



Sheet: Power

OBC\_1V2\_P\_PG  
OBC\_1V2\_R\_PG

File: Power.sch

Sheet: TMS570 uC

OBC\_1V2\_P\_PG  
OBC\_1V2\_R\_PG

Sheet: Supervisor\_RTC\_FRAM

SPVSR\_COPID  
SPVSR\_CIPID  
SPVSR\_CLK  
SPVSR\_nCS  
SPVSR\_ACSD  
SPVSR\_nRSTD  
SPVSR\_CNT

File: Supervisor\_RTC\_FRAM.sch

Sheet: CAN\_XCVR\_PL

CAN\_PL\_Rs  
CAN\_PL\_DD  
CAN\_PL\_R

File: CAN\_XCVR.sch

Sheet: CAN\_XCVR\_R

CAN\_PL\_Rs  
CAN\_PL\_DD  
CAN\_PL\_R

File: CAN\_XCVR.sch

Sheet: CAN\_XCVR\_PA

CAN\_PL\_Rs  
CAN\_PL\_DD  
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\_STS  
GPS\_P1PPS

GPS\_nRST  
GPS\_RXD0

GPS\_TXD0

File: Connectors.sch

Sheet: FRAM\_1

FRAM\_1\_CIPID  
FRAM\_1\_COPID  
FRAM\_1\_CLKD  
FRAM\_1\_nCS

File: FRAM\_BMBit.sch

Sheet: FL\_1

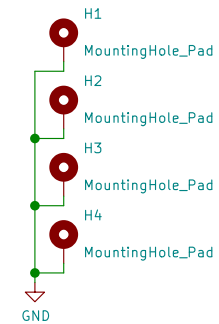
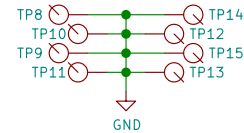
FL\_1\_nCS1D  
FL\_1\_nCS2D  
FL\_1\_CLKD  
FL\_1\_nRESETD  
FL\_1\_SL\_I00D  
FL\_1\_SO\_I01D

File: FL\_1Gbit.sch

Sheet: SDRAM\_1

DQ[0:15]  
BA[0:1]  
A[0:12]

