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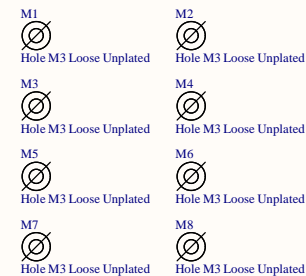
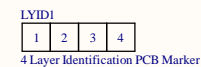
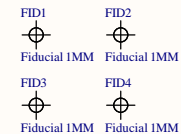
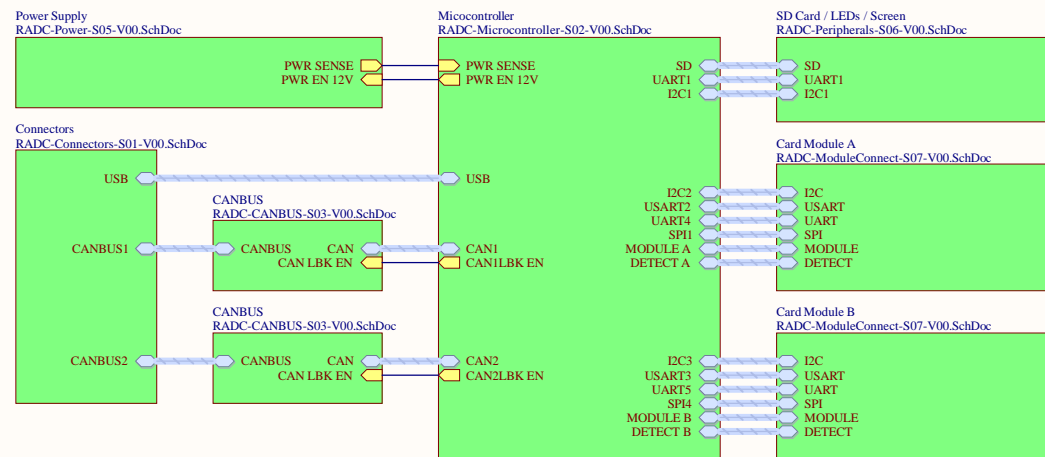
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Revision History:

Rev	Date	Description

Sheet Title: RADC Master (Top Level)		
Project: QUTMS RADIO COMPUTE		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia
Size: A3	Number: 1	Version: 00
Drawn By: Jonn Dillon		Revision: #
Print Date: 15/02/2021		Sheet: 1 of 7
Print Time: 12:48:22 PM		File Name: RADC-Master-S00-V00.SchDoc



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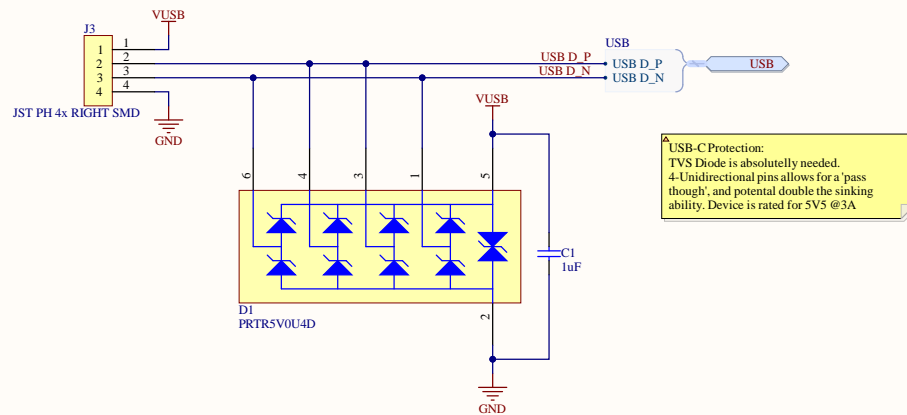
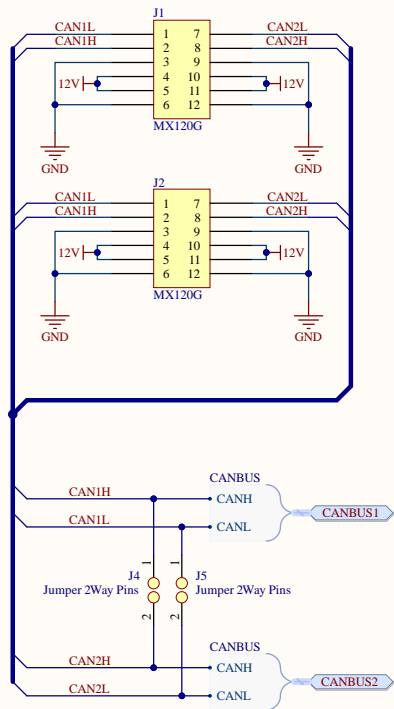
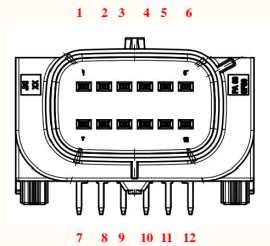
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Revision History:

Rev	Date	Description

Sheet Title: **RADC Connectors (2x MX120G, Dual CANBUS, USB Header)**

Project: **QUTMS RADIO COMPUTE**

Size: A3

Number: **2**

Drawn By: Jonn Dillon

Print Date: 15/02/2021

Version: **00**

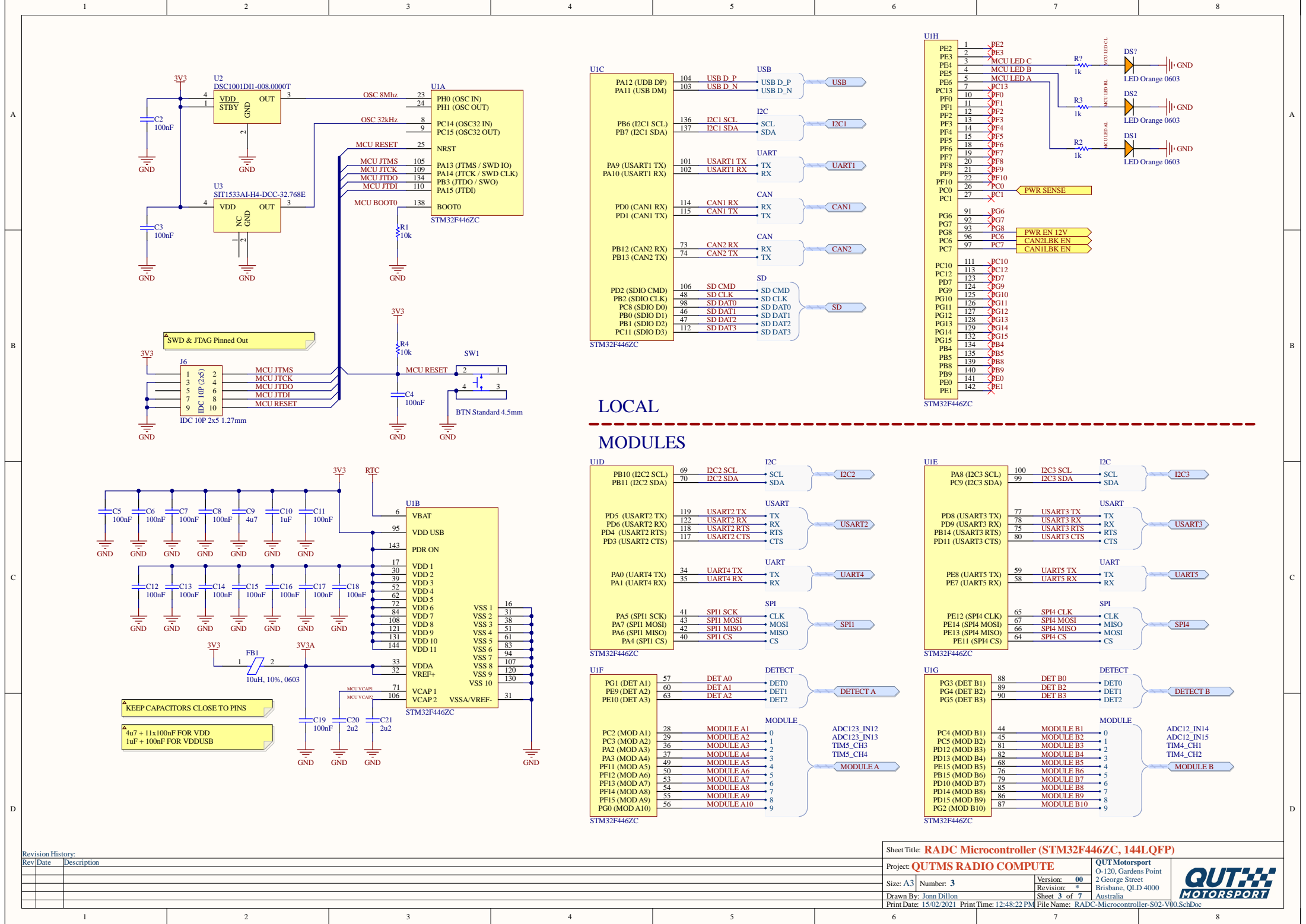
Revision: **#**

Sheet: **2** of **7**

File Name: RADC-Connectors-S01-V00.SchDoc

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Revision History:

Rev	Date	Description

Sheet Title: **RADC Microcontroller (STM32F446ZC, 144LQFP)**

Project: **QUTMS RADIO COMPUTE**

Size: A3

Number: 3

Drawn By: Jonn Dillon

Print Date: 15/02/2021

Version: 00

Revision: #

Sheet 3 of 7

File Name: RADC-Microcontroller-S02-V00.SchDoc

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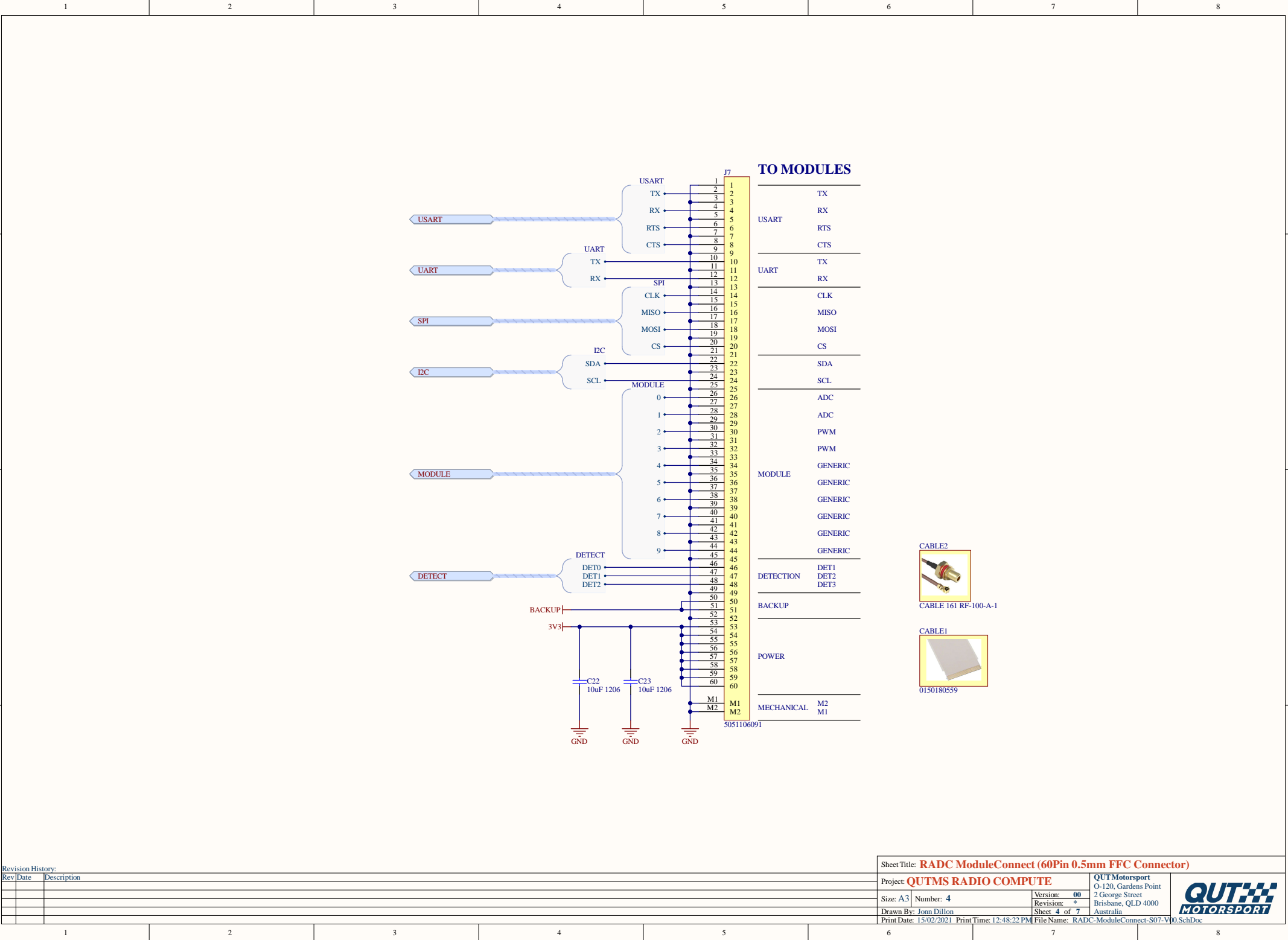
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Revision History:

Rev	Date	Description

Sheet Title: **RADC ModuleConnect (60Pin 0.5mm FFC Connector)**

Project: **QUTMS RADIO COMPUTE**

Size: A3

Number: **4**

Drawn By: Jonn Dillon

Print Date: 15/02/2021

Version: **00**

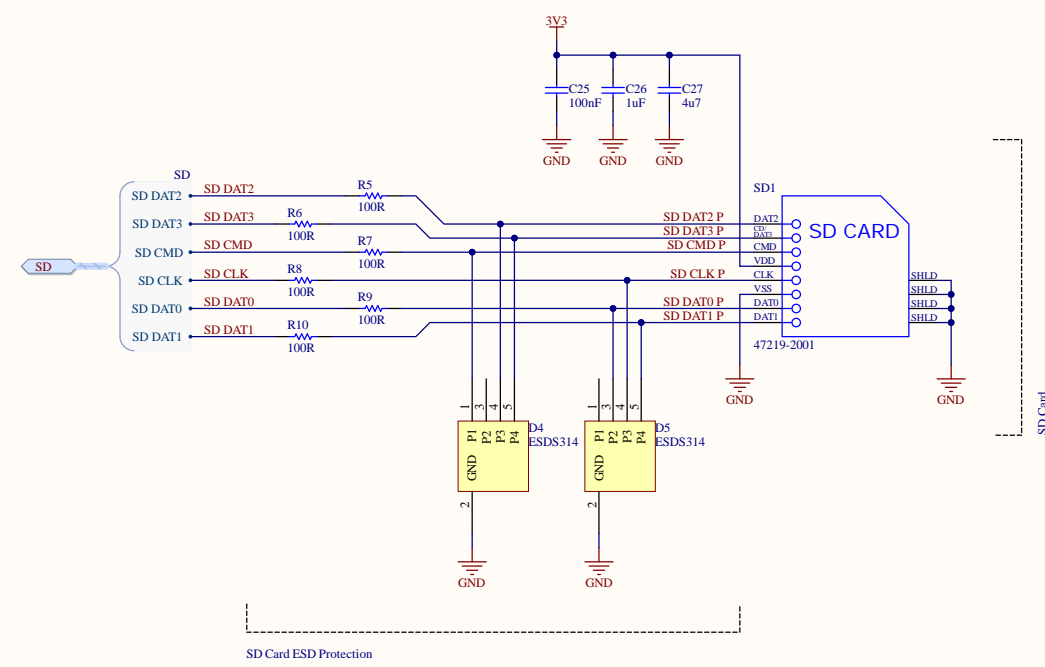
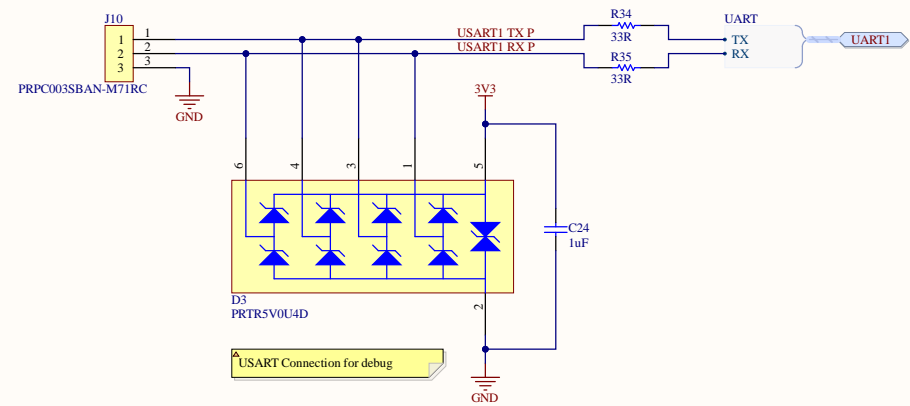
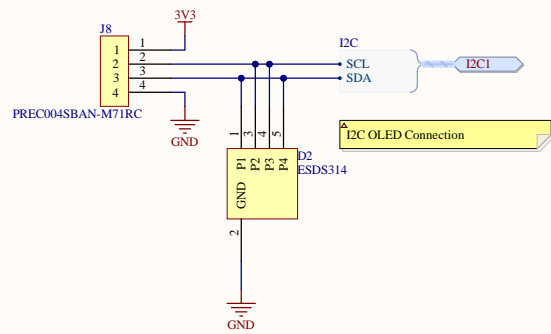
Revision: **#**

