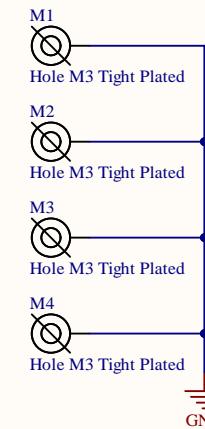
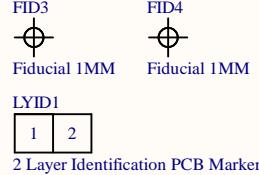
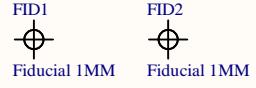




30mm Wide QUTMS Logo



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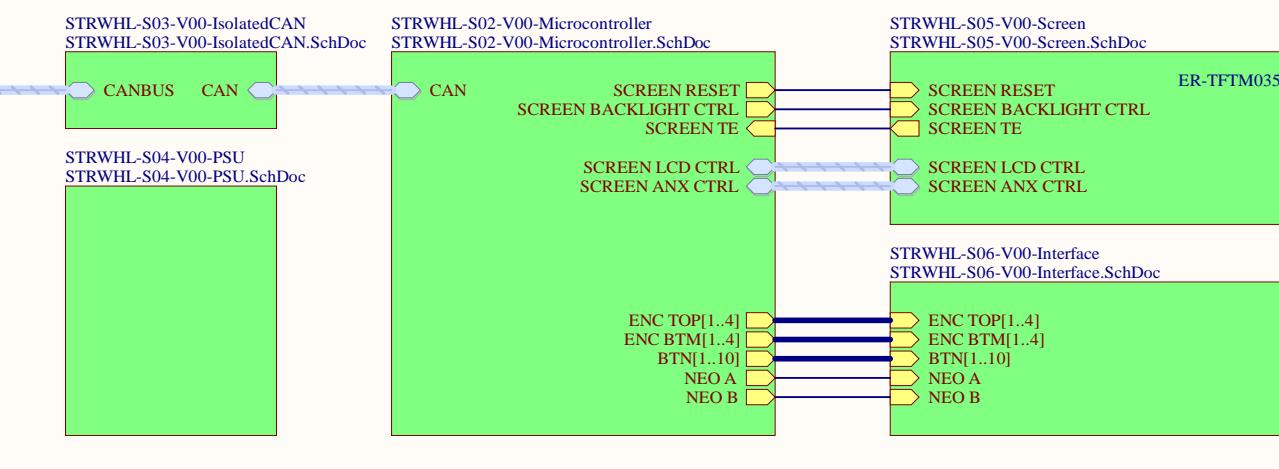
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Revision History:

Rev	Date	Description

Sheet Title: **Steering Wheel 2020**

Project: **Steering Wheel 2020**

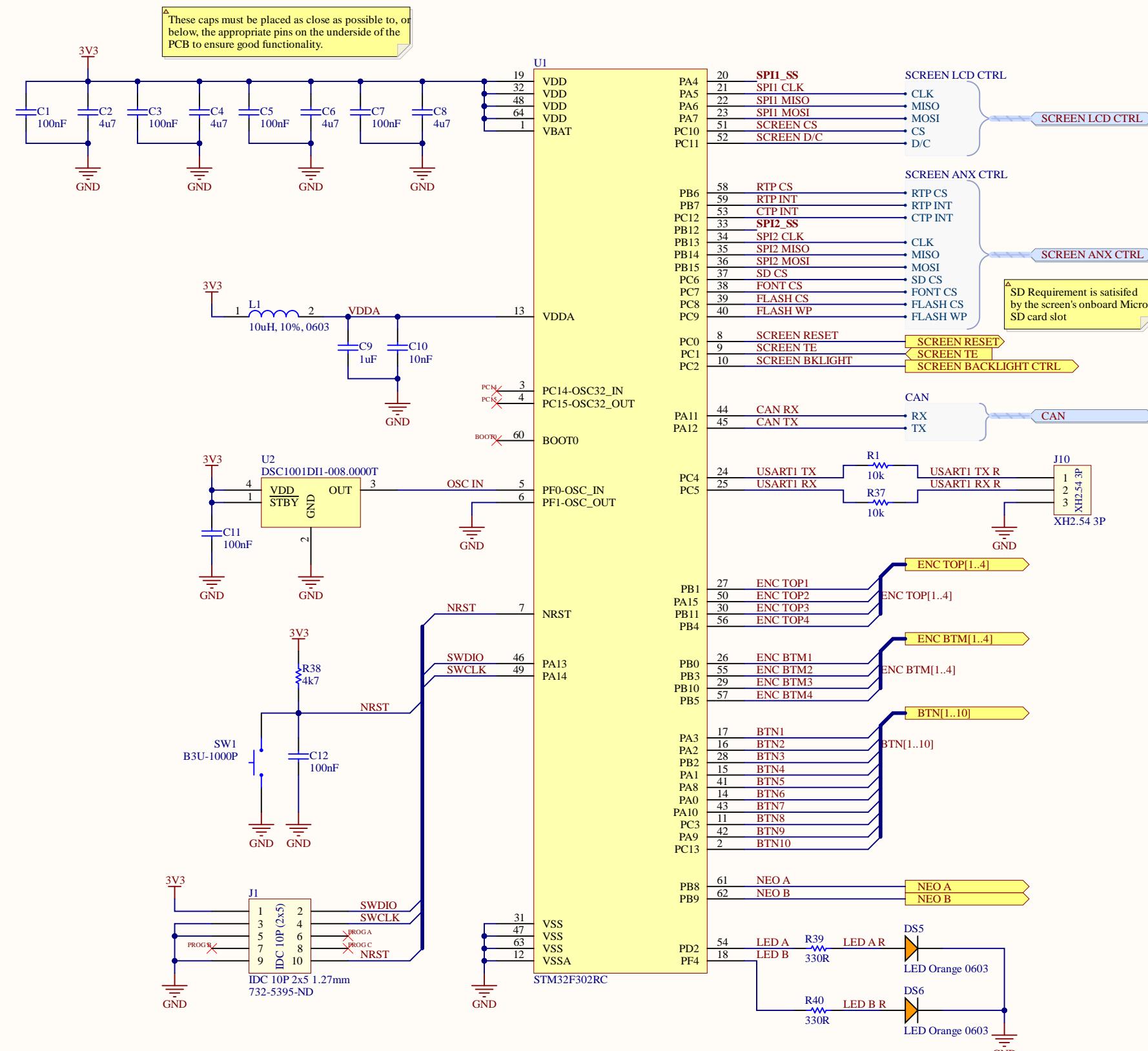
QUT Motorsport
O-120, Gardens Point
2 George Street
Brisbane, QLD 4000



