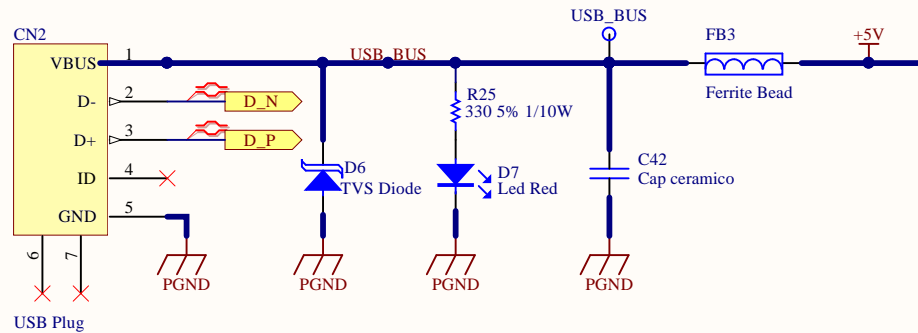


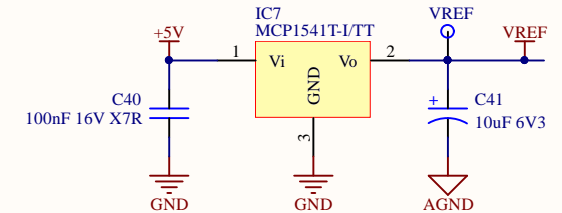
Title			
MercurialSDR - Block Diagram			
Size	Number		Revision
A4			Rev2.0
Date:	20/8/2020	Sheet 1 of 6	
File:	Z:\PID\c\MercurialSDR_BLK.SchDoc	Drawn By:	Andres Hojnadel

# Power Stage

## USB to +3V3 and +1V2



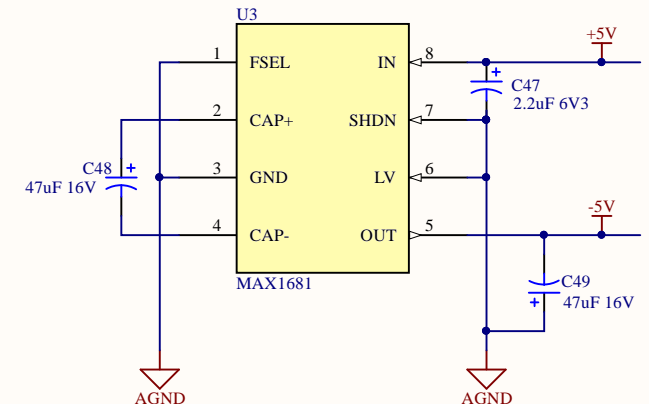
## Reference Voltage



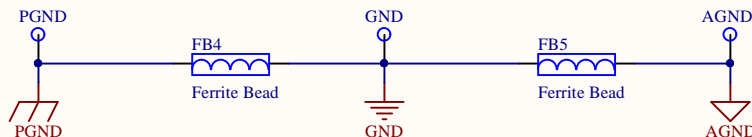
This is a precision voltage reference for DAC (IC1).  
Them must be close.

