


Title: <i>Power_Path</i>			Author:	Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div> 
Size: A4	Prj: USB-UART-ISO-CP2102		Approved:	Alcatraz	
Date: 19-11-2024	09:52:05	Sheet 1 of 7	Edited:	17-11-2024	
Git Hash: 394			Variant:	[No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\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

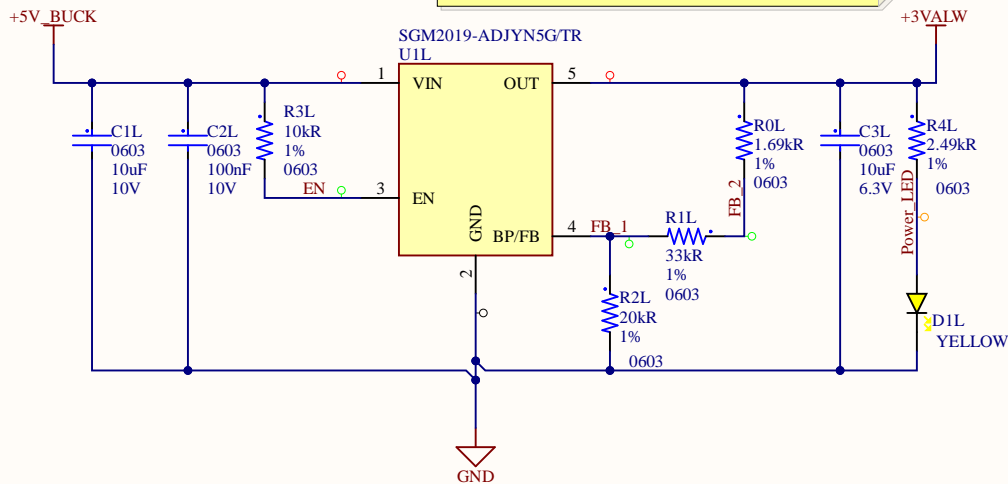
Values From Datasheet

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

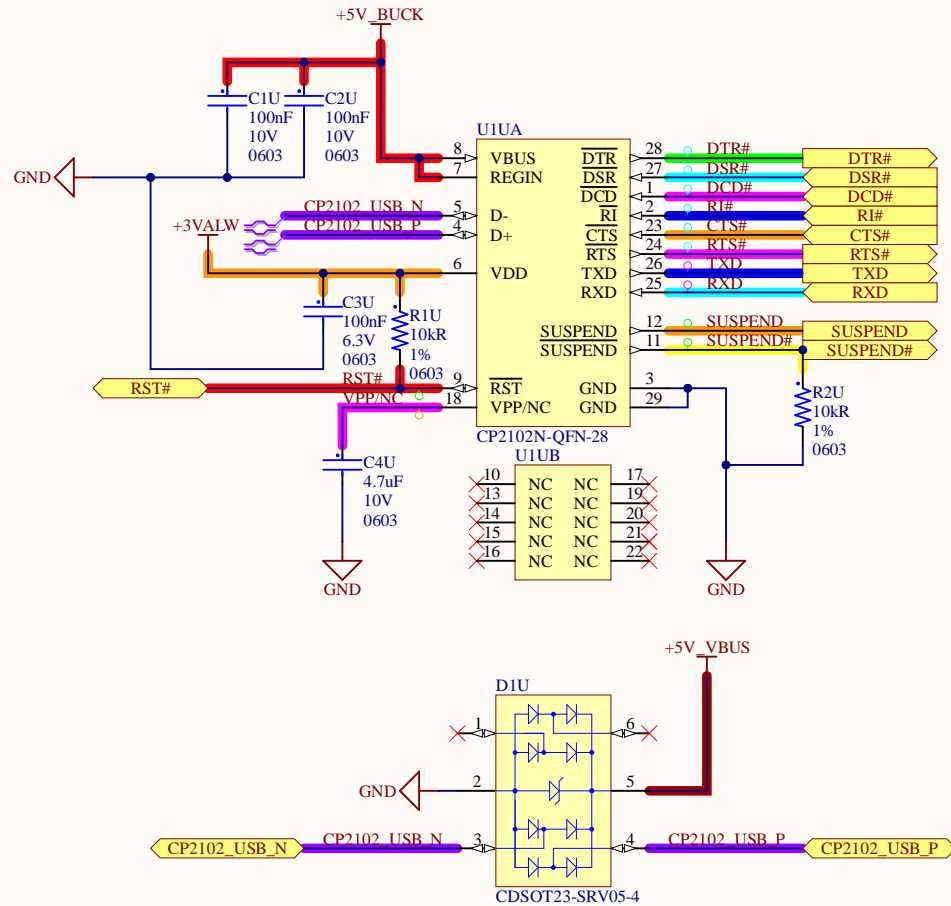
NOTE: V_{OUT} = (R₁ + R₂) R₂ × 1.207

Here are the calculated values of R1B (in kΩ) for VOUT= 3.3 V with different R2B 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