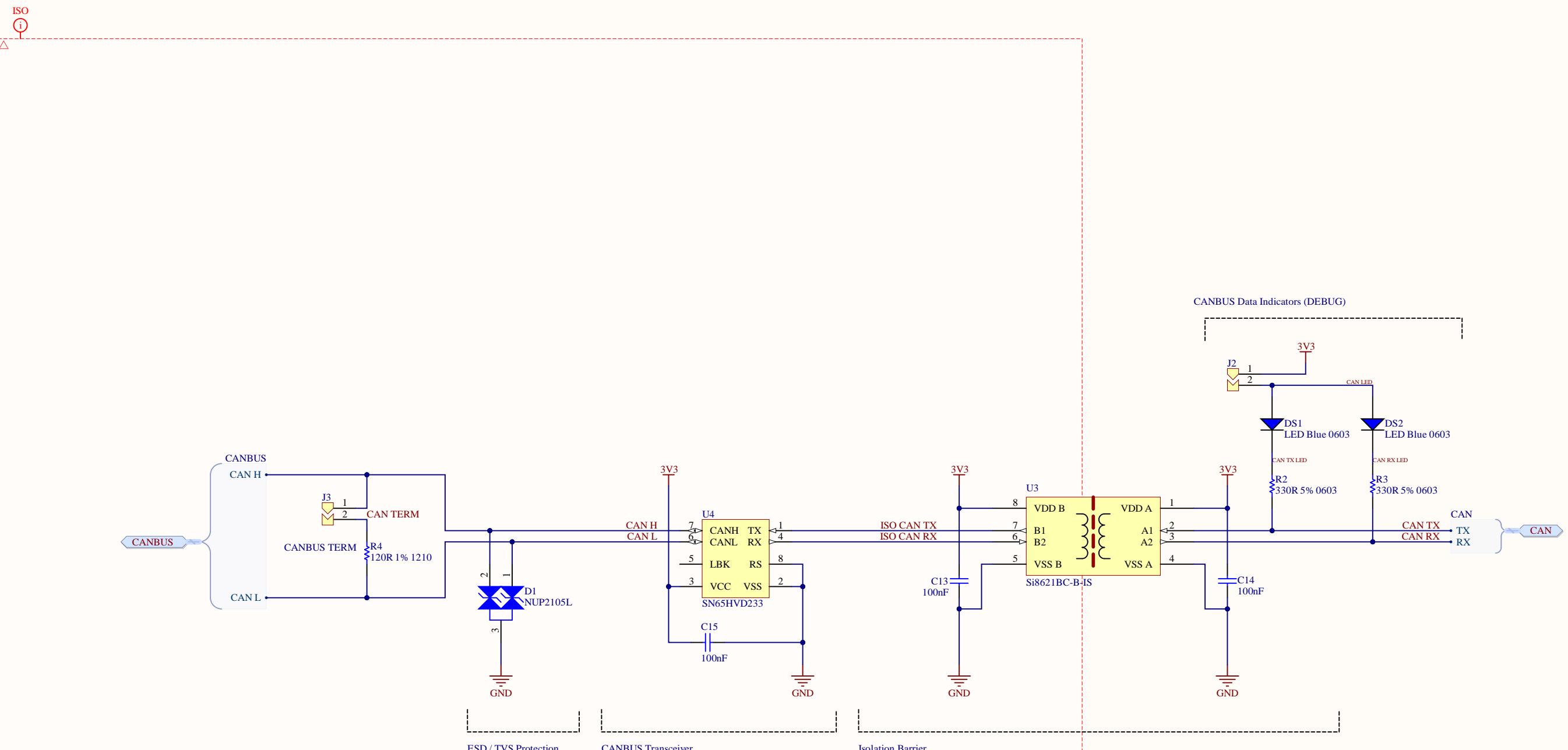
Size: A3 Number: 1 Version: 00

Revision: 00 Drawn By: Jonn Dillon Sheet 1 of 9

Australia Print Date: 27/07/2020 Print Time: 12:23:10 AM File Name: STRWHL-S01-V00-SteeringWheel.SchDoc



Revision History:		Sheet Title: Microcontroller		Project: Steering Wheel 2020		QUT Motorsport	
Rev	Date	Description		Size: A3	Number: 2	Version: *	O-120, Gardens Point
						Revision: 00	2 George Street
						Drawn By: Jonn Dillon	Brisbane, QLD 4000
						Sheet 2 of 9	Australia
						Print Date: 27/07/2020 Print Time: 12:23:10 AM	File Name: STRWHL-S02-V00-Microcontroller.SchDoc



Revision History:

Rev	Date	Description

Sheet Title: CANBUS

Project: Steering Wheel 2020

QUT Motorsport
O-120, Gardens Point

Size: A3 Number: 3 Version: * 2 George Street

Brisbane, QLD 4000

Revision: 00 Sheet 3 of 9 Australia

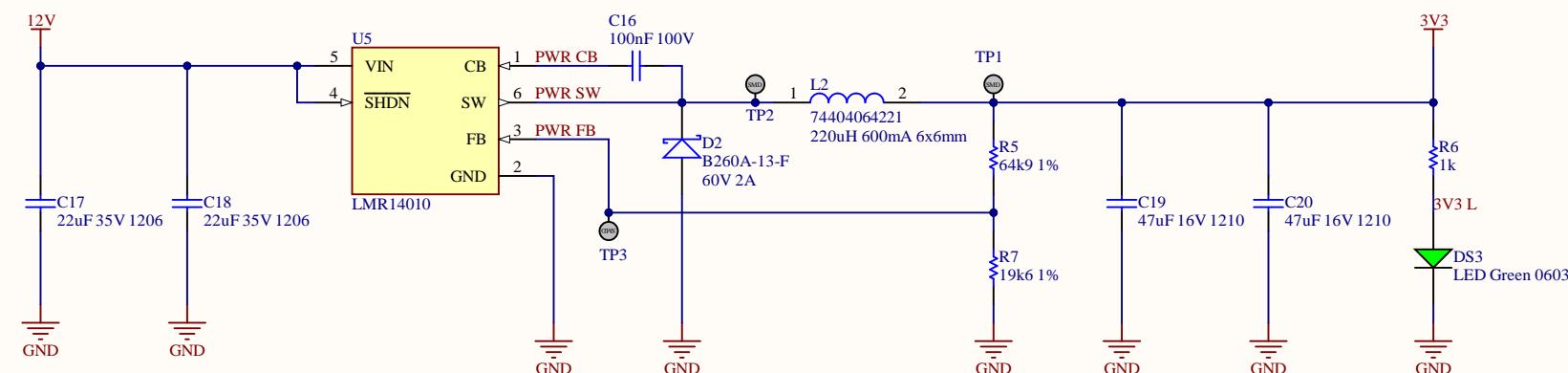
Drawn By: Jonn Dillon Print Date: 27/07/2020 Print Time: 12:23:11 AM File Name: STRWHL-S03-V00-IsolatedCAN.SchDoc

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Revision History:

Rev	Date	Description

Sheet Title: Power Supply (9-25V to 3v3 @ 0.1-0.3A)

