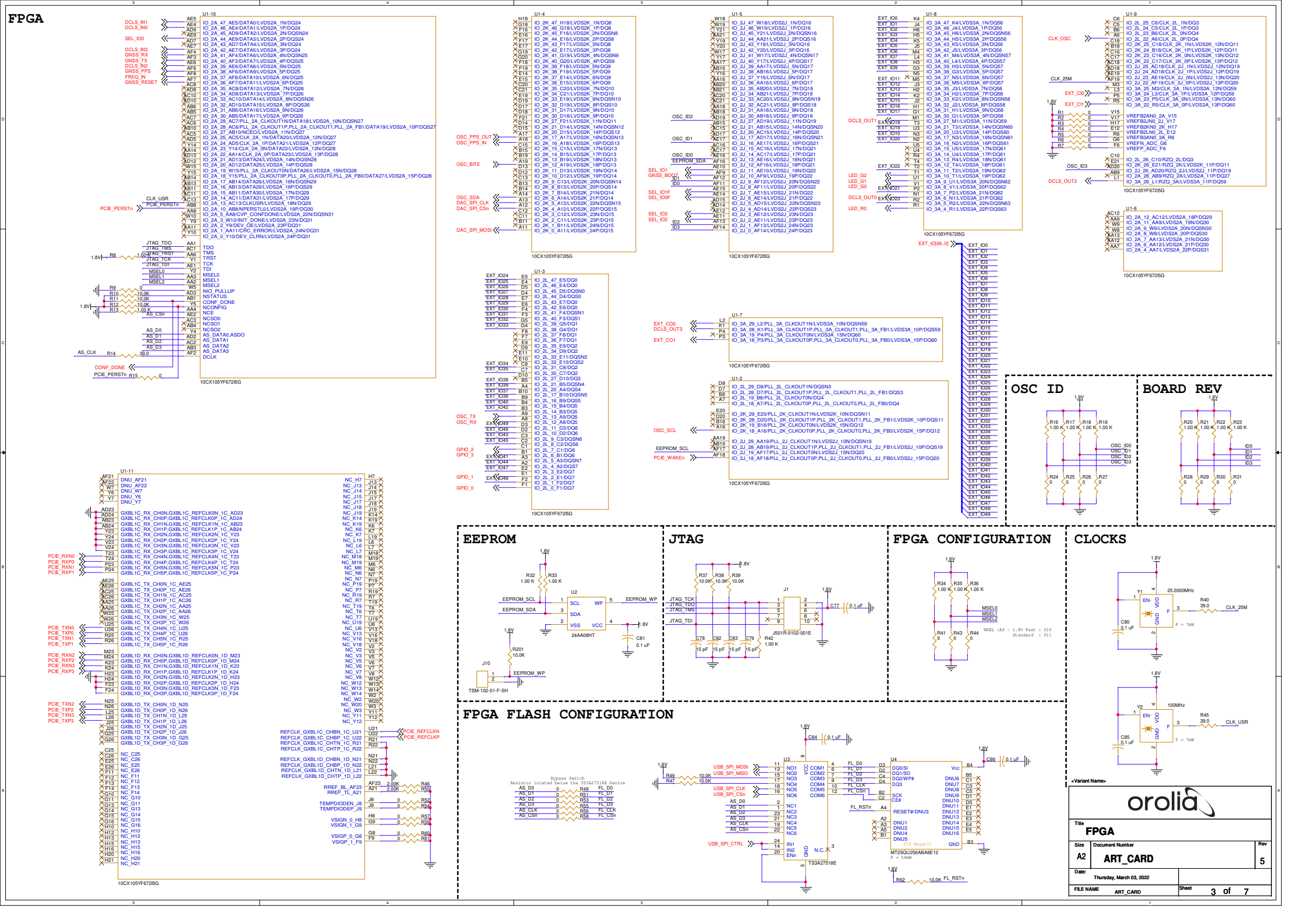
FPGA
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U1-4
10CX105YF672I5G
U1-5
10CX105YF672I5G
U1-8
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U1-9
10CX105YF672I5G
U1-6
10CX105YF672I5G
U1-3
10CX105YF672I5G
U1-7
10CX105YF672I5G
U1-2
10CX105YF672I5G
U1-11
10CX105YF672I5G
OSC ID
BOARD REV
EEPROM
JTAG
FPGA CONFIGURATION
CLOCKS
FPGA FLASH CONFIGURATION
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FPGA
Size