Sheet **4** of **7**

File Name: RADC-ModuleConnect-S07-V00.SchDoc

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Revision History:

Rev	Date	Description

Sheet Title: RADC Peripherals (SD Card, I2C / OLED Header, USART Header)		
Project: QUTMS RADIO COMPUTE		QUT Motorsport O-120, Gardens Point 2 George Street Brisbane, QLD 4000 Australia
Size: A3	Number: 5	Version: 00
Drawn By: Jonn Dillon		Revision: #
Print Date: 15/02/2021		Sheet 5 of 7
Print Time: 12:48:22 PM		File Name: RADC-Peripherals-S06-V00.SchDoc



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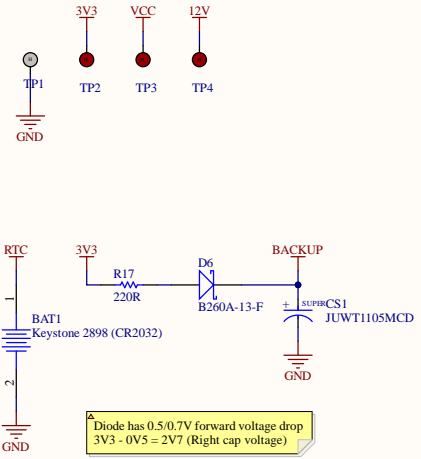
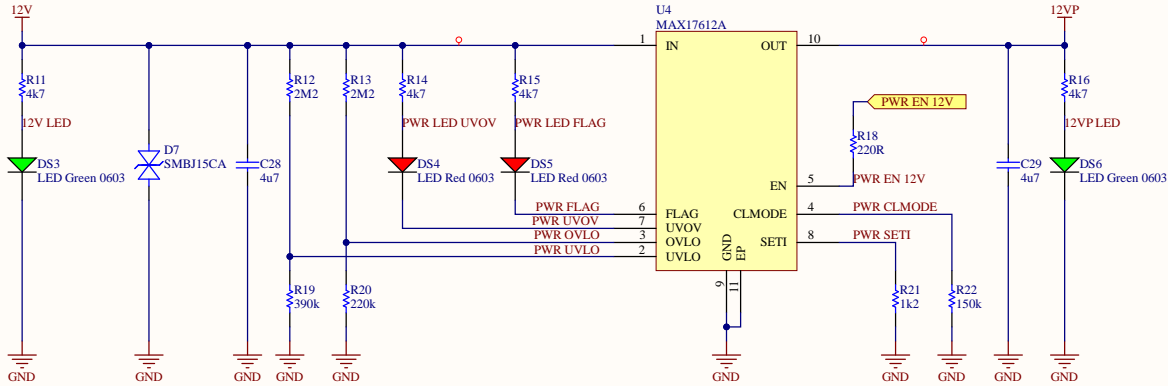
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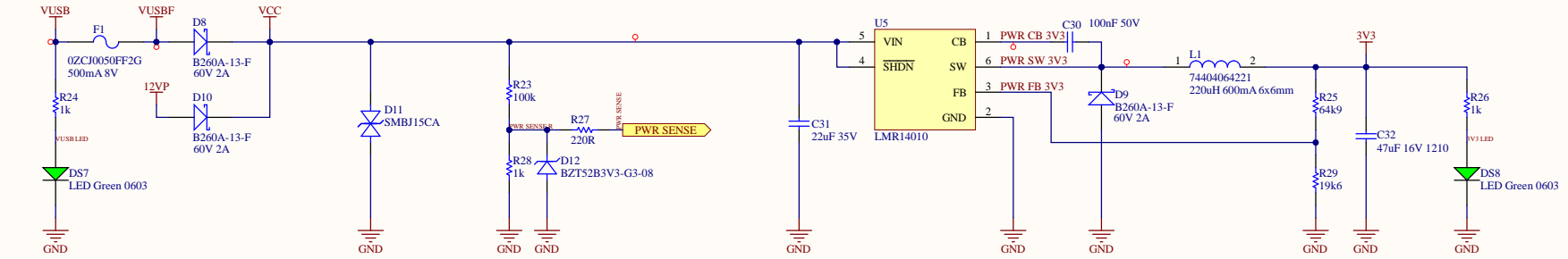
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UVLO: Set at 10V (390k)
OVLO: Set to 16V (220k)
Current Limit: Set to 250mA (Max) (1k2)
Auto-Retry: Disabled, must power cycle (150k)