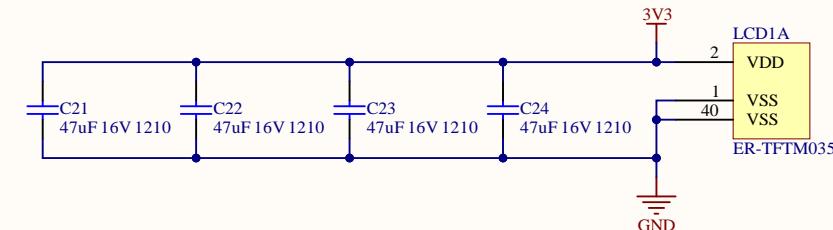
Project: Steering Wheel 2020

QUT Motorsport
O-120, Gardens Point
2 George Street
Brisbane, QLD 4000
Australia

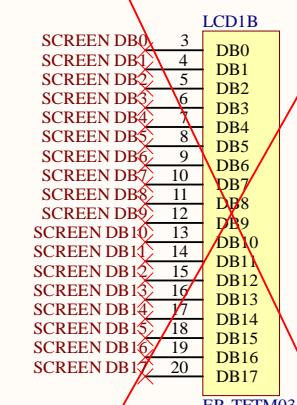
Size: A3 Number: 4

Version: *
Revision: 00
Drawn By: Jonn Dillon
Sheet 4 of 9
Print Date: 27/07/2020 Print Time: 12:23:11 AM File Name: STRWHL-S04-V00-PSU.SchDoc

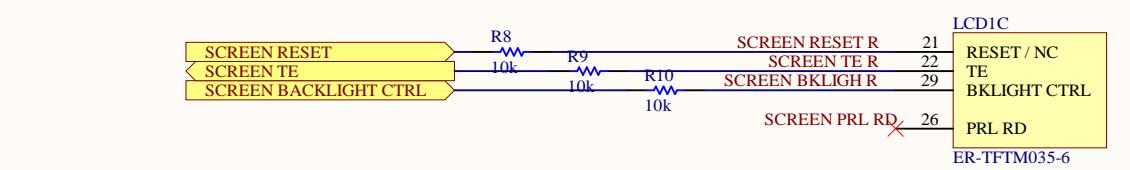
A



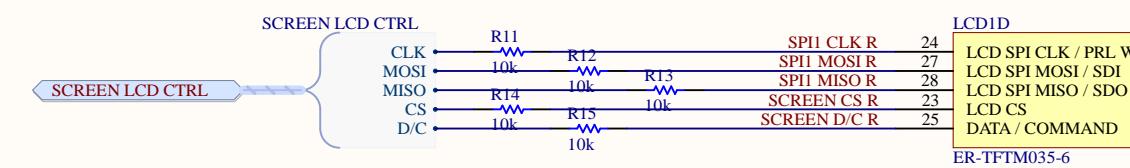
Parallel Interface Not Used!



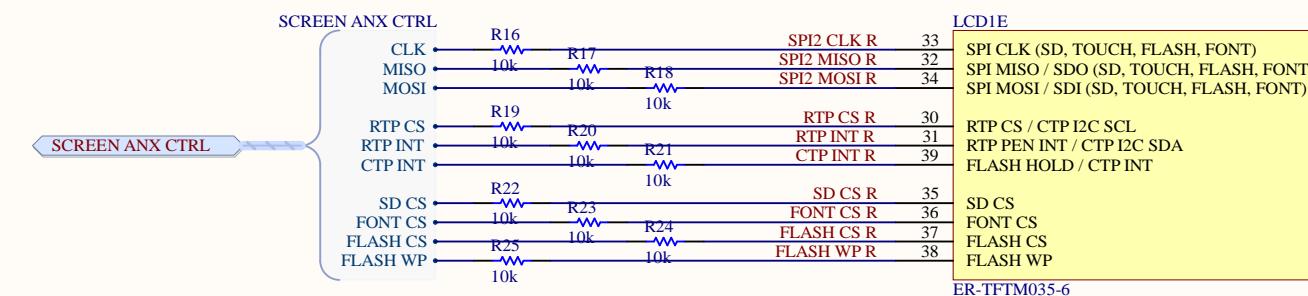
ER-TFTM035-6



ER-TFTM035-6



ER-TFTM035-6



ER-TFTM035-6

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Revision History:

Rev	Date	Description

Sheet Title: Screen Interface (ER-TFTM035-6)

Project: Steering Wheel 2020

QUT Motorsport
O-120, Gardens Point
2 George Street
Brisbane, QLD 4000

Size: A3 Number: 5

Version: 00
Revision: 00
Drawn By: Jonn Dillon Sheet 5 of 9 Australia

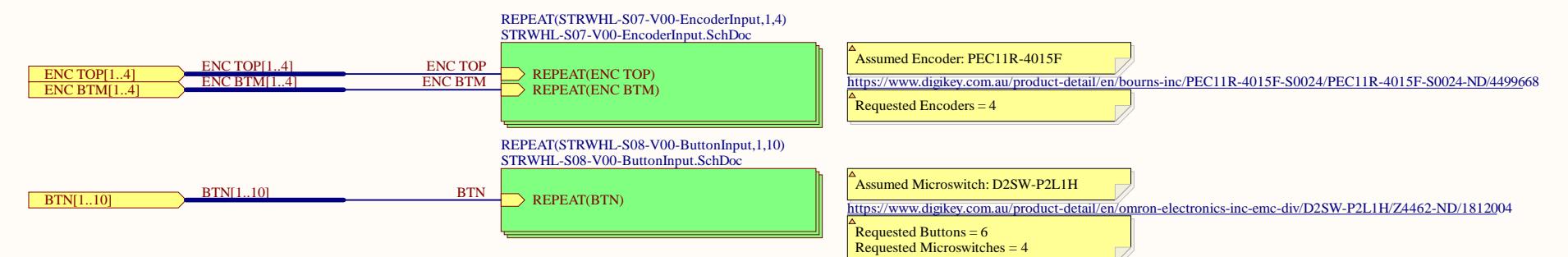
Print Date: 27/07/2020 Print Time: 12:23:11 AM File Name: STRWHL-S05-V00-Screen.SchDoc

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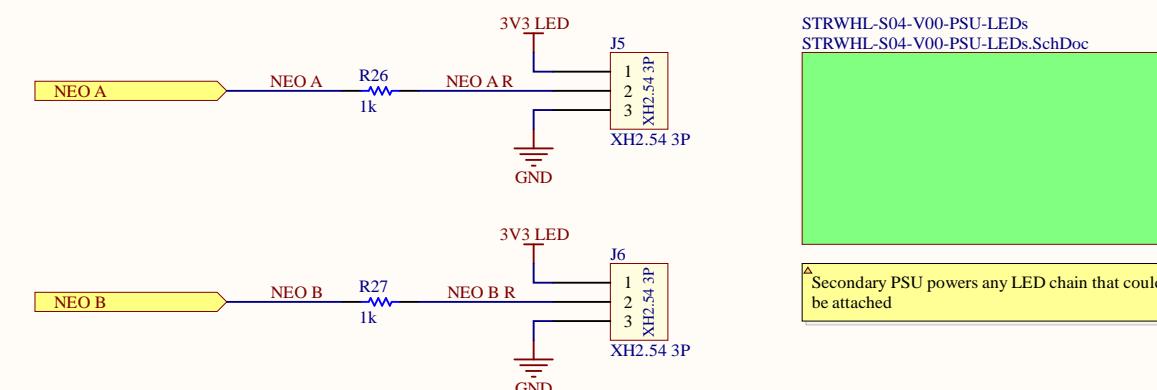
B