## Inverter Voltage

Es muy importante el ESR de los capacitores para el ripple

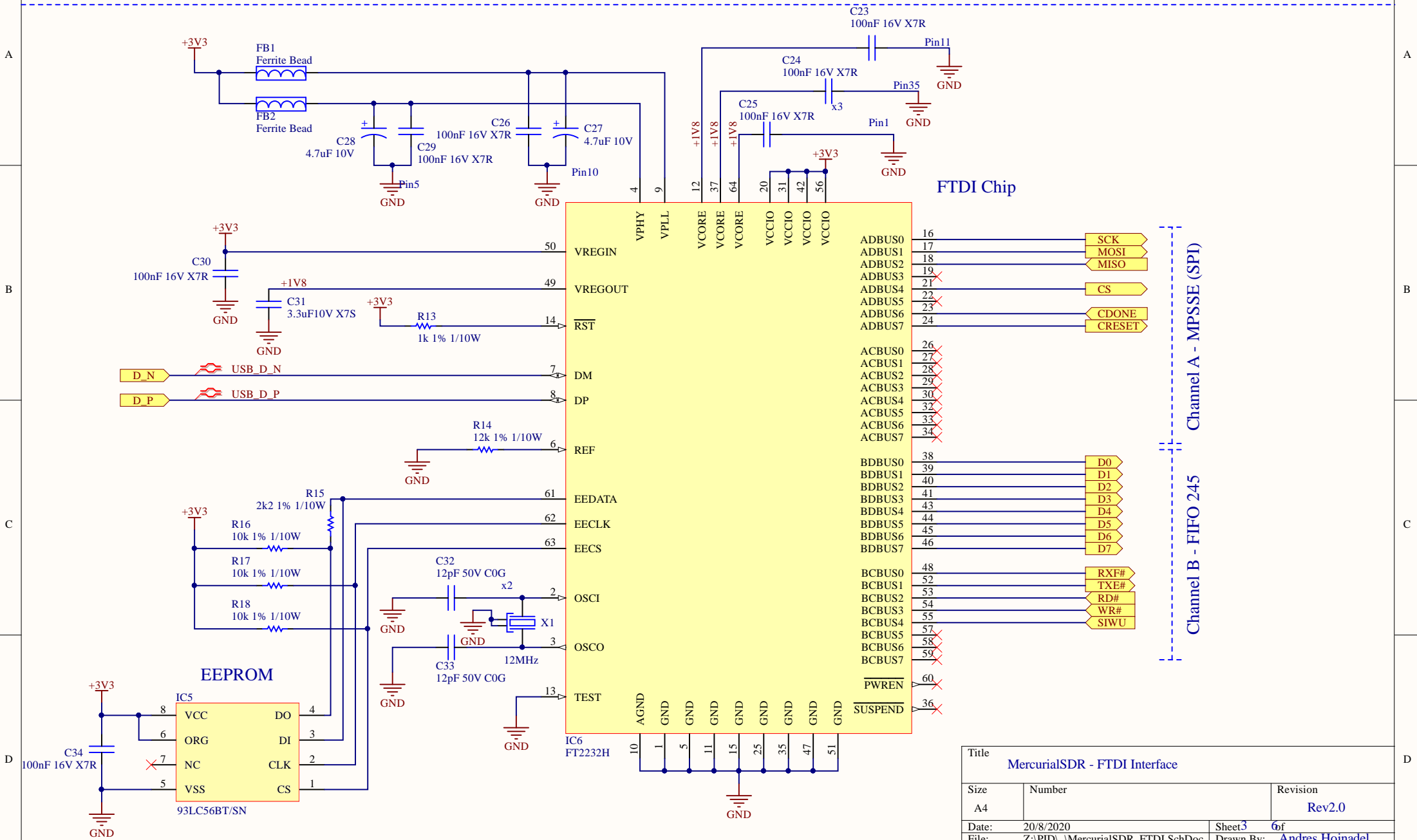


## Ground Connections



Title MercurialSDR - Power Stage		
Size A4	Number	Revision Rev2.0
Date: 20/8/2020	Sheet 2 of 6	
File: Z:\PID\MercurialSDR_PWR.SchDoc	Drawn By: Andres Hojnadel	

