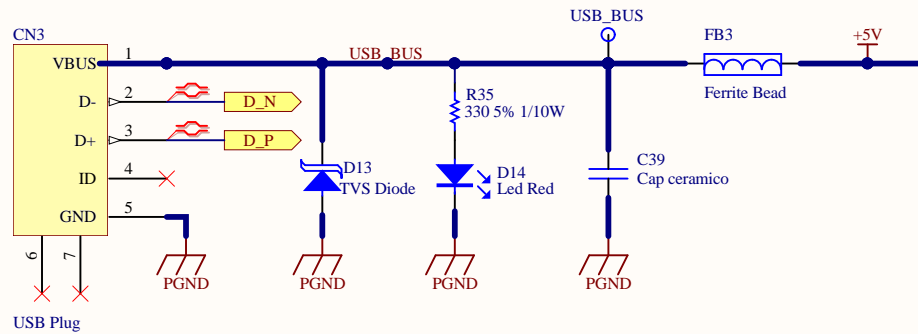


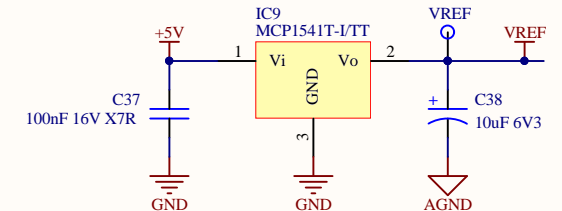
Title		
MercurialSDR - Block Diagram		
Size	Number	Revision
A4		Rev2.0
Date:	6/7/2020	Sheet 1 of 6
File:	C:\Users\...\MercurialSDR_BLK.SchDoc	Drawn By: Andres Hojnadel

Power Stage

USB to +3V3 and +1V2



Reference Voltage

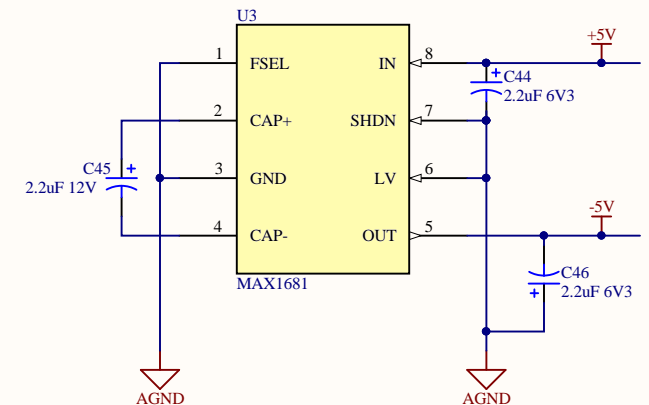


This is a precision voltage reference for DAC (IC1).

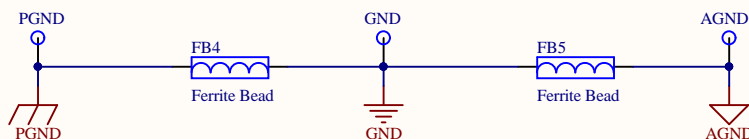
Them must be close.