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Revision History:	
Rev	Date

Sheet Title: **User Inputs / Interface (Buttons, Microswitches, Encoders)**Project: **Steering Wheel 2020**QUT Motorsport
O-120, Gardens Point
2 George Street
Brisbane, QLD 4000Size: **A3** Number: **6**Version: **00**
Revision: **00**Drawn By: **Jonn Dillon**Sheet **6** of **9**
AustraliaPrint Date: **27/07/2020** Print Time: **12:23:11 AM** File Name: **STRWHL-S06-V00-Interface.SchDoc**

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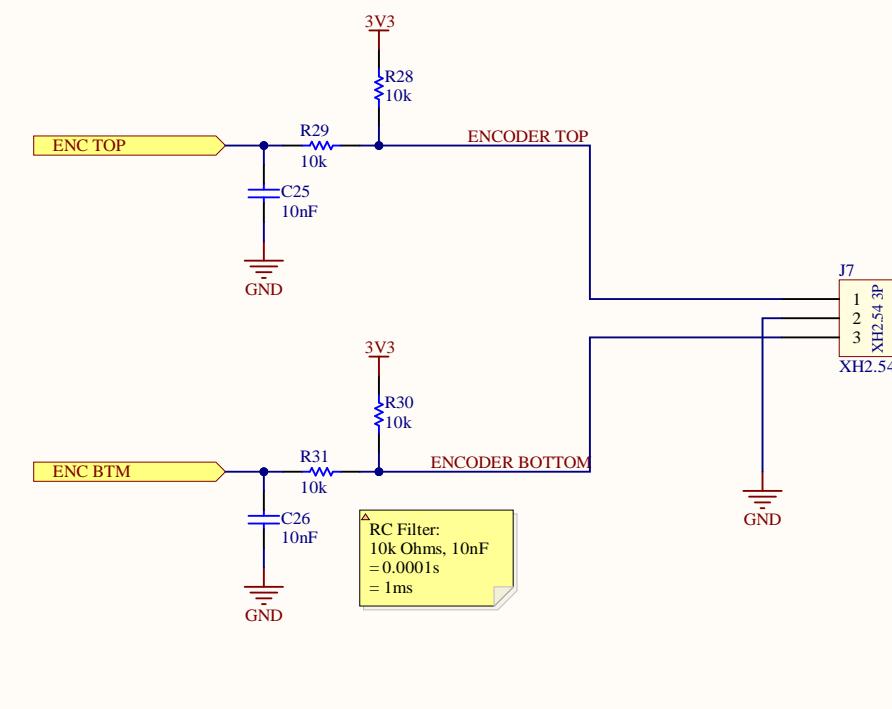
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Revision History:

Rev	Date	Description

Sheet Title: Encoder Input

Project: Steering Wheel 2020

QUT Motorsport
O-120, Gardens Point2 George Street
Brisbane, QLD 4000

Australia

Print Date: 27/07/2020 Print Time: 12:23:11 AM File Name: STRWHL-S07-V00-EncoderInput.SchDoc

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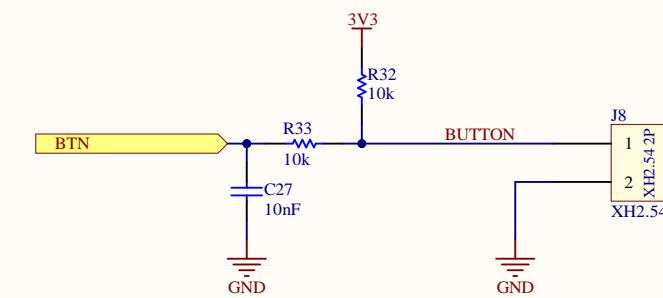
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Revision History:

Rev	Date	Description

Sheet Title: **Button Input**Project: **Steering Wheel 2020**QUT Motorsport
O-120, Gardens Point2 George Street
Brisbane, QLD 4000Version: 00
Drawn By: Jonn Dillon Sheet 8 of 9 Australia

Print Date: 27/07/2020 Print Time: 12:23:12 AM File Name: STRWHL-S08-V00-ButtonInput.SchDoc

