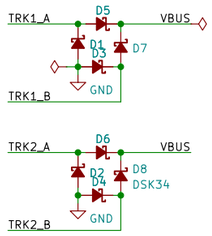
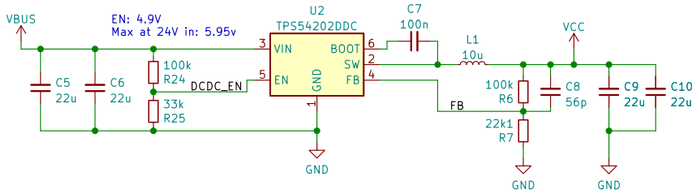
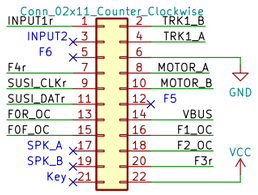
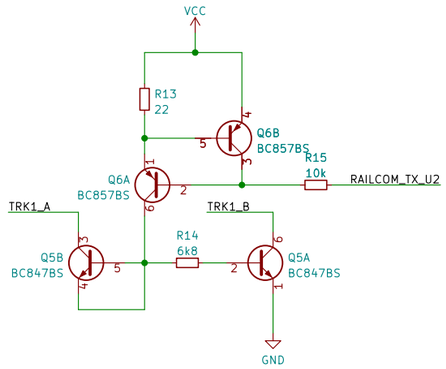
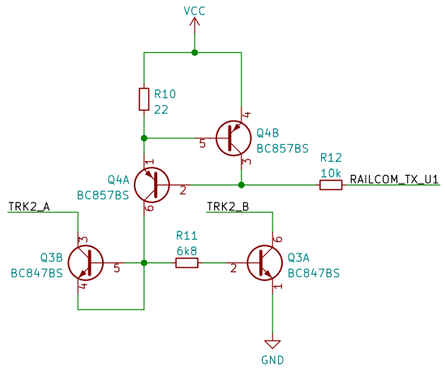


