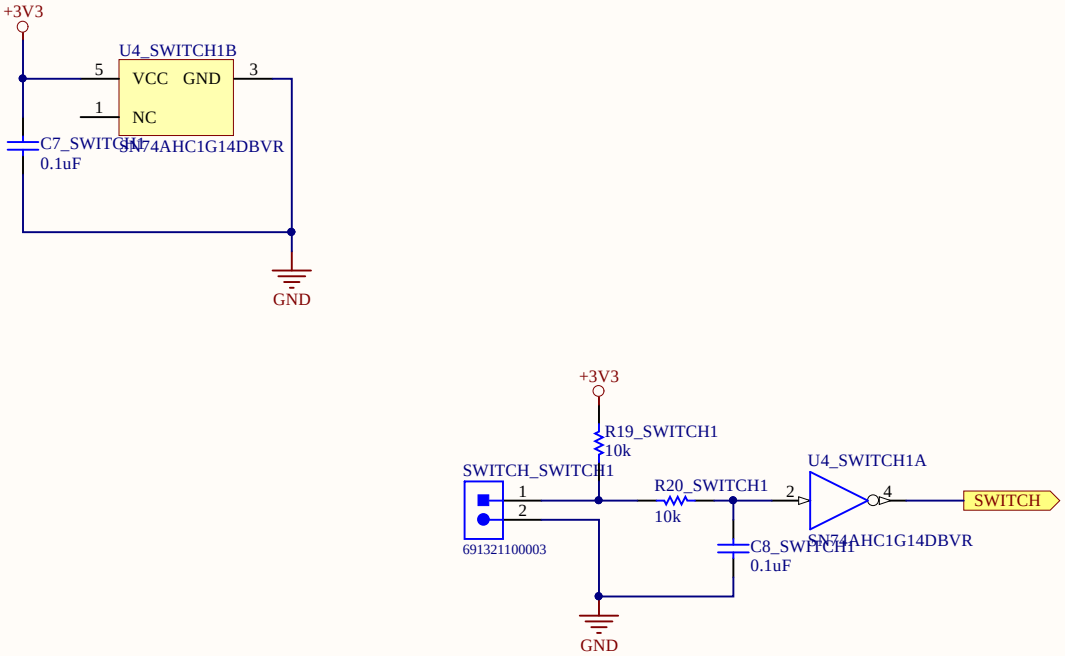

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Size: A4	Number	Revision
Date: 03-09-19		Sheet of
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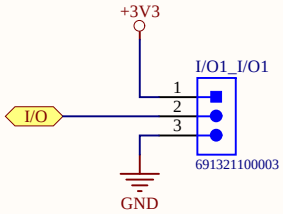

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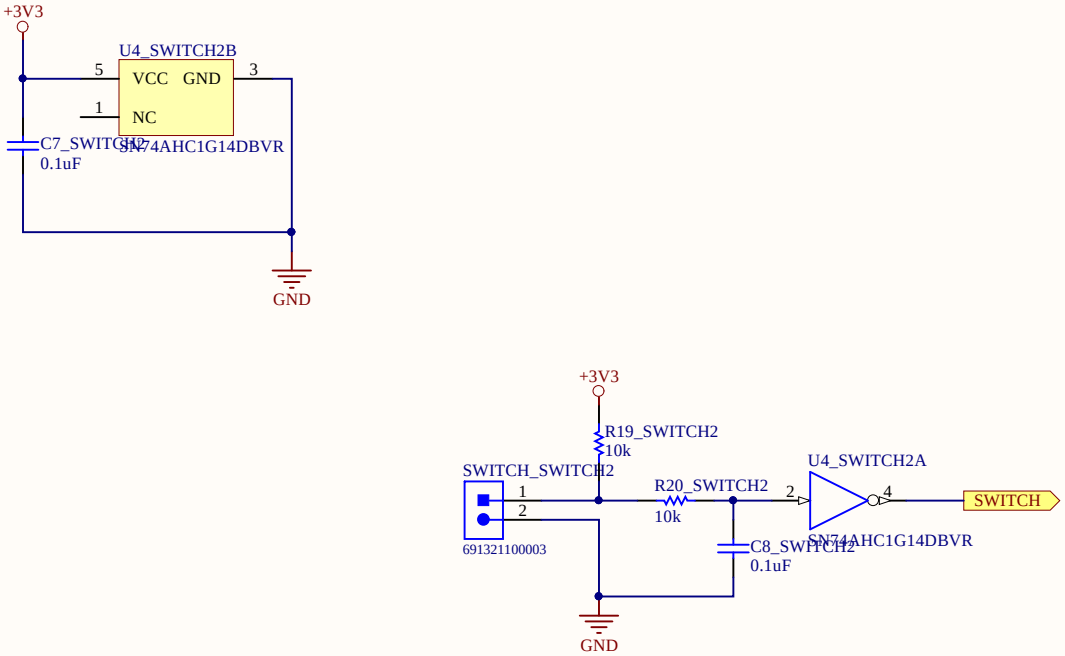

