
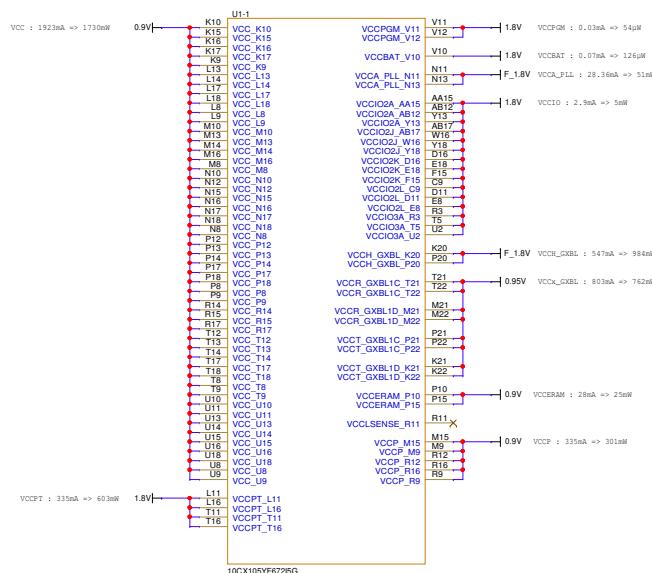


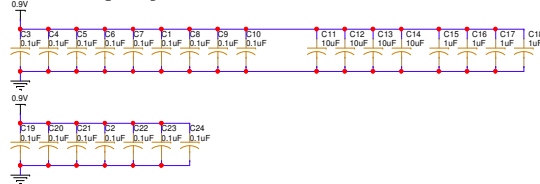
<Variant Name>

		
Title		
OVERVIEW		
Size	Document Number	Rev
A2	ART_CARD	4
Date:		
Wednesday, November 17, 2021		
FILE NAME	ART_CARD	Sheet 1 of 7

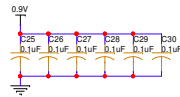
FPGA POWER SUPPLY



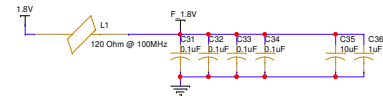
VCC Decoupling



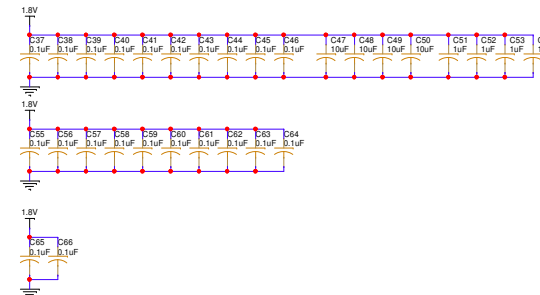
VCCP and VCCERAM Decoupling



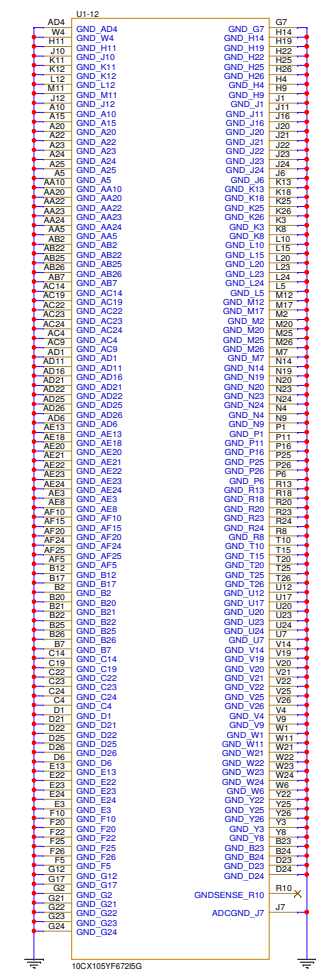
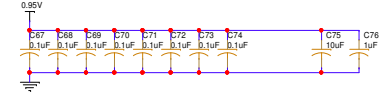
VCCA_PLL and VCCX_GXBL Decoupling



VCCPT, VCCPGM, VCCBAT and VCCIO Decoupling



VCCR/VCCPT Decoupling



<Variant Name>

orolia

Title		
FPGA POWER		
Size	Document Number	Rev
A2	ART_CARD	4
Date:	Thursday, October 21, 2021	
FILE NAME	ART_CARD	Sheet 2 of 7