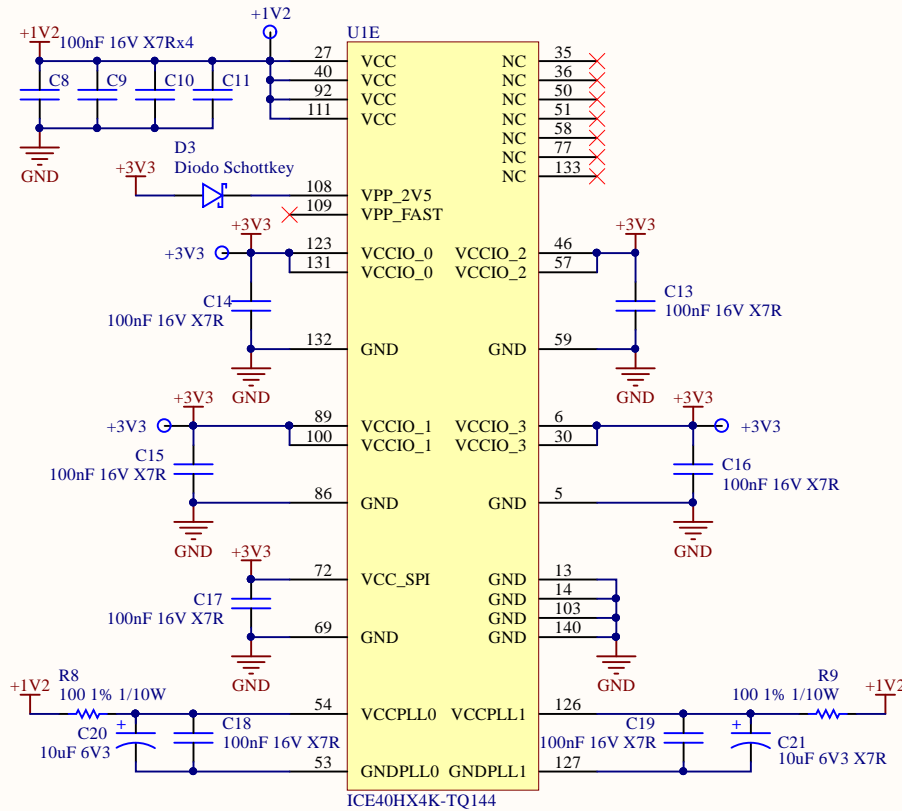
# FTDI Interface



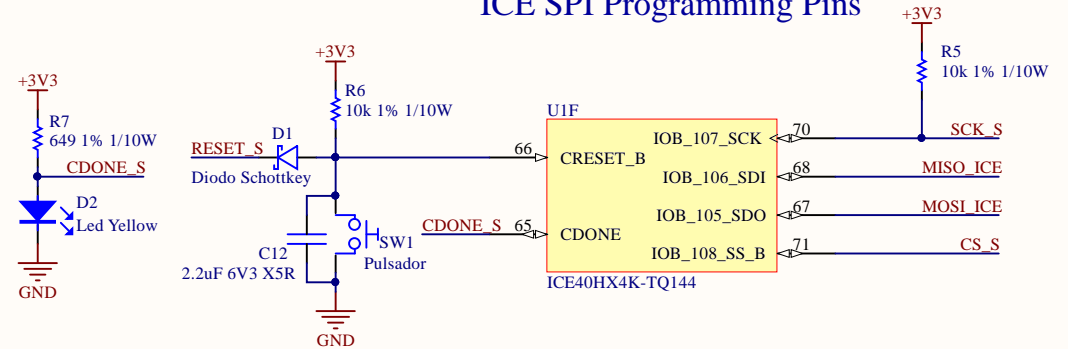
Title		
MercurialSDR - FTDI Interface		
Size	Number	Revision
A4		Rev2.0
Date:	20/8/2020	Sheet 3 of 6
File:	Z:\PID\c\MercurialSDR_FTDI.SchDoc	Drawn By: Andres Hojnadel