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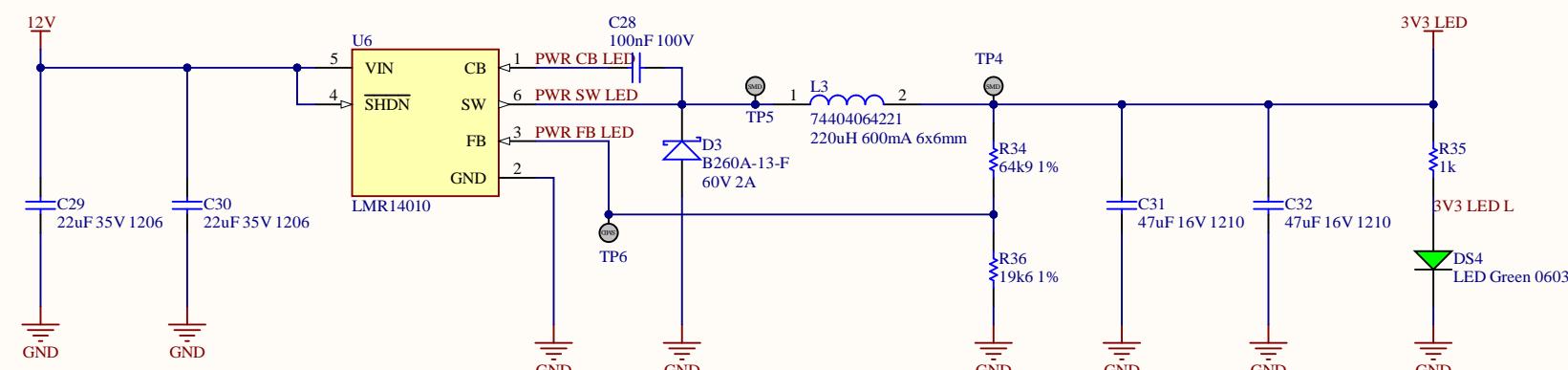
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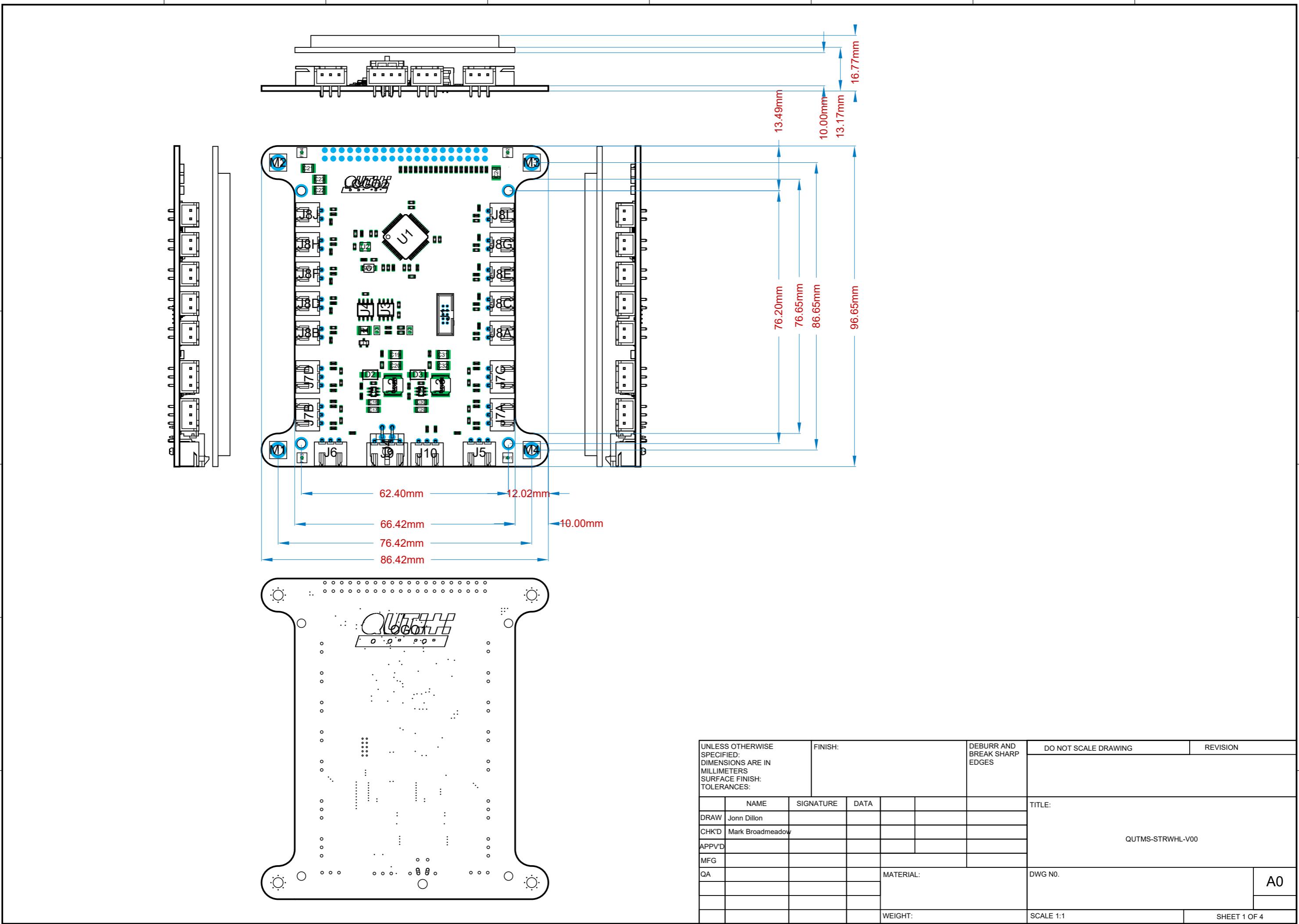
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Revision History:

Sheet Title: Power Supply (9-25V to 3v3 @ 0.1-0.3A) NEOPIXEL SUPPLY			
Project: Steering Wheel 2020			QUT Motorsport
Size: A3	Number: 9	Version: *	O-120, Gardens Point
		Revision: 00	2 George Street
Drawn By: John Dillon		Sheet 9 of 9	Brisbane, QLD 4000
Print Date: 27/07/2020	Print Time: 12-23-12 AM	File Name: STRWHL_S04_V000-PSU-L.FDF	Australia
			SchDoc



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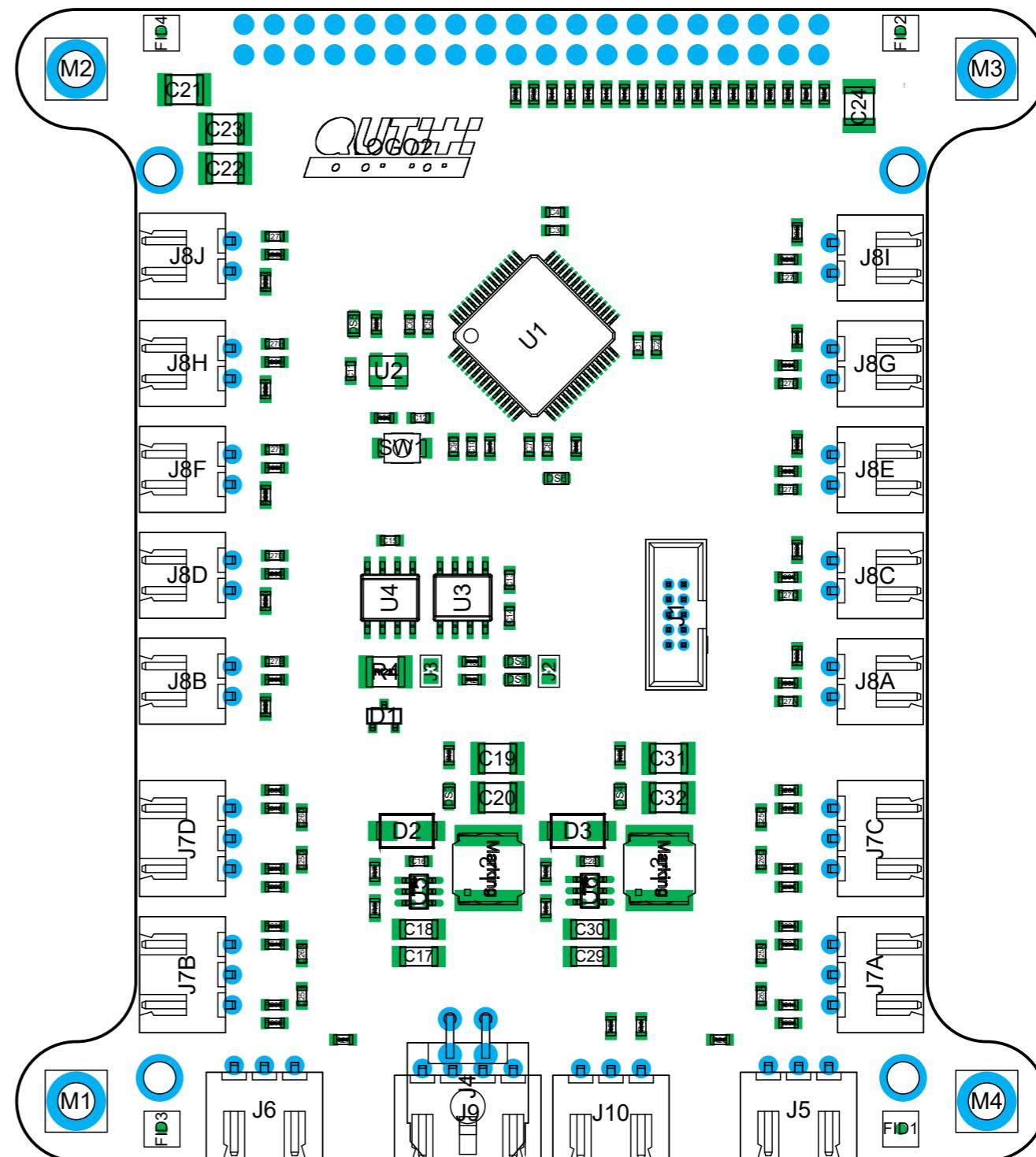
F