Inverter Voltage

Es muy importante el ESR de los capacitores para el ripple

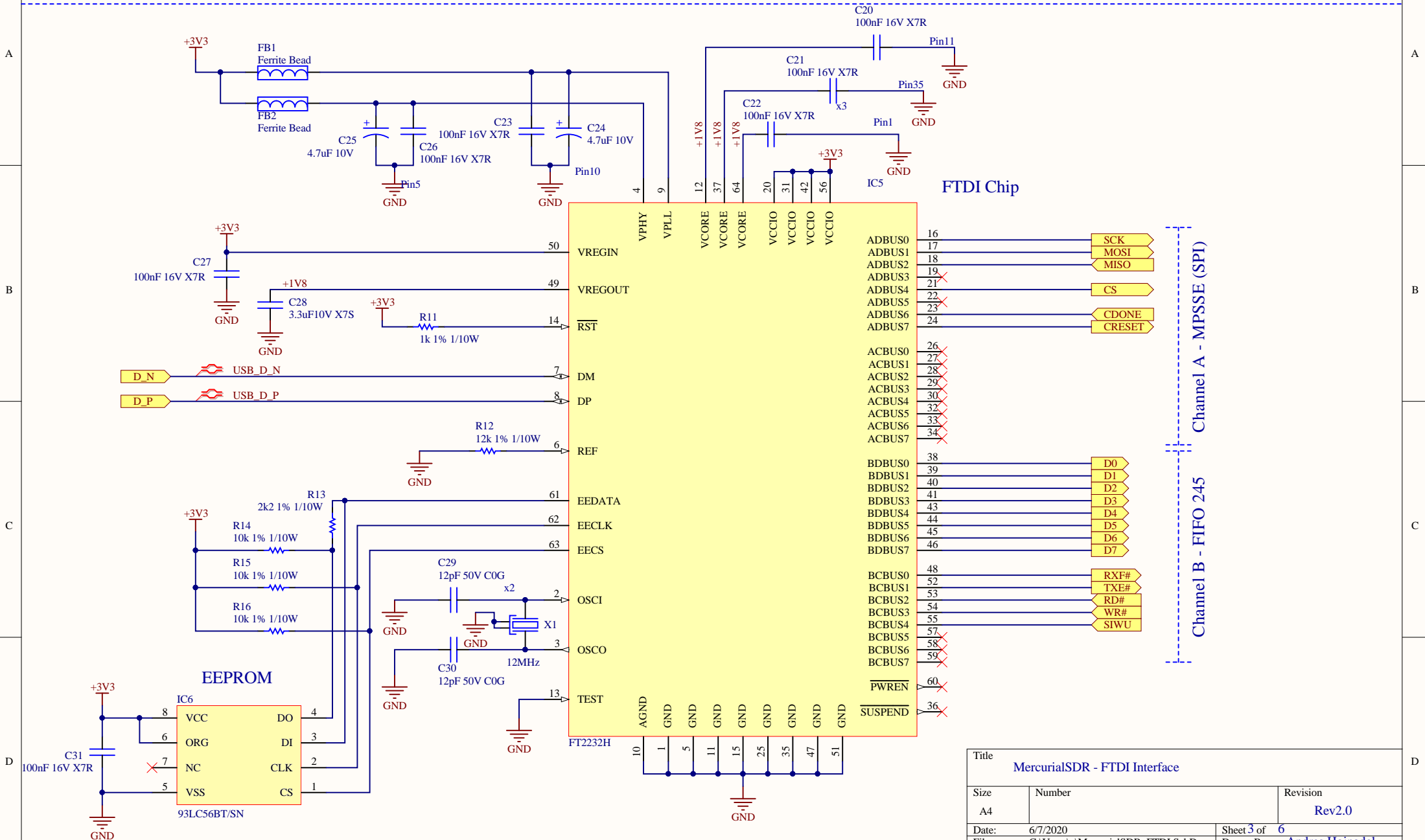


Ground Connections



Title MercurialSDR - Power Stage		
Size A4	Number	Revision Rev2.0
Date: 6/7/2020	Sheet 2 of 6	
File: C:\Users\...\MercurialSDR_PWR.SchDoc	Drawn By: Andres Hojnadel	