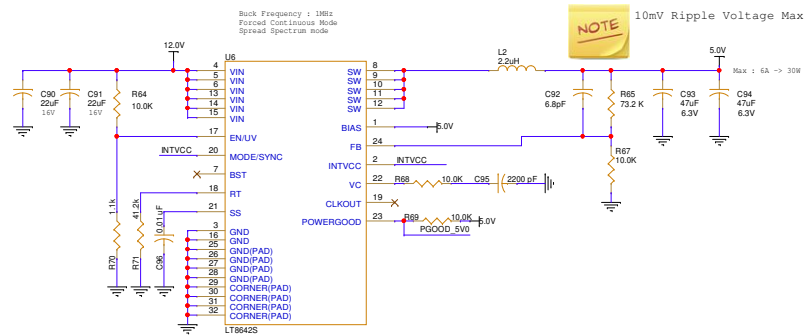
The diagram illustrates the internal architecture and pin connections of an FPGA-based board. Key components and sections include:

- FPGA:** The central component, with a detailed pinout table listing signals like DCLN_N1, DCLN_N0, SEL_I00, DCLN_N3, and various control signals.
- EEPROM:** A section showing the connection of an EEPROM chip to the FPGA via I2C or SPI.
- JTAG:** A section showing the connection of a JTAG debugger to the FPGA.
- FPGA CONFIGURATION:** A section showing the connection of an FPGA configuration chip to the FPGA.
- CLOCKS:** A section showing the connection of a clock source to the FPGA.
- FPGA FLASH CONFIGURATION:** A section showing the connection of an FPGA flash chip to the FPGA.

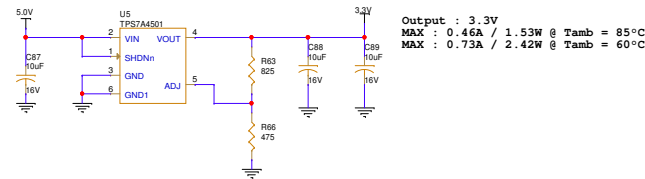
The diagram also includes a large table of pin connections, listing signals like DCLN_N1, DCLN_N0, SEL_I00, DCLN_N3, and various control signals. It also includes a detailed component list, listing components like the FPGA chip, memory, and peripheral devices.

POWER NEED :	FPGA :	OCXO :	Comp :	TOTAL
on 12V :	:	7500 :	:	7500 m
On 11V_ANA :	:	:	80 :	80 m
On 5.0V :	:	:	350 :	350 m
On 3.3V :	:	:	243 :	243 m
On 1.8V :	1643 :	:	61 :	1704 m
On 0.95V :	762 :	:	:	762 m
On 0.9V :	2056 :	:	:	2056 m
				-> 12695 m