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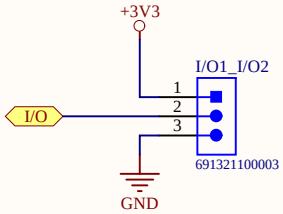

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Date: 03-09-19		Sheet	of
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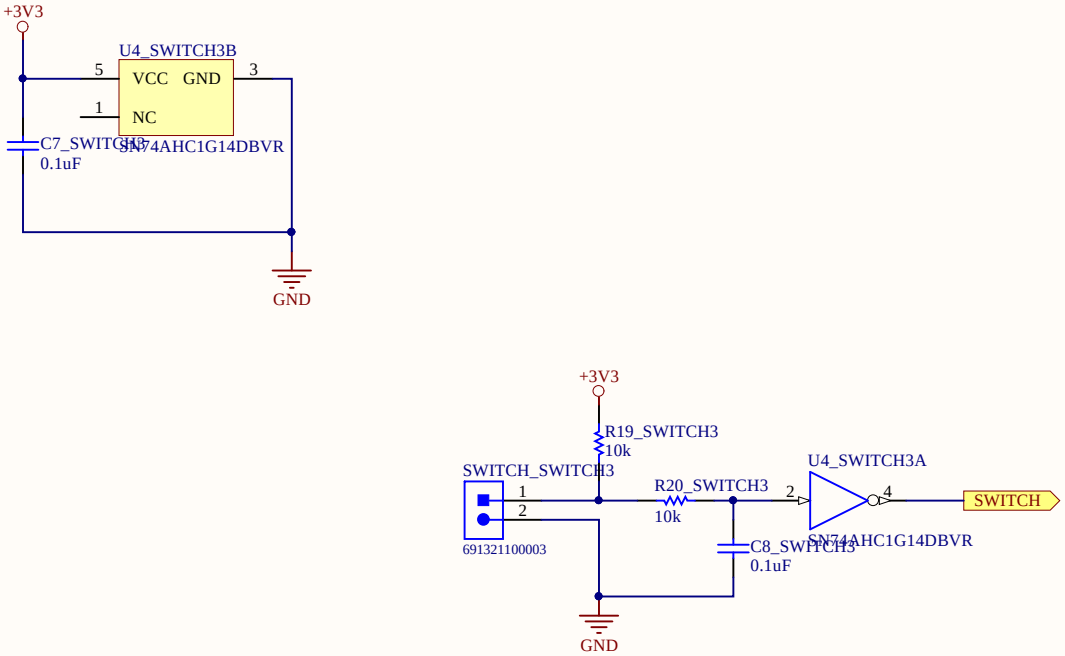