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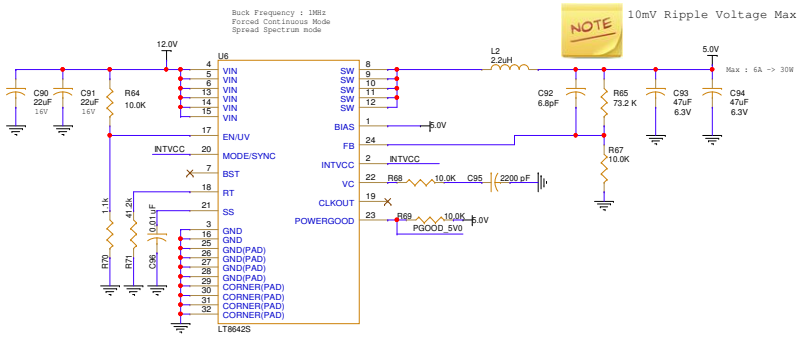
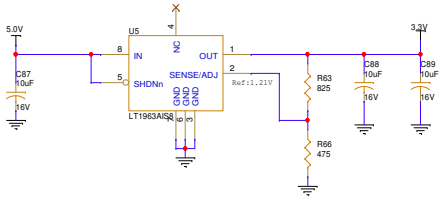
```
POWER NEED  : FPGA : OCXO : Comp : TOTAL
on 12V      :      : 7500 :      : 7500 mW
On 11V_ANA  :      :      :   80 :   80 mW
On 5.0V     :      :      :  350 :  350 mW
On 3.3V     :      :      :  243 :  243 mW
On 1.8V     : 1643 :      :   61 : 1704 mW
On 0.95V    :  762 :      :      :  762 mW
On 0.9V     : 2056 :      :      : 2056 mW
                                  -> 12695 mW
```