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Bill Of Materials

Line #	Designator	Comment	Quantity
1	C1, C3, C5, C7, C11, C12, C13, C14, C15	100nF	9
2	C2, C4, C6, C8	4u7	4
3	C9	1uF	1
4	C10, C25A, C25B, C25C, C25D, C26A, C26B, C26C, C26D, C27A, C27B, C27C, C27D, C27E, C27F, C27G, C27H, C27I, C27J	10nF	19
5	C16, C28	100nF 100V	2
6	C17, C18, C29, C30	22uF 35V 1206	4
7	C19, C20, C21, C22, C23, C24, C31, C32	47uF 16V 1210	8
8	D1	NUP2105L	1
9	D2, D3	B260A-13-F	2
10	DS1, DS2	LED Blue 0603	2
11	DS3, DS4	LED Green 0603	2
12	DS5, DS6	LED Orange 0603	2
13	FID1, FID2, FID3, FID4	Fiducial 1MM	4
14	J1	IDC 10P 2x5 1.27mm	1
15	J2, J3	Jumper 2Way Solderable	2
16	J4	Microfit 3.0 2x2	1
17	J5, J6, J7A, J7B, J7C, J7D, J10	XH2.54 3P	7
18	J8A, J8B, J8C, J8D, J8E, J8F, J8G, J8H, J8I, J8J	XH2.54 2P	10
19	J9	XH2.54 4P	1
20	L1	10uH, 10%, 0603	1
21	L2, L3	74404064221	2
22	LCD1	ER-TFTM035-6	1
23	LOGO1	30mm Wide QUTMS Logo	1
24	LOGO2	15mm Wide QUTMS Logo	1
25	LYID1	2 Layer Identification PCB Marker	1
26	M1, M2, M3, M4	Hole M3 Tight Plated	4
27	R1, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R28A, R28B, R28C, R28D, R29A, R29B, R29C, R29D, R30A, R30B, R30C, R30D, R31A, R31B, R31C, R31D, R32A, R32B, R32C, R32D, R32E, R32F, R32G, R32H, R32I, R32J, R33A, R33B, R33C, R33D, R33E, R33F, R33G, R33H, R33I, R33J, R37	10k	56
28	R2, R3	330R 5% 0603	2
29	R4	120R 1% 1210	1
30	R5, R34	64k9 1%	2
31	R6, R26, R27, R35	1k	4
32	R7, R36	19k6 1%	2
33	R38	4k7	1
34	R39, R40	330R	2
35	SW1	B3U-1000P	1
36	TP1, TP2, TP3, TP4, TP5, TP6	TestPoint_SMD	6
37	U1	STM32F302RC	1
38	U2	DSC1001DI1-008.0000T	1
39	U3	Si8621BC-B-IS	1
40	U4	SN65HVD233	1
41	U5, U6	LMR14010	2



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES:		FINISH:			DEBURR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING		REVISION
DRAW	NAME	SIGNATURE	DATA					
CHK'D	Mark Broadmeadow							
APPV'D								
MFG								
QA					MATERIAL:	DWG NO.	A0	
					WEIGHT:	SCALE 1:1	SHEET 2 OF 4	