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Size: A4	Number	Revision
Date: 03-09-19		Sheet of
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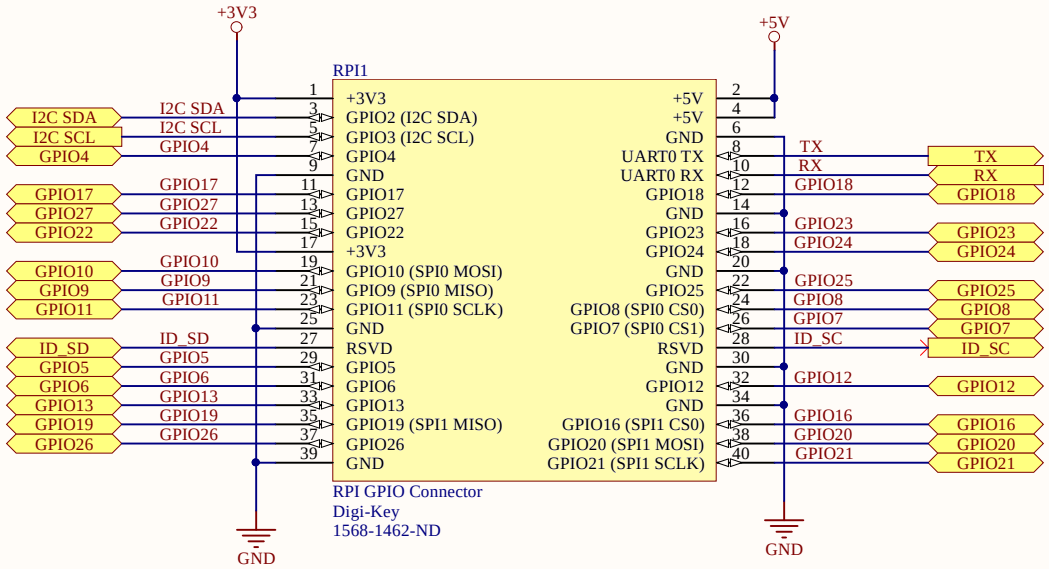
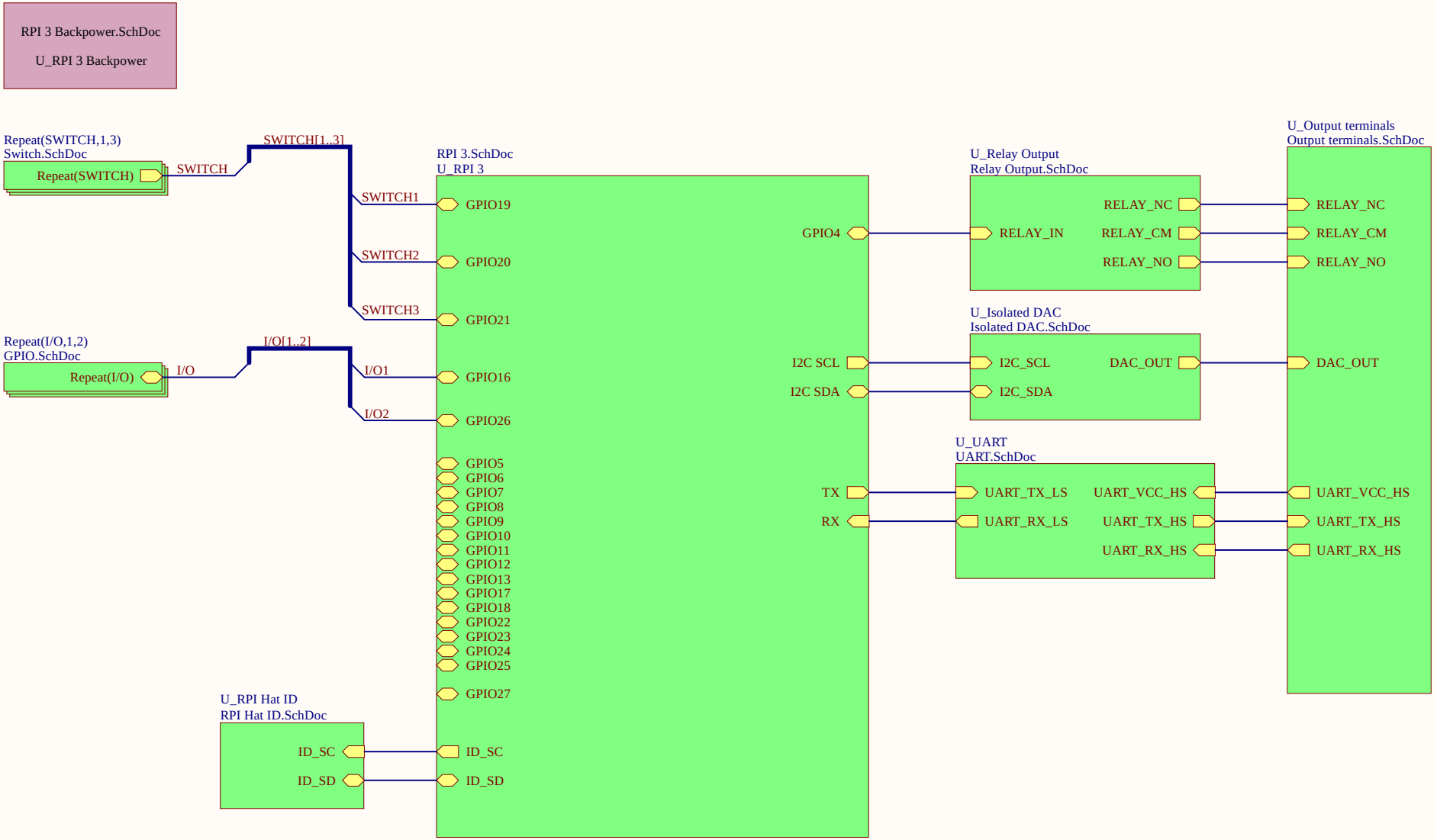

