

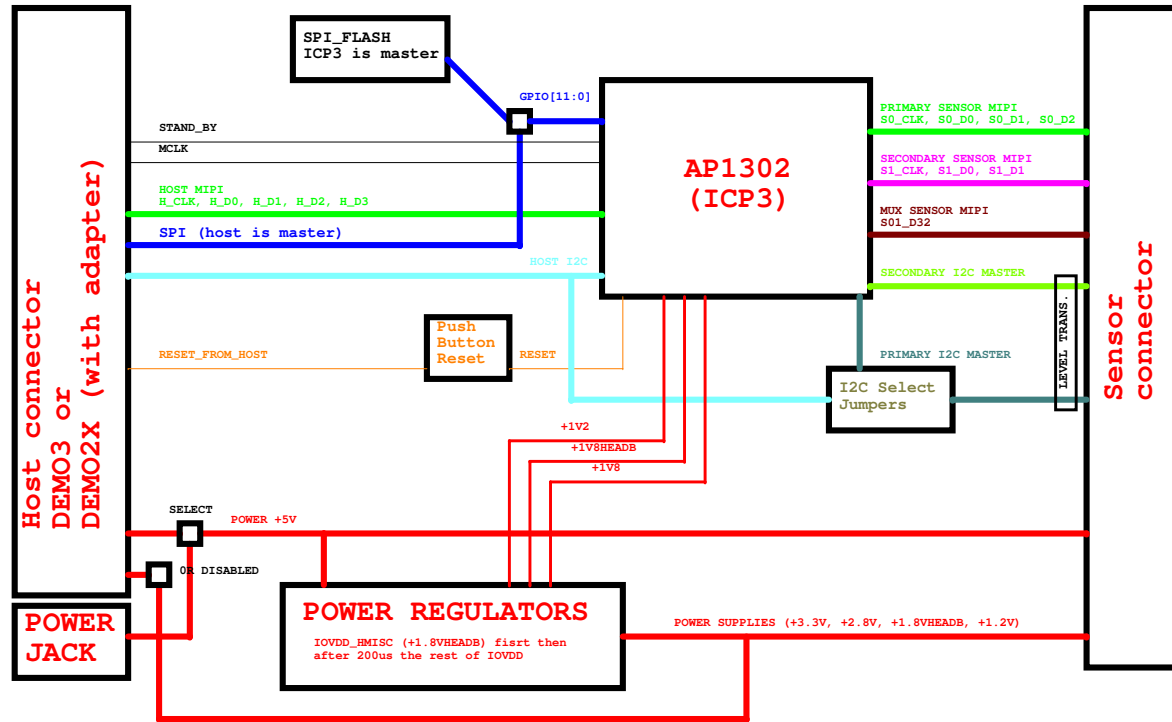
# AP1302\_ICP3\_120VFBGA\_DEMO

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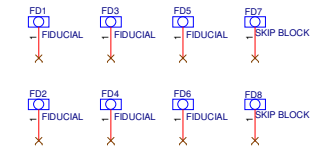
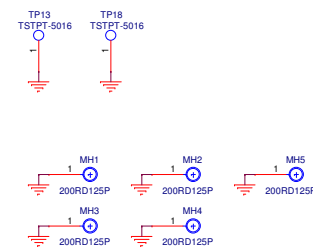
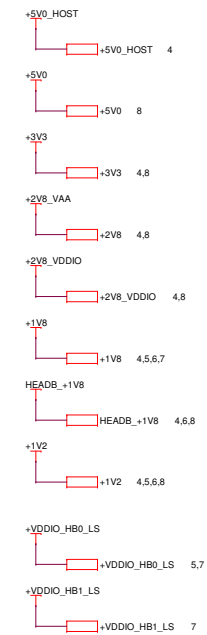
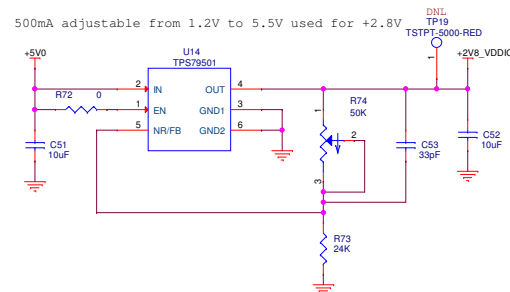
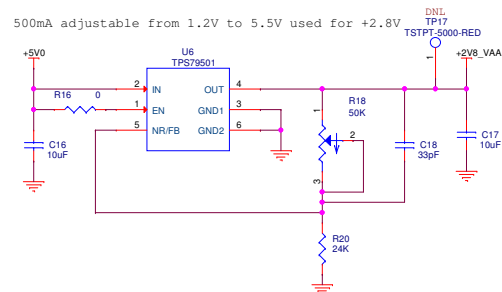
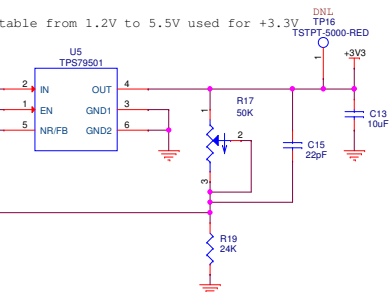
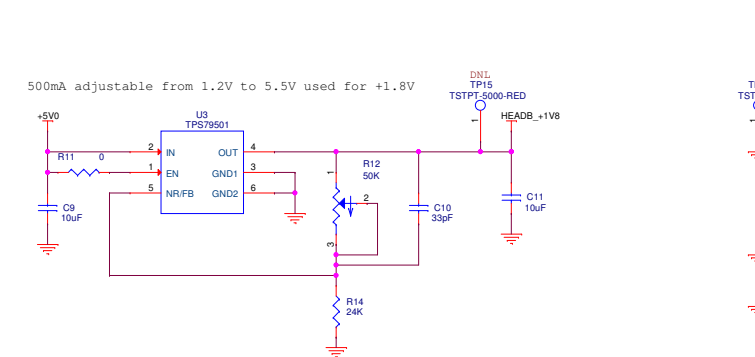
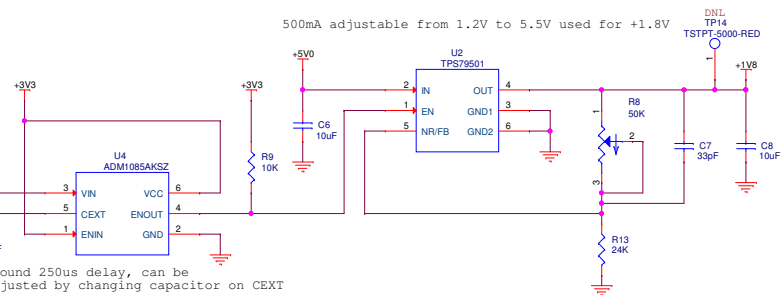
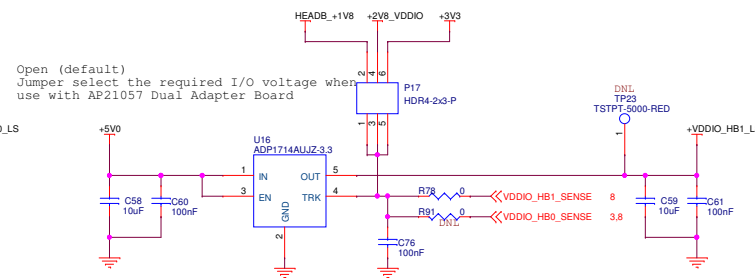
