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Status: PROTOTYPE
Drawn by: Ben Cartwright
The Flame Trench

Sheet: / File: OBC-1.sch		
Title: Singularity OBC – Top Level Architecture		
Size: A4	Date: 2021-05-24	Rev: PROTO_B_v01
KiCad E.D.A. kicad (5.1.10)-1		Id: 1/11

Sheet: Power

OBC_1V25_P_PGD
OBC_1V25_R_PGD

File: Power.sch

Sheet: TMS570_uC

OBC_1V25_P_PG
OBC_1V25_R_PG

Sheet: Supervisor

SPVSR_PET
SPVSR_nRST

File: Supervisor.sch

Sheet: RTC

RTC_CLKOUT
RTC_nINT
OBC_I2C_SDA
OBC_I2C_SCL

File: RTC_v2.sch

Sheet: CAN_XCVR_PL

CAN_PL_Rs
CAN_PL_D
CAN_PL_R
CAN_R_Rs
CAN_R_DD
CAN_R_R

File: CAN_XCVR.sch

Sheet: CAN_XCVR_R

CAN_PL_Rs
CAN_PL_D
CAN_PL_R
CAN_PL_Rs
CAN_PL_D
CAN_PL_R

File: CAN_XCVR.sch

Sheet: CAN_XCVR_PA

CAN_PL_Rs
CAN_PL_D
CAN_PL_R
CAN_PL_Rs
CAN_PL_D
CAN_PL_R

File: CAN_XCVR.sch

Sheet: Connectors

OBC_SDA
OBC_SCL
ADS_nRST

CAN_H_PL
CAN_L_PL

CAN_H_R
CAN_L_R

CAN_H_PA
CAN_L_PA

GPS_nRST
GPS_P1PPS

GPS_STS
GPS_RXD0

GPS_TXD0

File: Connectors.sch

Sheet: FRAM_1

FRAM_1_CIP0
FRAM_1_COPI
FRAM_1_CLK
FRAM_1_nCS

File: FRAM_BMbit.sch

Sheet: FL_1

FL_1_nCS1
FL_1_nCS2
FL_1_CLK
FL_1_nRESET
FL_1_SL_I00
FL_1_SO_I01

FL_1_nHOLD_I03

File: FL_1Gbit.sch

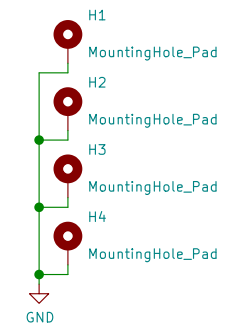
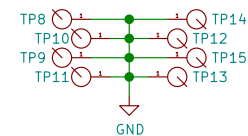
FL_1_nHOLD_I03