+3V3
+5V
RPI1
1 +3V3
2 +5V
3 GPIO2 (I2C SDA)
4 +5V
5 GPIO3 (I2C SCL)
6 GND
7 GPIO4
8 UART0 TX
9 GND
10 UART0 RX
11 GPIO17
12 GPIO18
13 GPIO27
14 GND
15 GPIO22
16 GPIO23
17 +3V3
18 GPIO24
19 GPIO10 (SPI0 MOSI)
20 GND
21 GPIO9 (SPI0 MISO)
22 GPIO25
23 GPIO11 (SPI0 SCLK)
24 GPIO8 (SPI0 CS0)
25 GND
26 GPIO7 (SPI0 CS1)
27 RSVD
28 RSVD
29 GPIO5
30 GND
31 GPIO6
32 GPIO12
33 GPIO13
34 GND
35 GPIO19 (SPI1 MISO)
36 GPIO16 (SPI1 CS0)
37 GPIO26
38 GPIO20 (SPI1 MOSI)
39 GND
40 GPIO21 (SPI1 SCLK)
I2C SDA
I2C SCL
GPIO4
GPIO17
GPIO27
GPIO22
GPIO10
GPIO9
GPIO11
ID_SD
GPIO5
GPIO6
GPIO13
GPIO19
GPIO26
TX
RX
GPIO18
GPIO23
GPIO24
GPIO25
GPIO8
GPIO7
ID_SC
GPIO12
GPIO16
GPIO20
GPIO21
GND
GND
RPI GPIO Connector
Digi-Key
1568-1462-ND



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Size: A4	Number	Revision
Date: 03-09-19	Sheet of	
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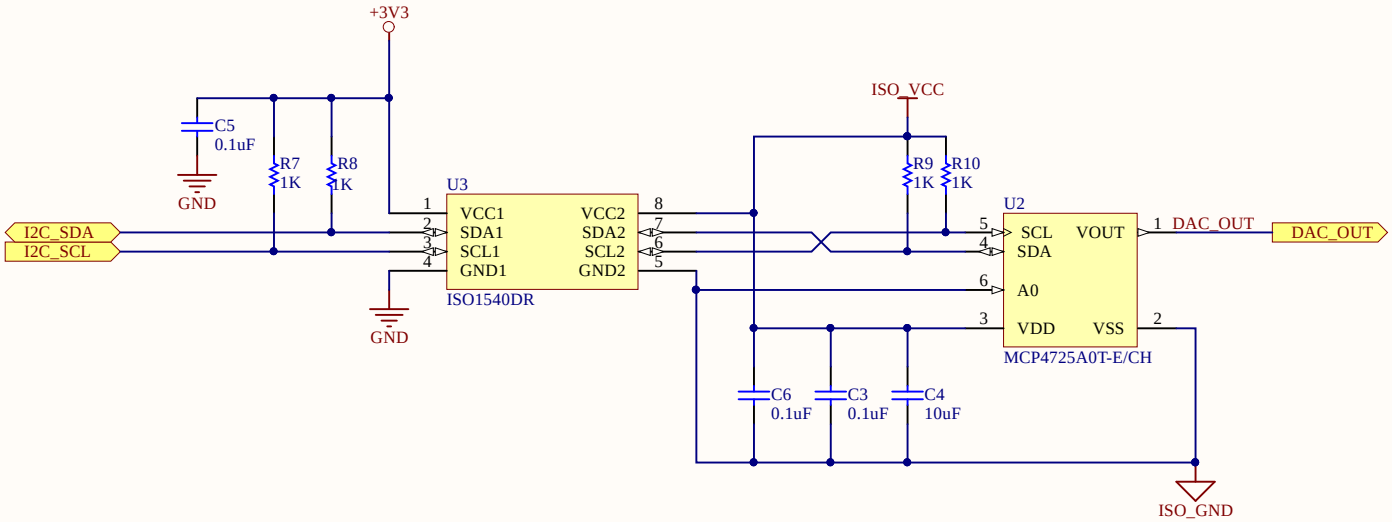