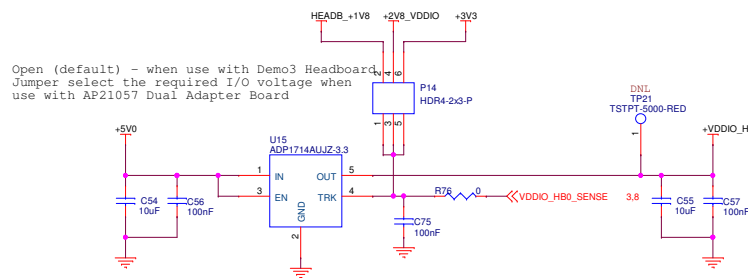
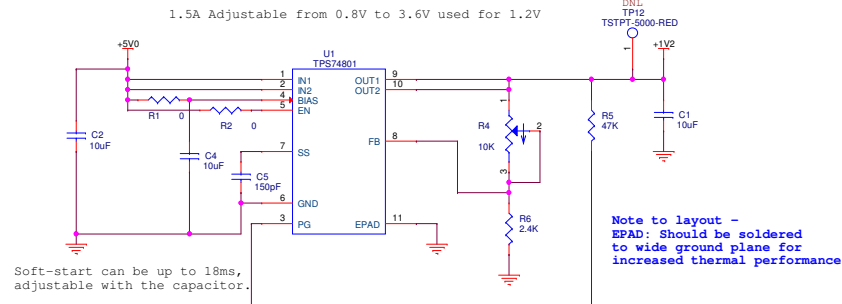
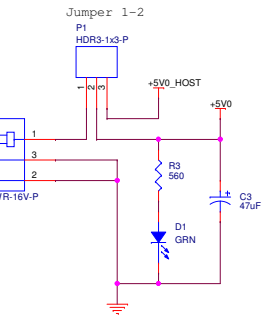
Rev	Who	Date	Description
Rev 0.0	Joe KK	02/14/12	Initial - Derive from AP1300_ICP2_Demo_Rev1 design
Rev 1.0	dmincinski	07/09/2013	Reassigned the Flash Pin to P20, S1_SDA to P24 and S1_SCL to P22. Added SP0 to P27 and Head_SSN to P34.
Rev 2.0	Sesha	02July2021	Based on Rev0, GPIO table in Page7 is updated with correct reset values