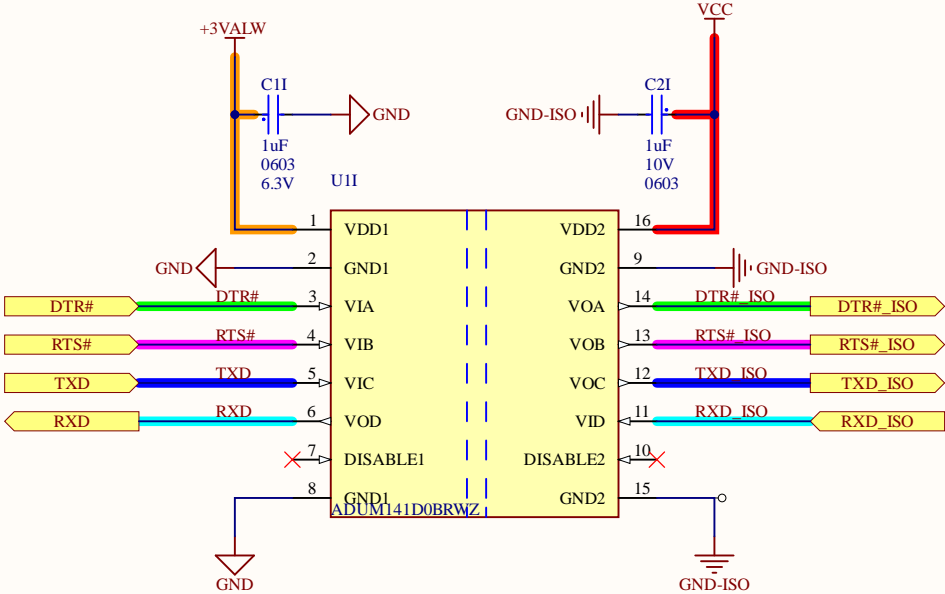
Title: LDO			Author: Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
Size: A4	Prj: USB-UART-ISO-CP2102		Approved: Alcatraz	
Date: 19-11-2024	09:52:05	Sheet 2 of 7	Edited: 19-11-2024	
Git Hash: 402			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\2_LDO.SchDoc			SW Version: 24.10.1.45	





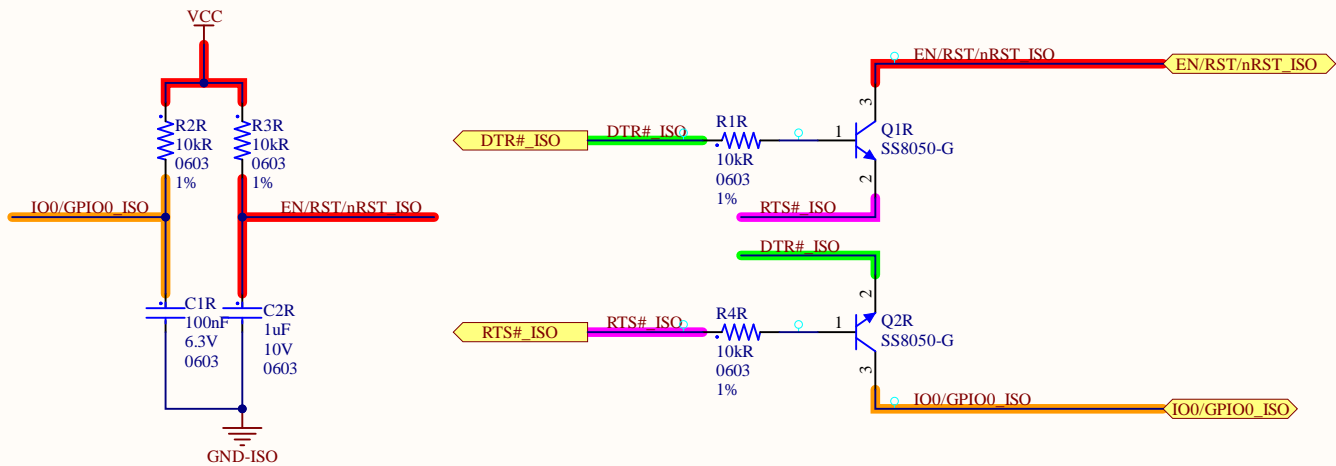
Title: USB_TO_UART			Author: Alcatraz	<div>DHNLAB PVT LTD</div> <div>DHANBAD</div> <div>JHARKHAND</div> <div>INDIA</div> <div>ASIA</div>
Size: A4	Prj: USB-UART-ISO-CP2102		Approved: Alcatraz	
Date: 19-11-2024	09:52:05	Sheet 3 of 7	Edited: 17-11-2024	
Git Hash: 394			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\3_USB_TO_UART.SchDoc			SW Version: 24.10.1.45	