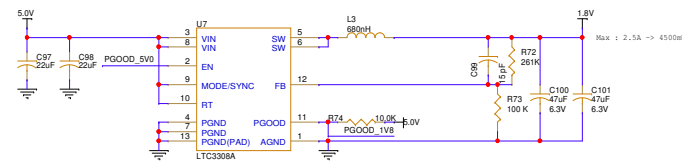
12V to 5V Switch Converter



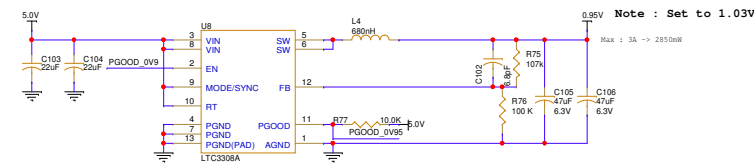
5V to 3.3V LDO Converter



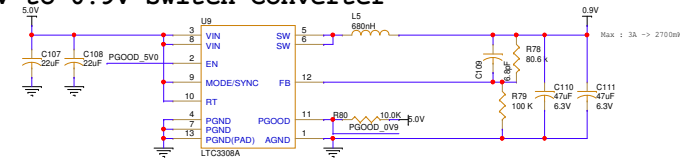
5V to 1.8V Switch Converter



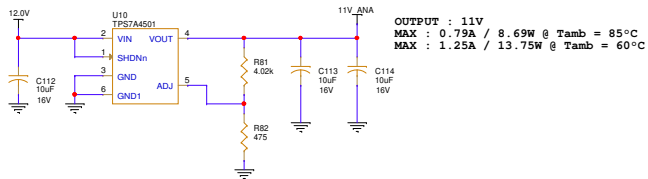
5V to 0.95V Switch Converter



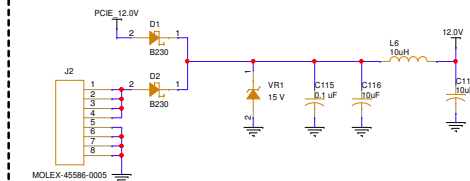
5V to 0.9V Switch Converter



ANALOG POWER SUPPLY



POWER CONNECTOR



<Variant Name>



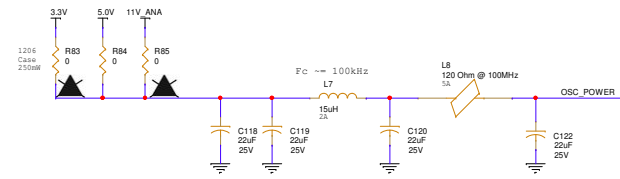
Title
POWER SUPPLY

Size	Document Number
A2	ART_CARD

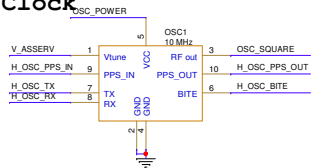
Date: Thursday, October 21, 2021

Sheet 4 of 7

OSCILLATOR POWER SUPPLY

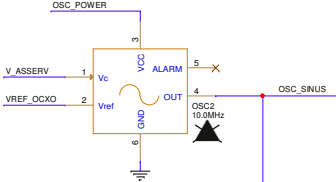


MiniRubidium
Miniature Atomic Clock

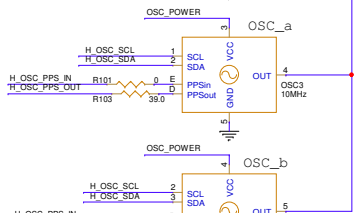


OCXO

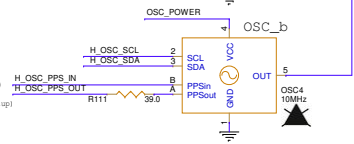
EuroPack OCXO
36x27mm
Power : 3W (nom.) to 6W (Startup)



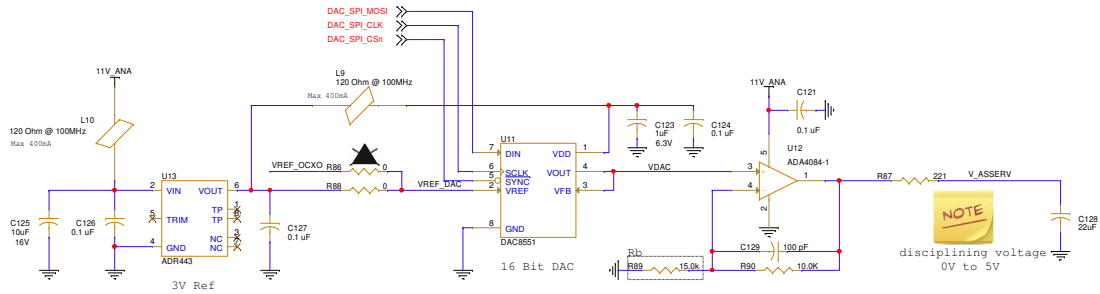
38x27mm NCOCXO
Power : 1W (nom.) to 2W (Startup)



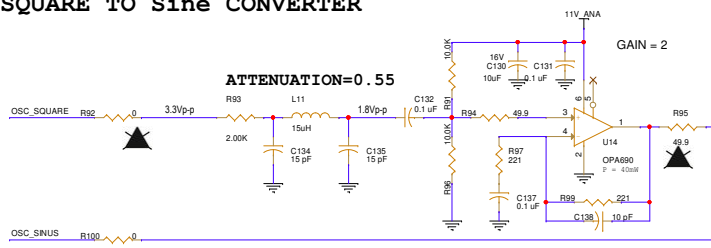
52x42mm NCOCXO
Power : 3W (nom.) to 7.5W (Startup)