12V to 5V Switch Converter

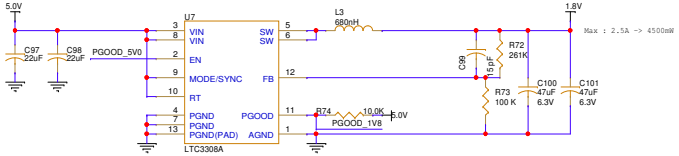


5V to 3.3V LDO Converter

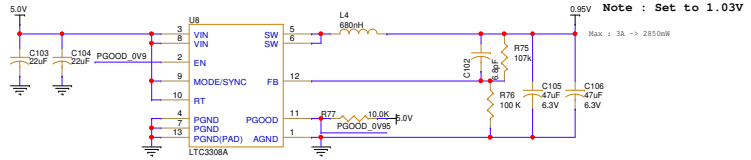


Output : 3.3V
MAX : 0.33A / 1.1W @ Tamb = 85°C
MAX : 0.55A / 1.8W @ Tamb = 60°C

5V to 1.8V Switch Converter

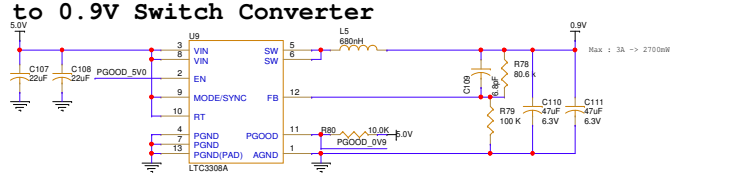


5V to 0.95V Switch Converter

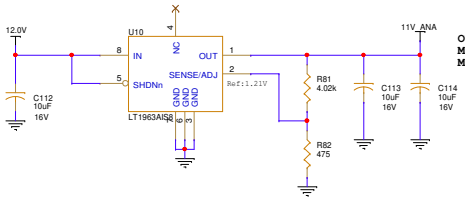


Note : Set to 1.03V

5V to 0.9V Switch Converter

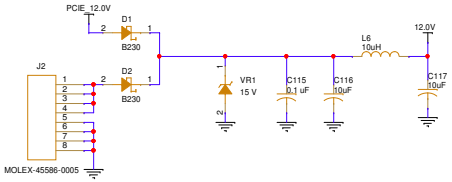


ANALOG POWER SUPPLY



OUTPUT : 11.45V
MAX : 1.03A / 11.86W @ Tamb = 85°C
MAX : 1.5A / 17.17W @ Tamb = 60°C

POWER CONNECTOR



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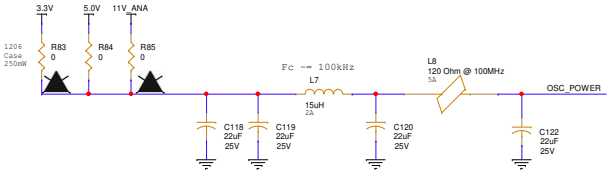
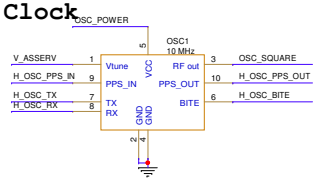
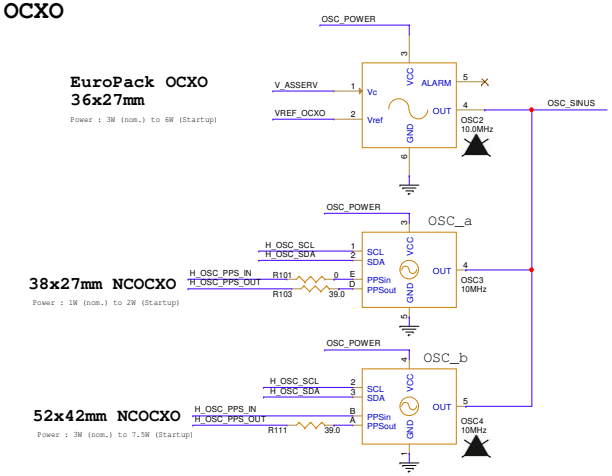
OSCILLATOR POWER SUPPLY