File: FL_1Gbit.sch

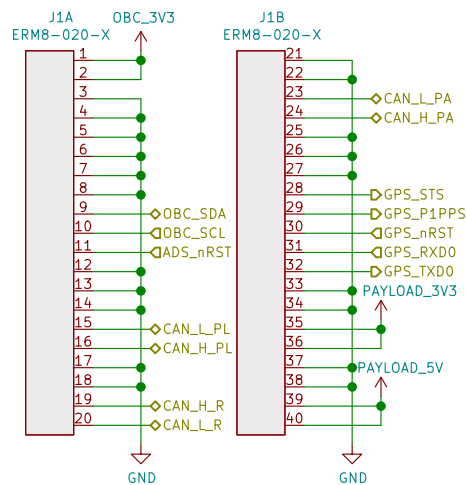
File: TMS570_uC.sch

TP4 JTAG_nTRST
TP1 JTAG_RTCK
TP5 JTAG_TCK
TP2 JTAG_TDI
TP6 JTAG_TDO
TP3 JTAG_TEST
TP7 JTAG_TMS

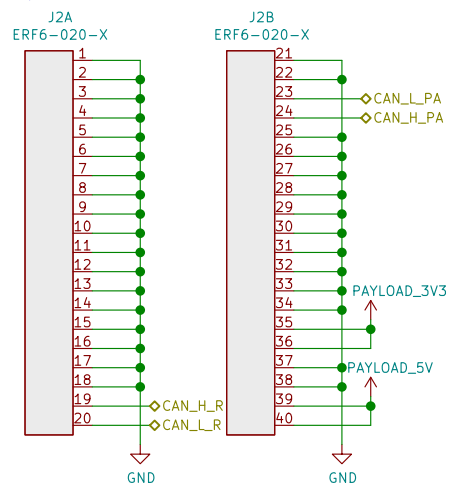
File: TMS570_uC.sch



RFS Connector



Payload Connector



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Sheet: /Connectors/

File: Connectors.sch

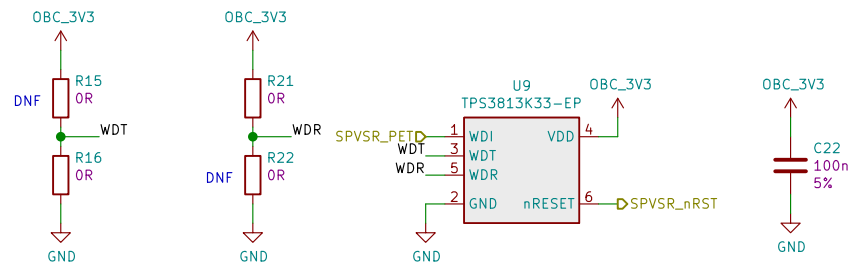
Title: Singularity OBC – Connectors

Size: A4 Date: 2021-05-24

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Sheet: /Supervisor/
File: Supervisor.sch