# Block Diagram

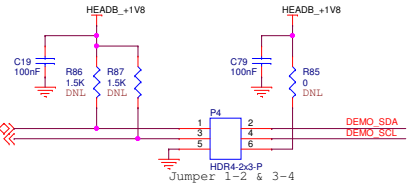


# Power Supplies

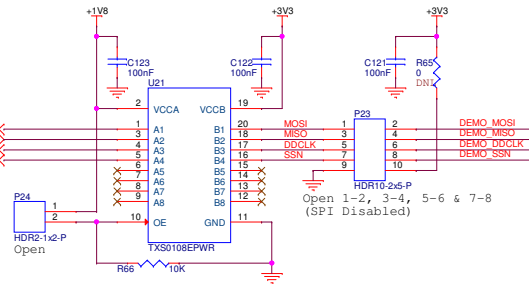


# Connector to Host (Demo3 Baseboard)

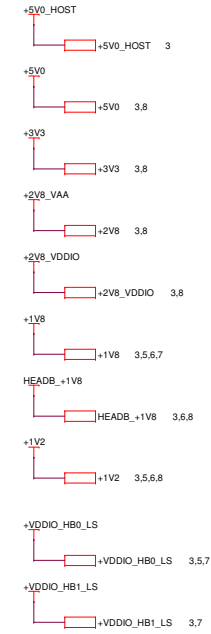
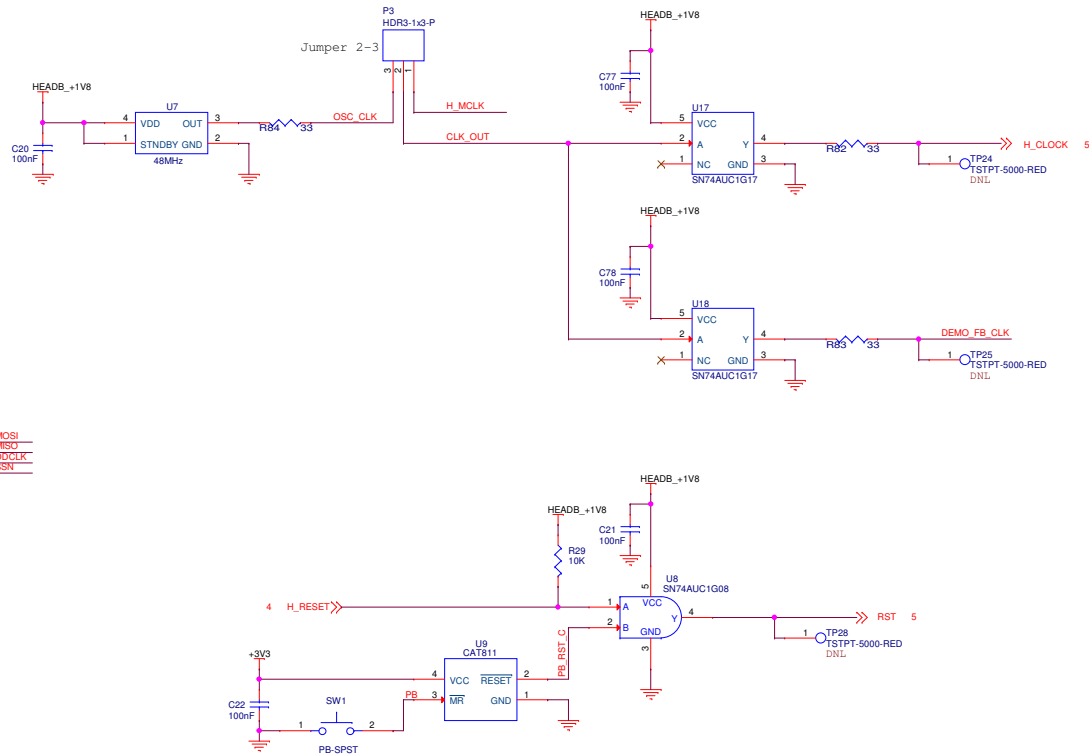
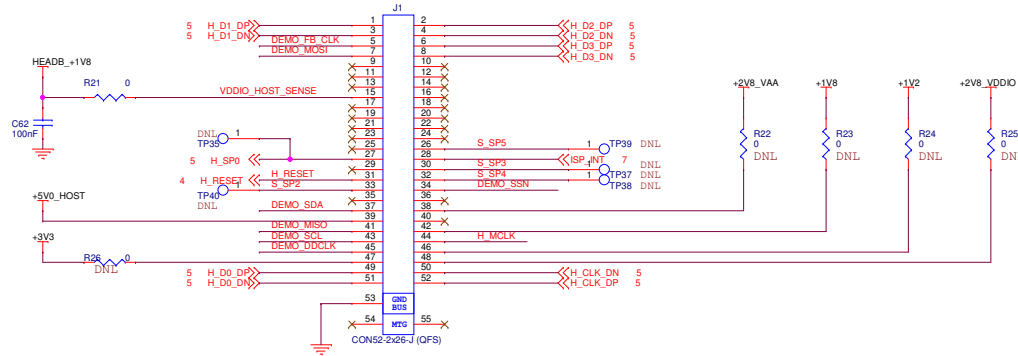
## I2C DEBUG