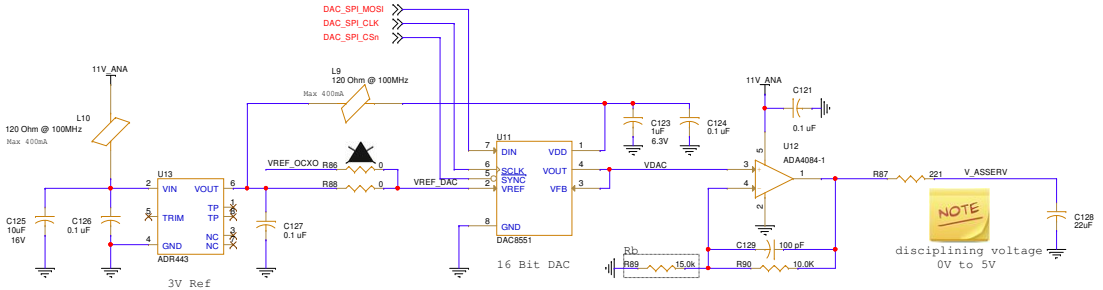
MiniRubidium
Miniature Atomic Clock



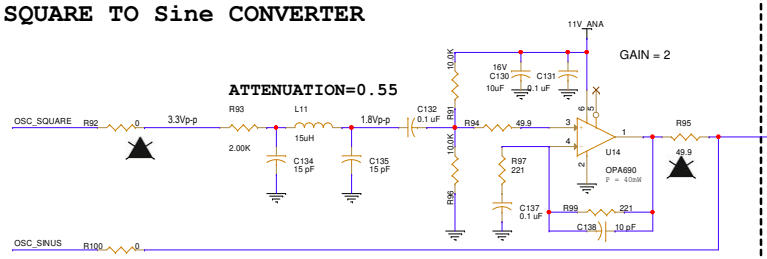
OCXO



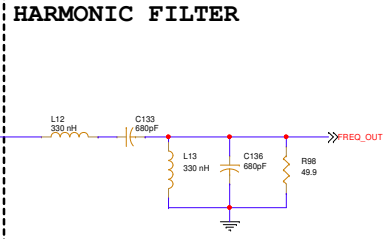
OSCILLATOR CONTROL VOLTAGE



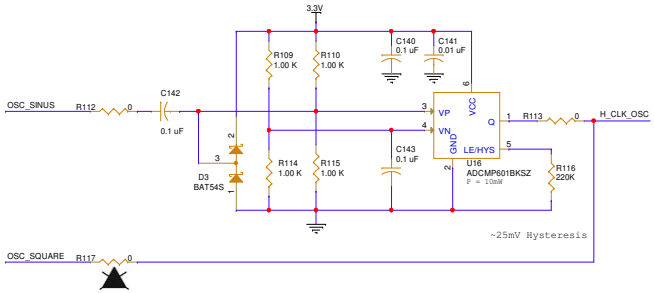
SQUARE TO Sine CONVERTER



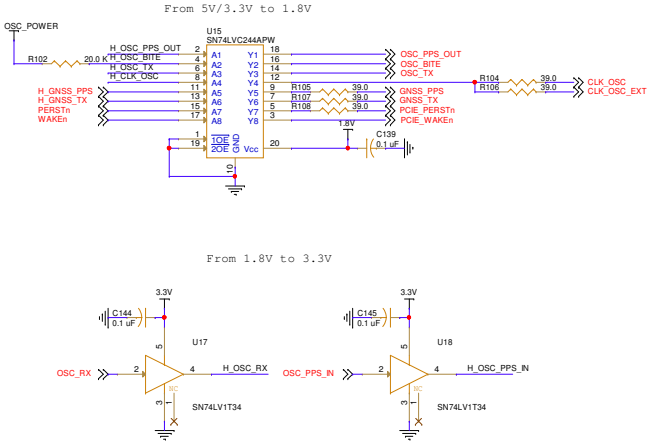
HARMONIC FILTER



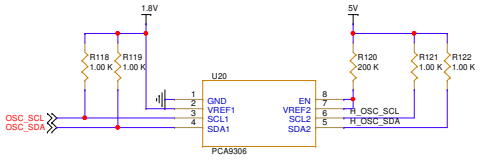
SINUS TO SQUARE CONVERTER



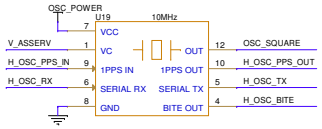
LOGIC VOLTAGE-LEVEL TRANSLATOR



I2C VOLTAGE-LEVEL TRANSLATOR



Chip Scale Atomic Clock



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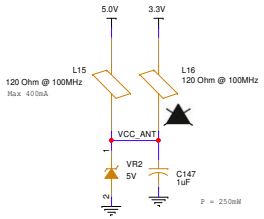
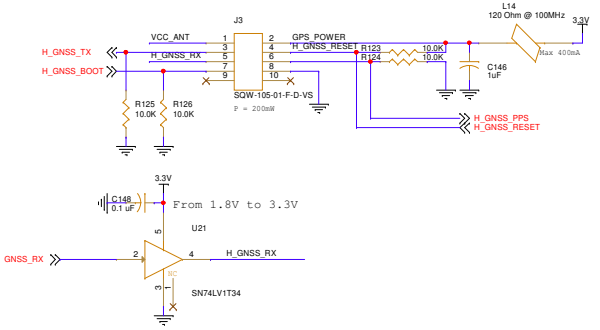
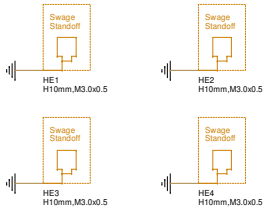
ANTENNA POWER SUPPLY



