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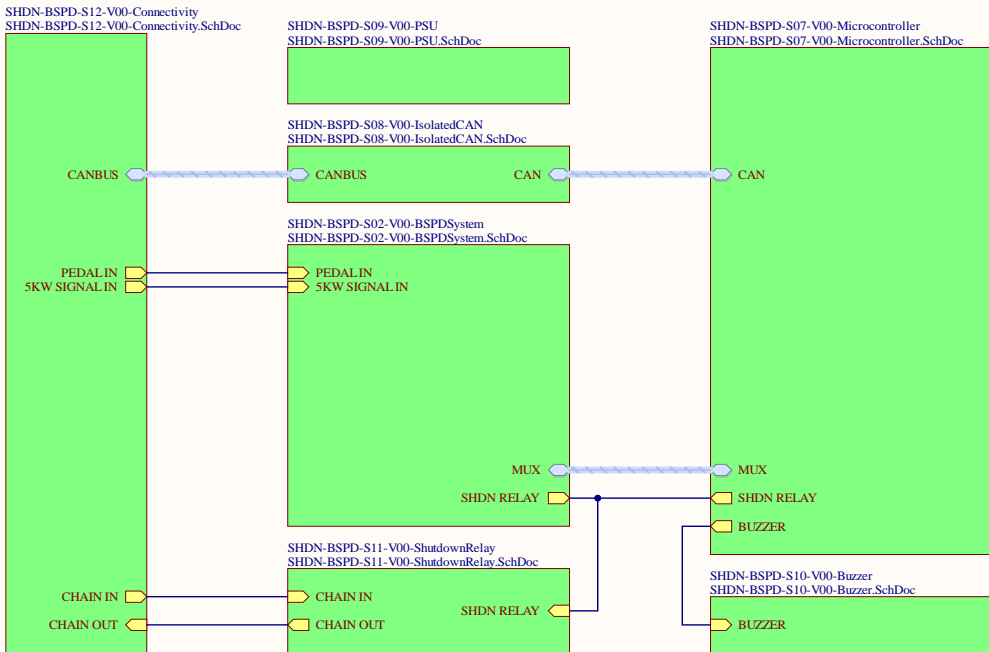
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Revision History:

Rev	Date	Description

Sheet Title: Brake System Plausability Device - BSPD		
Project:		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia
Size: A3	Number: 1	
Version:		
Revision: 01		
Drawn By: Jonn Dillon		Sheet 1 of 12
Print Date: 24/07/2020 Print Time: 1:59:42 PM		File Name: SHDN-BSPD-S01-V00-BSPDBoard.SchDoc