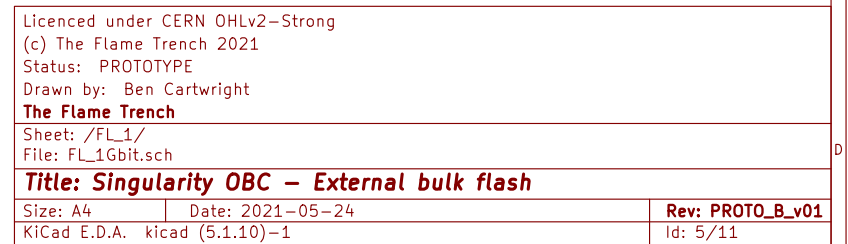
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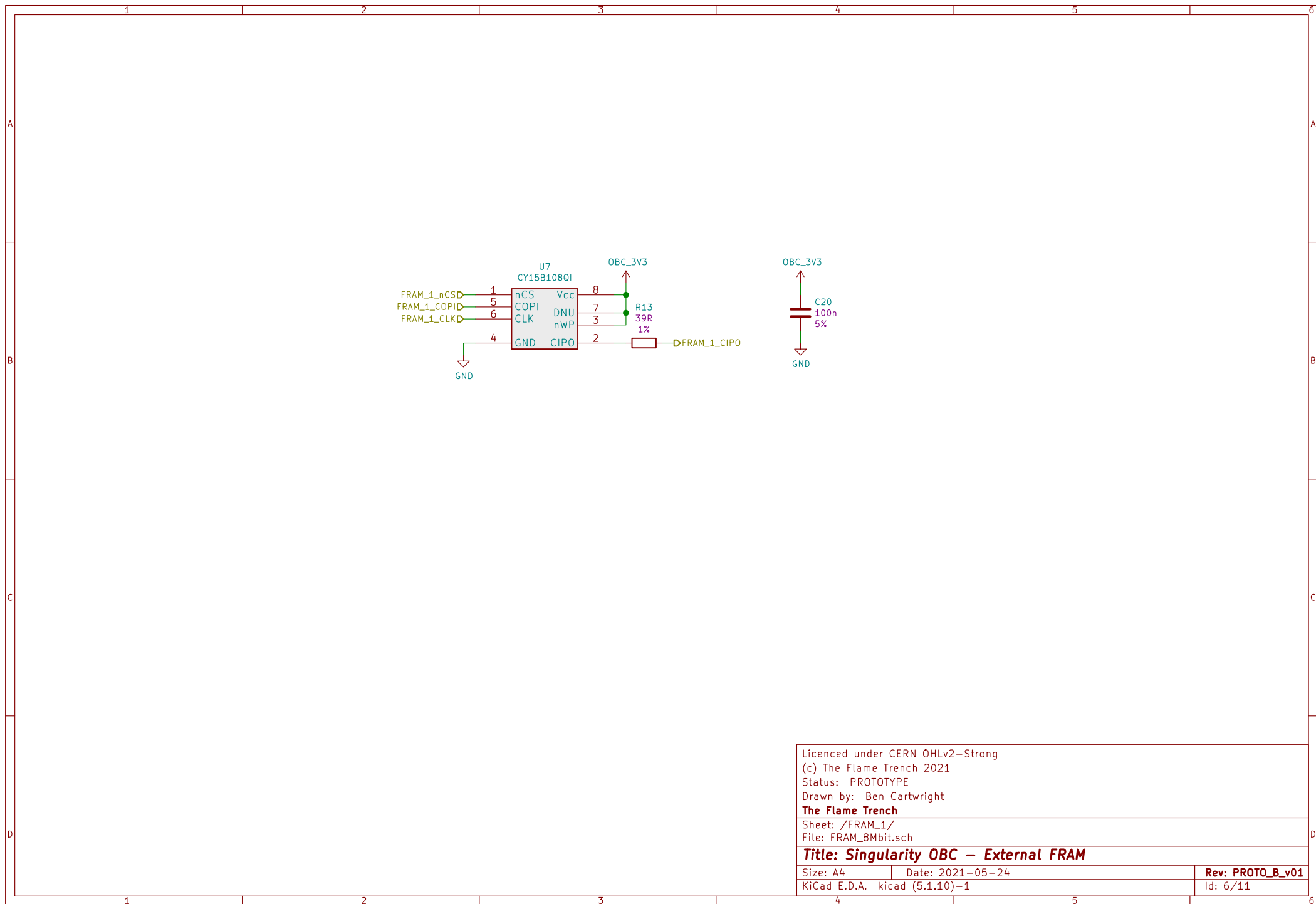
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