File: SDRAM\_128Mbit.sch



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Sheet: /

File: OBC-1.sch

Title: Singularity OBC – Top Level Architecture

Size: A4

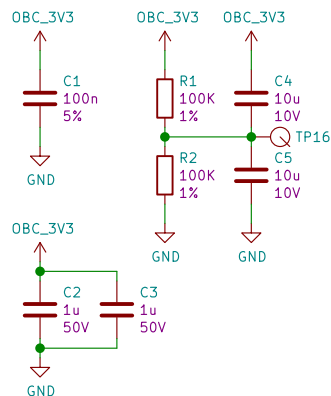
Date: 2021-03-11

Rev: PROTO\_A

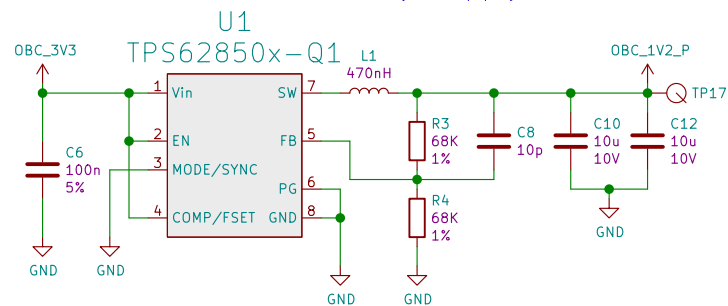
KiCad E.D.A. kicad (5.1.9)-1

Id: 1/11

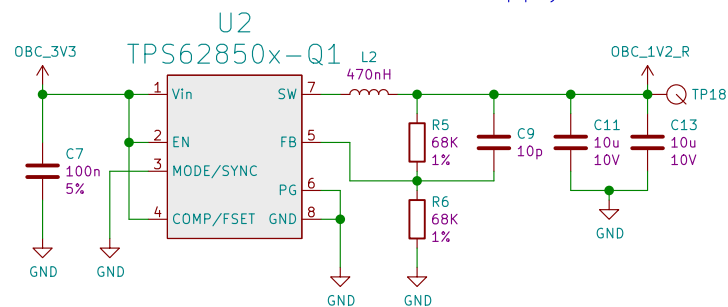
## Bulk decoupling



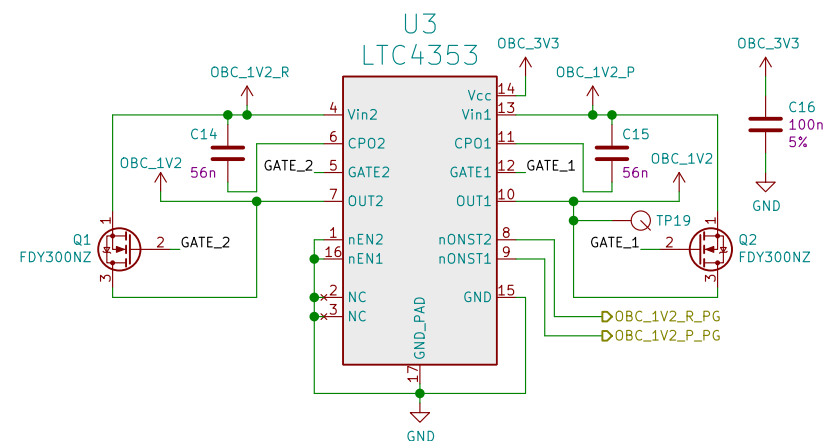