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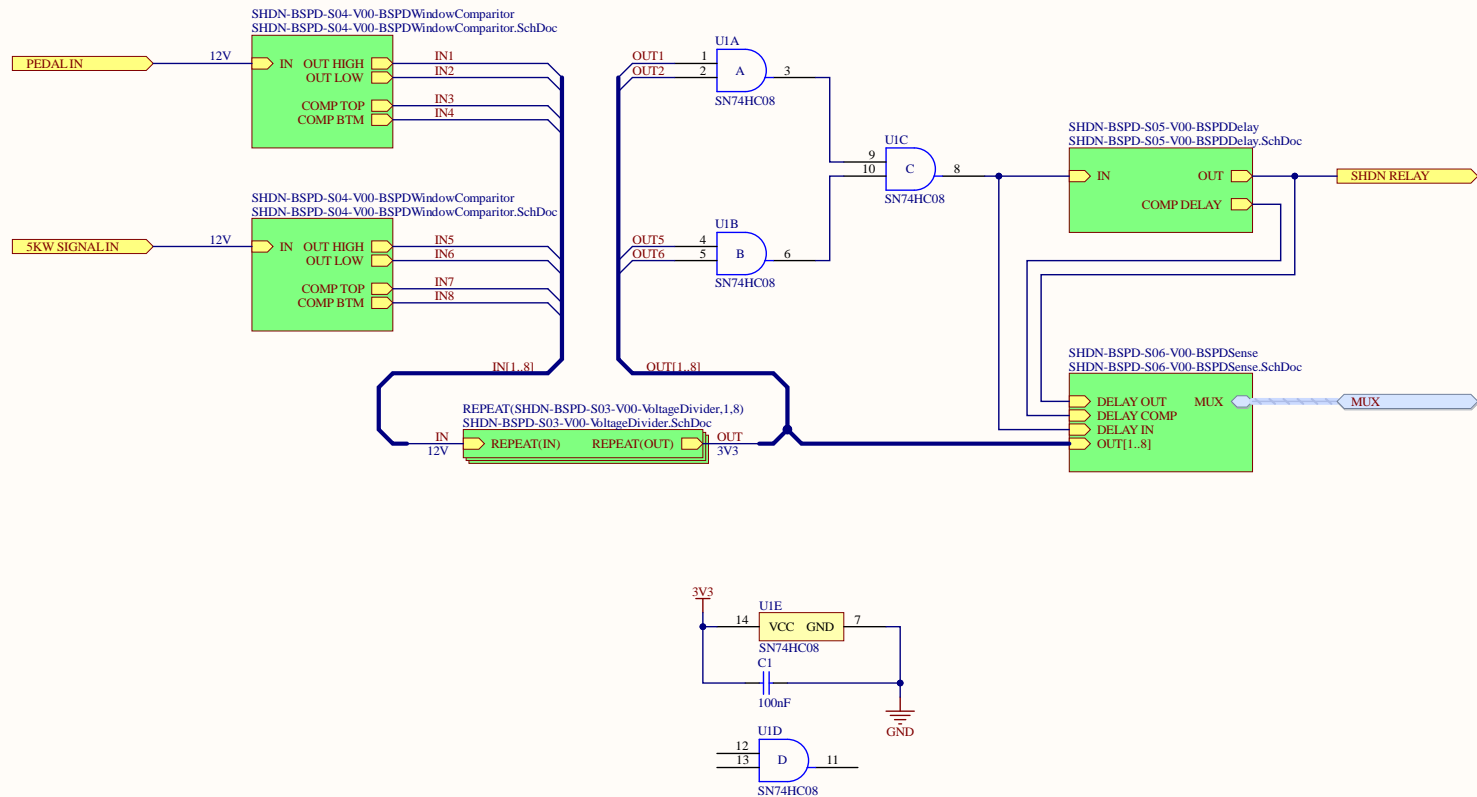
D

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Revision History:

Rev	Date	Description

Sheet Title: **BSPD System**

Project:		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia	
Size: A3	Number: 2	Version:	Revision: 01
Drawn By: Jonn Dillon		Sheet 2 of 12	
Print Date: 24/07/2020 Print Time: 1:59:43 PM		File Name: SHDN-BSPD-S02-V00-BSPDSystem.SchDoc	



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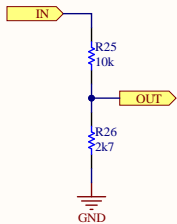
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Voltage Divider:
Input: 15V
Output: 3V3

 $15 \times 2.7k / (2.7k + 10k) = 3.19V$



Revision History:

Rev	Date	Description

Sheet Title: **Voltage Divider**

Project:

Size: A3

Drawn By: Jonn Dillon

Print Date: 24/07/2020

Number: 03

Version: 00

Revision: 01

Sheet 03 of 12

Print Time: 1:59:43 PM

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File Name: SHDN-BSPD-S03-V00-VoltageDivider.SchDoc

