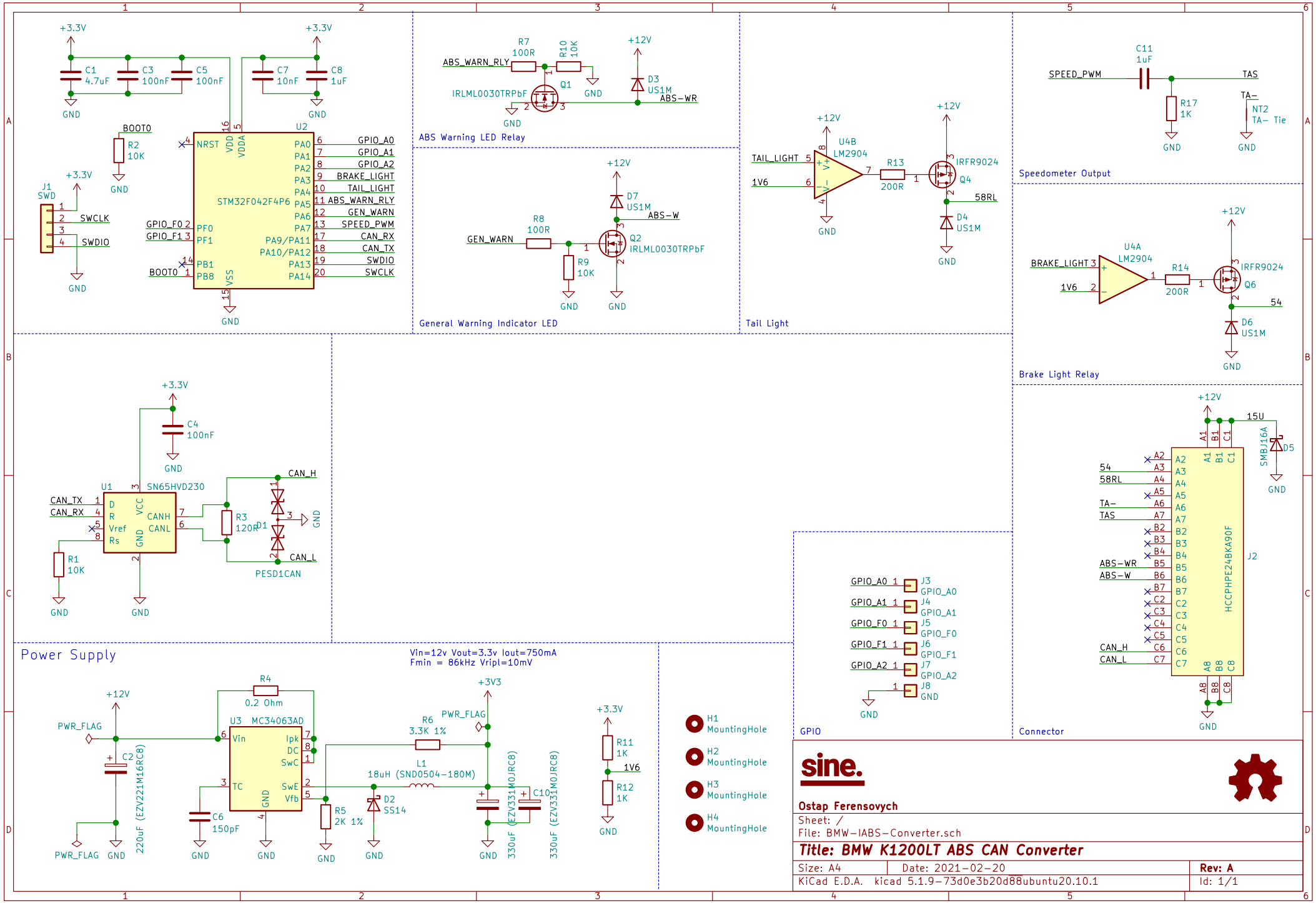
+3.3V
C1 4.7uF
C3 100nF
C5 100nF
C7 10nF
C8 1uF
GND
BOOT0
R2 10K
J1 SWD
SWCLK
SWDIO
U2
STM32F042F4P6
NRST
VDD
VDDA
PF0
PF1
PB1
PB8
VSS
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA9/PA11
PA10/PA12
PA13
PA14
GPIO_A0
GPIO_A1
GPIO_A2
BRAKE_LIGHT
TAIL_LIGHT
ABS_WARN_RLY
GEN_WARN
SPEED_PWM
CAN_RX
CAN_TX
SWDIO
SWCLK
GPIO_F0
GPIO_F1
ABS Warning LED Relay
R7 100R
R10 10K
+12V
D3 US1M
ABS-WR
Q1 IRLML0030TRPbF
General Warning Indicator LED
D7 US1M
ABS-W
R8 100R
R9 10K
Q2 IRLML0030TRPbF
Tail Light
U4B LM2904
R13 200R
IRFR9024
Q4
58RL
D4 US1M
Speedometer Output
C11 1uF
R17 1K
TAS
TA-
NT2 TA- Tie
Brake Light Relay
U4A LM2904
R14 200R
Q6
54
D6 US1M
1V6
U1 SN65HVD230
C4 100nF
CAN_TX
CAN_RX
CAN_H
CAN_L
R3 120R
D1 PESD1CAN
R1 10K
Connector
15U
SMBJ16A D5
HCCPHPE24BKA90F
J2
ABS-WR
ABS-W
GPIO
J3 GPIO_A0
J4 GPIO_A1
J5 GPIO_F0
J6 GPIO_F1
J7 GPIO_A2
J8 GND
Power Supply
Vin=12v Vout=3.3v Iout=750mA
Fmin = 86kHz Vripl=10mV
R4 0.2 Ohm
U3 MC34063AD
PWR_FLAG
C2 220uF (EZV221M16RC8)
C6 150pF
R5 2K 1%
D2 SS14
R6 3.3K 1%
L1 18uH (SND0504-180M)
C10 330uF (EZV331M0JRC8)
R11 1K
R12 1K
H1 MountingHole
H2 MountingHole
H3 MountingHole
H4 MountingHole
sine.
Ostap Ferensovych
Sheet: /
File: BMW-IABS-Converter.sch
Title: BMW K1200LT ABS CAN Converter
Size: A4
Date: 2021-02-20
Rev: A
KiCad E.D.A. kicad 5.1.9-73d0e3b20d88ubuntu20.10.1
Id: 1/1