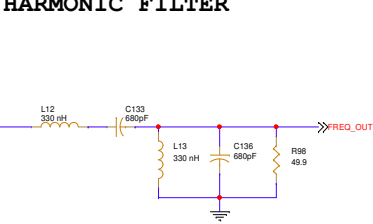
OSCILLATOR CONTROL VOLTAGE



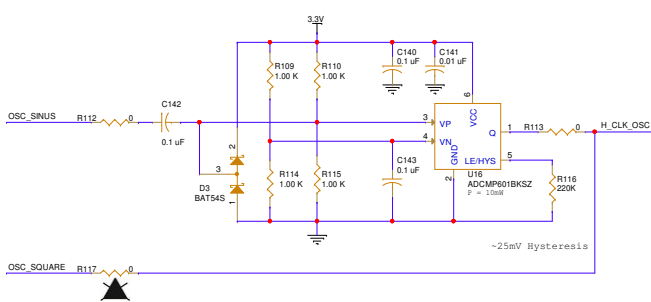
SQUARE TO Sine CONVERTER



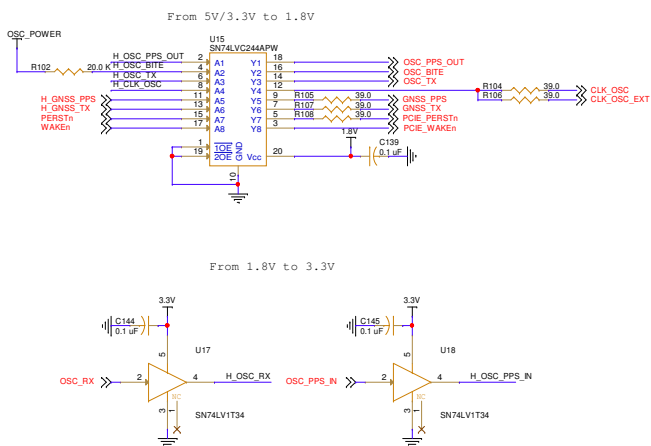
HARMONIC FILTER



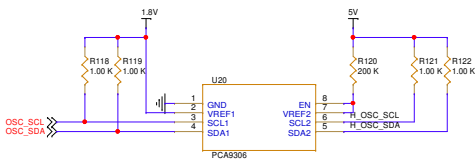
SINUS TO SQUARE CONVERTER



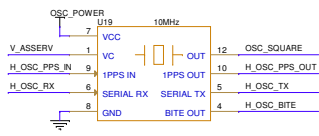
LOGIC VOLTAGE-LEVEL TRANSLATOR



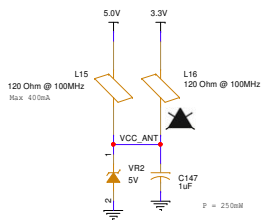
I2C VOLTAGE-LEVEL TRANSLATOR



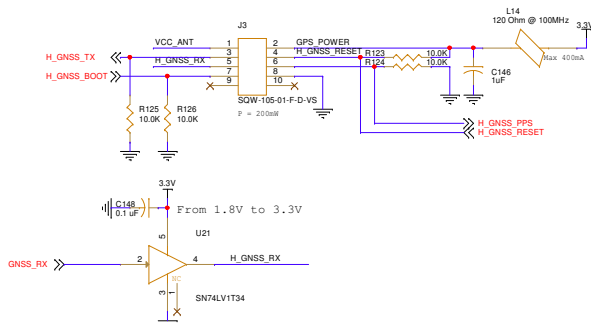
Chip Scale Atomic Clock



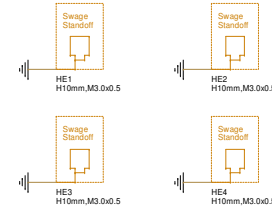