# ICE Programming & Power

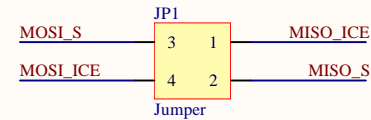
## iCE Power



## ICE SPI Programming Pins

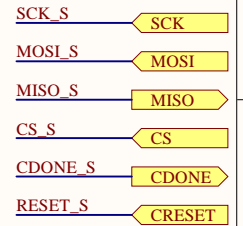


## ICE/Flash programming selection

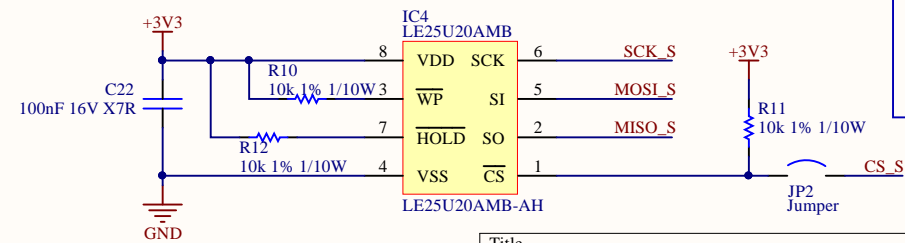


For programming ICE: shunt 1-3 & 2-4  
For programming Flash: shunt 1-2 & 3-4

## FTDI Ports



## Flash Memory

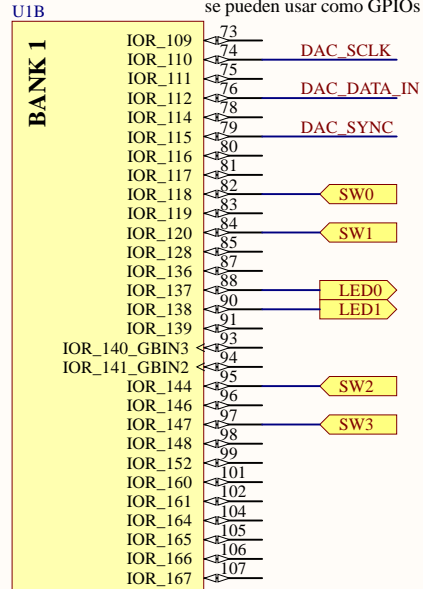


Remove JP2 only for programming ICE  
Shunt JP2 for Flash programming or normal operation

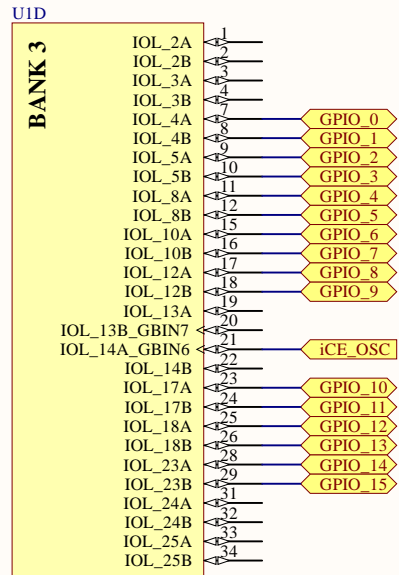
Title MercurialSDR - iCE Power & Program.		
Size A4	Number	Revision Rev2.0
Date: 20/8/2020	Sheet 4	of 6
File: Z:\PID\MercurialSDR_FPGA_P&P.SchDown By: Andres Hojnadel		