## OBC 1V2 Core Primary Supply



## OBC 1V2 Core Redundant Supply



## OBC 1V2 Core Supply ORing



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Sheet: /Power/

File: Power.sch

**Title: Singularity OBC – Power Conditioning**

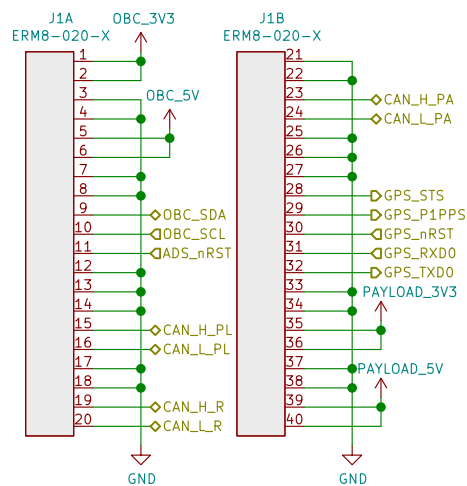
Size: A4 Date: 2021-03-11

KiCad E.D.A. kicad (5.1.9)-1

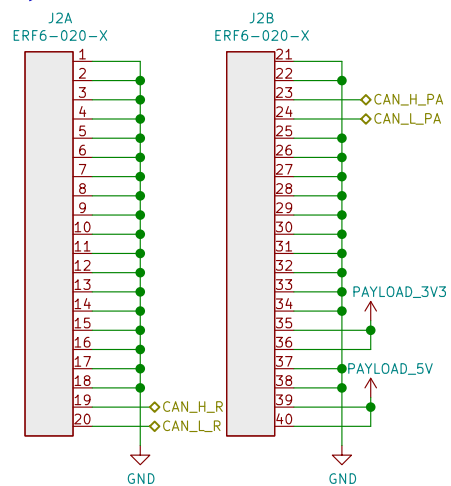
Rev: PROTO\_A

Id: 2/11

## RFS Connector



## Payload Connector



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Sheet: /Connectors/