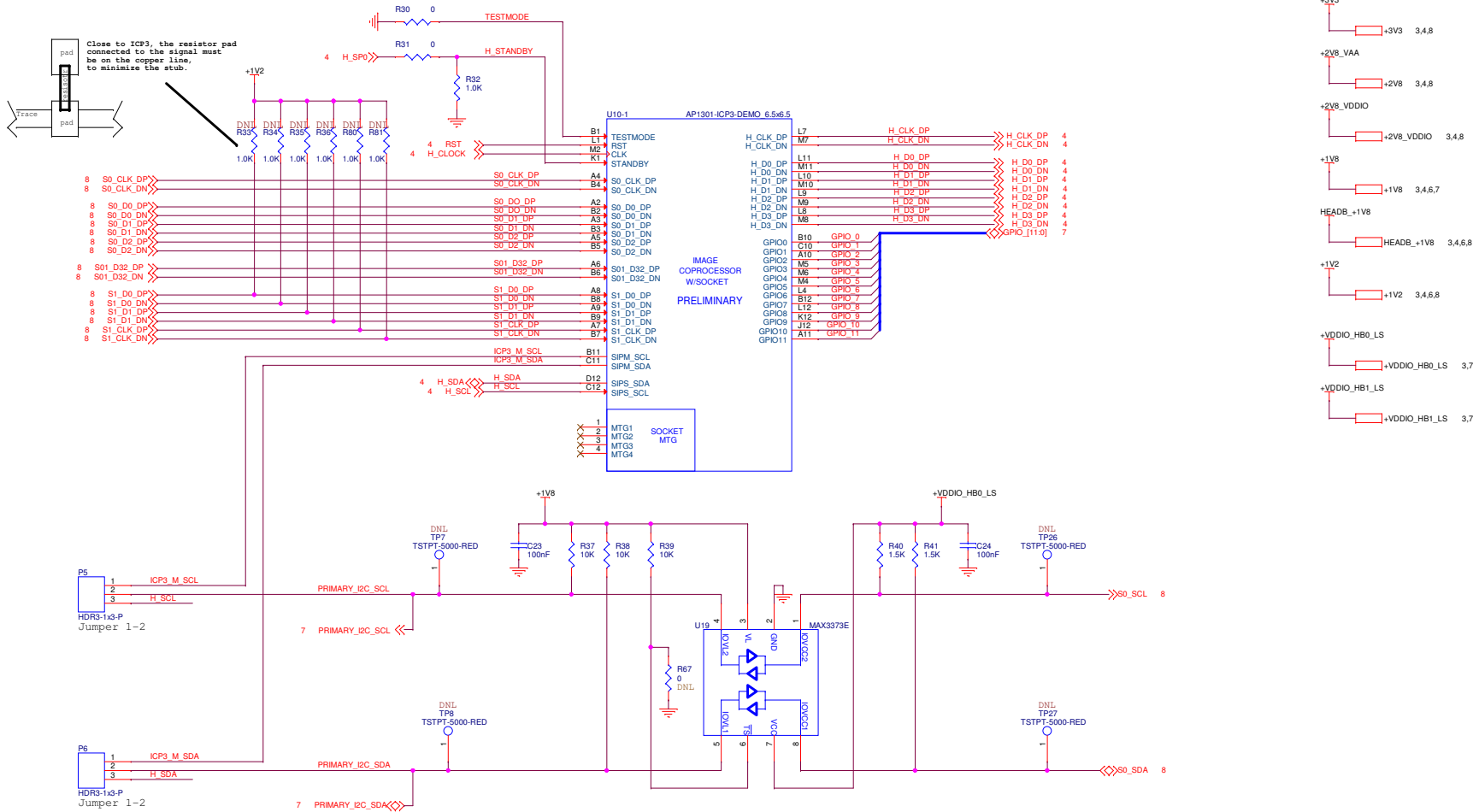
## SPI DEBUG



from DEMO3 -> to ICP3

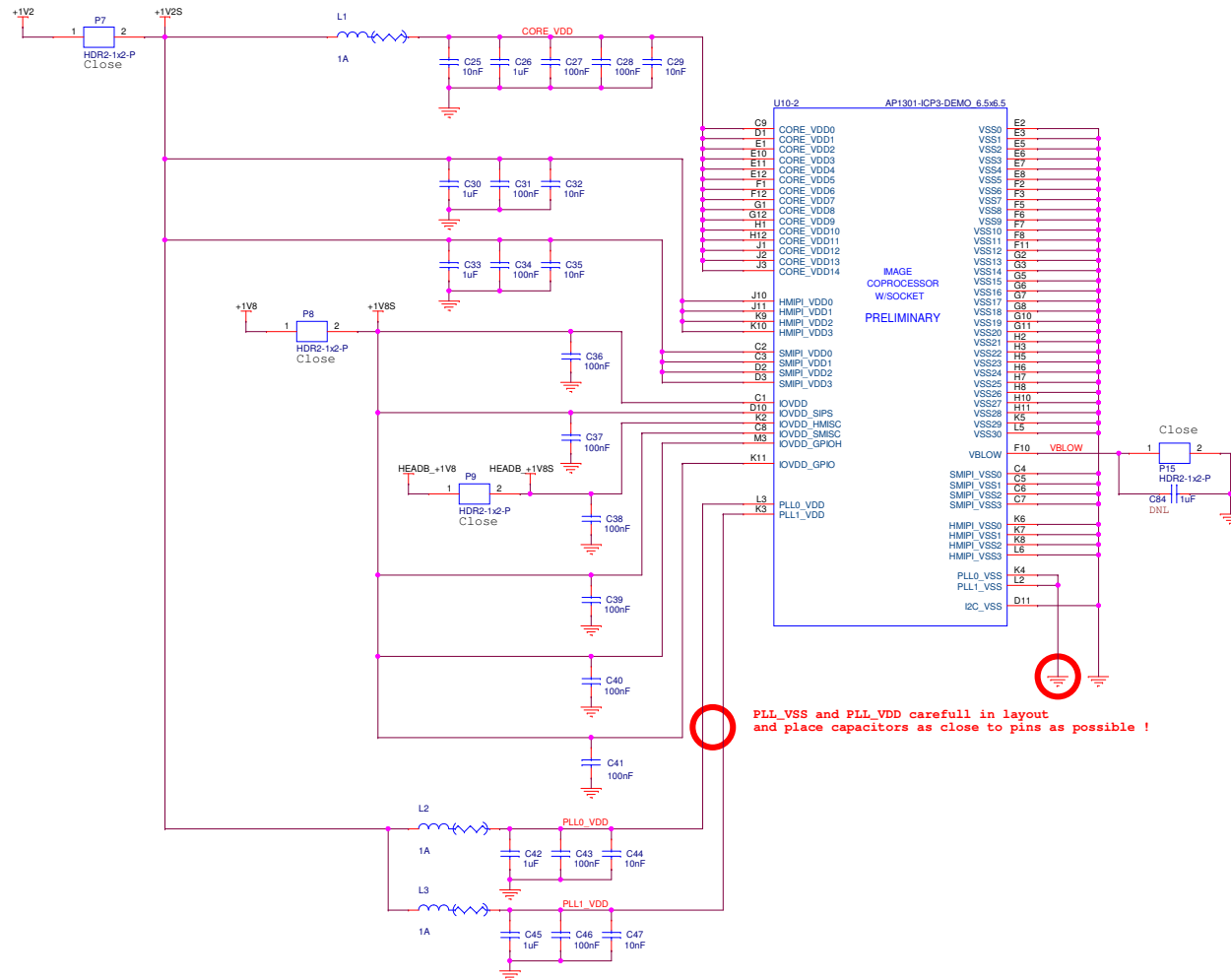


# AP1302 Signals

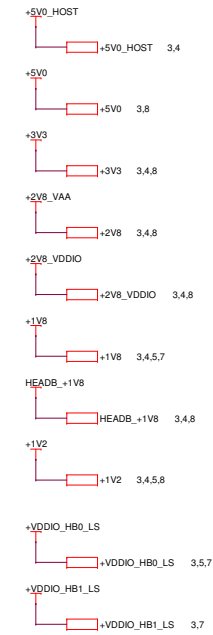


## AP1302 Powers

Place the jumpers close to power supplies  
