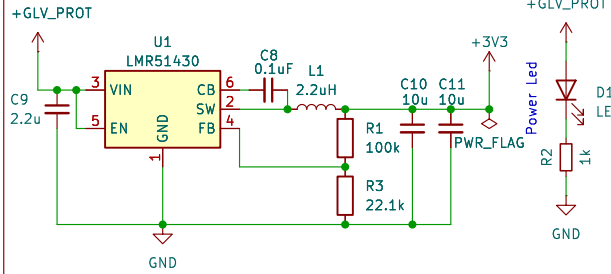
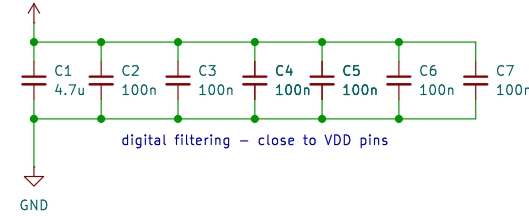


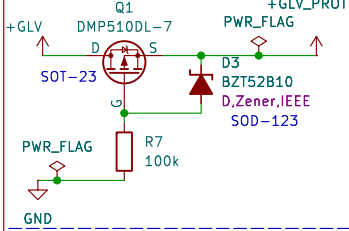
## Power regulator 12v – 3.3V



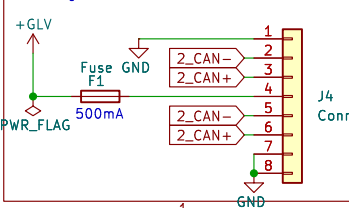
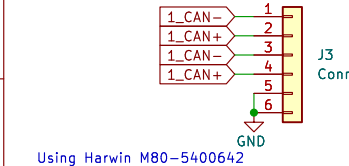
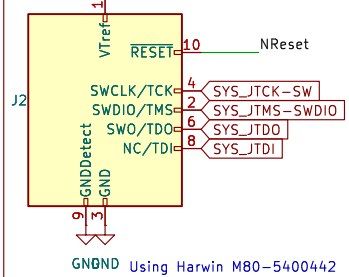
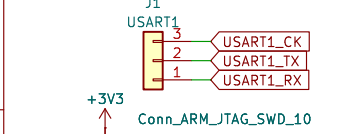
## Power filtering