File: Connectors.sch

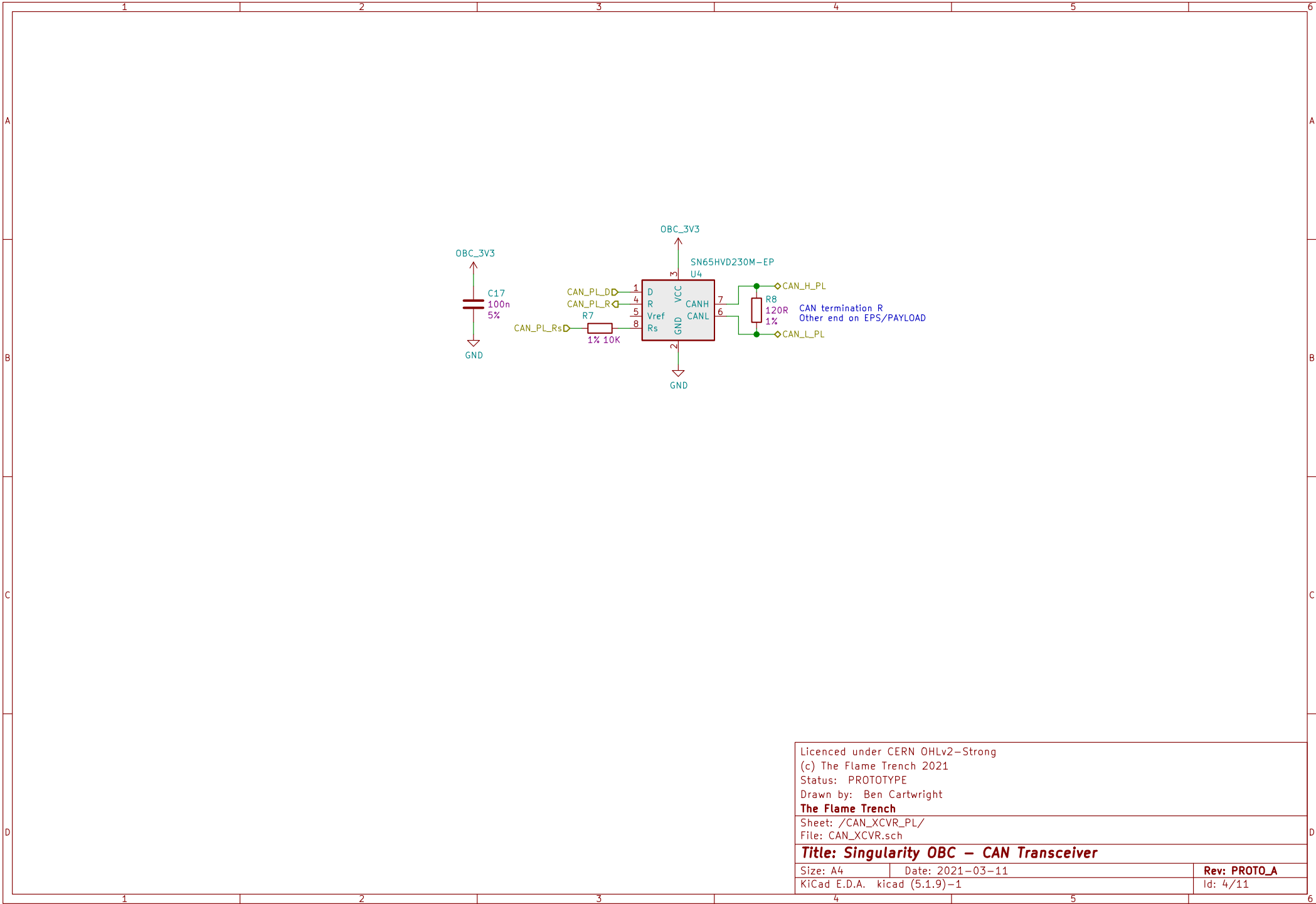
**Title: Singularity OBC – Connectors**

Size: A4 Date: 2021-03-11

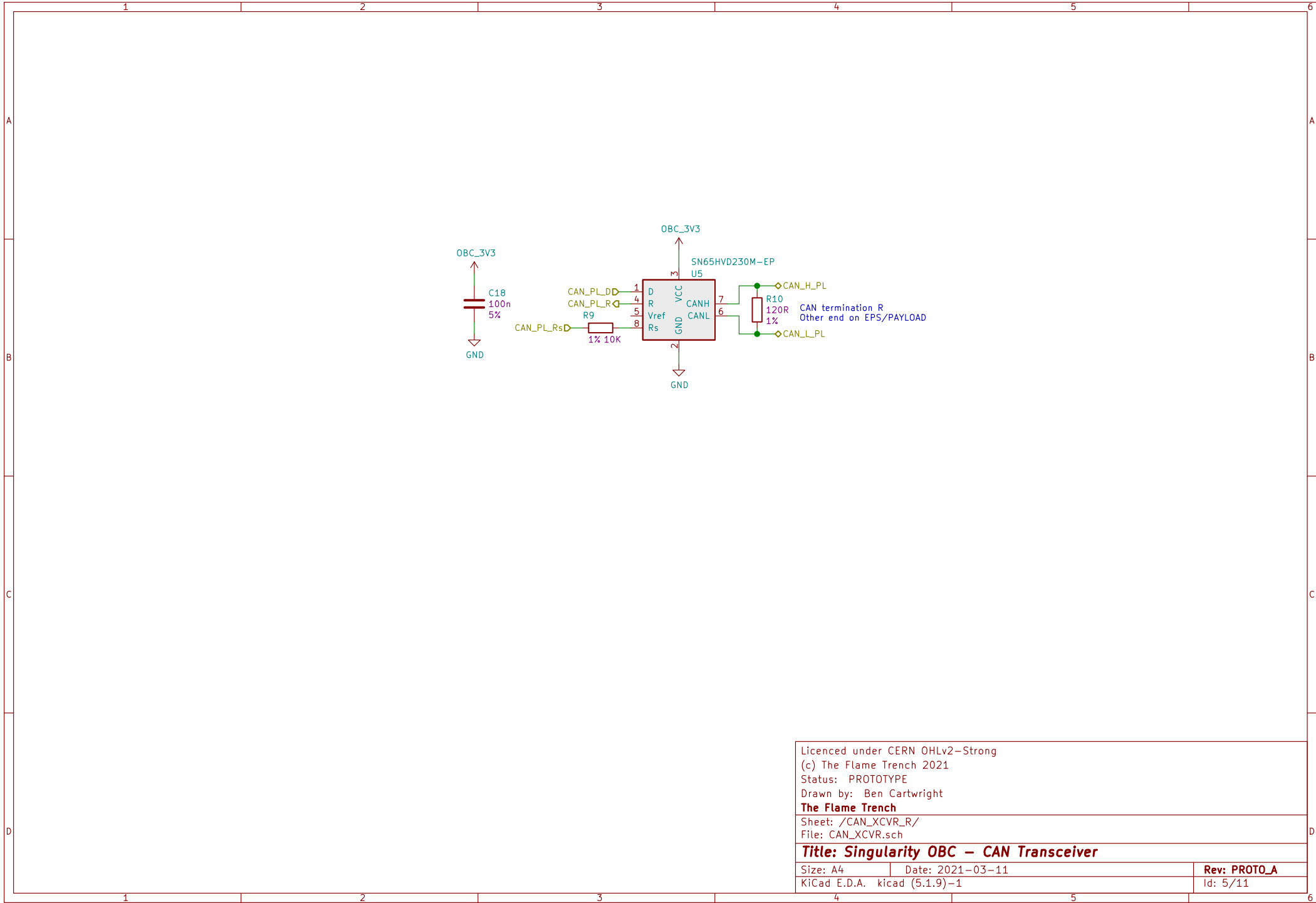
KiCad E.D.A. kicad (5.1.9)-1

Rev: PROTO\_A

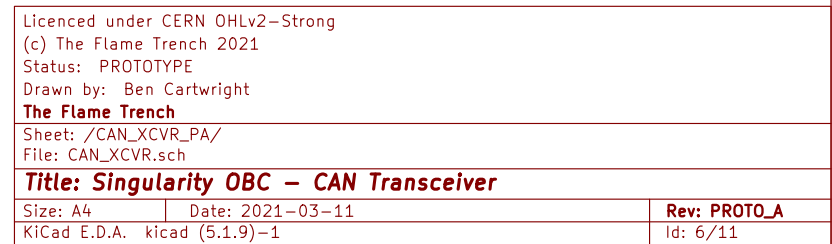
Id: 3/11

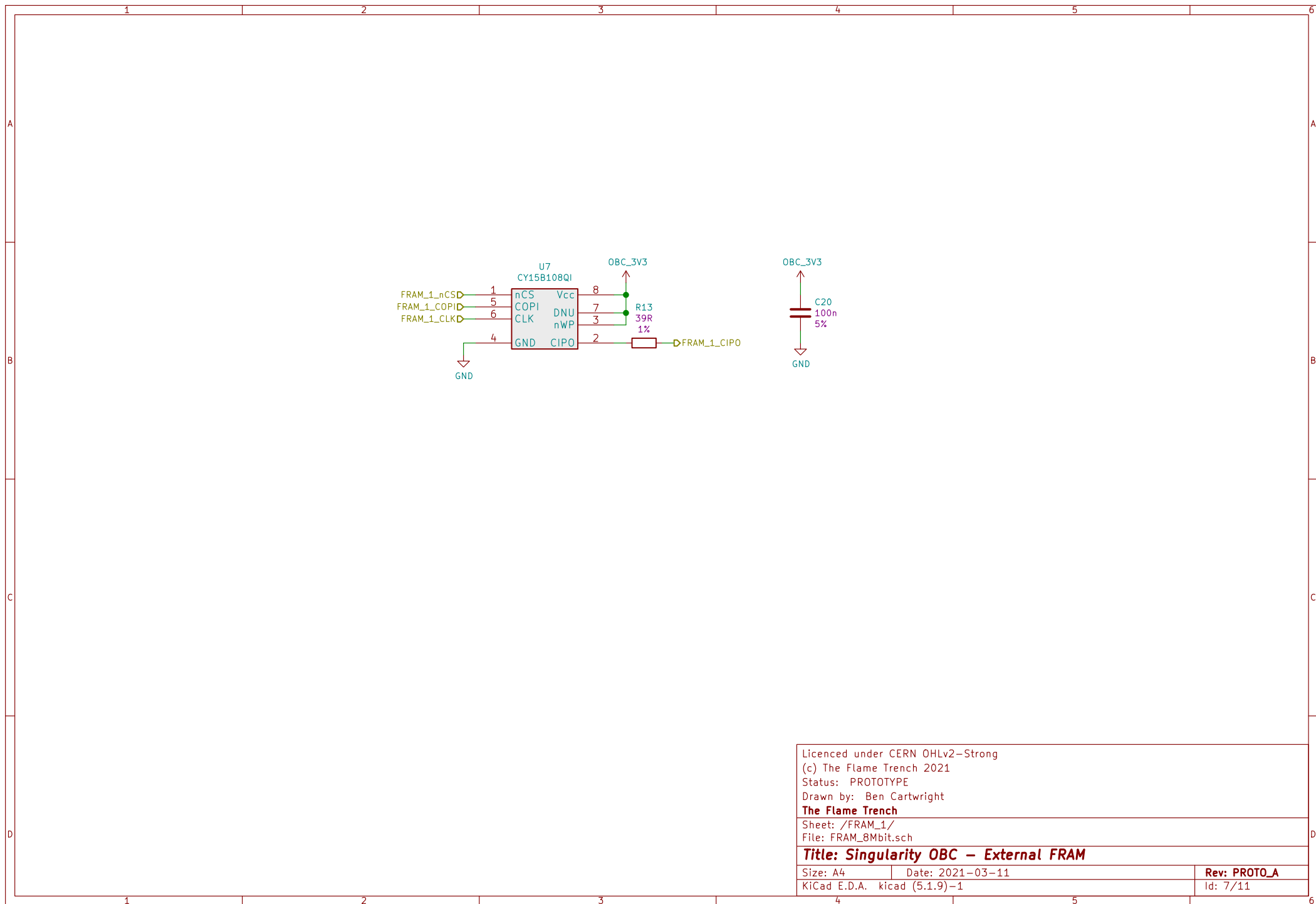


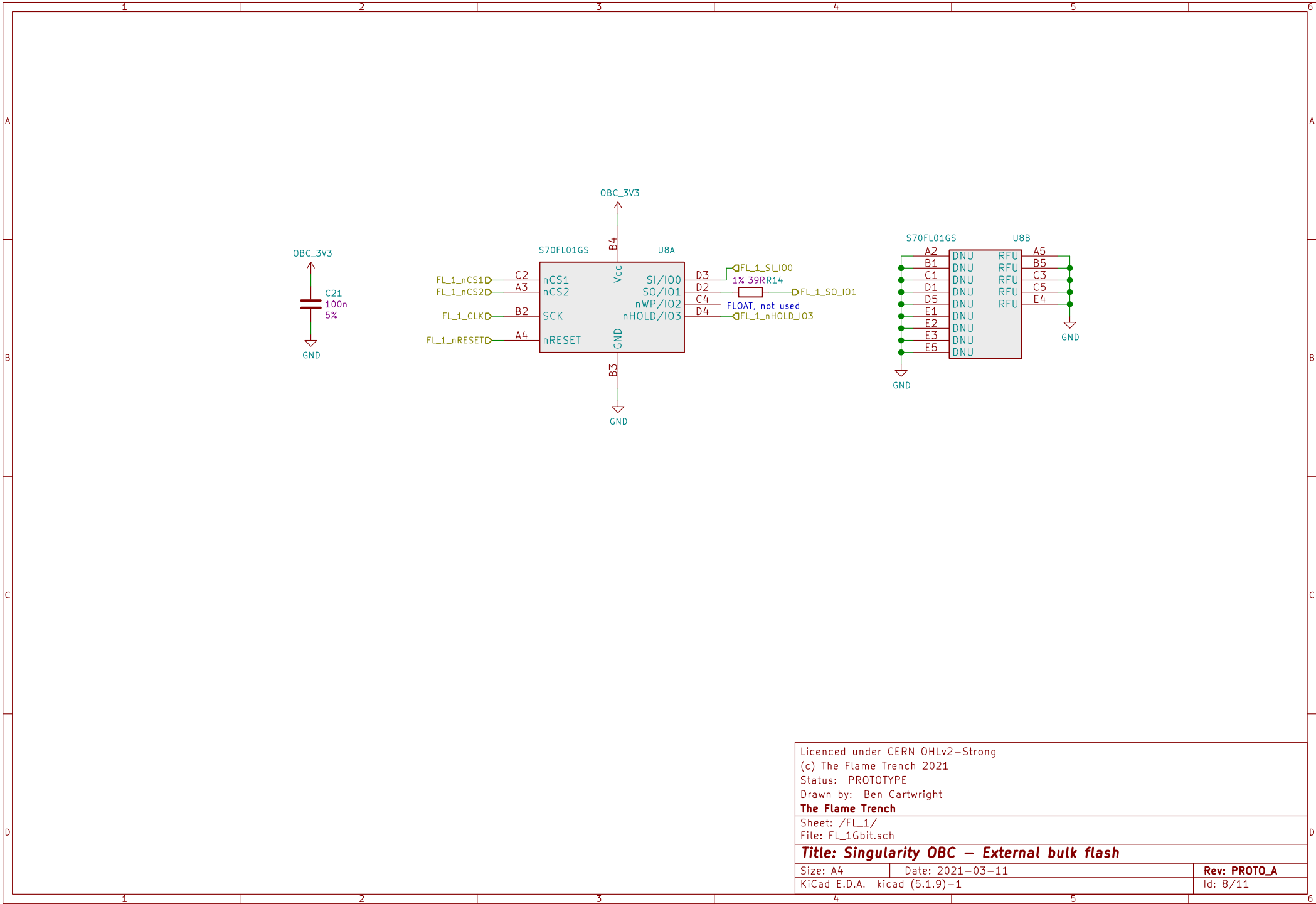
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Sheet: /CAN_XCVR_PL/		
