

1

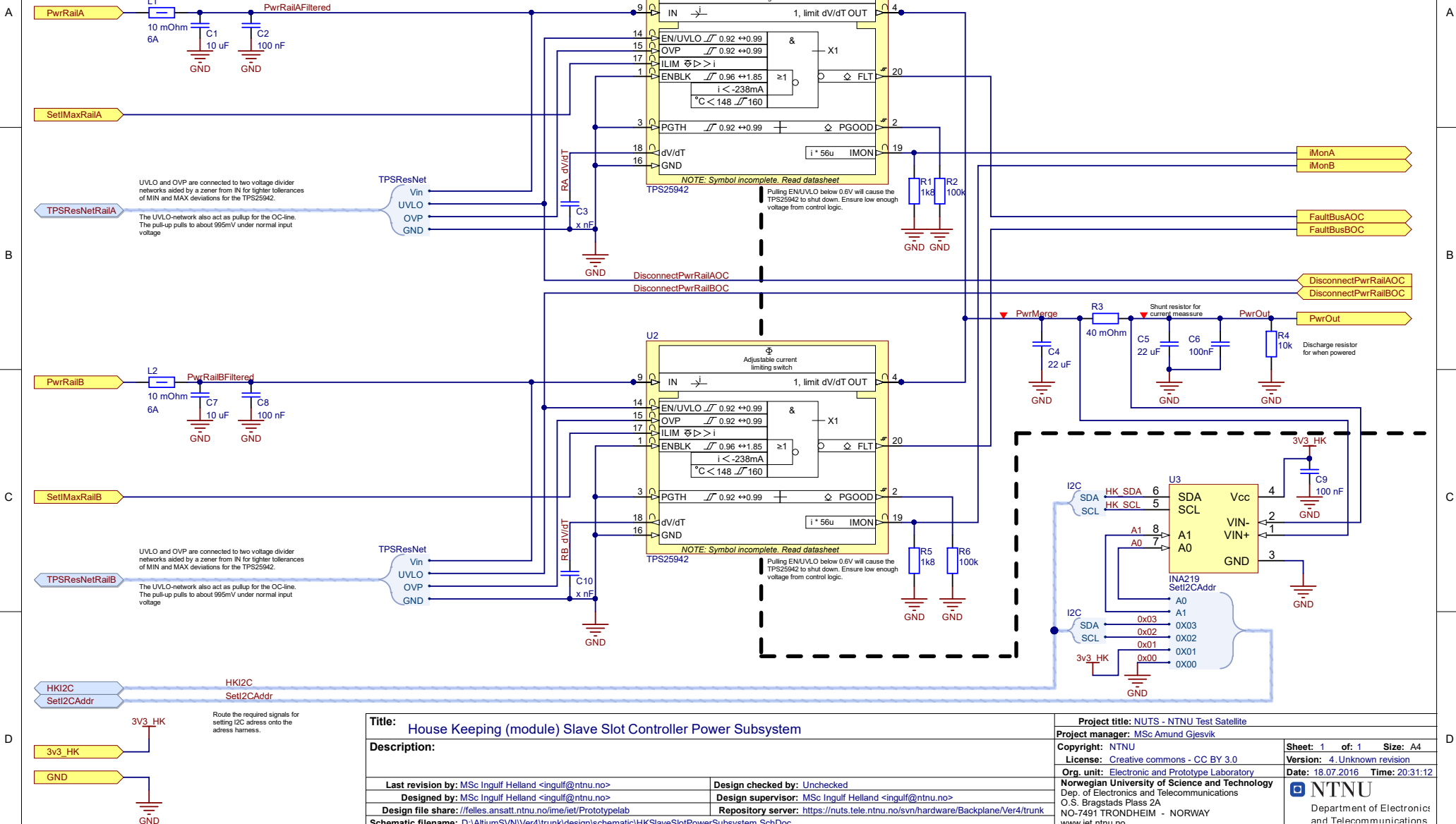
2

3

4

Fault isolation line

Any signal crossing this line needs to be individually and thoroughly checked for proper fault isolation



1

2

3

4

1

2

3

4

Backplane busses and signals

Ensure clocking of state register only on IDMatch

State register

Polarity setting for reset state and OC drivers for states

Fault isolation line

Any signal crossing this line needs to be individually and thoroughly checked for proper fault isolation