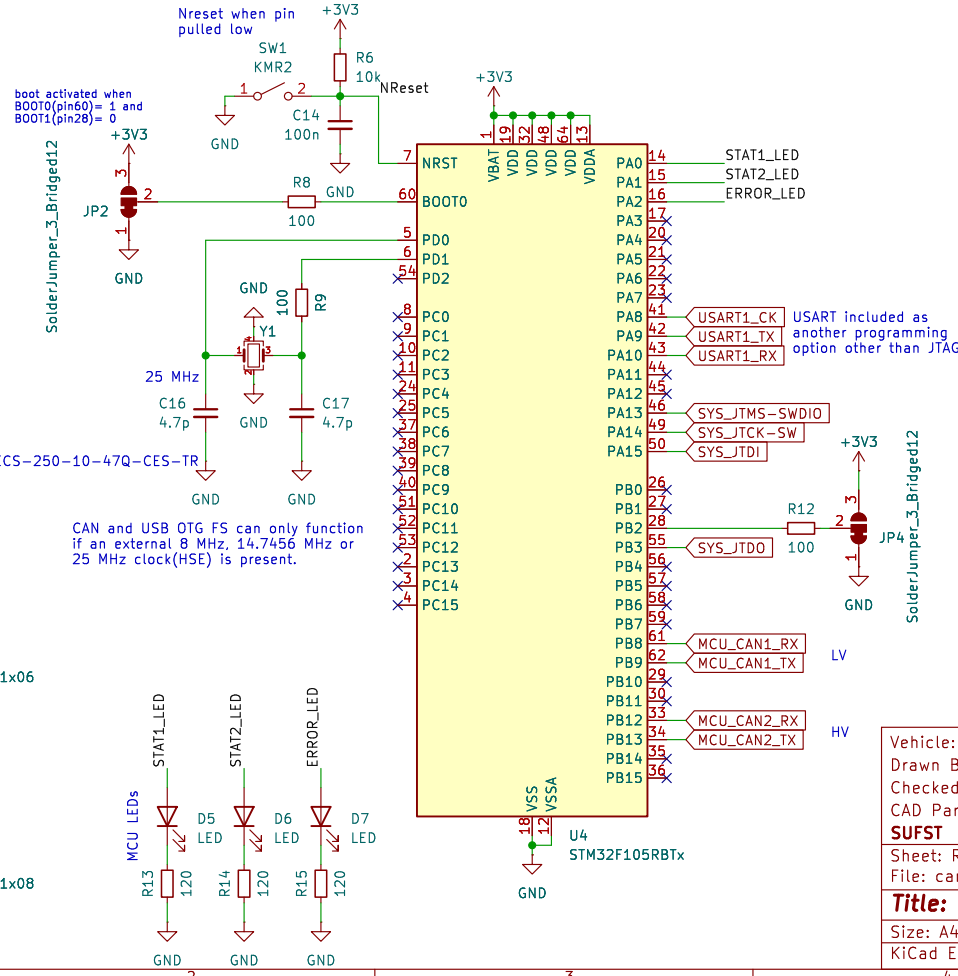
## Reverse Polarity Protection



## Connectors



## STM32F105RBT



## CAN Transceivers and Isolation

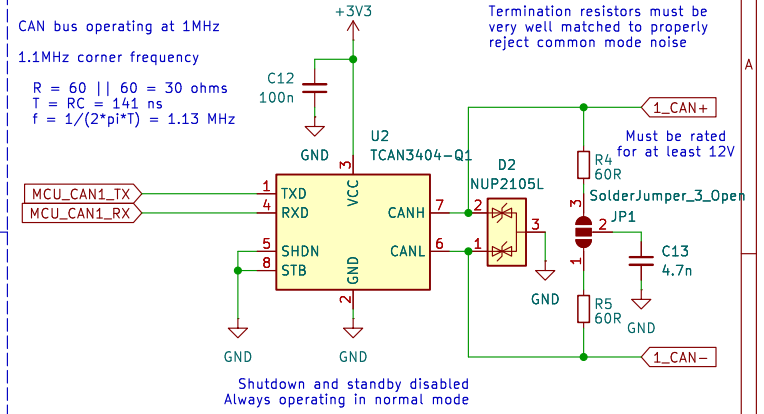
CAN bus operating at 1MHz

1.1MHz corner frequency

$$R = 60 \parallel 60 = 30 \text{ ohms}$$

$$T = RC = 141 \text{ ns}$$

$$f = 1/(2 \cdot \pi \cdot T) = 1.13 \text{ MHz}$$



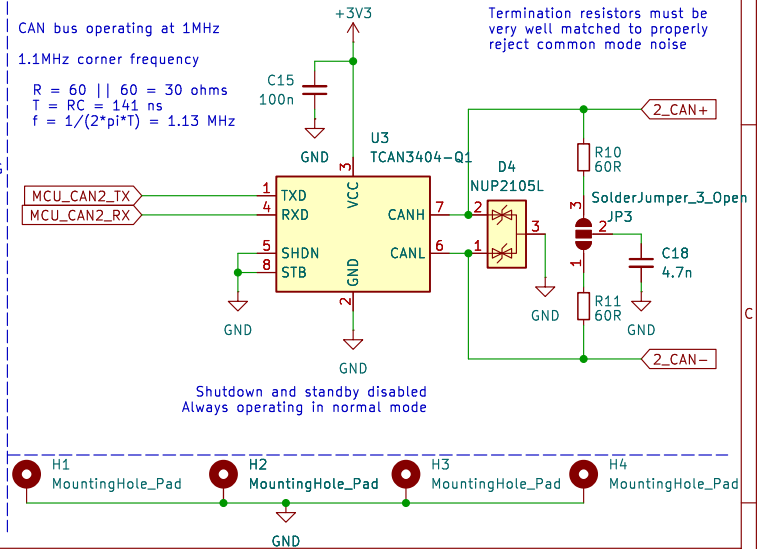
CAN bus operating at 1MHz

1.1MHz corner frequency

$$R = 60 \parallel 60 = 30 \text{ ohms}$$

$$T = RC = 141 \text{ ns}$$

$$f = 1/(2 \cdot \pi \cdot T) = 1.13 \text{ MHz}$$



Vehicle: STAG12  
 Drawn By: Adam Eastman  
 Checked By: Ray Wang & Annabel Owen  
 CAD Part:

SUFST

Sheet: Root  
 File: can-repeater.kicad\_sch

**Title: CAN-Repeater**

Size: A4 Date: 2025-11-06

KiCad E.D.A. 9.0.4

Rev: 1.1.0

Id: 1/1