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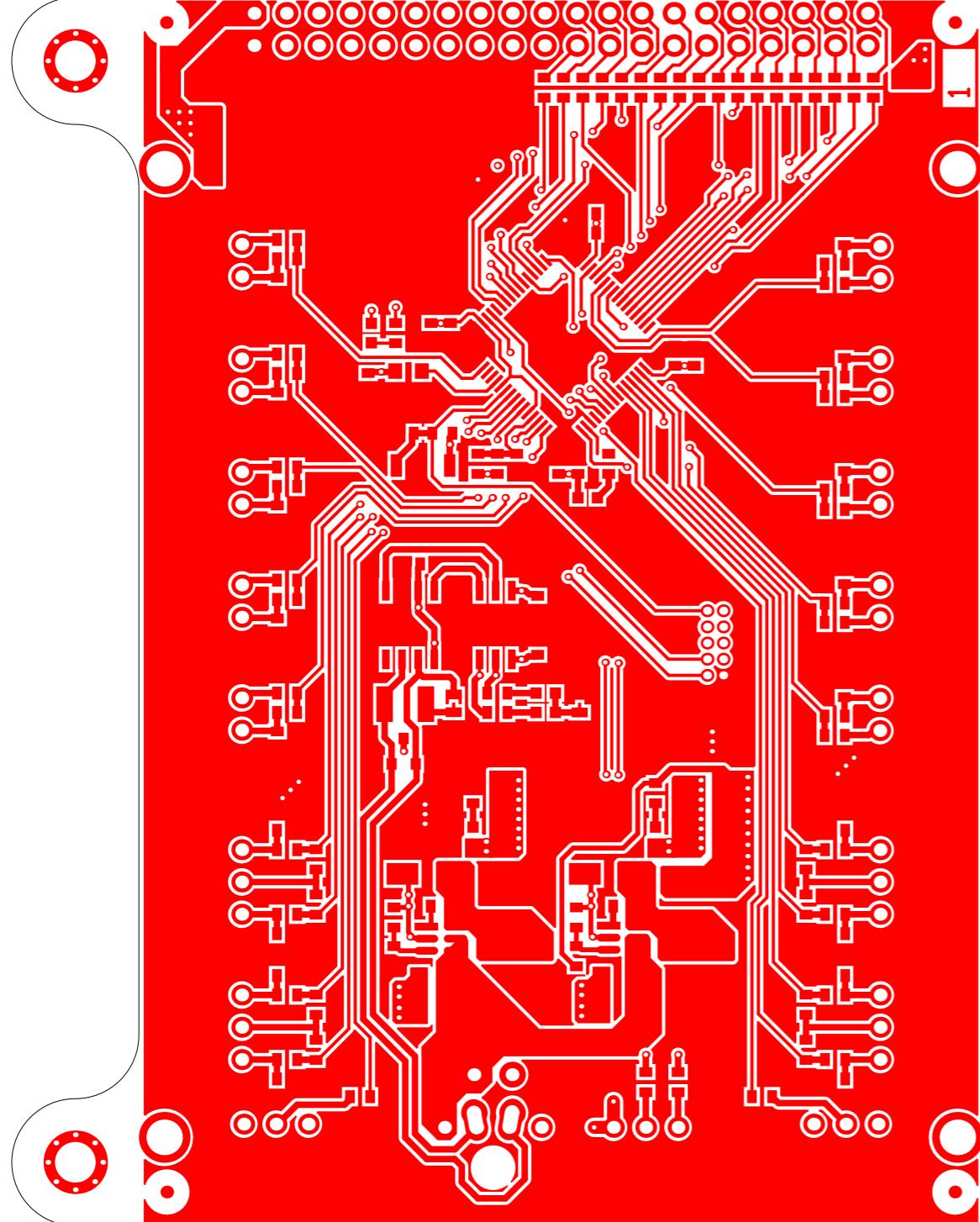
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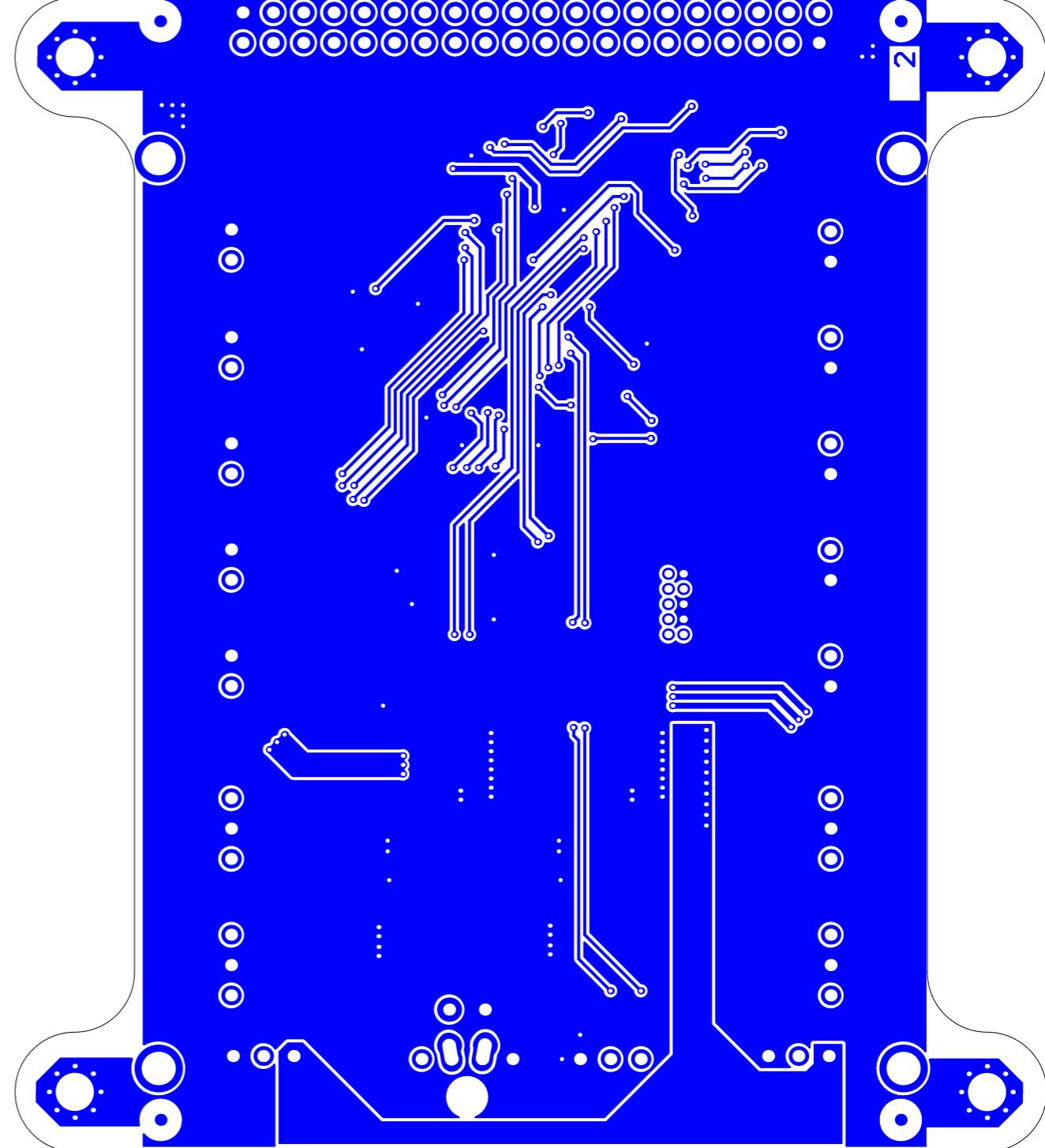
G

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Top Layer (Scale 2:1)



Bottom Layer (Scale 2:1)



UNLESS OTHERWISE
SPECIFIED:
DIMENSIONS ARE IN
MILLIMETERS
SURFACE FINISH:
TOLERANCES:

	NAME	SIGNATURE	DATA		
DRAW	Jonn Dillon				
CHK'D	Mark Broadmeadow				
APPV'D					
MFG					
QA				MATERIAL:	

		WEIGHT:	SCALE 1:1	

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

TITLE:

QUTMS-STRWHL-V00

DWG NO.

