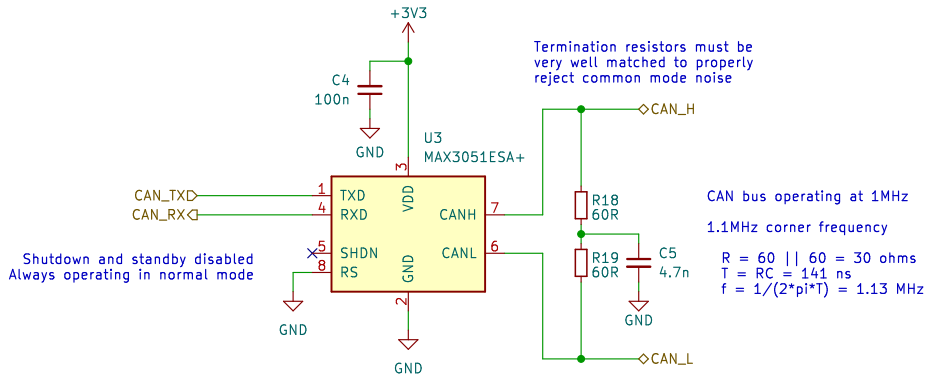
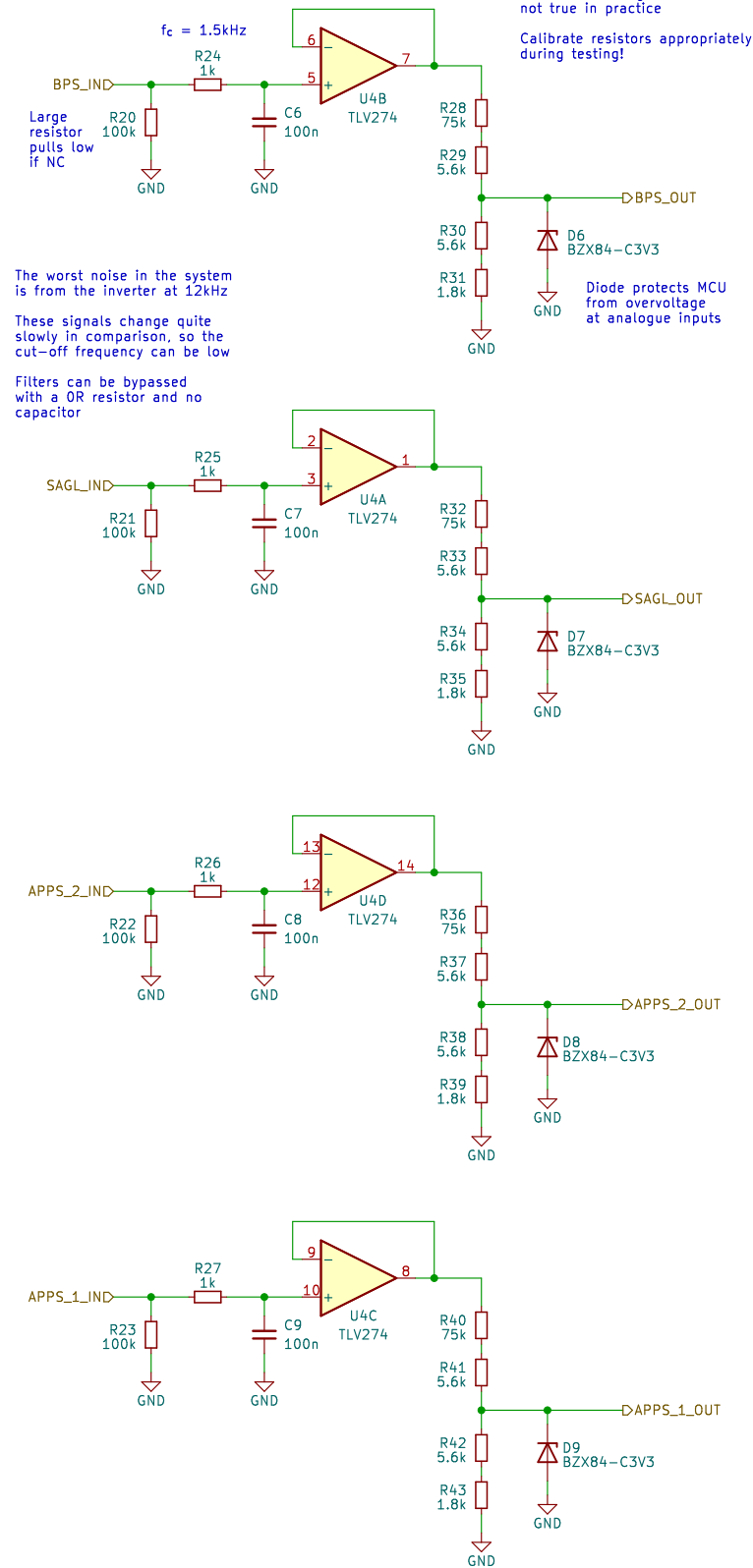