ANTENNA POWER SUPPLY



GNSS RECEIVER



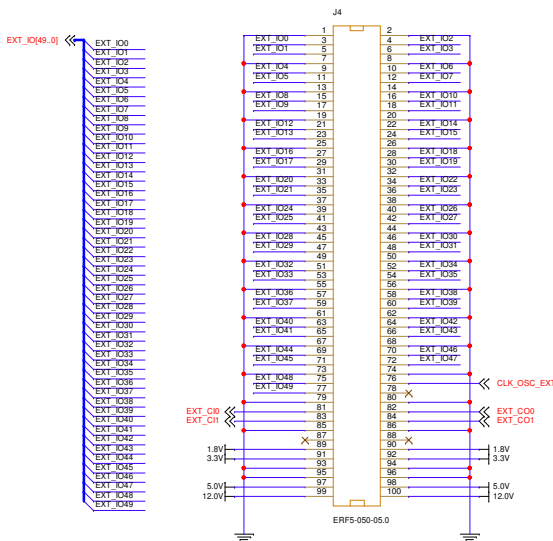
GNSS STANDOFF



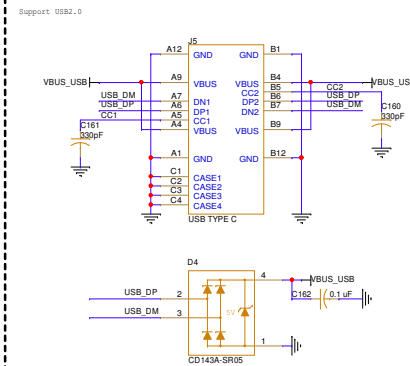
BRACKET HOLES



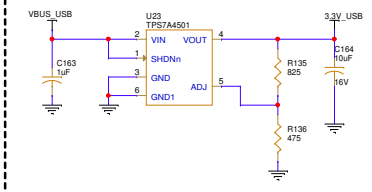
EXTENSION CONNECTOR



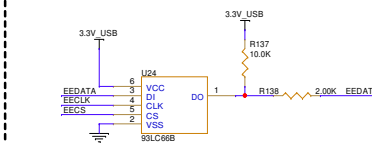
USB-C CONNECTOR



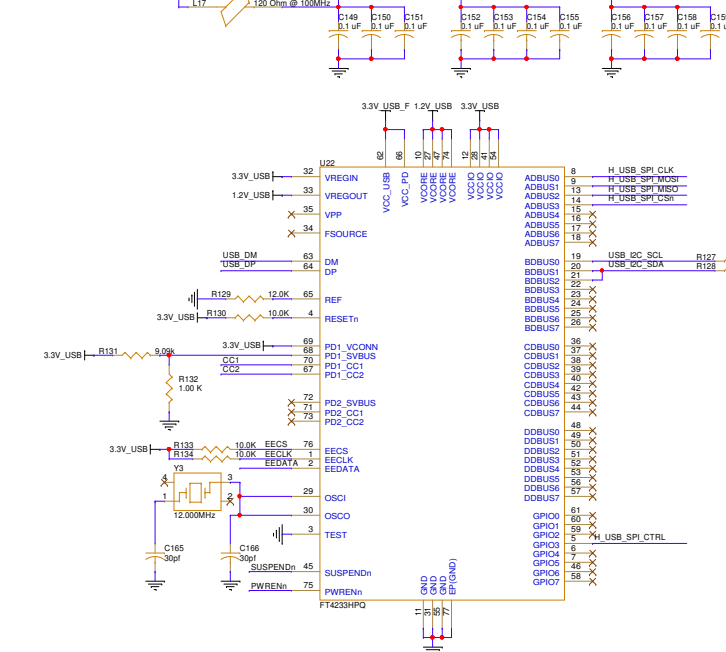
USB SELF-POWERED



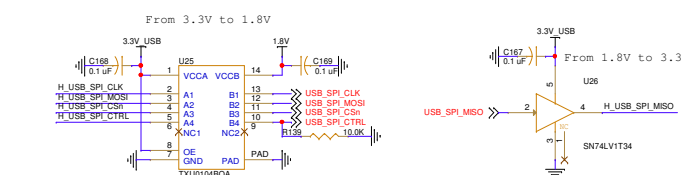
EEPROM FTDI



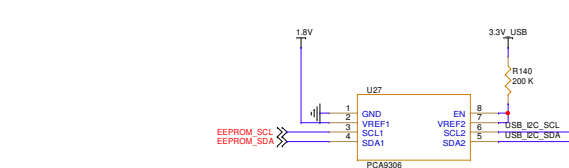
EEPROM FTDI



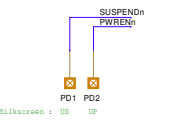