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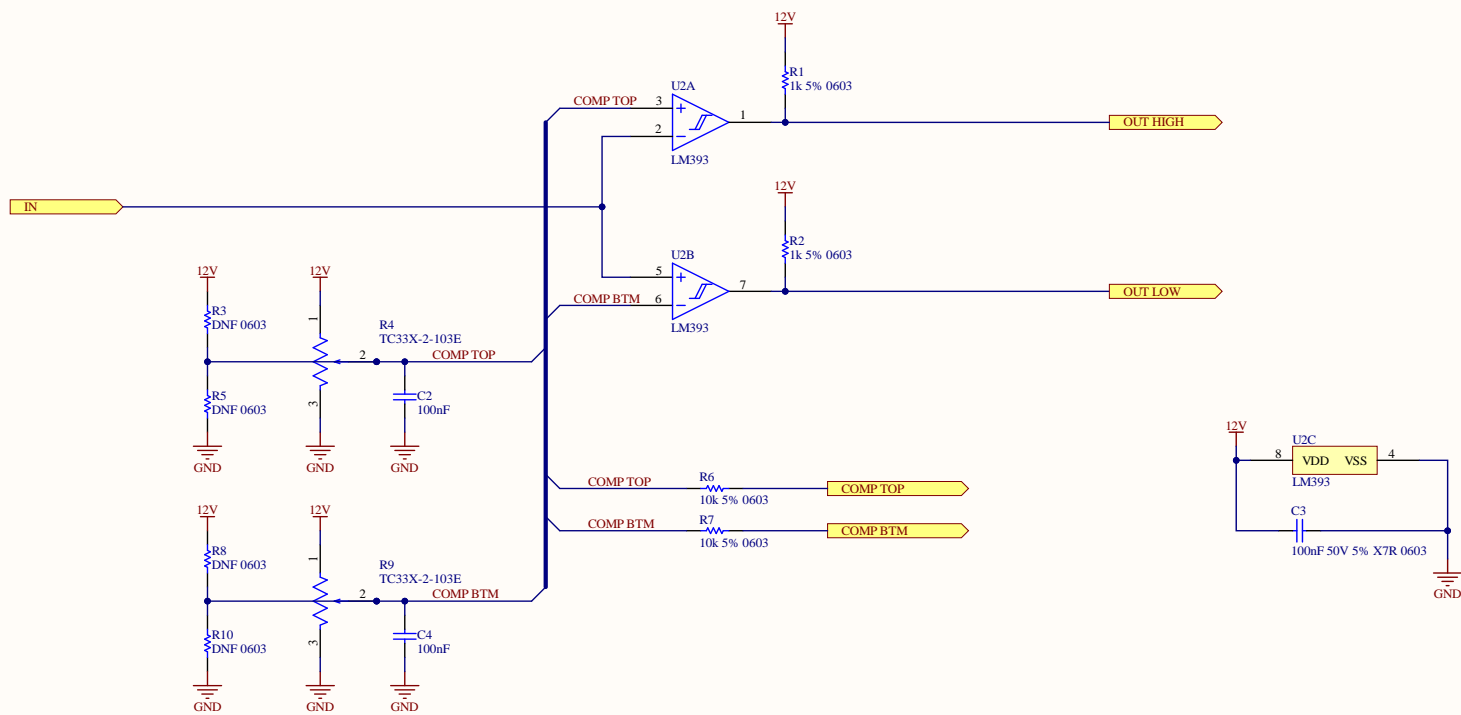
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Revision History:

Rev	Date	Description

Sheet Title: **Window Comparitor**

Project:		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia	
Size: A3	Number: 4	Version:	Revision: 01
Drawn By: Jonn Dillon		Sheet 4 of 12	
Print Date: 24/07/2020 Print Time: 1:59:43 PM		File Name: SHDN-BSPD-S04-V00-BSPDWindowComparitor.SchDoc	



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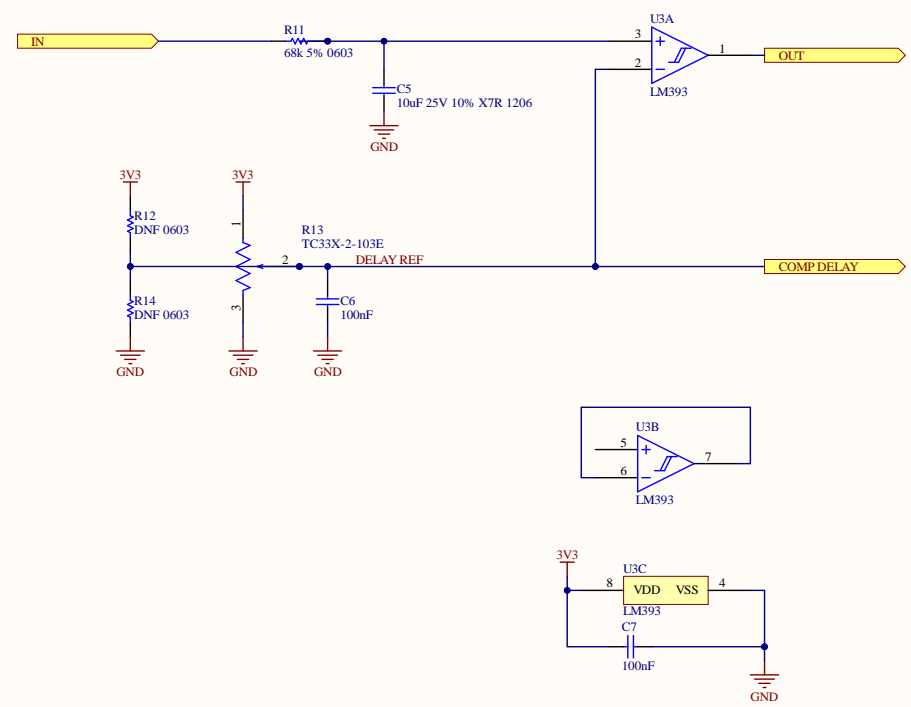
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RC Charging Circuit:
50% Charge Voltage Rise at 500ms (to compare at 2V5)
 $500\text{ms} = 0.7T = 0.7 * R * C$
 $C = 10\mu\text{F} = 0.01\text{F}$
 $\gg R = 71\text{k}\Omega$