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Date: 03-09-19		Sheet of
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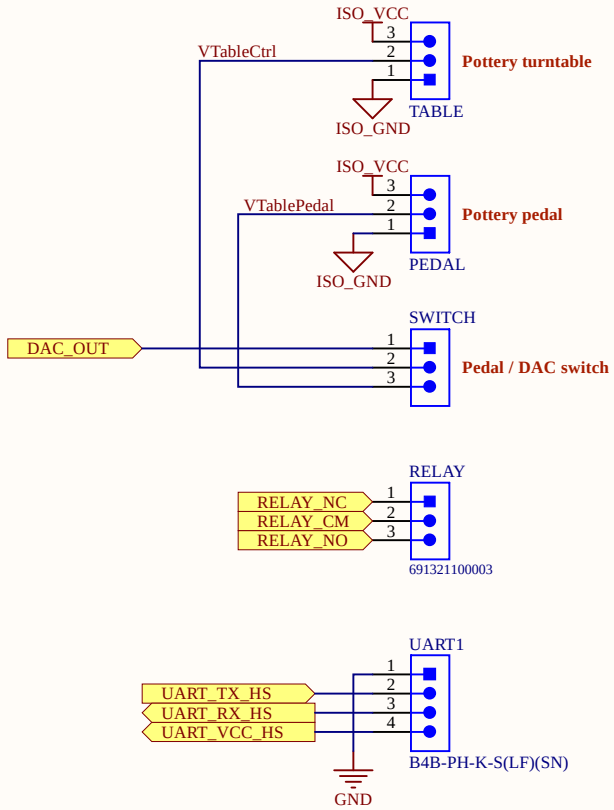

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Size A4	Number	Revision
Date: 03-09-19		Sheet of
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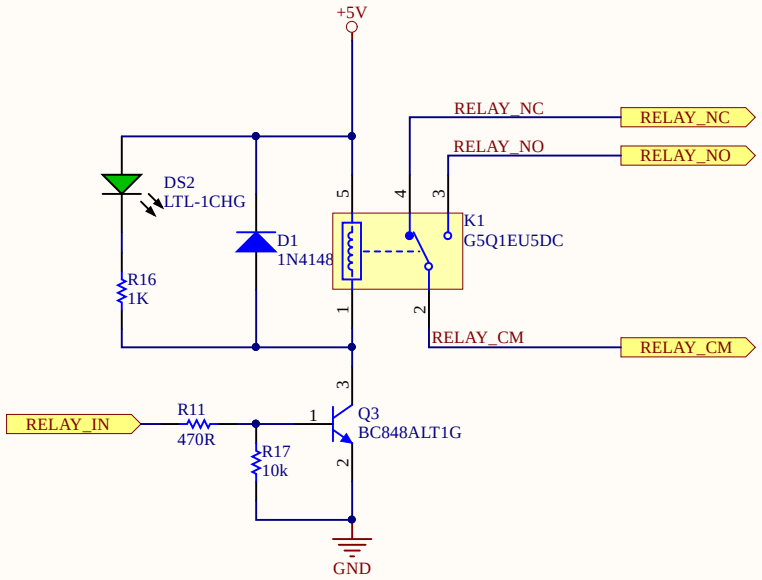