File: CAN_XCVR.sch		
<b>Title: Singularity OBC – CAN Transceiver</b>		
Size: A4	Date: 2021-03-11	Rev: PROTO_A
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Sheet: /CAN_XCVR_R/		
File: CAN_XCVR.sch		
Title: Singularity OBC – CAN Transceiver		
Size: A4	Date: 2021-03-11	Rev: PROTO_A
KiCad E.D.A. kicad (5.1.9)-1		Id: 5/11

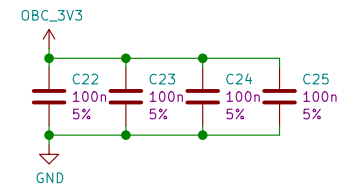
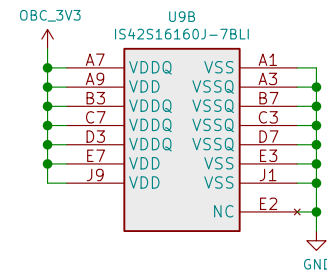
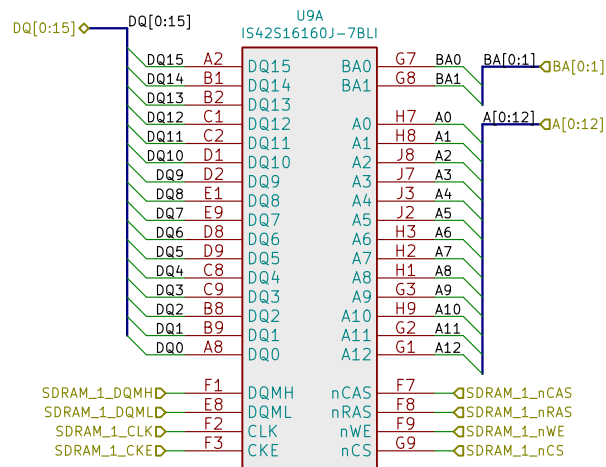






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Sheet: /FL_1/		
File: FL_1Gbit.sch		
Title: Singularity OBC - External bulk flash		
Size: A4	Date: 2021-03-11	Rev: PROTO_A
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Sheet: /SDRAM_1/ File: SDRAM_128Mbit.sch		
<b>Title: Singularity OBC - External SDRAM</b>		
Size: A4	Date: 2021-03-11	Rev: PROTO_A
KiCad E.D.A. kicad (5.1.9)-1		Id: 9/11