# FPGA Banks

PIN93y94 son GlobalPins, pero se pueden usar como GPIOs

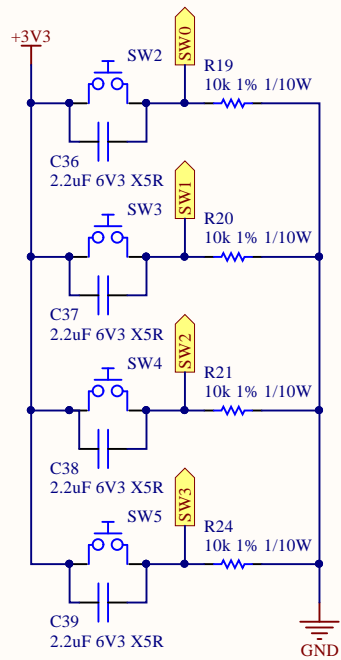


iCE40HX4K-TQ144

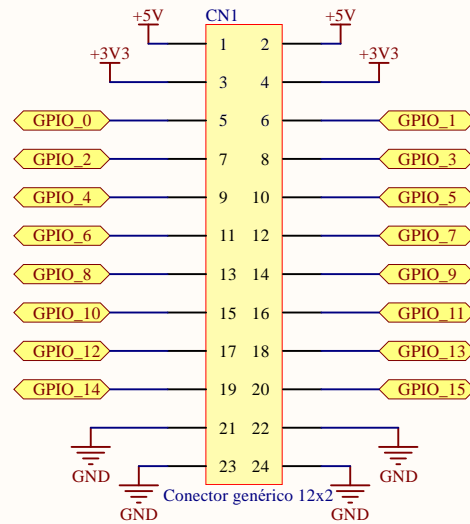


# Miscellaneous

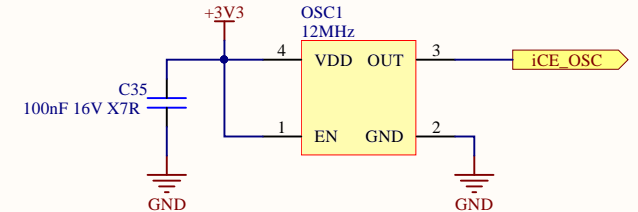
## Buttons



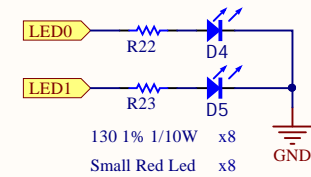
## GPIO Ports



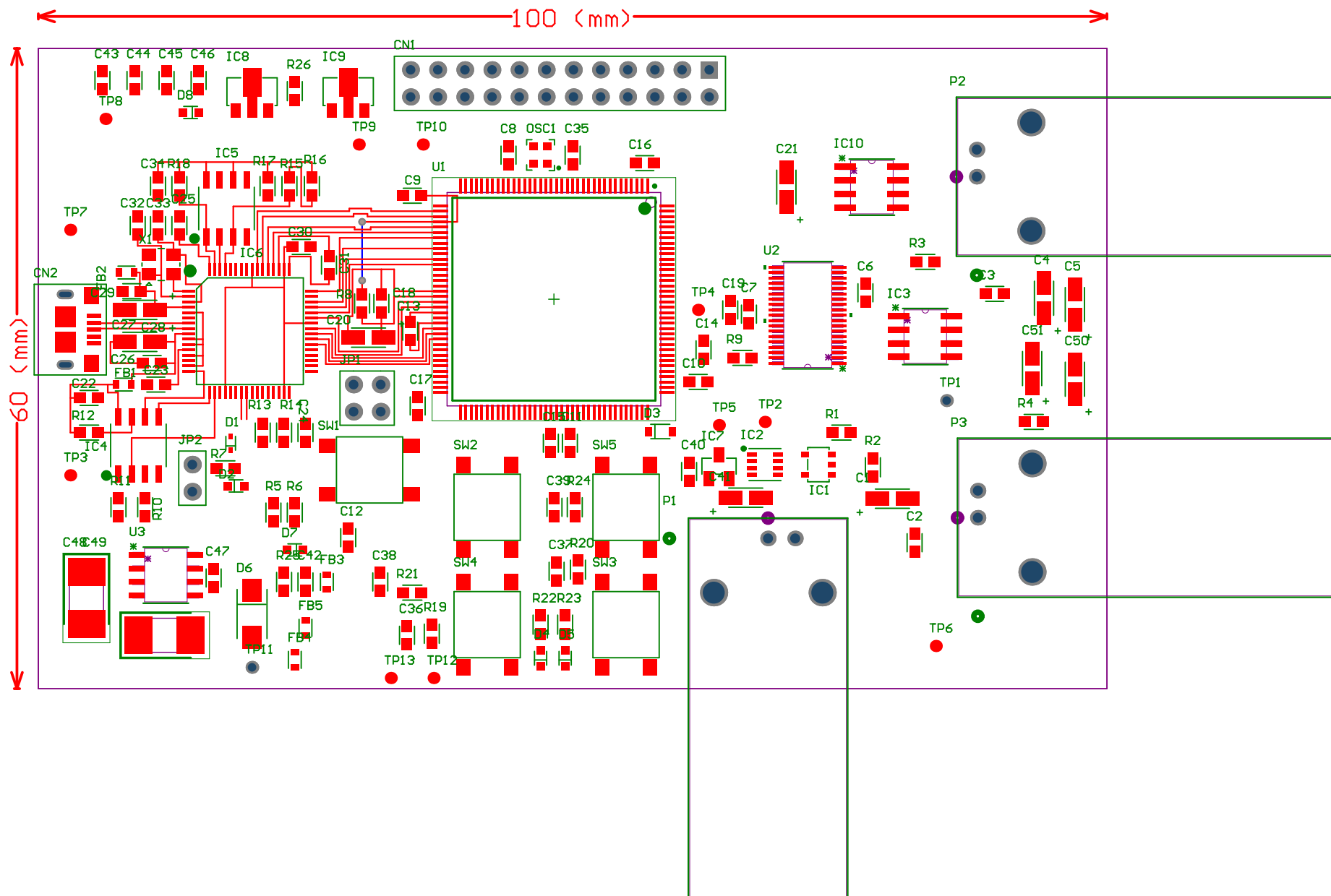
## iCE Oscillator



## Leds



Title MercurialSDR - Miscellaneous		
Size A4	Number	Revision Rev2.0
Date: 20/8/2020	Sheet 6	of 6
File: Z:\PID\...\MercurialSDR_MISC.SchDoc	Drawn By: Andres Hojnadel	



Boards