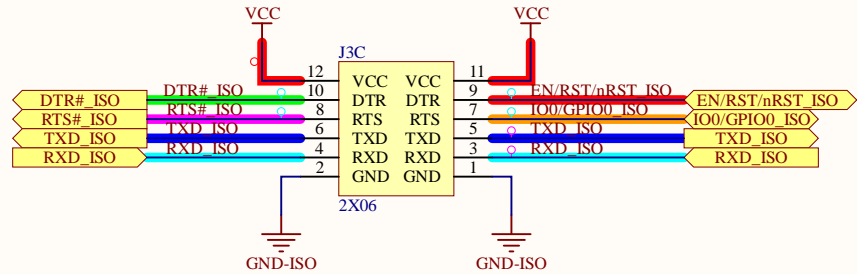
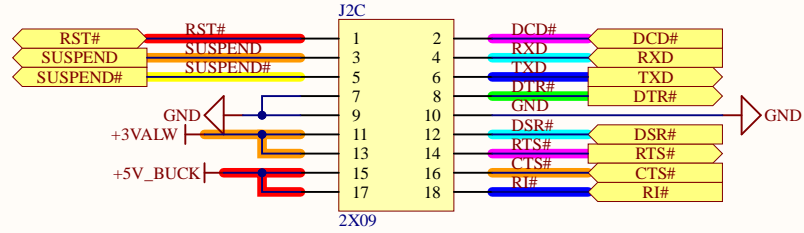
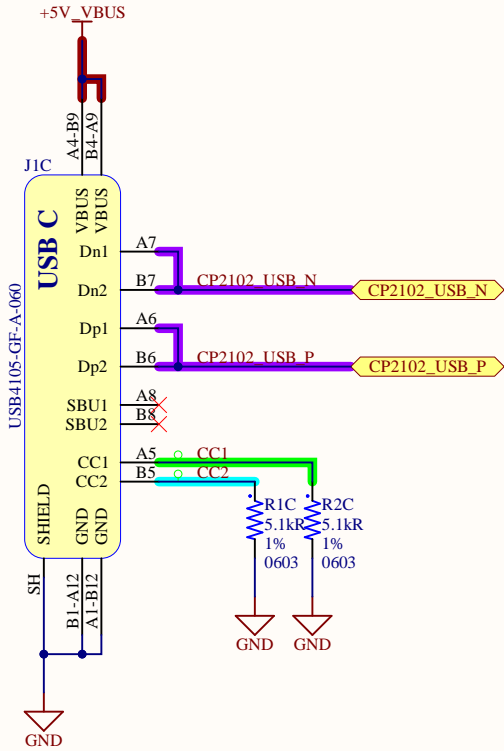
Title: <i>Digital Isolator</i>			Author: Alcatraz	<div>DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA</div>
Size: A4	Prj: USB-UART-ISO-CP2102		Approved: Alcatraz	
Date: 19-11-2024	09:52:05	Sheet 4 of 7	Edited: 17-11-2024	
Git Hash: 394			Variant: [No Variations]	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\4_Digital_Isolator.schDoc			SW Version: 24.10.1.45	





Title: Auto_Reset			Author:	Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
			Approved:	Alcatraz	
size: A4			Prj: USB-UART-ISO-CP2102		
Date: 19-11-2024			09:52:05		
Git Hash: 394			Sheet 5 of 7		
File:			C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\5_Auto_Reset.SchDoc		
			Author:	Alcatraz	
			Approved:	Alcatraz	
			PUBLIC		
			Edited:	17-11-2024	
			Variant: [No Variations]		
			SW Version: 24.10.1.45		





Title: Connector			Author: Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
Size: A4			Approved: Alcatraz PUBLIC	
Prj: USB-UART-ISO-CP2102			Edited: 17-11-2024	
Date: 19-11-2024 09:52:05			Variant: [No Variations]	
Git Hash: 394			SW Version: 24.10.1.45	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\6_Connector.SchDoc				





Title: MountingHoles			Author: Alcatraz	DHNLAB PVT LTD DHANBAD JHARKHAND INDIA ASIA
			Approved: Alcatraz	
Size: A4	Prj: USB-UART-ISO-CP2102		Edited: 19-11-2024	
Date: 19-11-2024	09:52:05	Sheet 7 of 7	Variant: [No Variations]	
Git Hash: 404			SW Version: 24.10.1.45	
File: C:\Users\desktop\Documents\Project Files\Altium\Projects\Project - Development\USB-UART-ISO-CP2102\7_MountingHoles.Sch				