Revision History:

Rev	Date	Description

Sheet Title: **RC Charging Delay**

Project:		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia	
Size: A3	Number: 5	Version: 01	Revision: 01
Drawn By: Jonn Dillon		Sheet 5 of 12	
Print Date: 24/07/2020 Print Time: 1:59:43 PM		File Name: SHDN-BSPD-S05-V00-BSPD-Delay.SchDoc	



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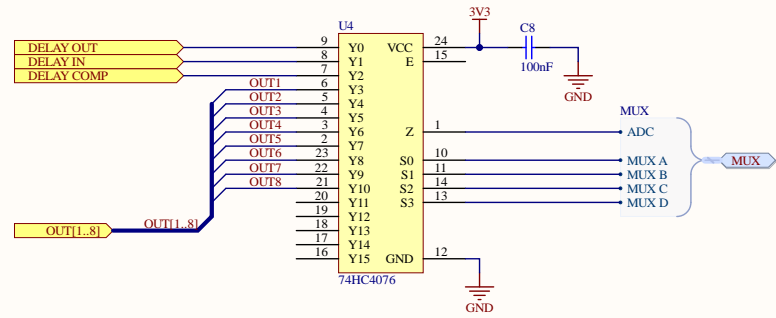
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Revision History:

Rev	Date	Description

Sheet Title: **Multiplexer**

Project:

Size: A3

Number: 6

Version:

Revision: 01

Sheet 6 of 12

Drawn By: Joe Richards

Print Date: 24/07/2020

Print Time: 1:59:43 PM

File Name: SHDN-BSPD-S06-V00-BSPD\$ense.SchDoc

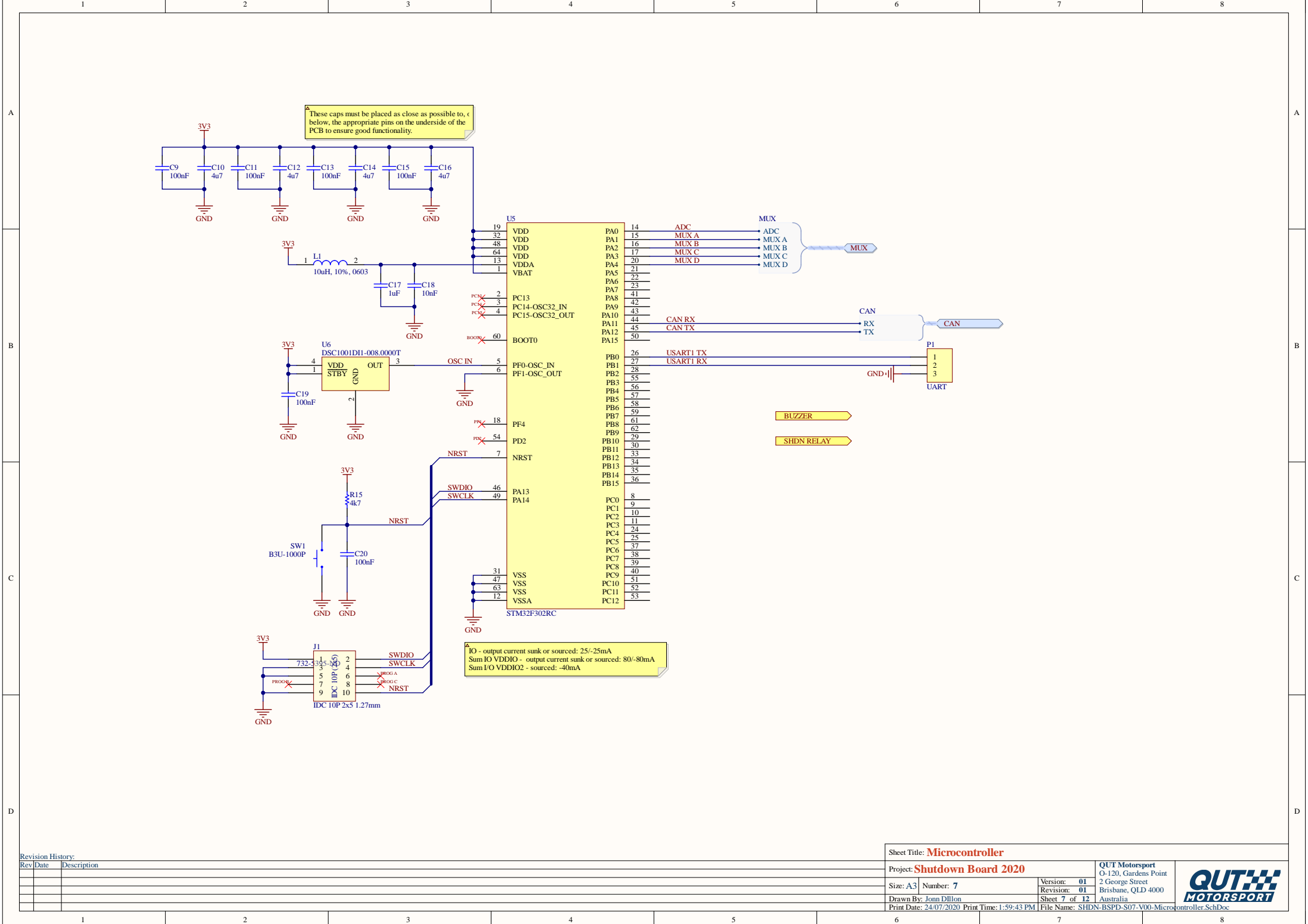
QUT Motorsport

O-120, Gardens Point

2 George Street

Brisbane, QLD 4000

Australia



Revision History:

Rev	Date	Description



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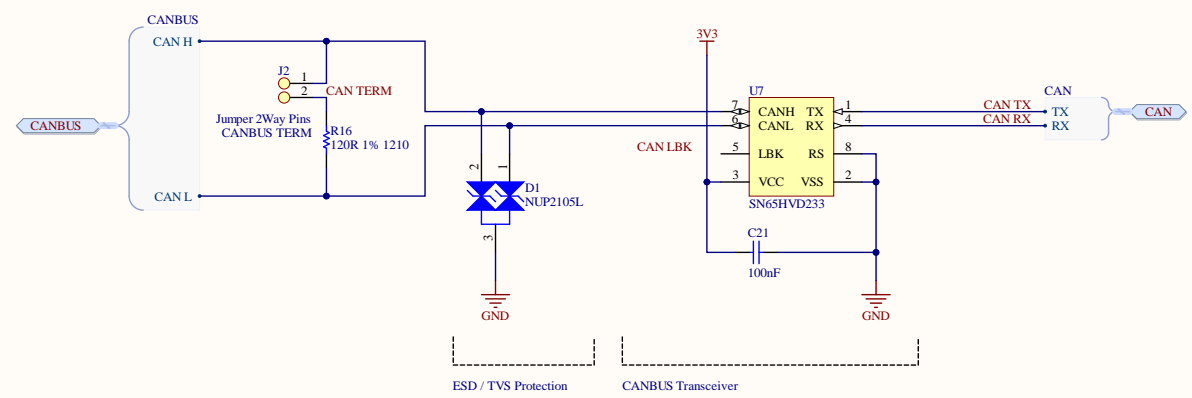
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Revision History:

Rev	Date	Description

Sheet Title: Isolated CANBUS @ 3V3			
Project: Battery Managment System 2020		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia	
Size: A3	Number: 8	Version: 01	
		Revision: 01	
Drawn By: Jonn Dillon		Sheet 8 of 12	
Print Date: 24/07/2020 Print Time: 1:59:44 PM		File Name: SHDN-BSPD-S08-V00-IsolatedCAN.SchDoc	