SPI VOLTAGE-LEVEL TRANSLATOR



I2C VOLTAGE-LEVEL TRANSLATOR

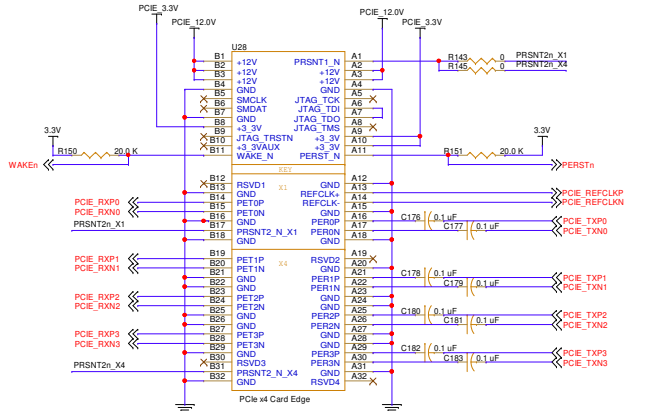


TEST POINTS



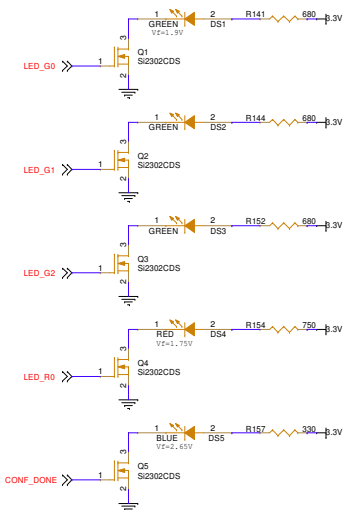
orolia		
Title	GNSS - EXTENSION	
Size	Document Number	Rev
A2	ART_CARD	4
Date:	Thursday, October 21, 2021	
FILE NAME	ART_CARD	Sheet 6 of 7

PCIe CONNECTOR

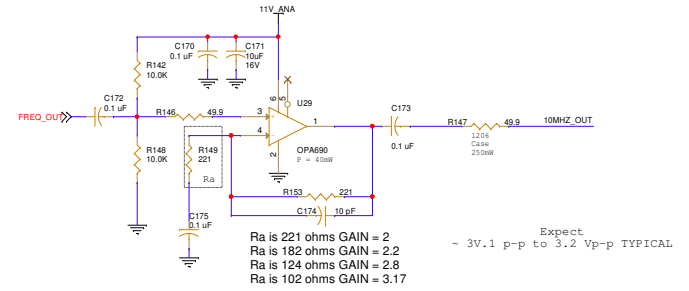


LED

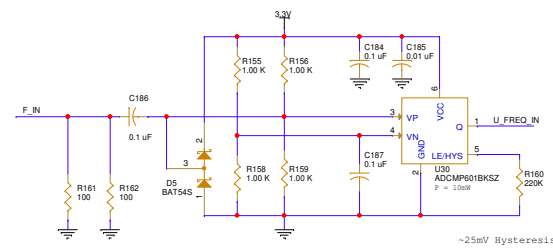
P = 3.3V



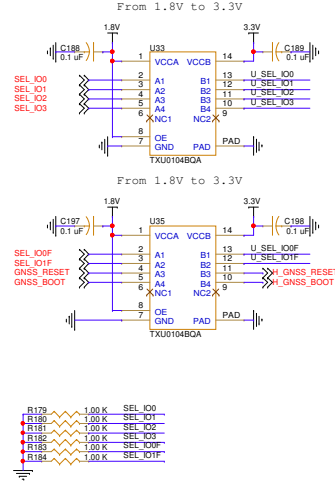
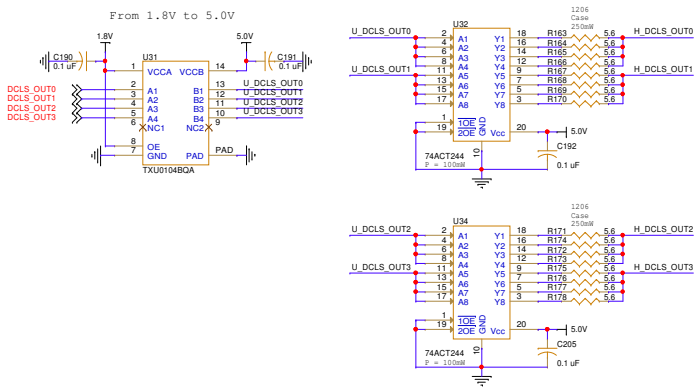
FREQ OUTPUT DRIVER