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Date:	03-09-19	Sheet	of
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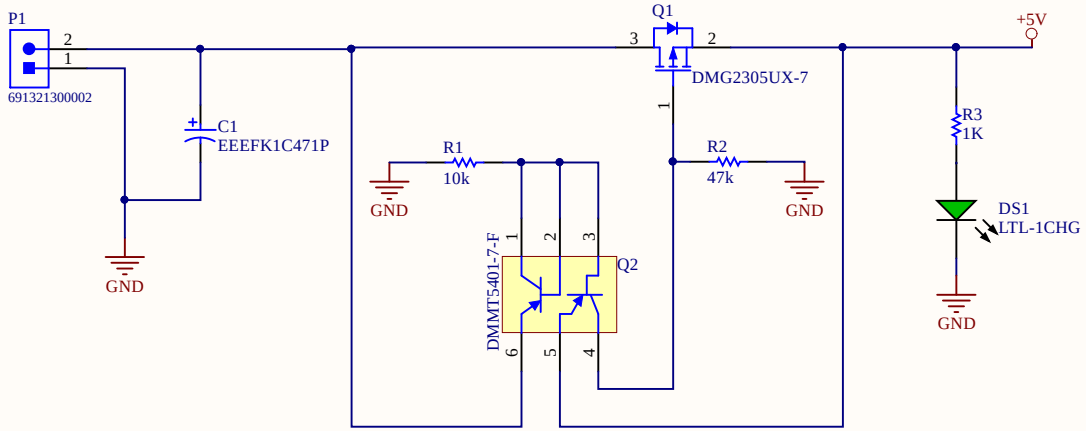

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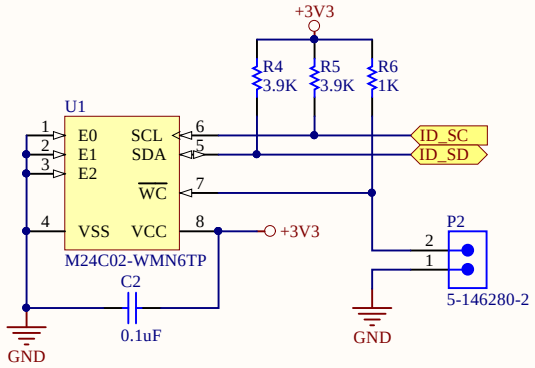
Date: 03-09-19		Sheet	of
File: D:\Dev\..\RPI 3 Backpower.SchDoc		Drawn By:	



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Date: 03-09-19		Sheet	of
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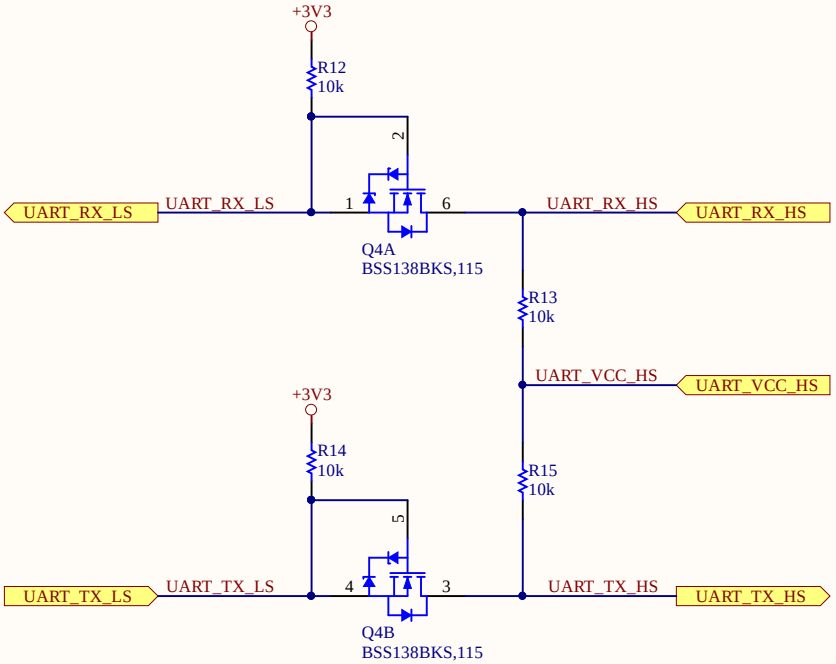