Diode has 0.5/0.7V forward voltage drop
3V3 - 0V5 = 2V7 (Right cap voltage)



Power Selection

Power OR:
Diodes picked to withstand up to 35V, at a continuous 1A

Power In Voltage Sense

Power Sense:
Voltage divider can take up to 35V's sensing range

DC/DC converter stage (5V-30V IN -> 3V3 OUT)

Revision History:

Rev	Date	Description

Sheet Title: **RADC POWER (12V & USB, 12V Protection, 3V3 Out)**

Project: **QUTMS RADIO COMPUTE**

Size: A3

Number: 6

Version: 00

Revision: #

Drawn By: Jonn Dillon

Print Date: 15/02/2021

Print Time: 12:48:22 PM

File Name: RADC-Power-S05-V00.SchDoc

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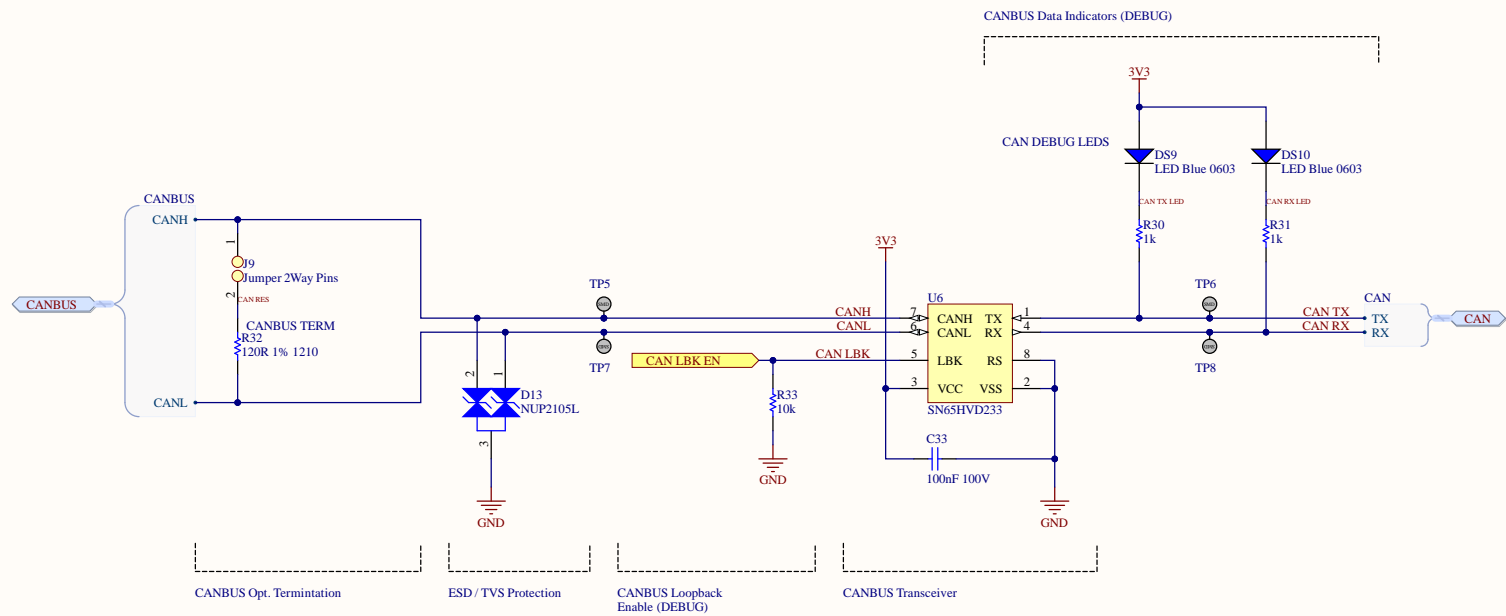
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Revision History:

Rev	Date	Description

Sheet Title: **RADC CANBUS (CAN2.0B, ESD Protection, LED Indicators)**

Project: **QUTMS RADIO COMPUTE**

Size: A3

Number: **7**

Drawn By: Jonn Dillon

Print Date: 15/02/2021

Version: **00**

Revision: **#**

Sheet: **7** of **7**

File Name: RADC-CANBUS-S03-V00.SchDoc

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