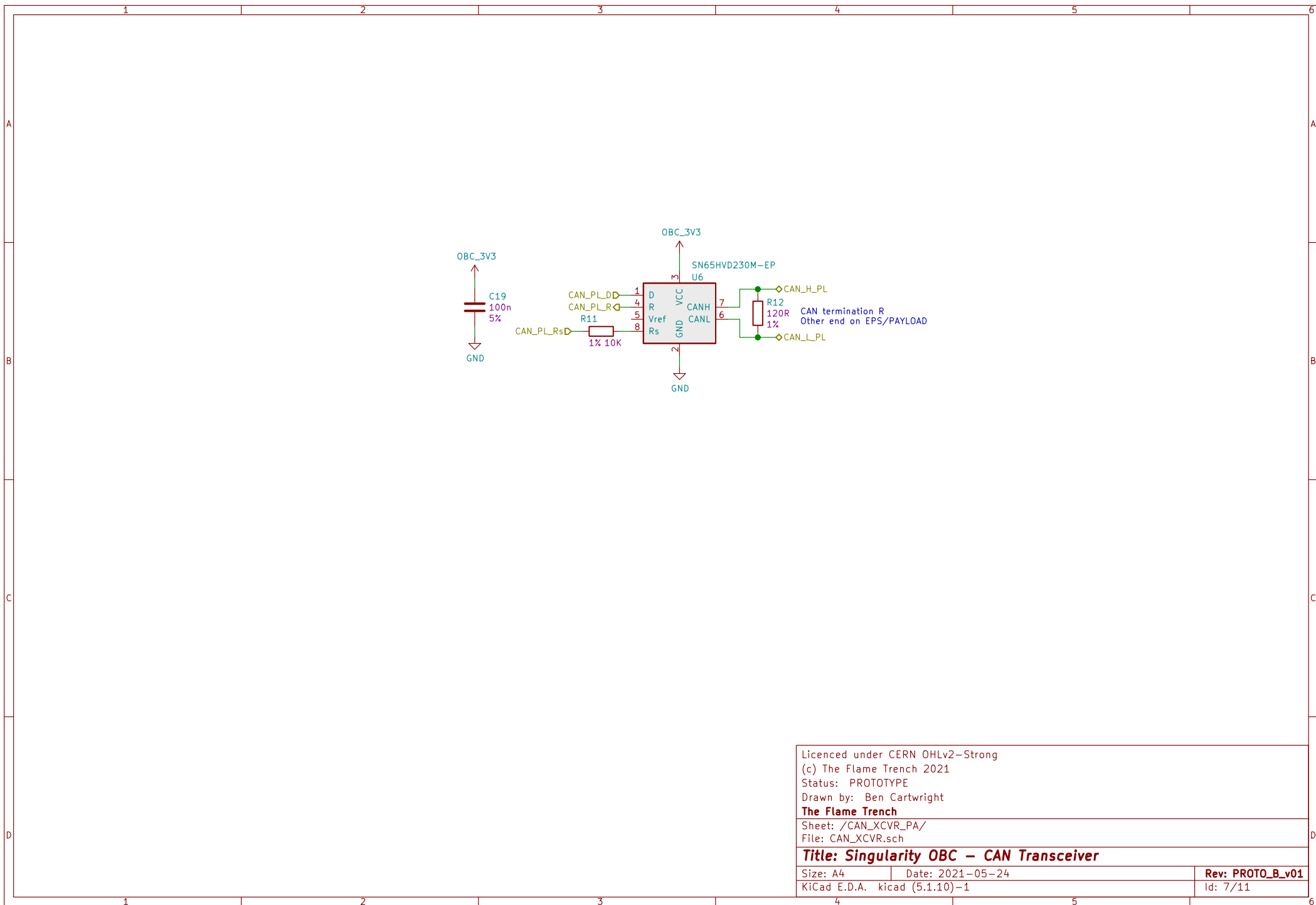
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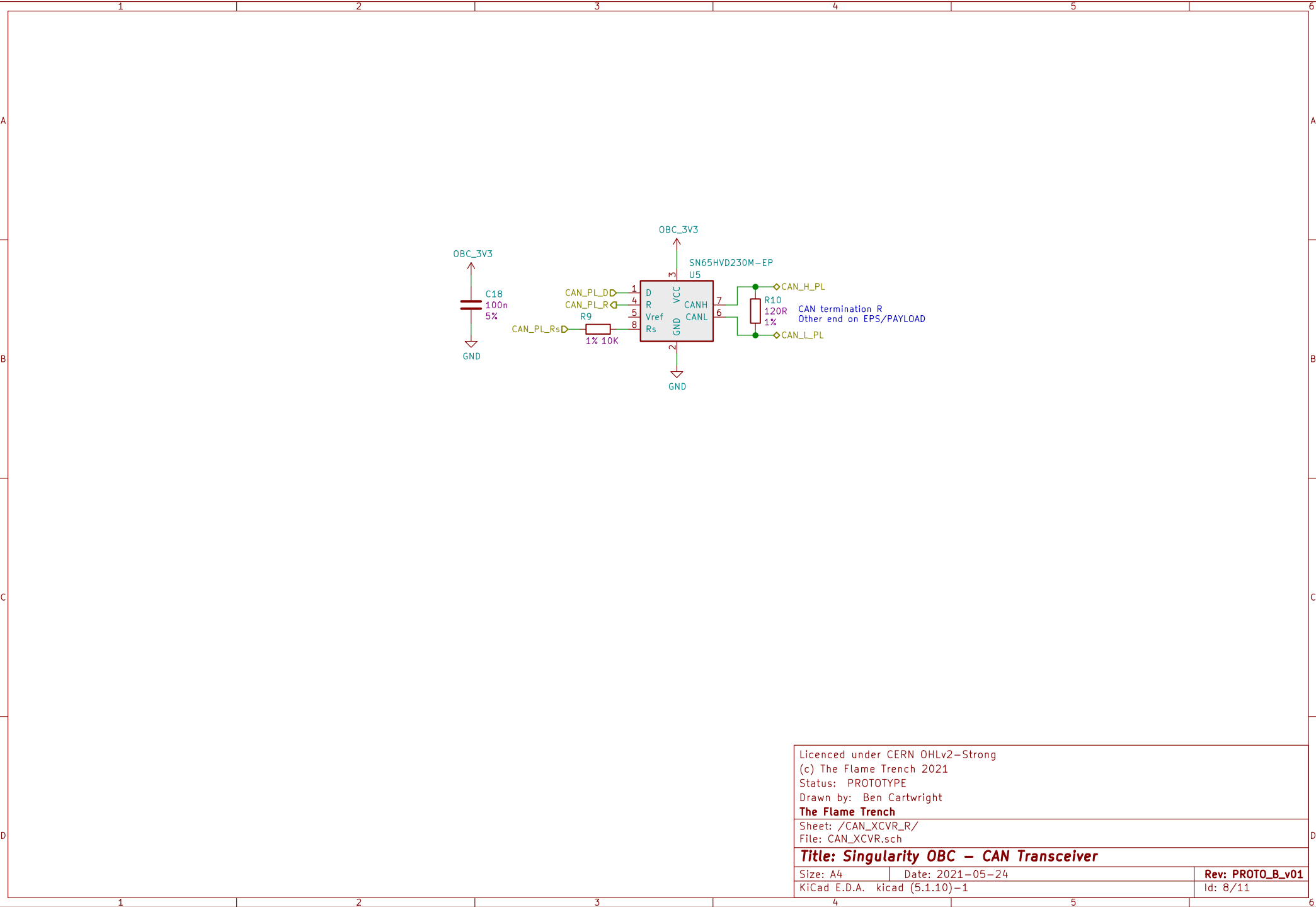
Rev: PROTO_B_v01