Debug signals

Debug signals are not fault isolated as they are only used for engineering. Signals are to remain unconnected on flight models

A

A

B

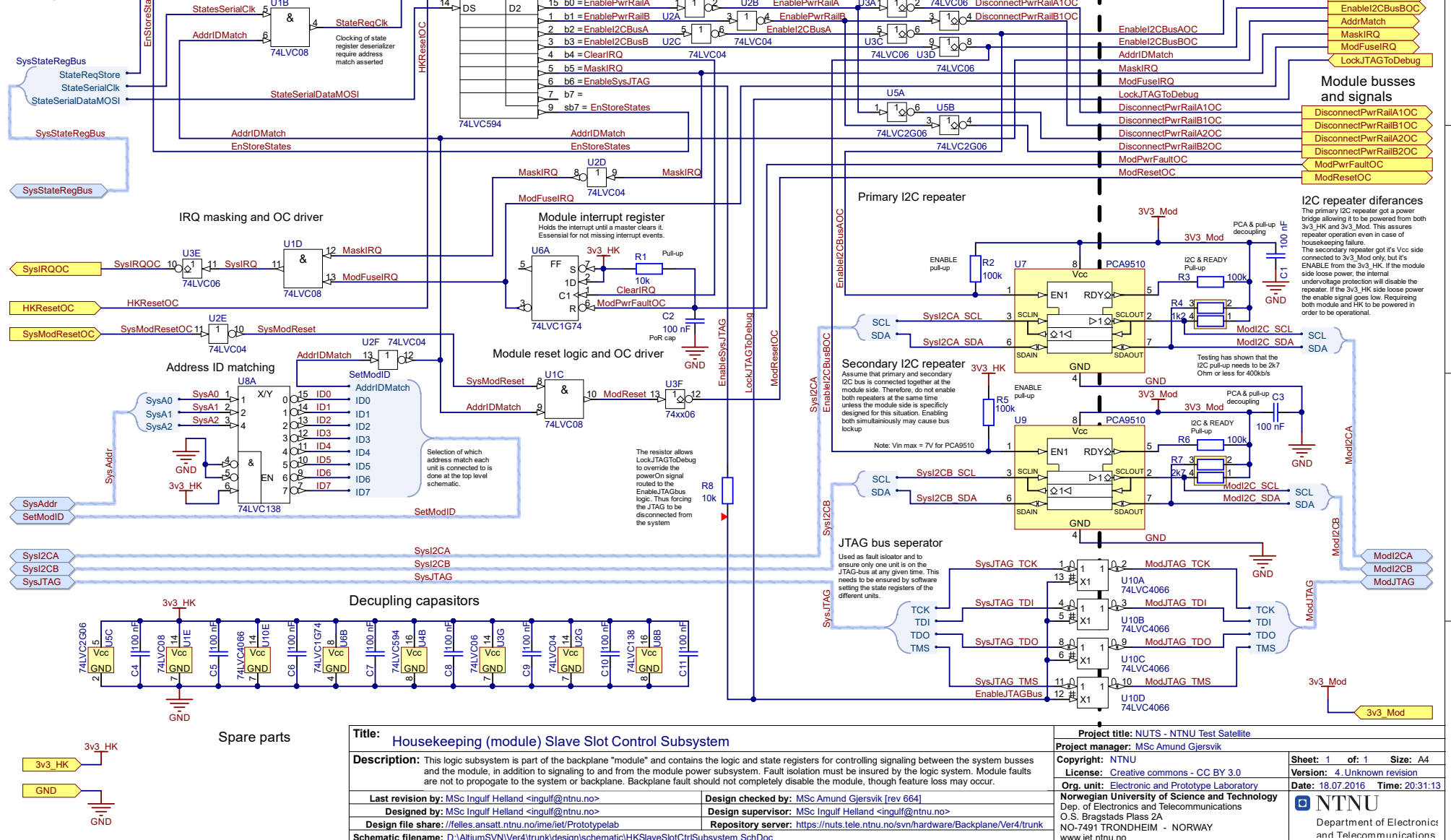
B

C

C

D

D



Title: Housekeeping (module) Slave Slot Control Subsystem

Description: This logic subsystem is part of the backplane "module" and contains the logic and state registers for controlling signaling between the system busses and the module, in addition to signaling to and from the module power subsystem. Fault isolation must be insured by the logic system. Module faults are not to propagate to the system or backplane. Backplane fault should not completely disable the module, though feature loss may occur.