GNSS RECEIVER

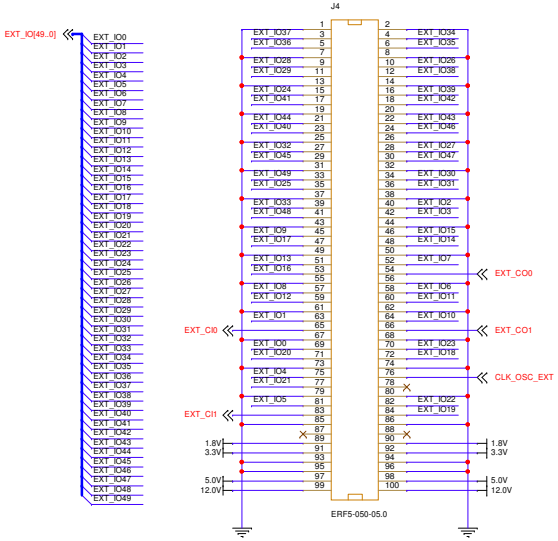


GNSS STANDOFF



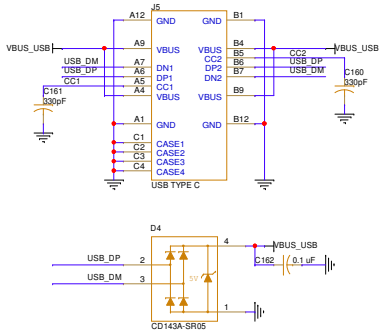
BRACKET HOLES

EXTENSION CONNECTOR

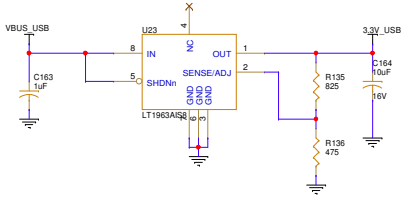


USB-C CONNECTOR

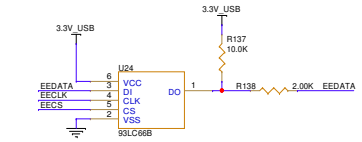
Support USB2.0



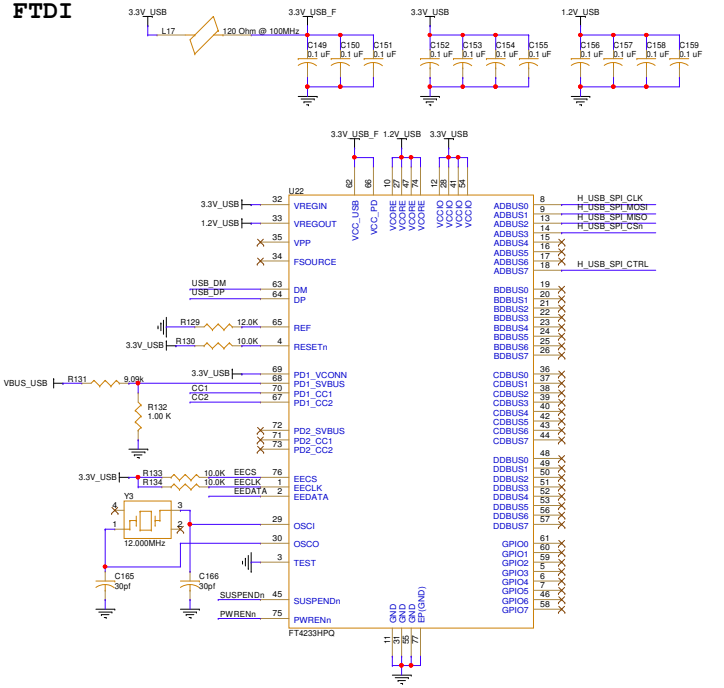
USB SELF-POWERED