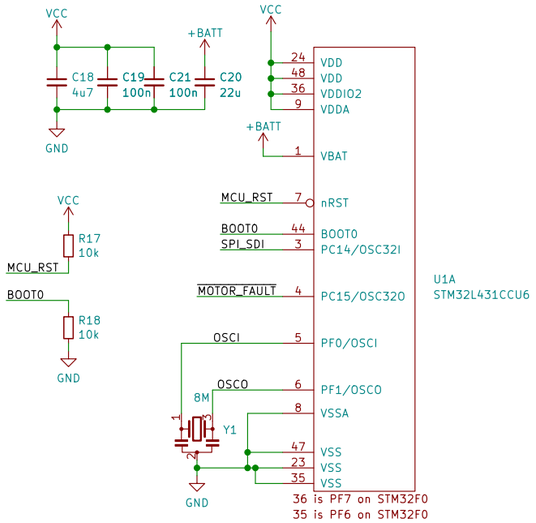


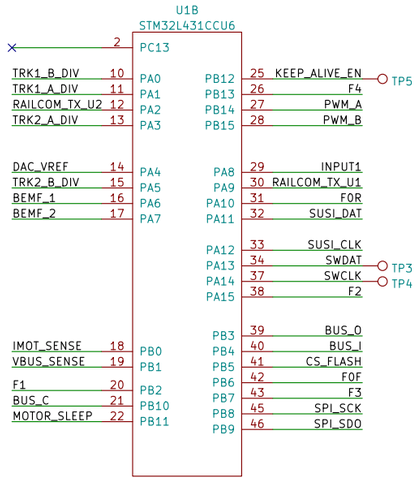


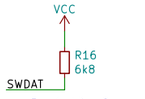


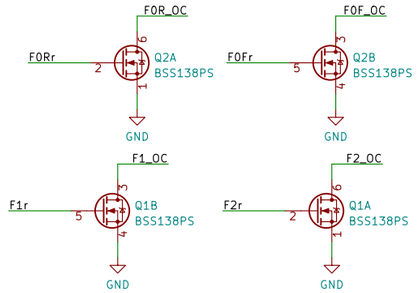


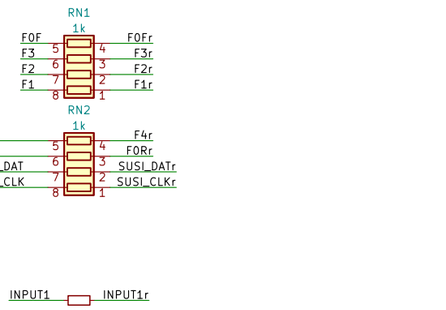
Expected backup time ~60s

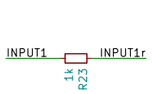










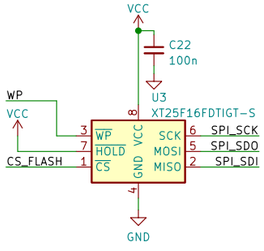


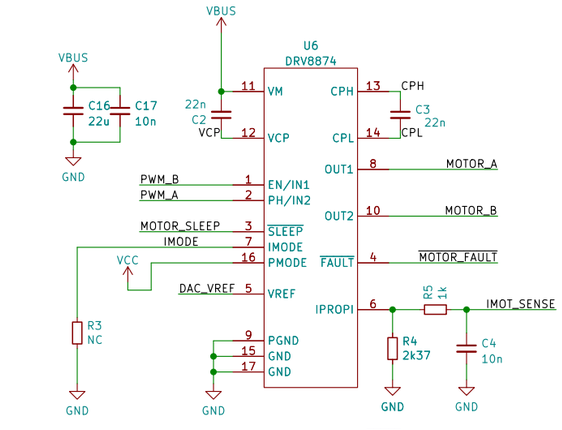
TIM1_CH1 COMP1_OUT
TIM2_CH4 COMP2_OUT

TIM15_CH1 for PWM_A
TIM15_CH2 for PWM_B
TIM16_CH1N for F0F
LPTIM1_OUT for F1

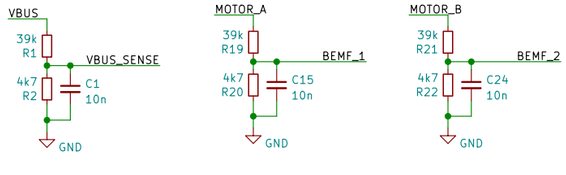
COMP1_P -> TRK1_A_DIV (/ADC1_IN6)
COMP1_N -> TRK1_B_DIV (/ADC1_IN5)
COMP2_P -> TRK2_A_DIV (/ADC1_IN8)
COMP2_N -> TRK2_B_DIV (/ADC1_IN10)
ADC1_IN11 -> BEMF1
ADC1_IN12 -> IMOT_SENSE
ADC1_IN15 -> BEMF2
ADC1_IN16 -> VBUS_SENSE

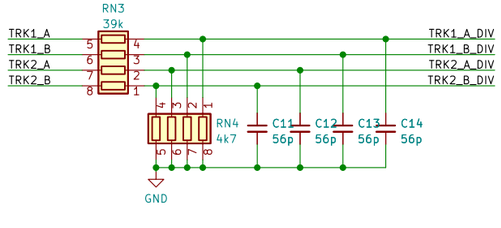
UART1 -> RailCom 2 TX
UART2 -> RailCom 1 TX
UART3 -> Train Bus
SUSI bus can map to CAN1

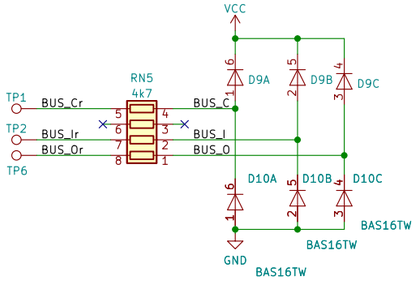




IMODE Hi-Z -> Fixed off time, latch off if over current, $\overline{\text{FAULT}}$ indicates overcurrent only
PMODE VCC -> PWM control mode
VREF max = 3.3V, should correspond to Imotor = 3A,
Iprop = 2.344k







TechnicallyObsolete

Sheet: /
File: dcc_loco_decoder.kicad_sch

Title: DCC Loco Decoder (21 Pin)

Size: A3	Date: 2025-04-12	**Rev: 1v00**
KiCad E.D.A. kicad 6.0.11+dfsg-1		Id: 1/1