Last revision by: MSc Ingulf Helland <ingulf@ntnu.no>

Designed by: MSc Ingulf Helland <ingulf@ntnu.no>

Design file share: //felles.ansatt.ntnu.no/iet/Prototypelab

Schematic filename: D:\AltiumSVN\Ver4\trunk\design\schematic\HKSlaveSlotCtrlSubsystem.SchDoc

Design checked by: MSc Amund Gjersvik [rev 664]

Design supervisor: MSc Ingulf Helland <ingulf@ntnu.no>

Repository server: https://nuts.tele.ntnu.no/svn/hardware/Backplane/Ver4/trunk

Project title: NUTS - NTNU Test Satellite

Project manager: MSc Amund Gjersvik

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Org. unit: Electronic and Prototype Laboratory

Norwegian University of Science and Technology

Dep. of Electronics and Telecommunications

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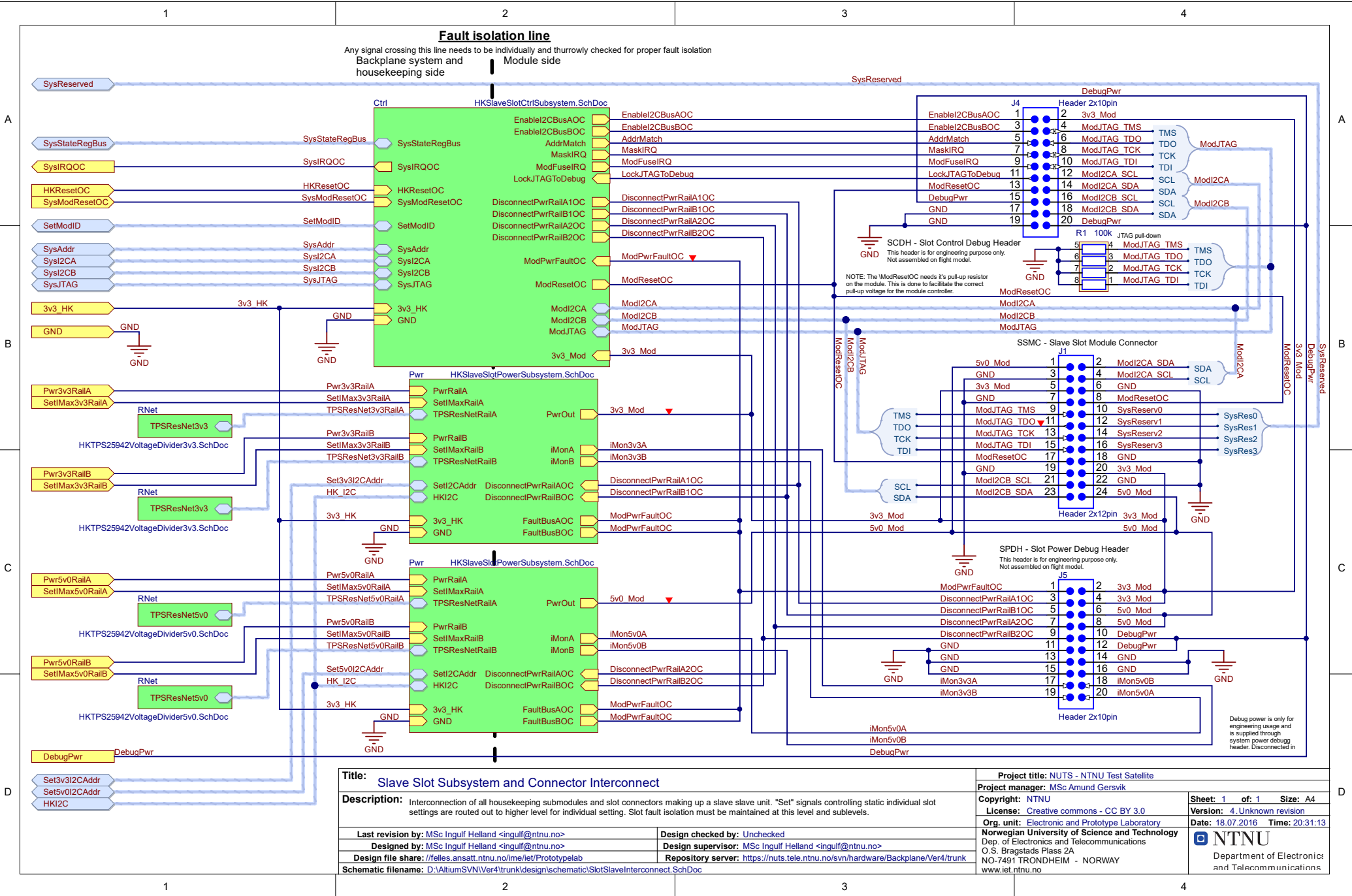
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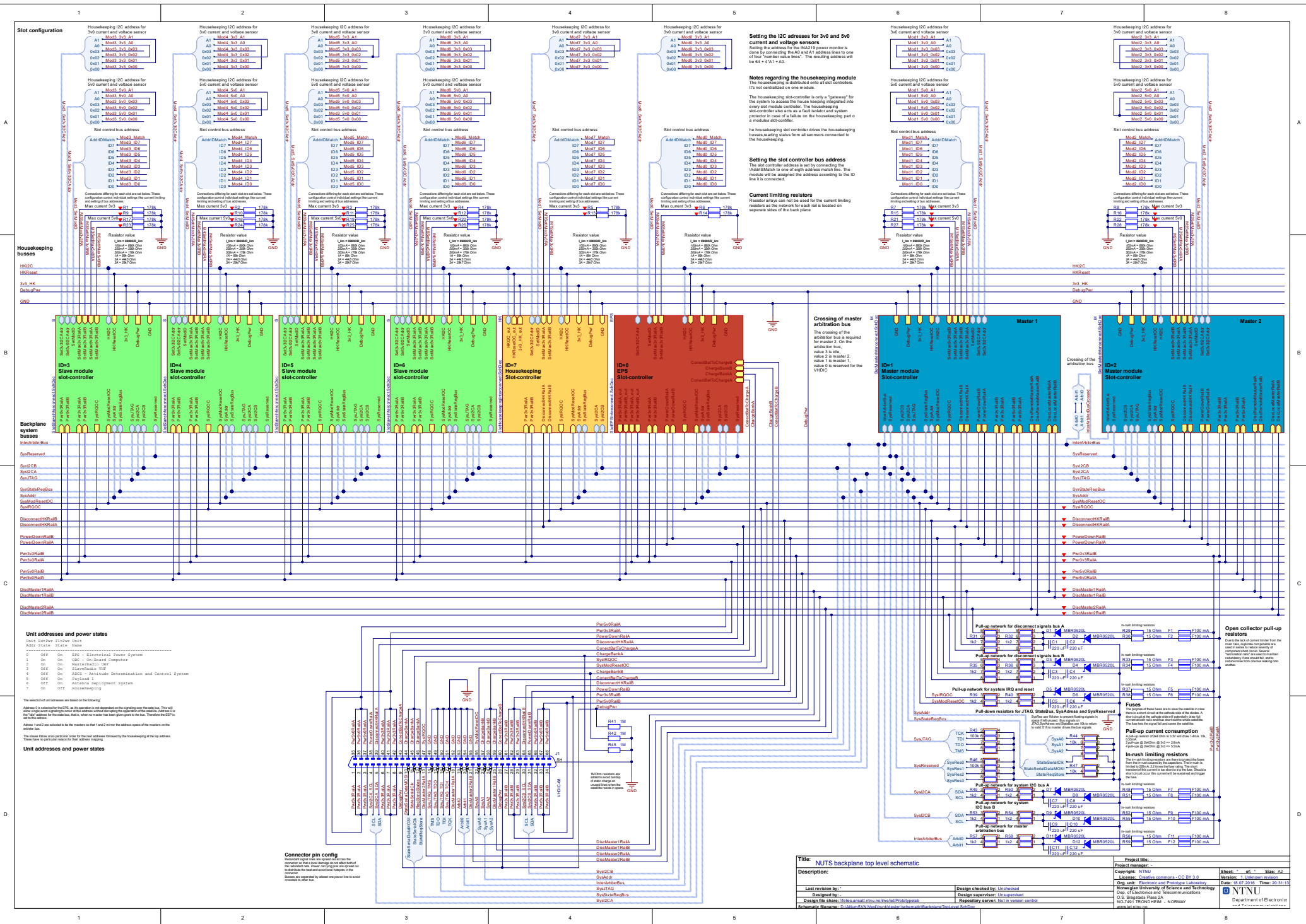
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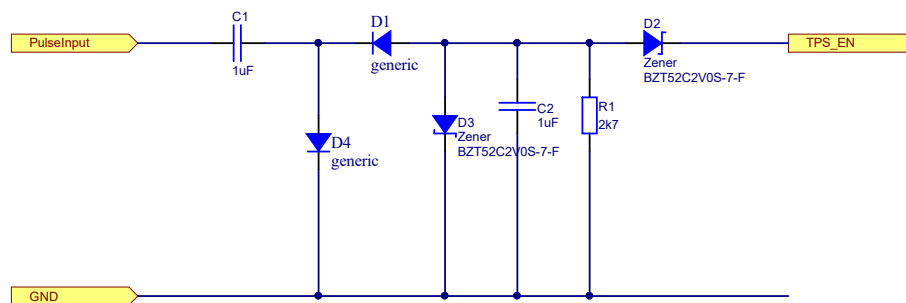
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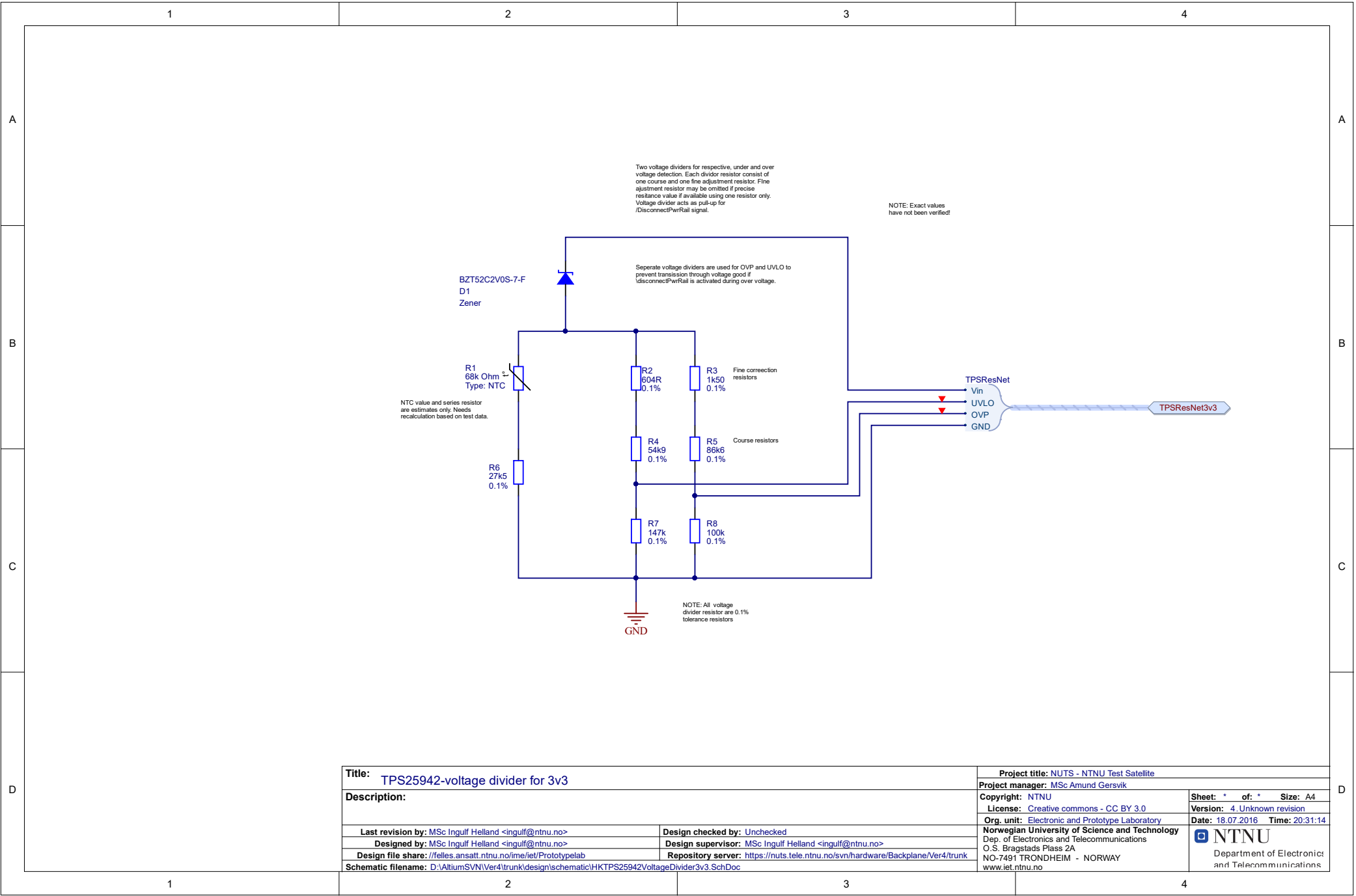