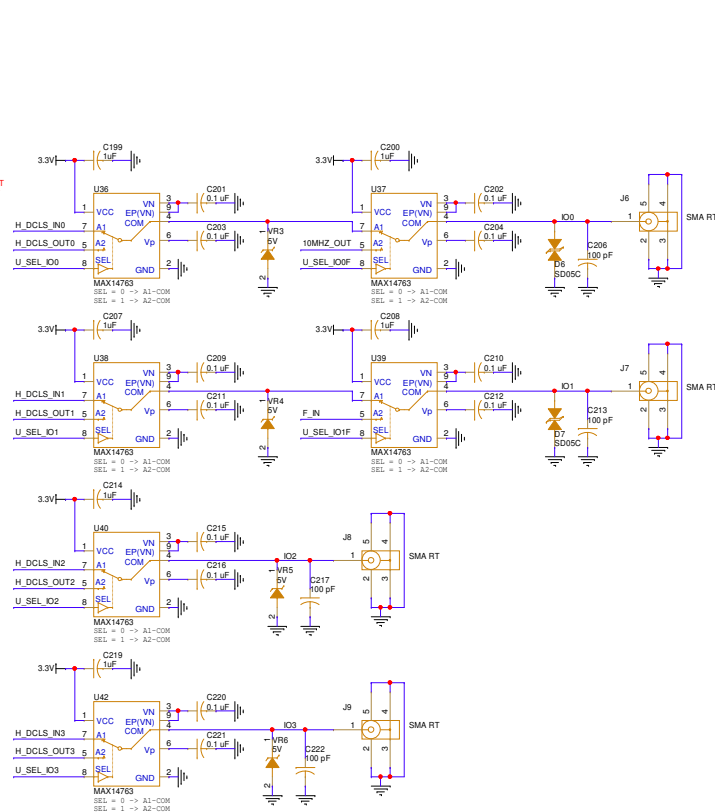
FREQUENCY INPUT



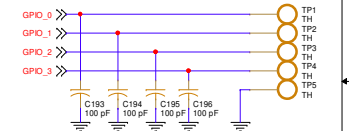
DCLS OUTPUT DRIVER



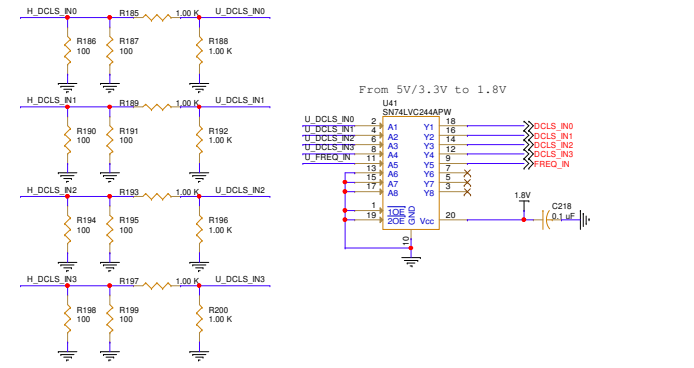
IO CONNECTORS / SWITCH



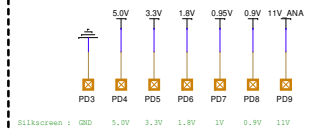
GPIO



DCLS INPUT DRIVER



TEST POINTS



Variant Name:		
Title		
CONNECTORS		
Size	Document Number	Rev
A2	ART_CARD	4
Date:	Thursday, October 21, 2021	
FILE NAME	ART_CARD	Sheet 7 of 7