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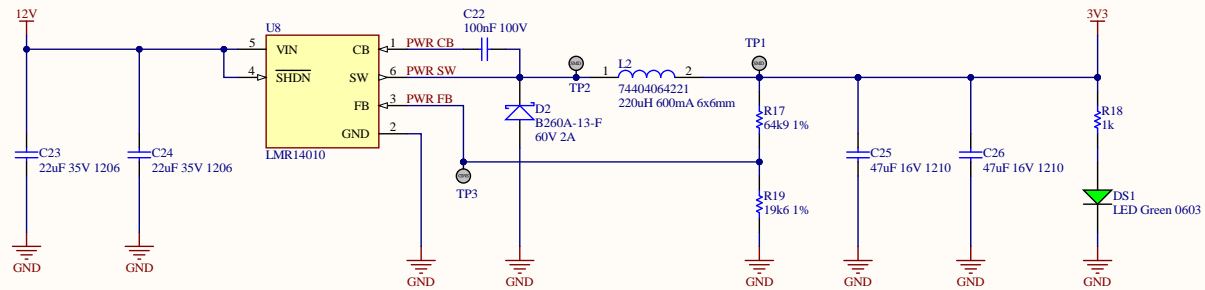
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Revision History:

Rev	Date	Description

Sheet Title: **Power Supply (20-40V to 3v3 @ 0.1-0.6A)**

Project: **Battery Management System 2020**

Size: A3

Number: **9**

Drawn By: Jonn Dillon

Print Date: 24/07/2020 Print Time: 1:59:44 PM

Version: **01**

Revision: **01**

Sheet **9** of **12**

File Name: SHDN-BSPD-S09-V00-PSU.SchDoc

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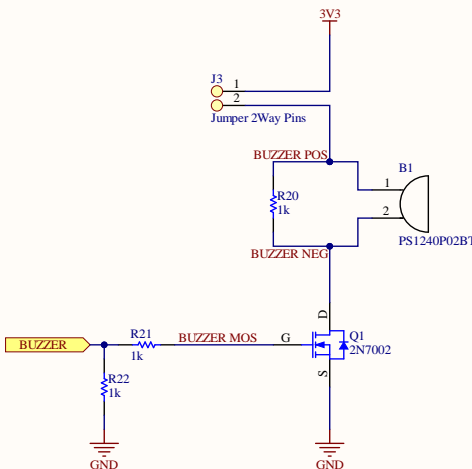
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Revision History:

Rev	Date	Description

Sheet Title: **Buzzer**

Project:

Size: A3

Number: **10**

Version:

Revision: **01**

Sheet **10** of **12**

Drawn By: John Dillon

Print Date: 24/07/2020

Print Time: 1:59:44 PM

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File Name: SHDN-BSPD-S10-V00-BuzzerSchDoc

Revision History:

Sheet Title: **Shutdown Relay**

Project:		QUT Motorsport		
Size: A3 Number: 11		O-120, Gardens Point 2 George Street Brisbane, QLD 4000		
Version:		Australia		
Revision: 01				
Sheet 11 of 12				
Drawn By: John Dillon				
Print Date: 24/07/2020 Print Time: 1:59:44 PM File Name: SHDN-BSPD-S11-V00-ShutdownRelay_SchDoc				



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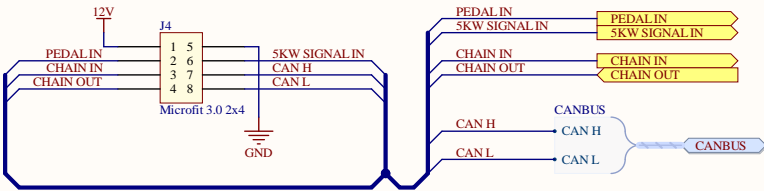
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Revision History:

Rev	Date	Description

Sheet Title: 8 Pin Connector		
Project:		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia
Size: A3	Number: 12	
Version: 01		
Revision: 01		
Drawn By: Jonn Dillon		Sheet 12 of 12
Print Date: 24/07/2020 Print Time: 1:59:44 PM		File Name: SHDN-BSPD-S12-V00-Connectivity.SchDoc