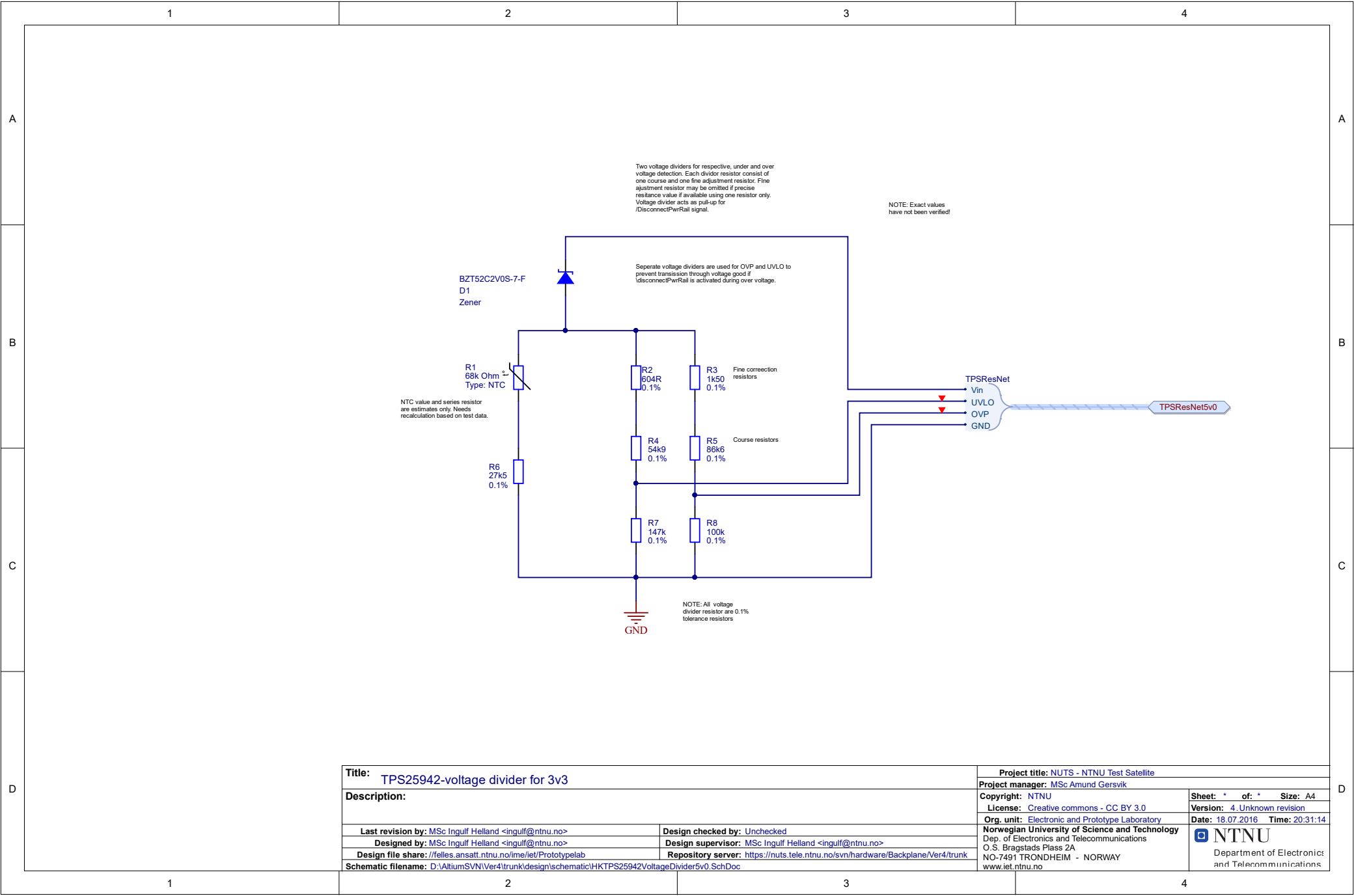


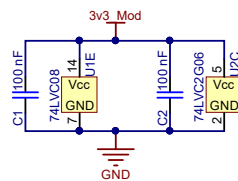
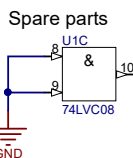
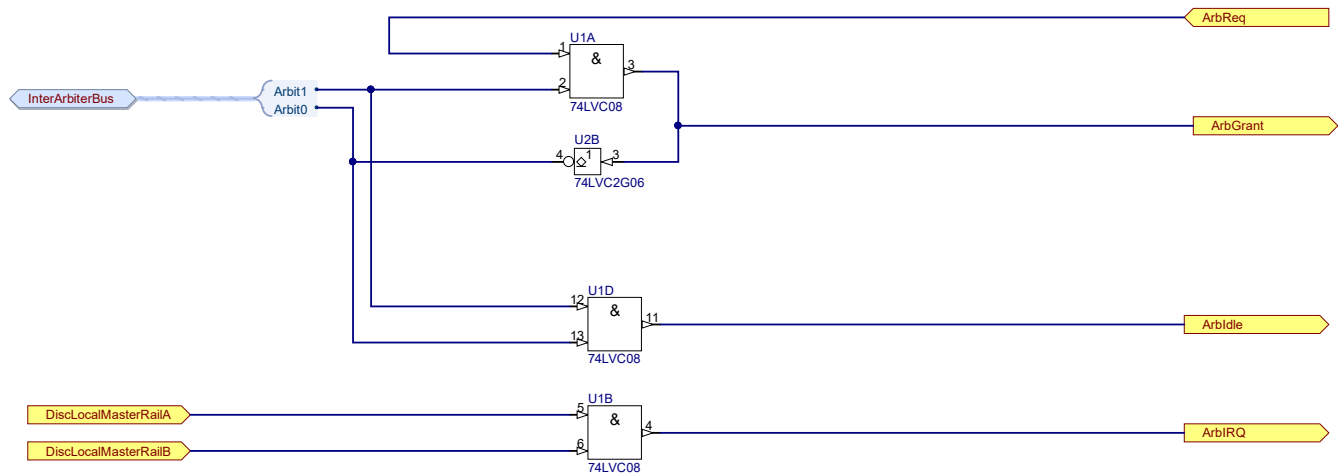
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Last revision by: -		Design checked by: Unchecked	
Designed by: -		Design supervisor: Unsupervised	
Drawn by: -		Regulatory server: Not in version control	
License: Confidential		Sheet: 1 of 1	
Org. unit: Electronics and Photonics Laboratory		Date: 18.05.2018	
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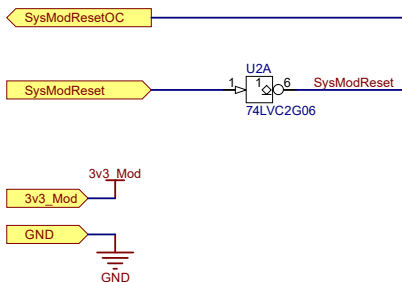
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Design file share: //felles.ansatt.ntnu.no/time/iet/Prototypelab		Org. unit: Electronic and Prototype Laboratory	Date: 18.07.2016 Time: 20:31:14
Design supervisor: Not in version control		Norwegian University of Science and Technology	
Repository server: Not in version control		Dep. of Electronics and Telecommunications	
Schematic filename: D:\AltiumSVN\Ver4\trunk\design\schematic\HKTPS25942PulsePowerDown.SchDoc		O.S. Bragstads Plass 2A	
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74LVC2G06 reside in this subsheet in order for the \SysModResetOC to share IC with the InterArb OC driver.