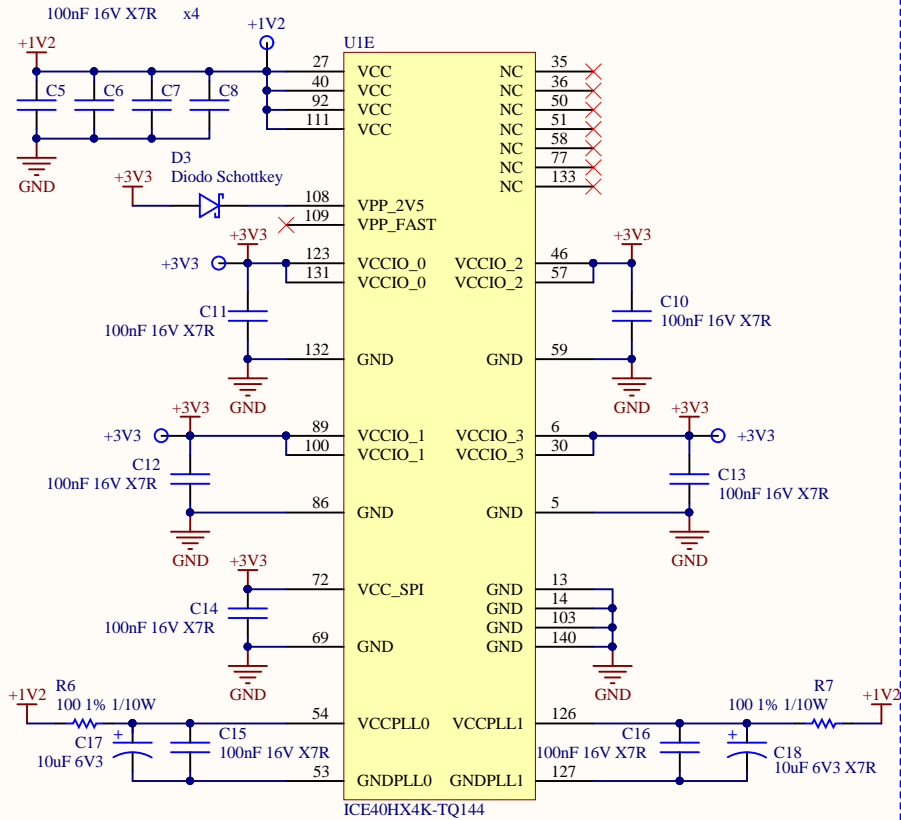
FTDI Interface



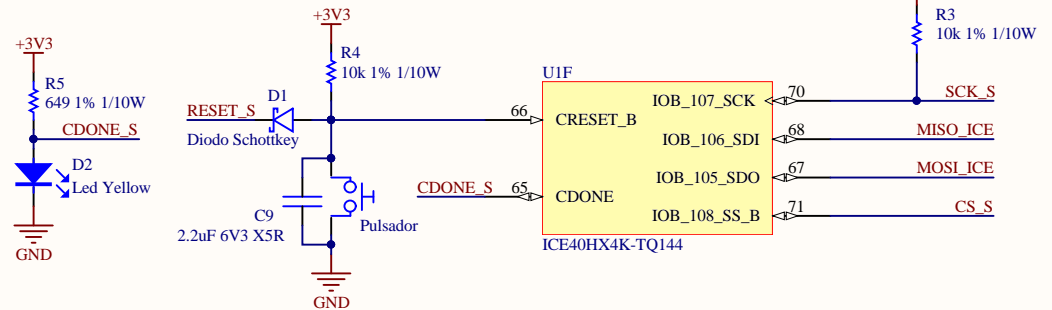
Title			MercurialSDR - FTDI Interface		
Size	Number			Revision	
A4				Rev2.0	
Date:	6/7/2020			Sheet 3 of 6	
File:	C:\Users\...\MercurialSDR_FTDI.SchDoc			Drawn By:	Andres Hoinade