and the capacitors as close to ICP2 as possible.



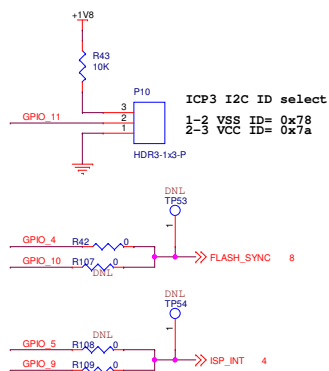
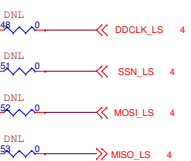
**PLL\_VSS and PLL\_VDD carefull in layout  
and place capacitors as close to pins as possible !**



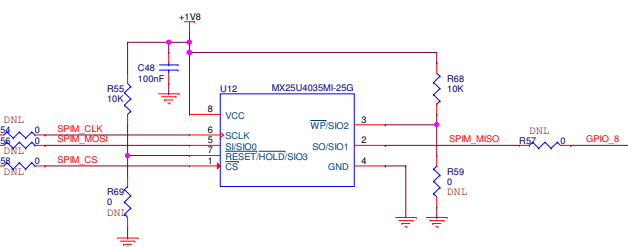
GPIO Function Mapping Table

ION	RESET VALUE
CLK1	HIGH-Z
DOWN1	0
CLK2	HIGH-Z
DOWN2 / SPIS_CLK	HIGH-Z
MISO	1
_MOSI / 2ND_I2C_SCL	HIGH-Z
_CS / 2ND_I2C_SDA	HIGH-Z
CLK	1
MISO	HIGH-Z
_MOSI	0
_CS	1
I2C ID SELECT	HIGH-Z

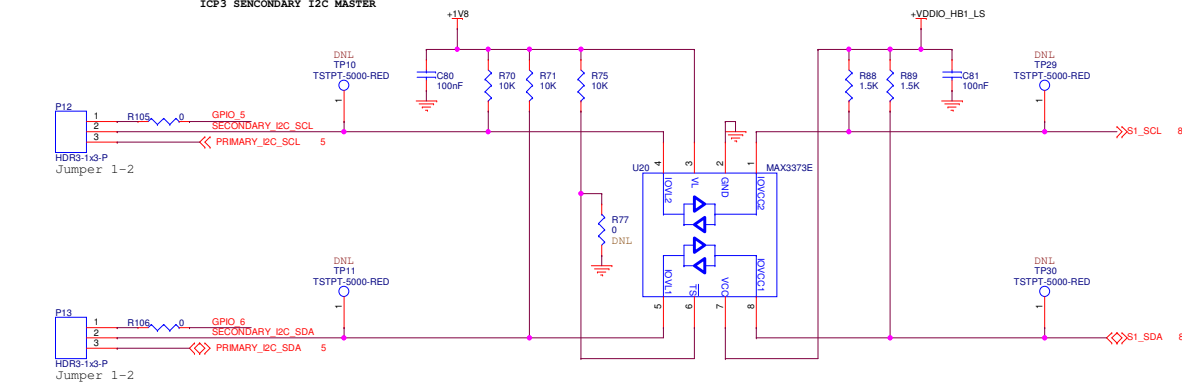
3 slave, host master)