A0

SHEET 3 OF 4

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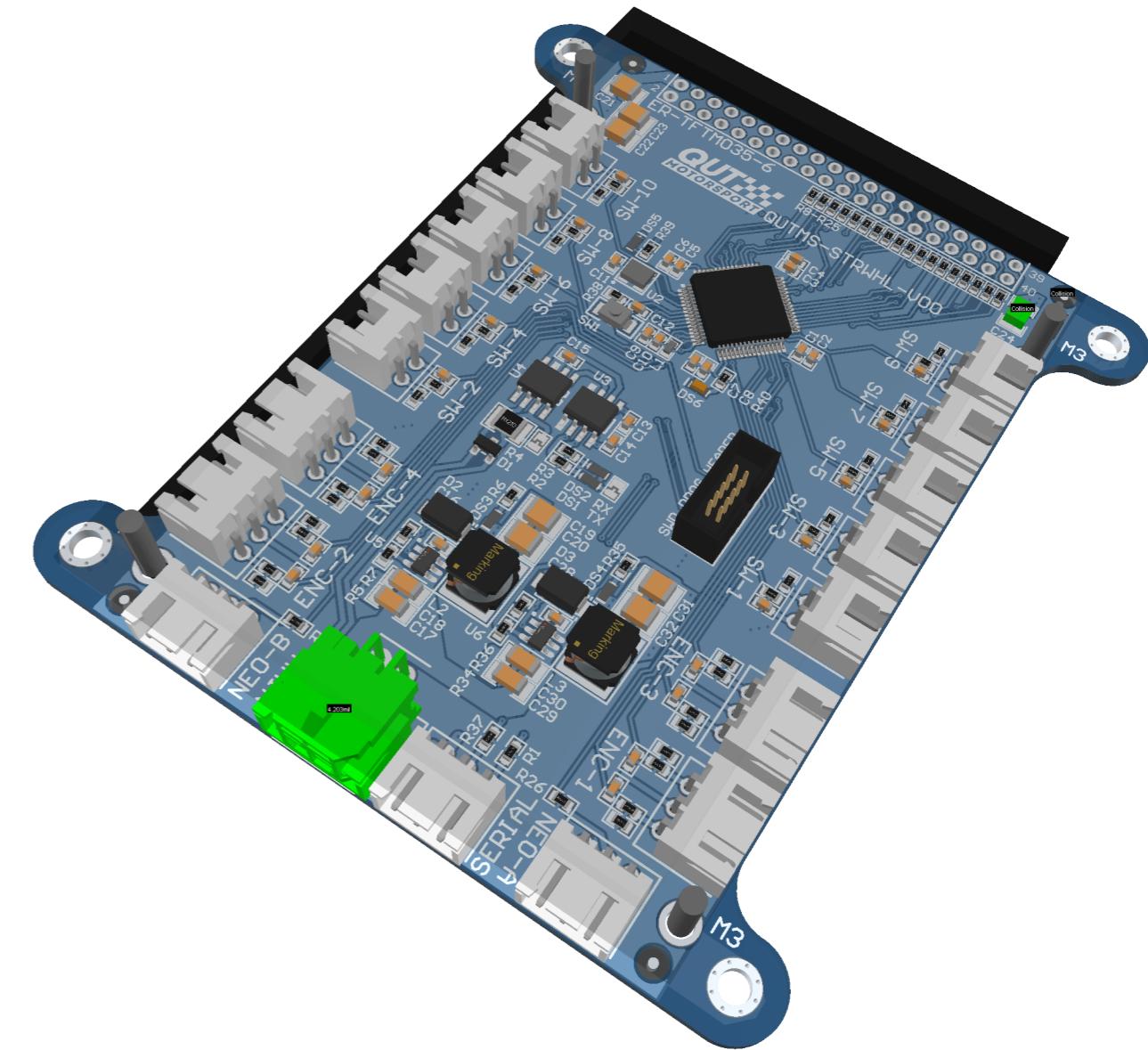
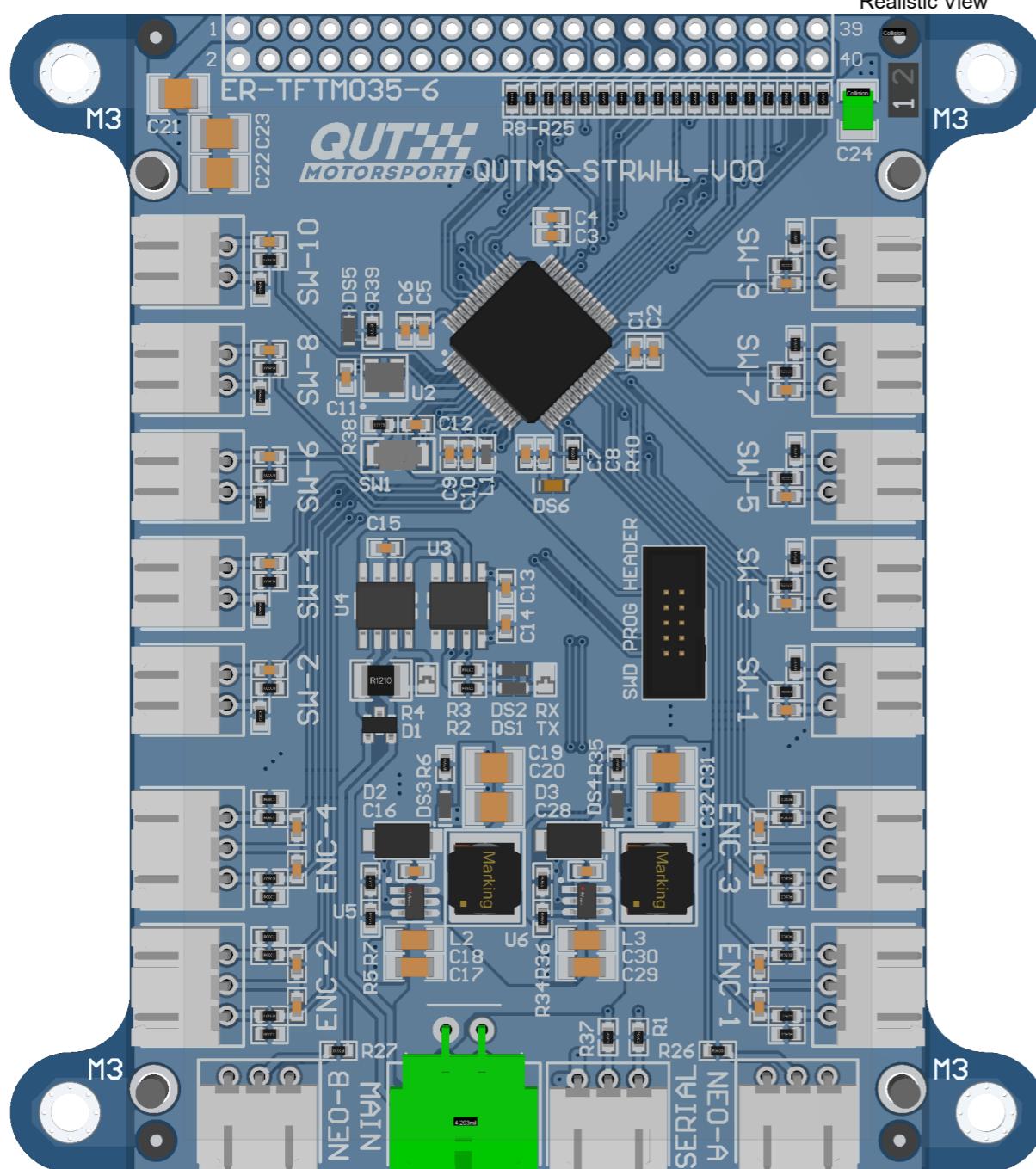
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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES:		FINISH:			DEBURR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING	REVISION		
DRAW	NAME	SIGNATURE	DATA			TITLE: QUTMS-STRWHL-V00	A0		
DRAW	Jonn Dillon								
CHK'D	Mark Broadmeadow								
APPV'D									
MFG									
QA				MATERIAL:					
			WEIGHT:	SCALE 1:1		SHEET 4 OF 4			