ICE Programming & Power

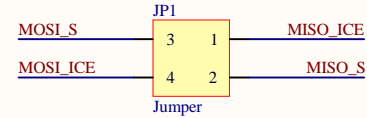
iCE Power



ICE SPI Programming Pins



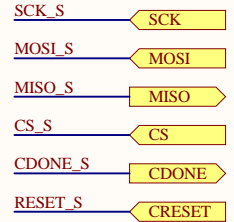
ICE/Flash programming selection



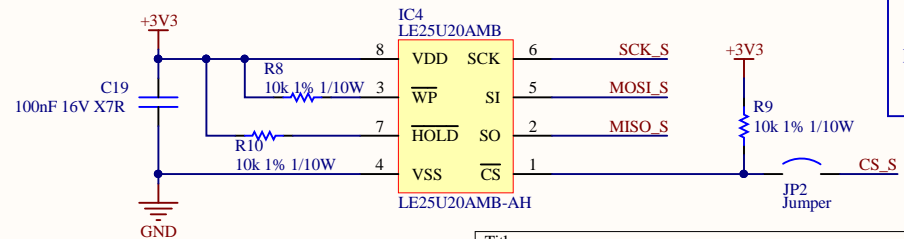
For programming ICE: shunt 1-3 & 2-4

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

FTDI Ports



Flash Memory



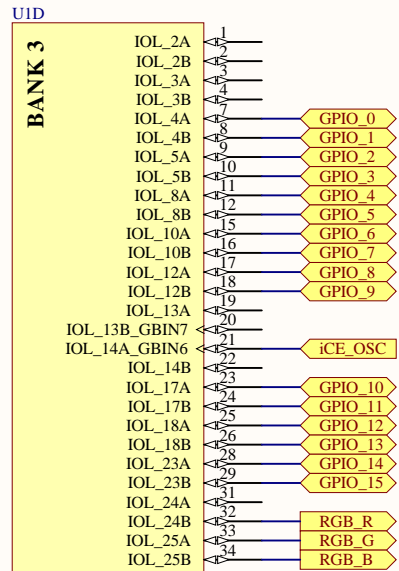
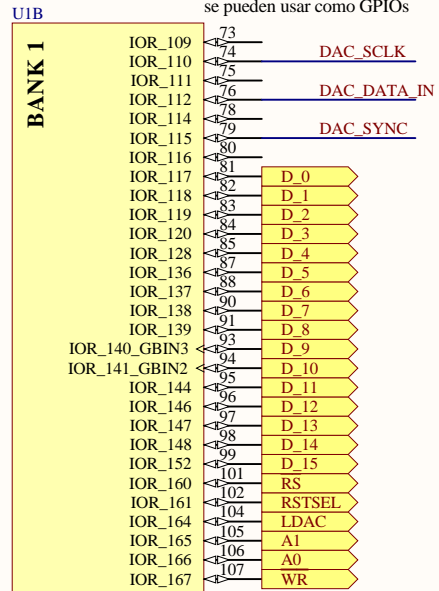
Remove JP2 only for programming ICE

Shunt JP2 for Flash programming or normal operation

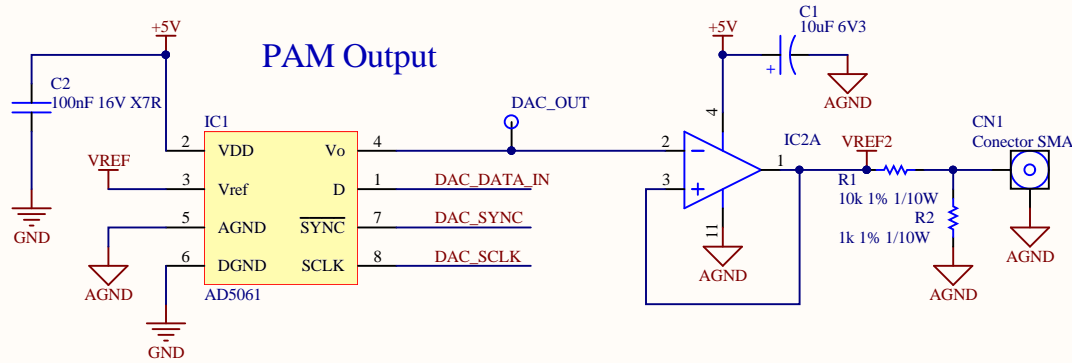
Title			MercurialSDR - iCE Power & Program.		
Size	Number			Revision	
A4				Rev2.0	
Date:	6/7/2020			Sheet 4 of 6	
File:	C:\Users\...\MercurialSDR_FPGA_P&P.Sch			Drawn By:	Andres Hojnadel