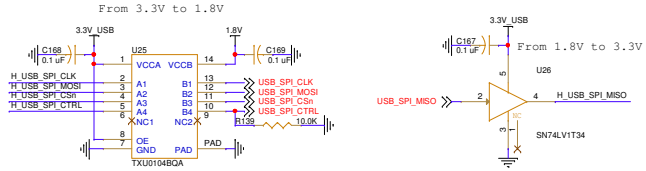
EEPROM FTDI



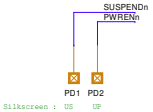
EEPROM FTDI



SPI VOLTAGE-LEVEL TRANSLATOR



TEST POINTS



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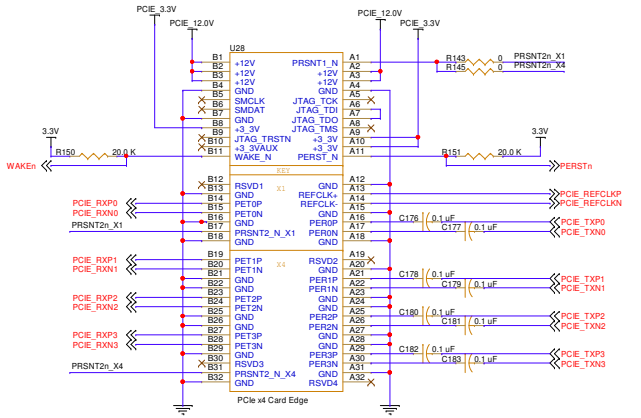
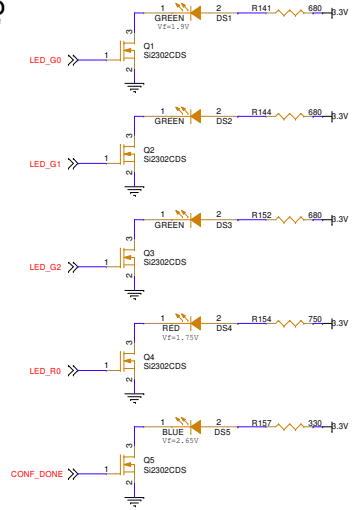
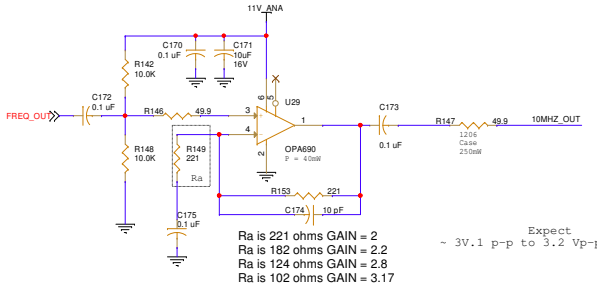
PCIe CONNECTOR