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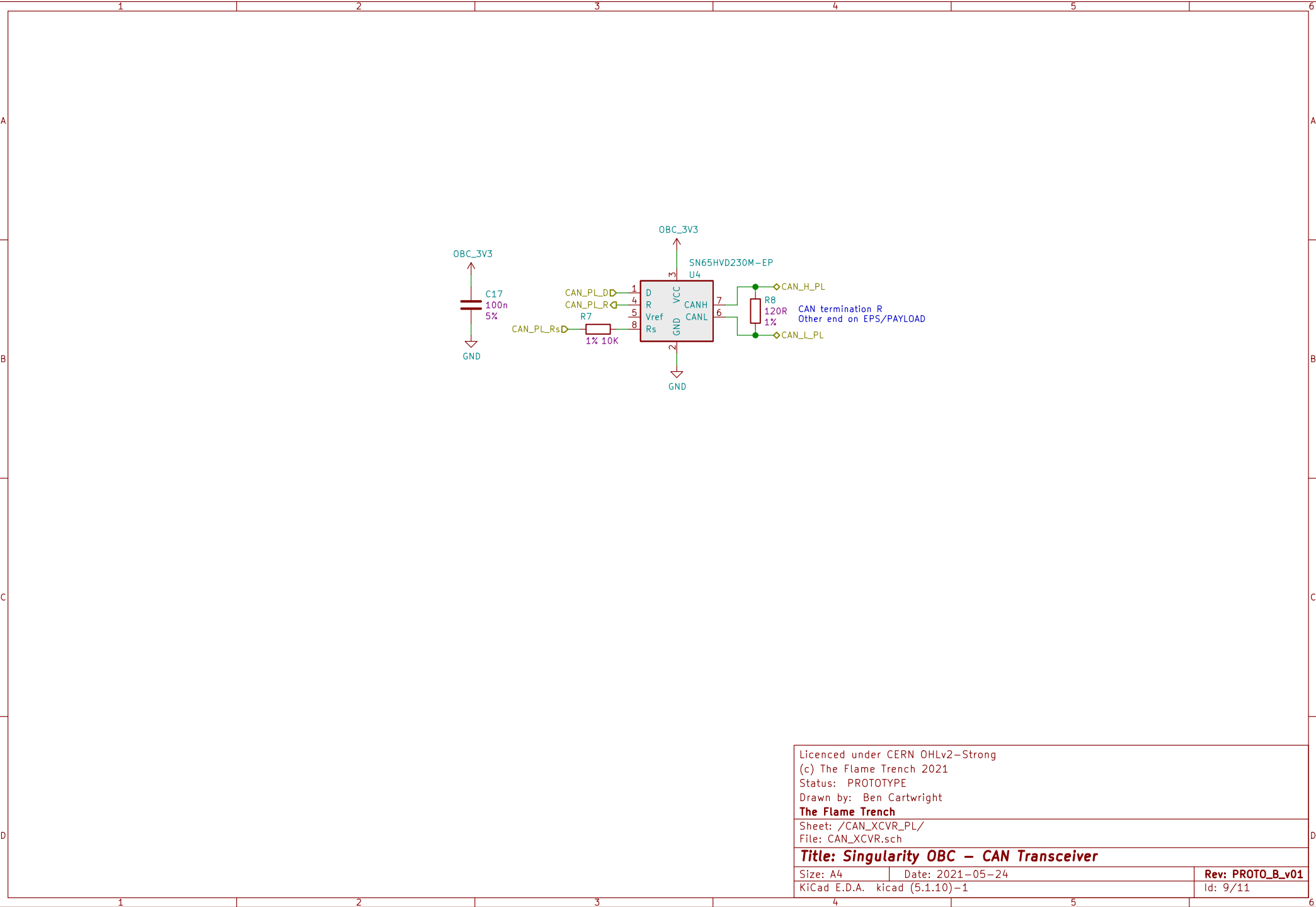