FPGA Banks

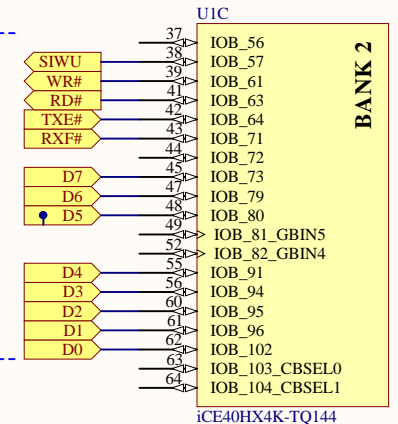
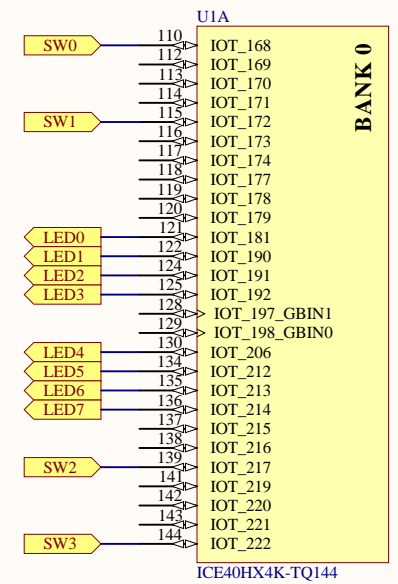
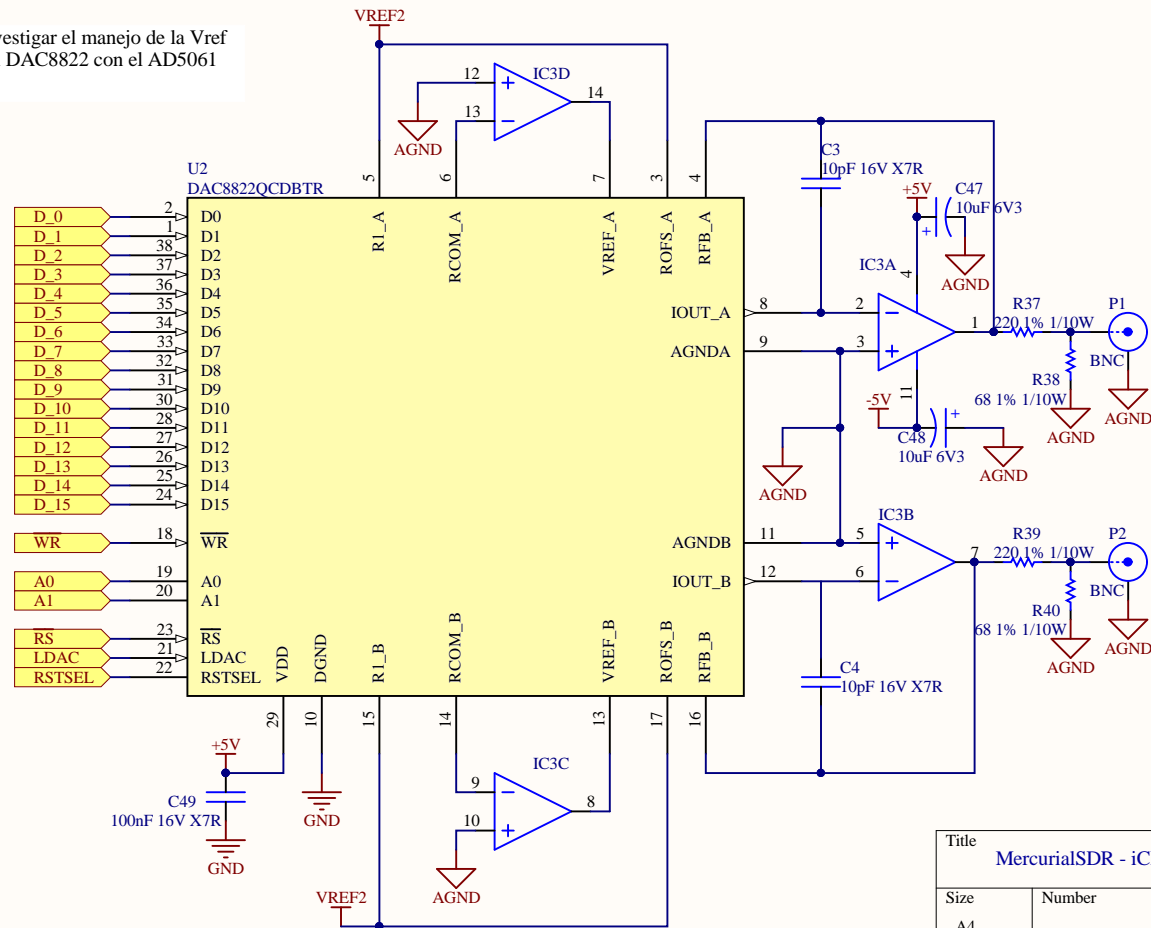
PIN93y94 son GlobalPins, pero se pueden usar como GPIOs



PAM Output



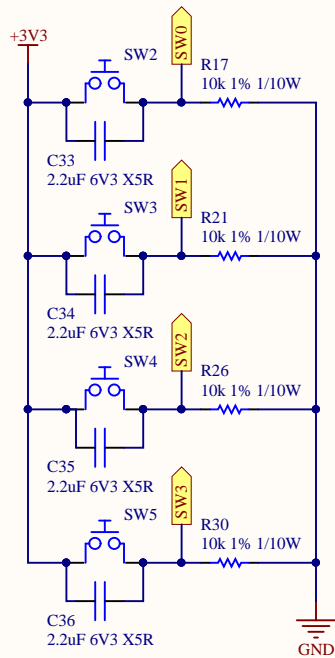
Investigar el manejo de la Vref del DAC8822 con el AD5061



