

Title: <b>Power_Path</b>			Author:	Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA	
Size: A4			Prj: USB-SMB-ISO-CP2112	Approved:		Alcatraz
				<b>PUBLIC</b>		
Date: 06-12-2024			18:06:42	Sheet 1 of 6		
Git Hash: 471				Edited:		03-12-2024
				Variant:		[No Variations]
				SW Version:	24.10.1.45	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\1_Power_Path.SchDoc						



SGM2019-ADJ  
Populate R0L, R1L and R2L

SGM2019-3.3  
Only Populate R2L With 100nF  
Cap  
DNP - R0L, R1L

HT7833  
DNP - R0L, R1L and R2L

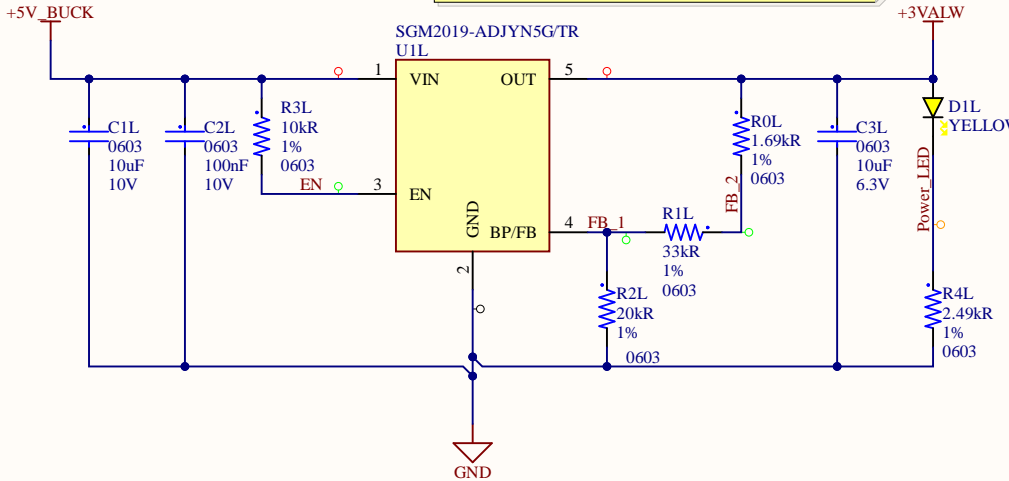
SGM2019-ADJYN5G/TR  
Vout = 3.3V  
Register Values For  
R0L, R1L and R2L  
R1L=R0B+R1L

Values From Datasheet

Standard 1% Resistor Values for Common Output Voltages of Adjustable Voltage Version

V <sub>OUT</sub> (V)	R <sub>1</sub> (kΩ)	R <sub>2</sub> (kΩ)
1.2	0	63.4
1.5	10.5	42.2
1.8	34	63.4
2.8	84.5	63.4
3.0	63.4	42.2
3.3	73.2	42.2
3.6	84.5	42.2
4.2	105	42.2

NOTE: V<sub>OUT</sub> = (R<sub>1</sub> + R<sub>2</sub>) R<sub>2</sub> × 1.207



Here are the calculated values of R1L (in kΩ) for VOUT= 3.3 V with different R2L values:

IF R0L= 0Ω

R2L=10kΩ: R1L≈17.34kΩ

R2L=20kΩ: R1L≈34.68kΩ

R2L=30kΩ: R1L≈52.02kΩ

R2L=40kΩ: R1L≈69.36kΩ

R2L=50kΩ: R1L≈86.70kΩ

R2L=60kΩ: R1L≈104.04kΩ

R2L=70kΩ: R1L≈121.38kΩ

R2L=80kΩ: R1L≈138.72kΩ

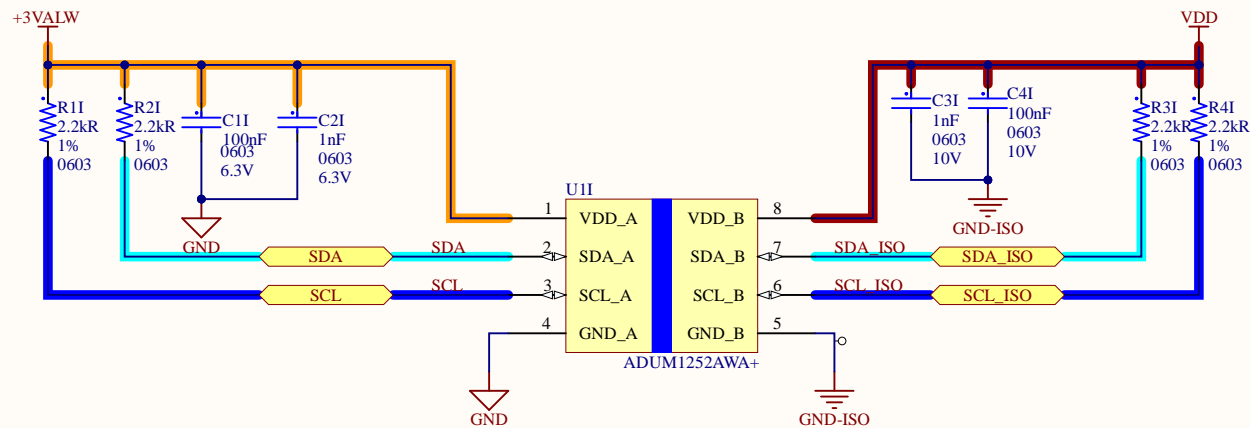
R2L=90kΩ: R1L≈156.06kΩ

R2L=100kΩ: R1L≈173.41kΩ

Title: <b>LDO</b>			Author: Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
Size: A4	Prj: USB-SMB-ISO-CP2112		Approved: Alcatraz	
Date: 06-12-2024	18:06:42	Sheet 2 of 6	Edited: 06-12-2024	
Git Hash: 476			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\2_LDO.SchDoc			SW Version: 24.10.1.45	

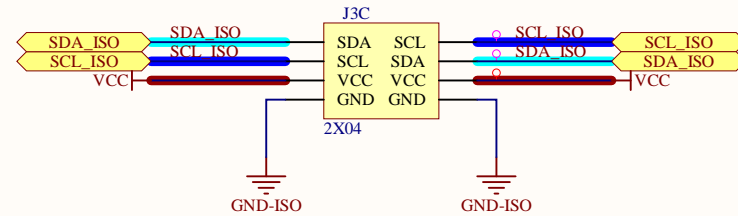
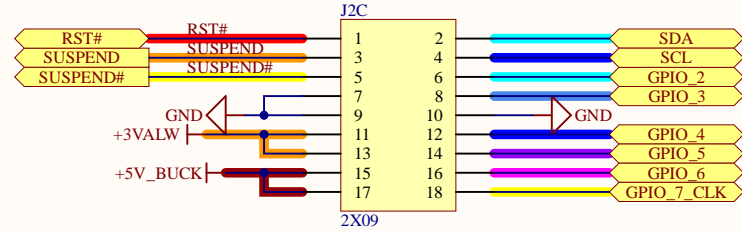
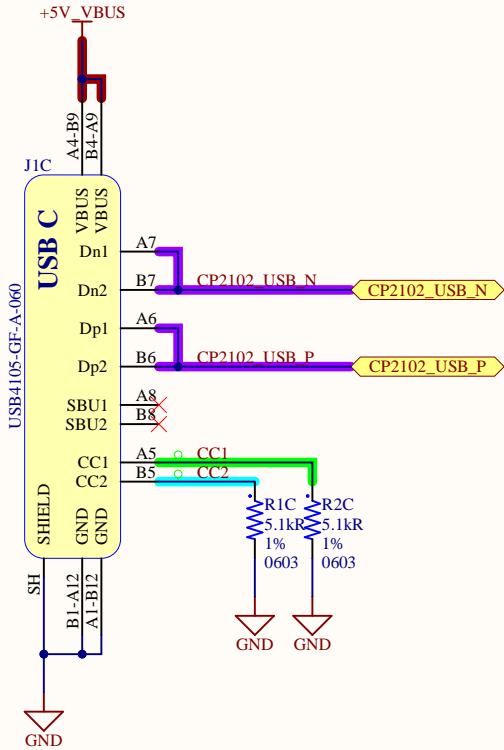






Title: <b>Digital_Isolator</b>			Author: Alcatraz	<b>DHNLAB PVT LTD</b> DHANBAD JHARKHAND INDIA ASIA
Size: A4			Approved: Alcatraz	
Prj: USB-SMB-ISO-CP2112			<b>PUBLIC</b>	
Date: 06-12-2024 18:06:43			Edited: 22-11-2024	
Sheet 4 of 6			Variant: [No Variations]	
Git Hash: 425			SW Version: 24.10.1.45	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\4_Digital_Isolator.SchDoc				






Title: <b>Connector</b>			Author: Alcatraz		DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
Size: A4		Prj: USB-SMB-ISO-CP2112		Approved: Alcatraz <b>PUBLIC</b>	
Date: 06-12-2024		18:06:43		Edited: 22-11-2024	
Git Hash: 420		Sheet 5 of 6		Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\6_Connector.SchDoc				SW Version: 24.10.1.45	





Title: <b>MountingHoles</b>			Author: Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div> 
			Approved: Alcatraz	
Size: A4	Prj: USB-SMB-ISO-CP2112		<b>PUBLIC</b>	
Date: 06-12-2024	18:06:43	Sheet 6 of 6	Edited: 22-11-2024	
Git Hash: 420			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\7_MountingHoles.SchDoc			SW Version: 24.10.1.45	