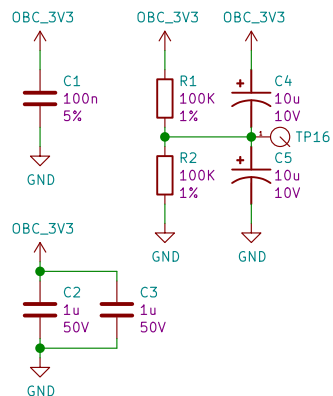


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Sheet: /CAN_XCVR_R/		
File: CAN_XCVR.sch		
Title: Singularity OBC – CAN Transceiver		
Size: A4	Date: 2021-05-24	Rev: PROTO_B_v01
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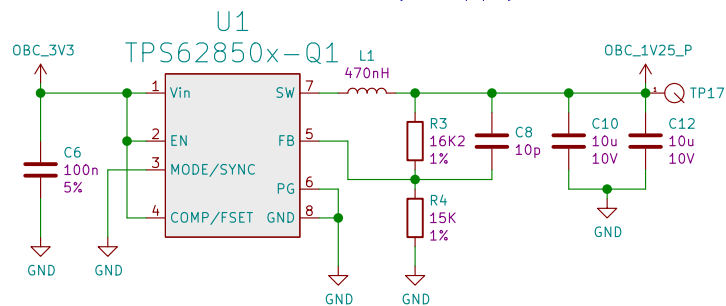


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Sheet: /CAN_XCVR_PL/		
File: CAN_XCVR.sch		
Title: Singularity OBC – CAN Transceiver		
Size: A4	Date: 2021-05-24	Rev: PROTO_B_v01
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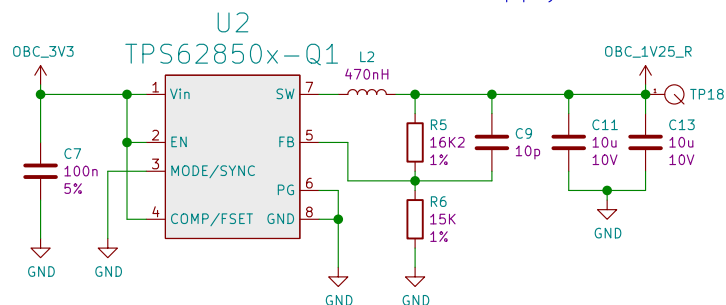
Bulk decoupling



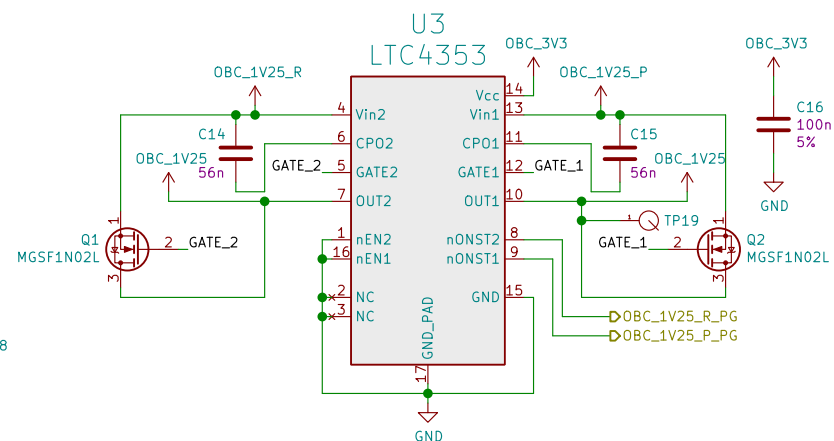
OBC 1V2 Core Primary Supply



OBC 1V2 Core Redundant Supply



OBC 1V2 Core Supply ORing



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Sheet: /Power/

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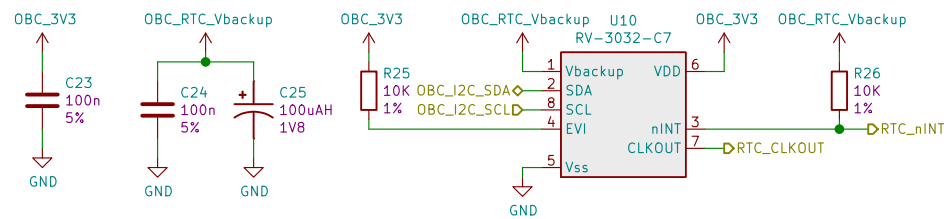
Title: Singularity OBC – Power Conditioning

Size: A4 Date: 2021-05-24

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Sheet: /RTC/
File: RTC_v2.sch

Title:

Size: A4
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Date:
Id: 11/11
Rev: PROTO_B_v01