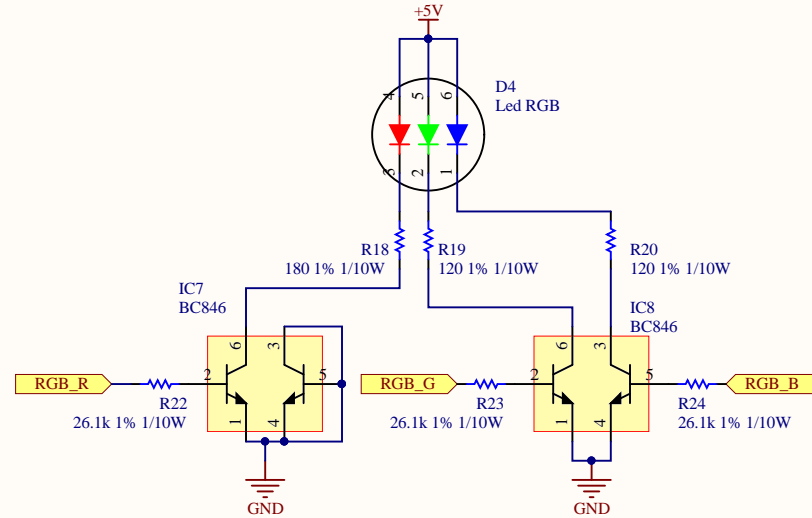
Title		
MercurialSDR - iCE Banks		
Size	Number	Revision
A4		Rev2.0
Date:	6/7/2020	Sheet 5 of 6
File:	C:\Users\...\MercurialSDR_FPGA_BNK_Sch	Drawn By: Andres Hojnadel