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Date: 03-09-19		Sheet of
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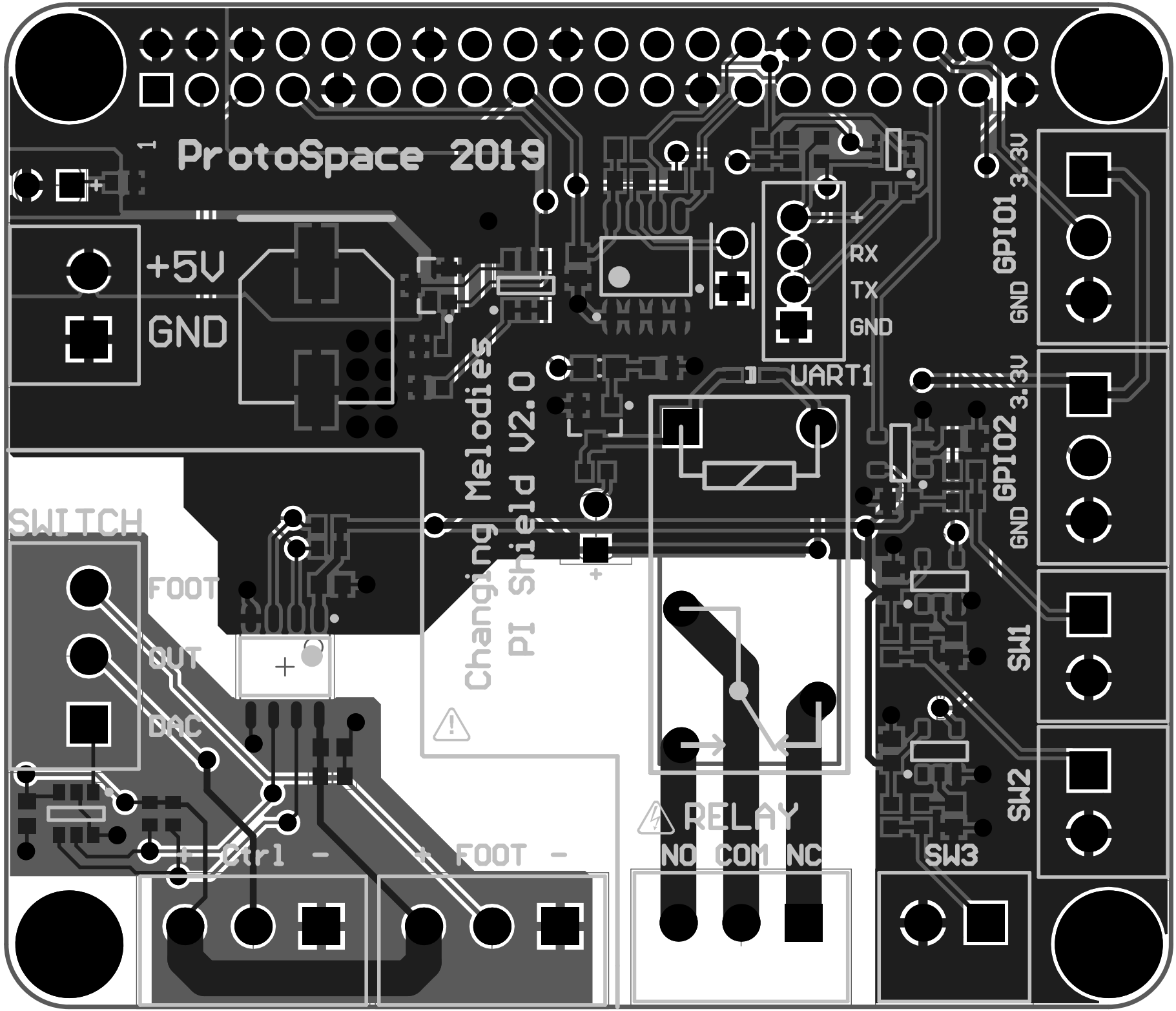
ProtoSpace 2019
+5V
GND
RX
TX
GND
UART1
3.3V
GPIO1
GND
3.3V
GPIO2
GND
SW1
SW2
SW3
SWITCH
FOOT
OUT
DAC
Changing Melodies
PI Shield V2.0
RELAY
NO COM NC
+ Ctrl -
+ FOOT -

Bill of Materials

Bill of Materials for Project [ChanginMelodies_RPIShield.PrjPcb] (No PCB Document Selected)

