

Title: Power_Path			Author: Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div>
Size: A4			Approved: Alcatraz	
Prj: USB-SMB-ISO-CP2112			PUBLIC	
Date: 06-12-2024	14:26:24	Sheet 1 of 6	Edited: 03-12-2024	
Git Hash: 471			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\1_Power_Path.SchDoc			SW Version: 24.10.1.45	



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 _{OUT} (V)	R ₁ (kΩ)	R ₂ (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_{OUT} = (R₁ + R₂) R₂ × 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

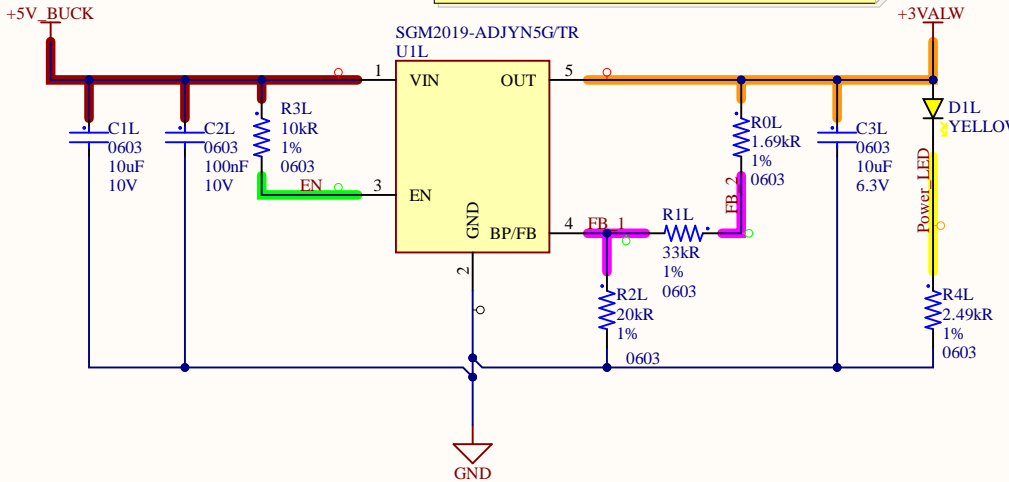
R2L=60kΩ: R1L≈104.04kΩ

R2L=70kΩ: R1L≈121.38kΩ

R2L=80kΩ: R1L≈138.72kΩ

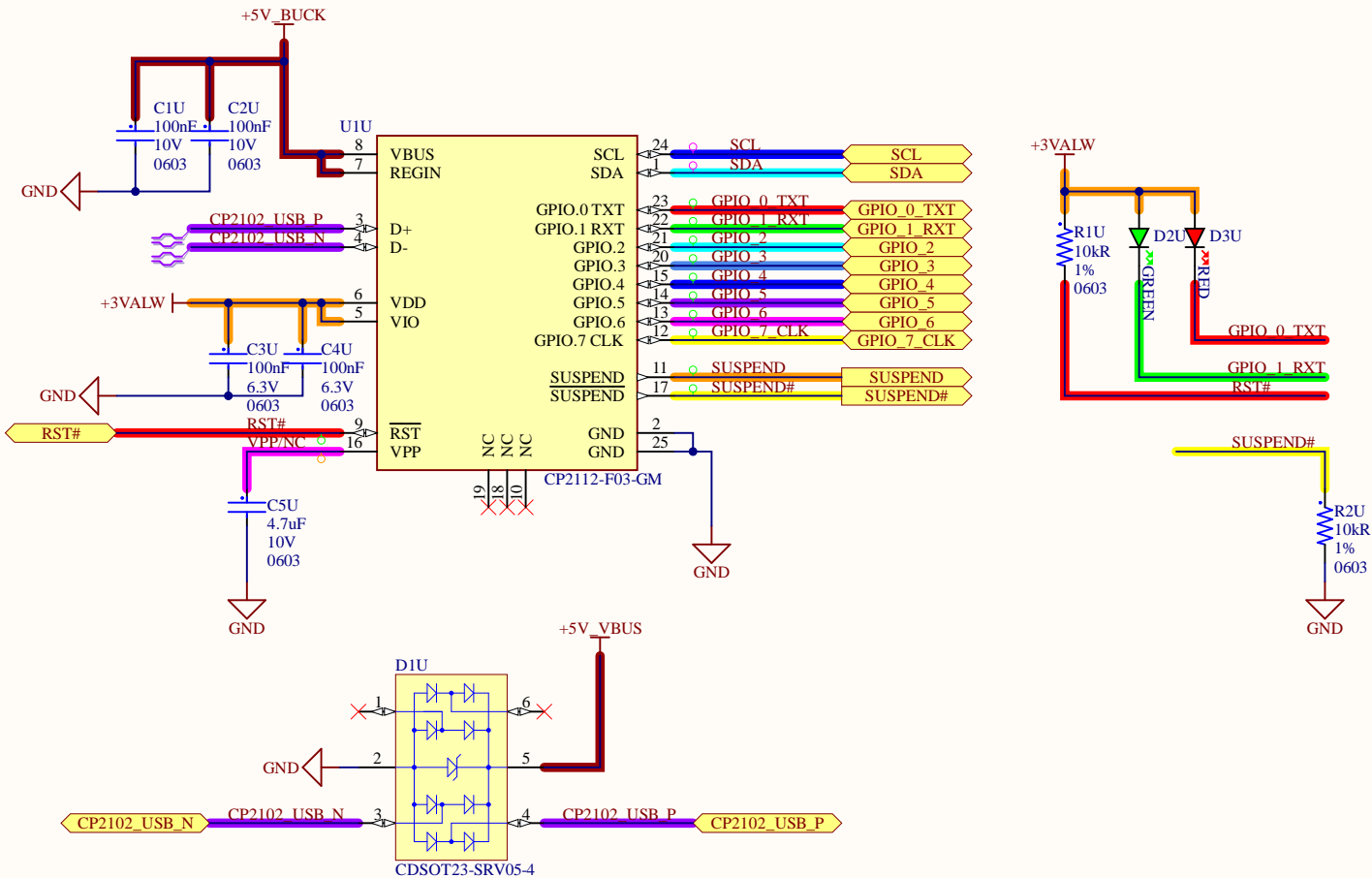
R2L=90kΩ: R1L≈156.06kΩ

R2L=100kΩ: R1L≈173.41kΩ



Title: LDO			Author: Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
Size: A4	Prj: USB-SMB-ISO-CP2112		Approved: Alcatraz	
Date: 06-12-2024	14:26:24	Sheet 2 of 6	Edited: 22-11-2024	
Git Hash: 421			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: **USB_TO_UART**