Miscellaneous

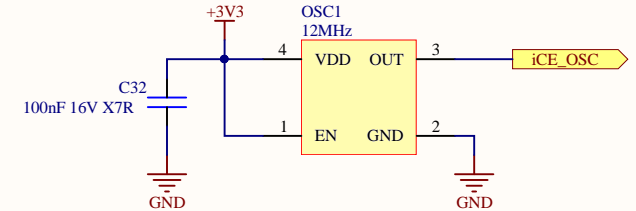
Buttons



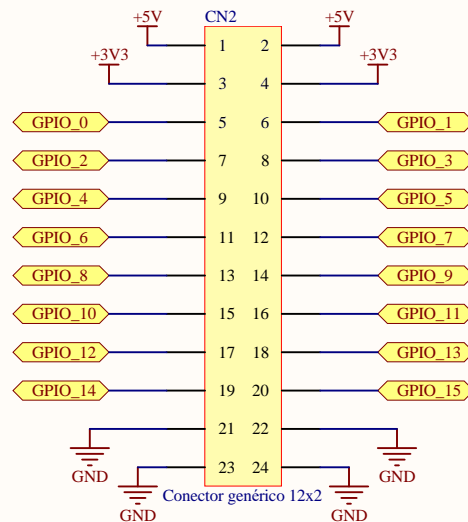
RGB Led



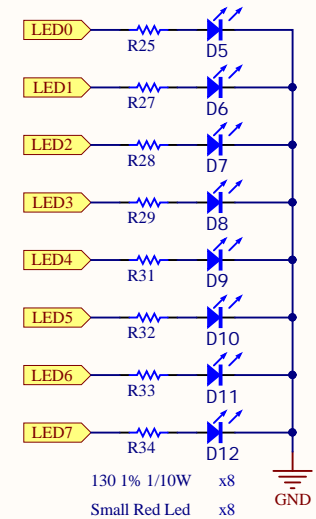
iCE Oscillator



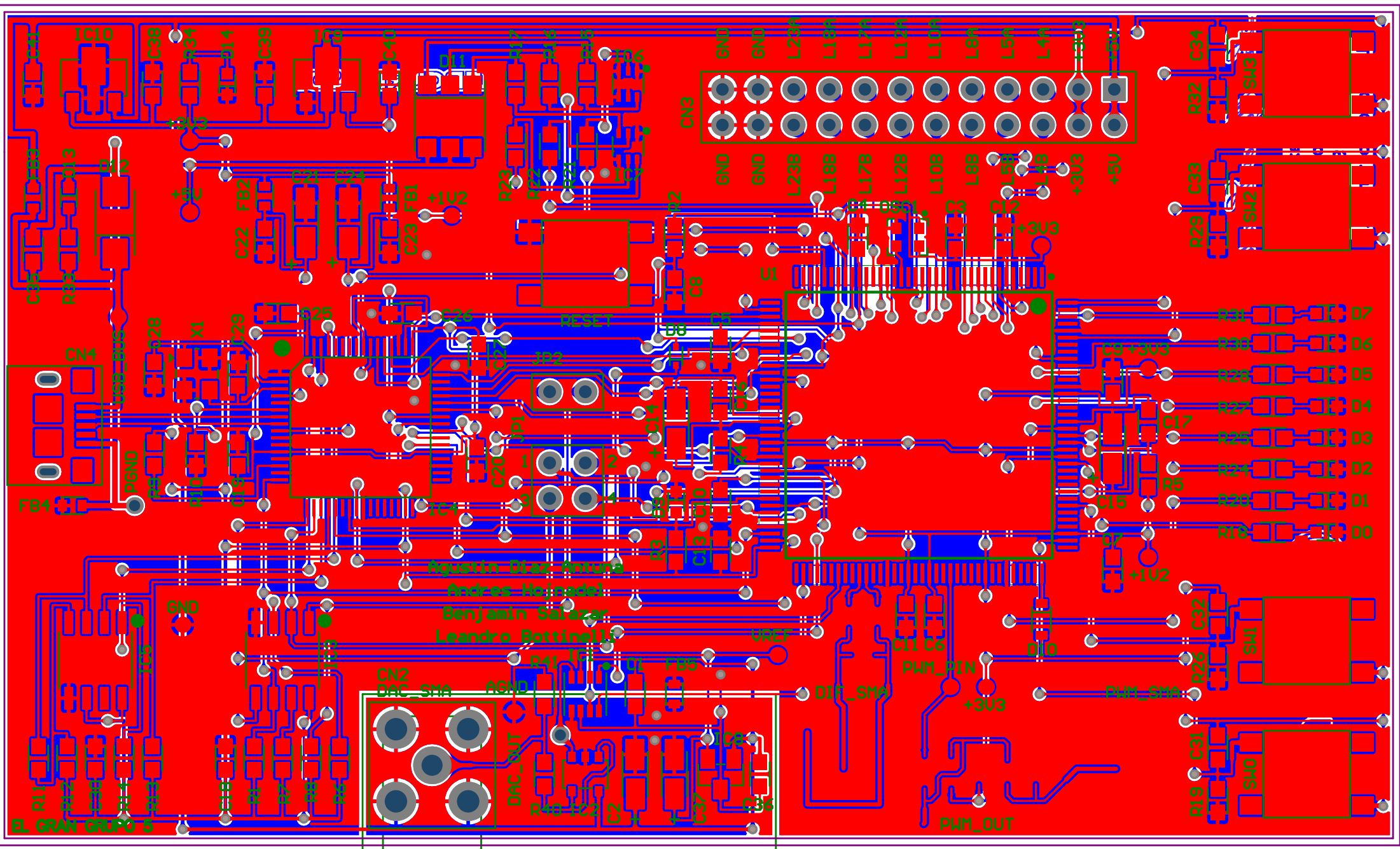
GPIO Ports



8-Led Array

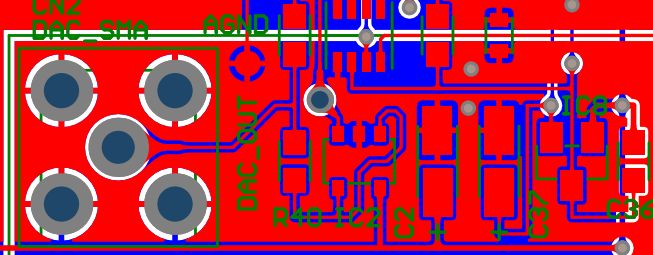


Title MercurialSDR - Miscellaneous		
Size A4	Number	Revision Rev2.0
Date: 6/7/2020	Sheet 6 of 6	Drawn By: Andres Hojnadel
File: C:\Users\...\MercurialSDR_MISC.SchDoc		



EL GRAN GRUPO 5

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Leandro Bottinelli



PWM_OUT