Source Data From: ChanginMelodies_RPIShield.PrjPcb
Project: ChanginMelodies_RPIShield.PrjPcb
Variant: None

Creation Date: 03-09-19 09:35
Print Date: 03-Sep-19 9:35:59 AM

#Column Name	Footprint	Comment	LibRef	Designator	Description	Quantity
	PNSC-FK-V-F	EEEFK1C471P	CMP-2000-0620	C1	Aluminum Electrolytic Capacitor, 470 uF, +	1
	CAPC1608X8	0.1uF	CMP-2006-0330	C2, C3, C5, C6, C7_SWITCH1,		10
	CAPC1608X9	10uF	CMP-2006-0279	C4		1
	FAIR-SOD-52	1N4148WT	CMP-0881-0000	D1	High Conductance Fast Switching Diode, 7	1
	LTST-LTL-1CH	LTL-1CHG	CMP-1674-0001	DS1, DS2	LITE-ON Electronic, INC, 120 mA, 100 mW	2
	691321100003	691321100003	CMP-1502-0178	I/O1_I/O1, I/O1_I/O2, RELAY	Serie 3211 - 3.50mm Vertical PCB Header	3
	G5Q1EU5DC	G5Q1EU5DC	G5Q1EU5DC	K1	OMRON - G5Q-1EU 5DC - RELAY, SPDT,	1
	691321300002	691321300002	CMP-1502-0186	P1	Serie 321 - 3.81mm Vertical PCB Header V	1
	TECO-5-1462	5-146280-2	CMP-2000-0749	P2	Male Header, Pitch 2.54 mm, 1 x 2 Positio	1
	691321300003	691321300003	CMP-1502-0186	PEDAL_SWITCH_TABLE	Serie 321 - 3.81mm Vertical PCB Header V	3
	DIOD-SOT23-	DMG2305UX-7	CMP-1693-0000	Q1	P-Channel Enhancement Mode MOSFET, 2	1
	DIOD-SOT-26	DMMT5401-7-F	CMP-1667-0000	Q2	Matched PNP Small Signal Surface Mount	1
	ONSC-SOT-2	BC848ALT1G	CMP-1048-0069	Q3	General Purpose Transistor, NPN Silicon, 3	1
	NXP-SOT363	BSS138BKS,115	CMP-1259-0011	Q4	Dual N-Channel Trench MOSFET, 60 V, 0.3	1
	RESC1609X5	10k	CMP-2000-0745	R1, R12, R13, R14, R15, R17,	Chip Resistor, 10 KOhm, +/- 1%, 0.1 W, -5	12
	RESC1608X5	47k	CMP-2000-0484	R2		1
	RESC1608X5	1K	CMP-2000-0018	R3, R7, R8, R9, R10, R16		6
	RESC1608X5	3.9K	CMP-2000-0018	R4, R5		2
	RESC1608X5	1K	CMP-2000-0018	R6		1
	RESC0603(16	470R	CMP-1012-0047	R11	470R 0.1W 1% 0603 (1608 Metric) SMD	1
	rpi	RPI GPIO Conn	rpi connector	RPI1	GPIO Header for Raspberry Pi A+/B+/Pi 2	1
	691321100002	691321100003	CMP-1502-0178	SWITCH_SWITCH1, SWITCH_SWITCH2	Serie 3211 - 3.50mm Vertical PCB Header	3
	STM-M24C02-	M24C02-WMN6T	CMP-2000-0537	U1	EEPROM Serial-I2C, 2Kbit, 2.5 to 5.5 V, 40	1
	SOT-23-CH6_	MCP4725A0T-E/	CMP-0188-0076	U2	12-Bit Digital-to-Analog Converter with EEP	1
	ISO1540DR S	ISO1540DR	ISO1540DR	U3	DGTL ISO 2.5KV 2CH I2C 8SOIC	1
	DBV0005A_L	SN74AHC1G14	CMP-2000-0713	U4_SWITCH1, U4_SWITCH2,	Single Schmitt-Trigger Inverter Gate, 10.6	3
	JST-B4B-PH-	B4B-PH-K-S(LF)	CMP-2000-0516	UART1	Male Header, Pitch 2 mm, 1 x 4 Position,	1
						62

Approved	Notes	