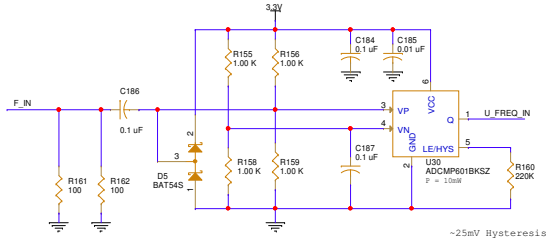
LED



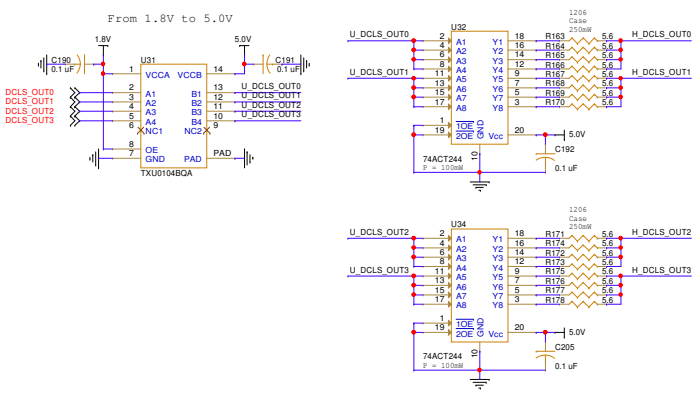
FREQ OUTPUT DRIVER

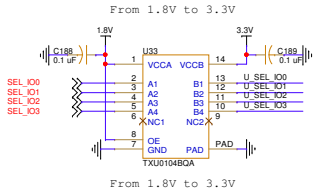


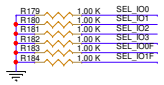
FREQUENCY INPUT



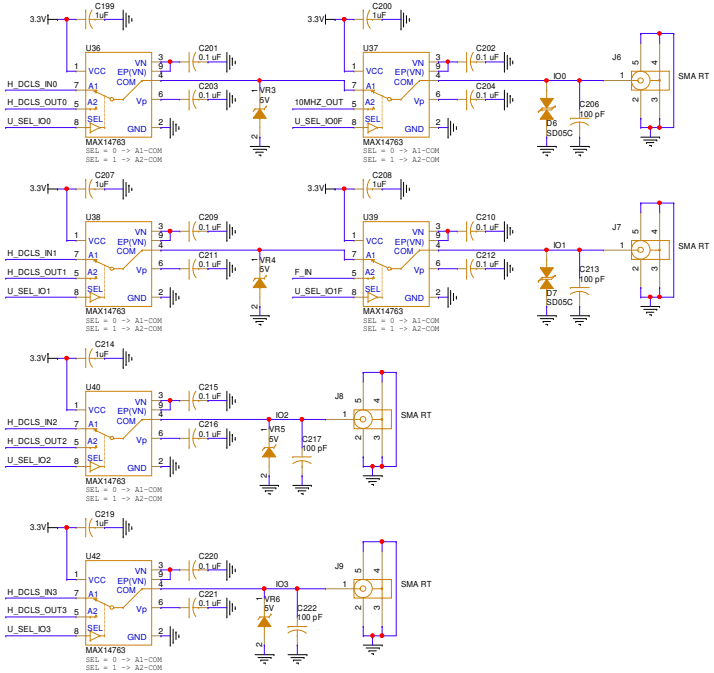
DCLS OUTPUT DRIVER



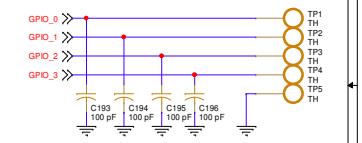




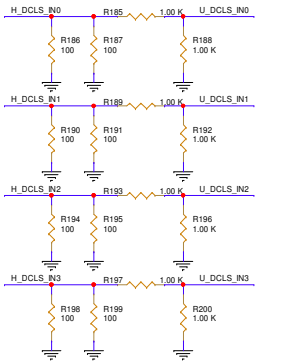
IO CONNECTORS / SWITCH

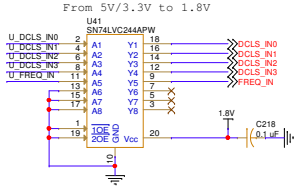


GPIO

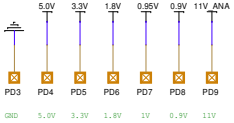


DCLS INPUT DRIVER





TEST POINTS



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Title	CONNECTORS	
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