Title: MasterArbiter

Description:

Last revision by: MSc Ingulf Helland <ingulf@ntnu.no>

Designed by: MSc Ingulf Helland <ingulf@ntnu.no>

Design file share: //felles.ansatt.ntnu.no/time/iet/Prototypelab

Schematic filename: D:\AltiumSVN\Ver4\trunk\design\schematic\MasterArbiter.SchDoc

Design checked by: Unchecked

Design supervisor: MSc Ingulf Helland <ingulf@ntnu.no>

Repository server: <https://nuts.tele.ntnu.no/svn/hardware/Backplane/Ver4/trunk>

Project title: NUTS - NTNU Test Satellite

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Org. unit: Electronic and Prototype Laboratory

Norwegian University of Science and Technology

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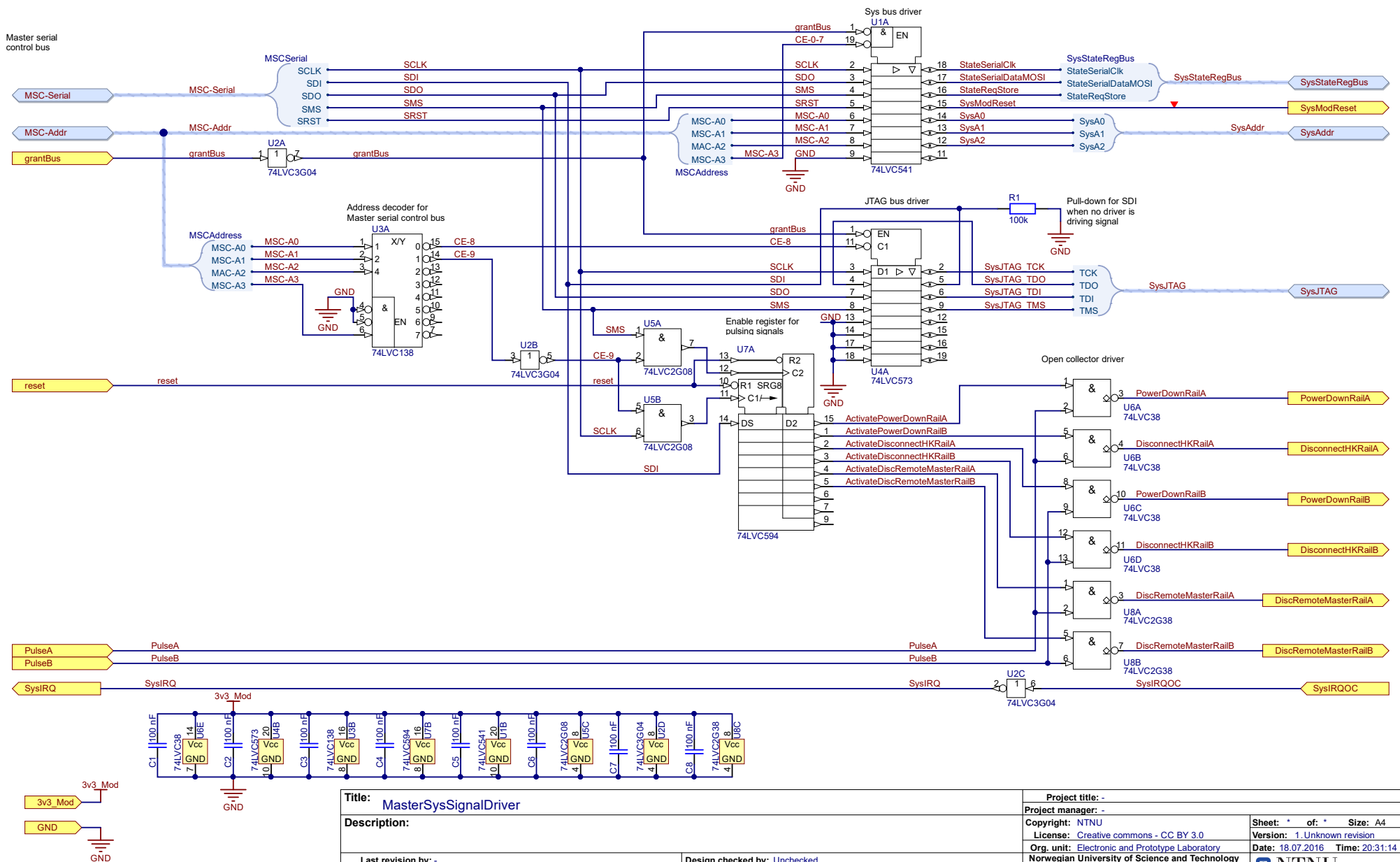
Master serial control bus

A

B

C

D



A

B

C

D