Size: A4

Prj: USB-SMB-ISO-CP2112

Date: 06-12-2024 14:26:25 Sheet 3 of 6

Git Hash: 420

File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\3_USB_TO_UART.SchDoc

Author: Alcatraz

Approved: Alcatraz

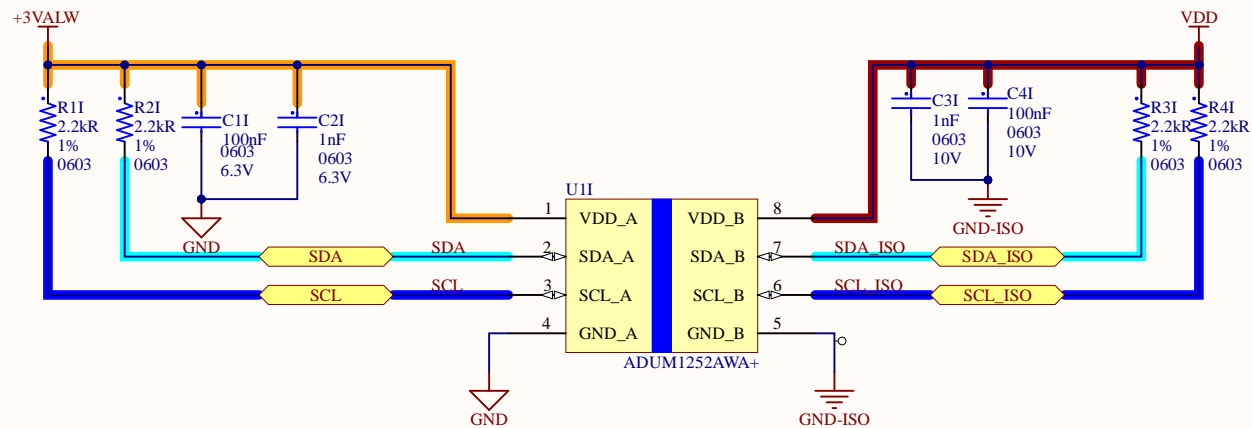
Edited: 22-11-2024

Variant: [No Variations]

SW Version: 24.10.1.45

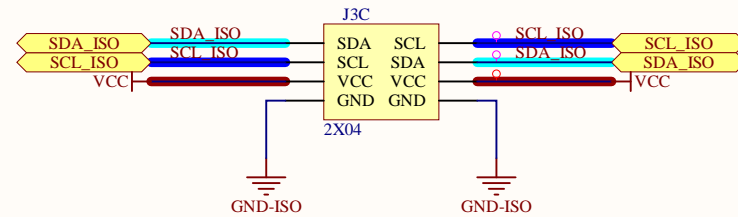
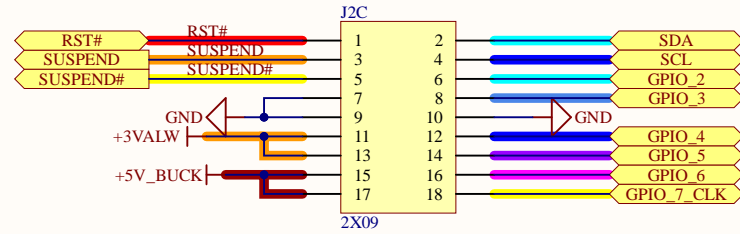
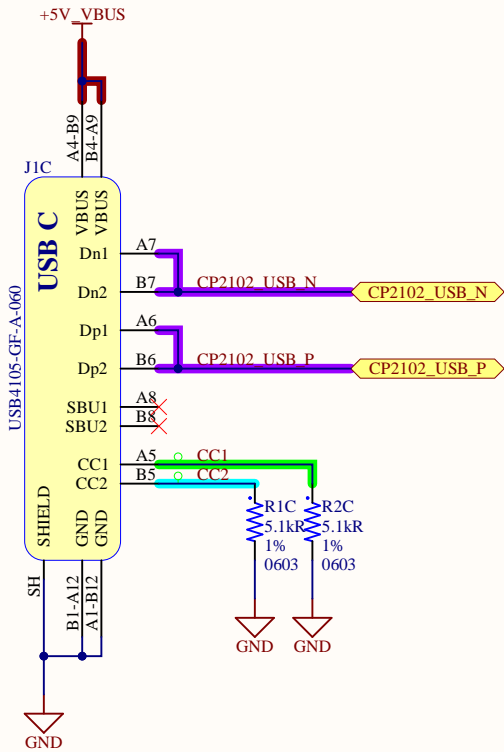
DHNLAB PVT LTD
DHANBAD
JHARKHAND
INDIA
ASIA





Title: <i>Digital Isolator</i>			Author:	Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASTA
Size: A4			Approved:	Alcatraz	
Prj: USB-SMB-ISO-CP2112			PUBLIC		
Date: 06-12-2024	14:26:25	Sheet 4 of 6	Edited:	22-11-2024	
Git Hash: 425			Variant:	[No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-SMB-ISO-CP2112\4_Digital_Isolator.SchDoc			SW Version:	24.10.1.45	






Title: Connector			Author: Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div>
Size: A4	Prj: USB-SMB-ISO-CP2112		Approved: Alcatraz	
Date: 06-12-2024	14:26:25	Sheet 5 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\6_Connector.SchDoc			SW Version: 24.10.1.45	





Title: MountingHoles			Author:	Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div> 
			Approved:	Alcatraz	
Size: A4	Prj: USB-SMB-ISO-CP2112			PUBLIC	
Date: 06-12-2024	14:26:25	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	