Vehicle: STAG 9		
Drawn By: Tim Brewis		
Checked By: Max O'Brien		
CAD Part:		
<b>SUFST</b>		
Sheet: /CAN-C Bus Transceiver/		
File: can-transceiver.kicad_sch		
<b>Title: VCU</b>		
Size: A3	Date: 2023-03-03	Rev: <b>1.3.0</b>
KiCad E.D.A. kicad (6.0.11-0)	Id: 2/6	



Vehicle: STAG 9		
Drawn By: Tim Brewis		
Checked By: Max O'Brien		
CAD Part:		
<b>SUFST</b>		
Sheet: /CAN-S Bus Transceiver/		
File: can-transceiver.kicad_sch		
<b>Title: VCU</b>		
Size: A3	Date: 2023-03-03	Rev: 1.3.0
KiCad E.D.A. kicad (6.0.11-0)	Id: 3/6	

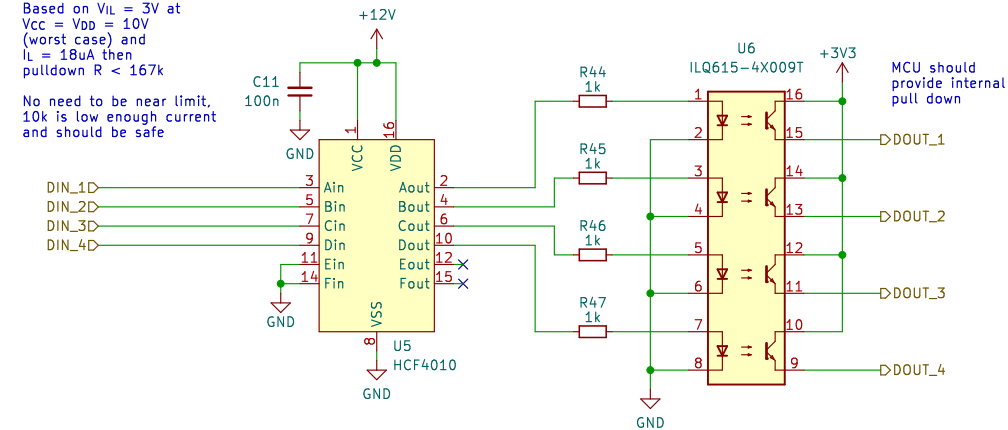
Analogue (12V  $\rightarrow$  3.3V)



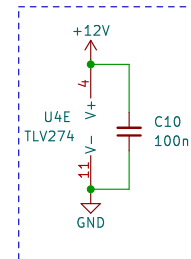
Digital (12V → 3.3V)

Based on  $V_{IL} = 3V$  at  
 $V_{CC} = V_{DD} = 10V$   
 (worst case) and  
 $I_L = 18\mu A$  then  
 pulldown  $R < 167k$

No need to be near limit,  
 $10k$  is low enough current  
 and should be safe



## IC Power and Unused



Vehicle: STAG 9  
Drawn By: Tim Brewis  
Checked By: Max O'Brien  
CAD Part:

**SUFST**

Sheet: /Input Shift/  
File: input-shift.kicad\_sch

**Title:** VCU

Size: A3	Date: 2023-03-03
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Size: A3	Date: 2023-
KiCad E.D.A. kicad (6.0.11-0)	

Rev: 1.3.0

Id: 5/6