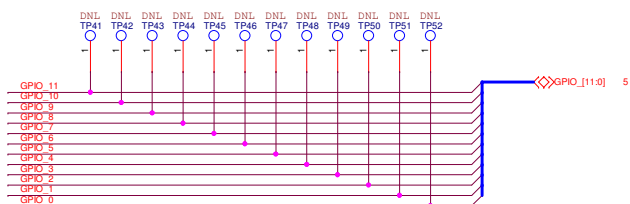
ICP3 is SPI master



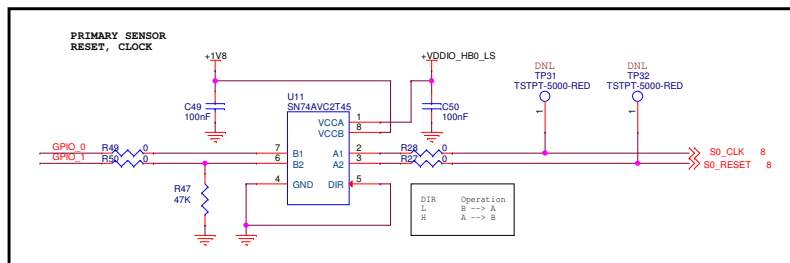
ICP3 SENCONDRY I2C MASTER



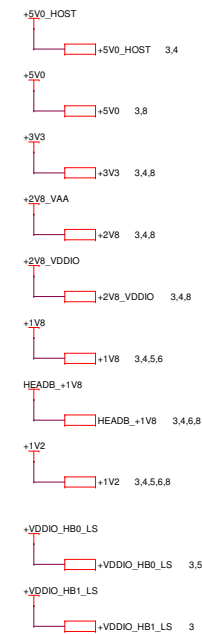
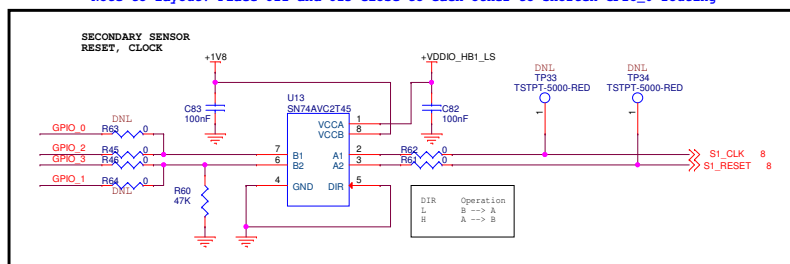
# AP1302 GPIOs



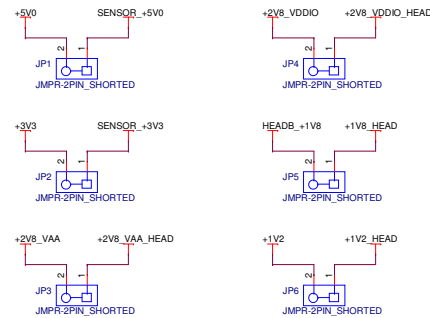
Note to layout:  
Place all GPIOs OR resistors close to ICP3



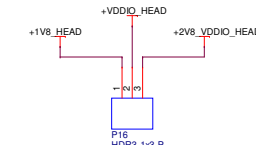
Note to layout: Place U11 and U13 close to each other to shorten GPIO\_0 routing



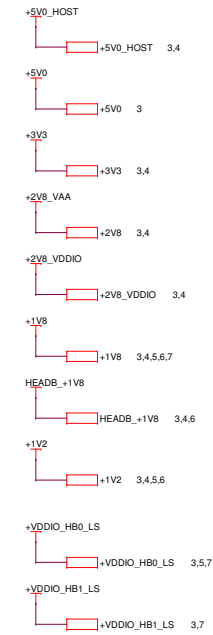
# Connector to Sensors (Demo3 Headboards)



Power Debug Header: Cut away the shorted trace and mount header for power debugging



Jumper 2-3 (default) - when use with Demo3 Headboard  
Jumper 1-2 - when use with AP21057 Dual Adapter Board



from ICP3 -> to Headboard or Dual Adapter Board

