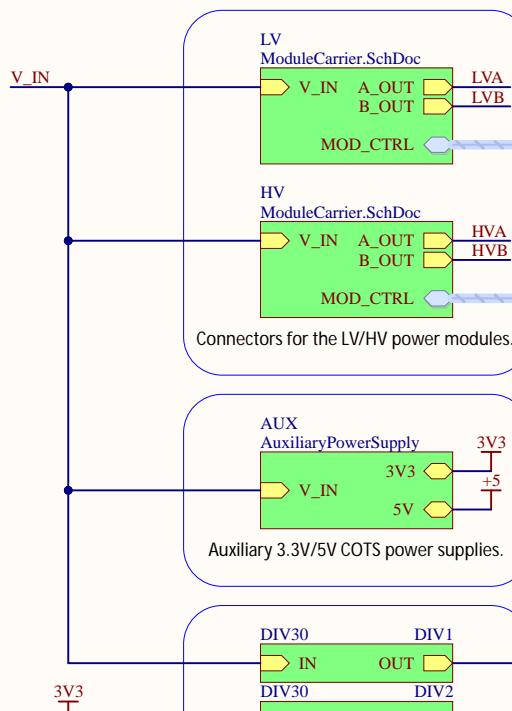
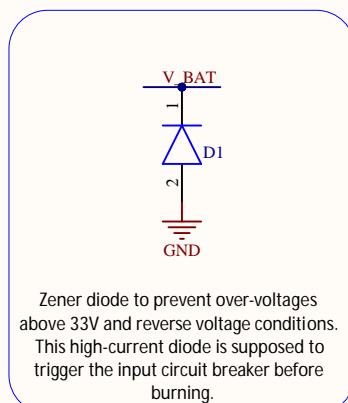


1 2 3 4



A

A

B

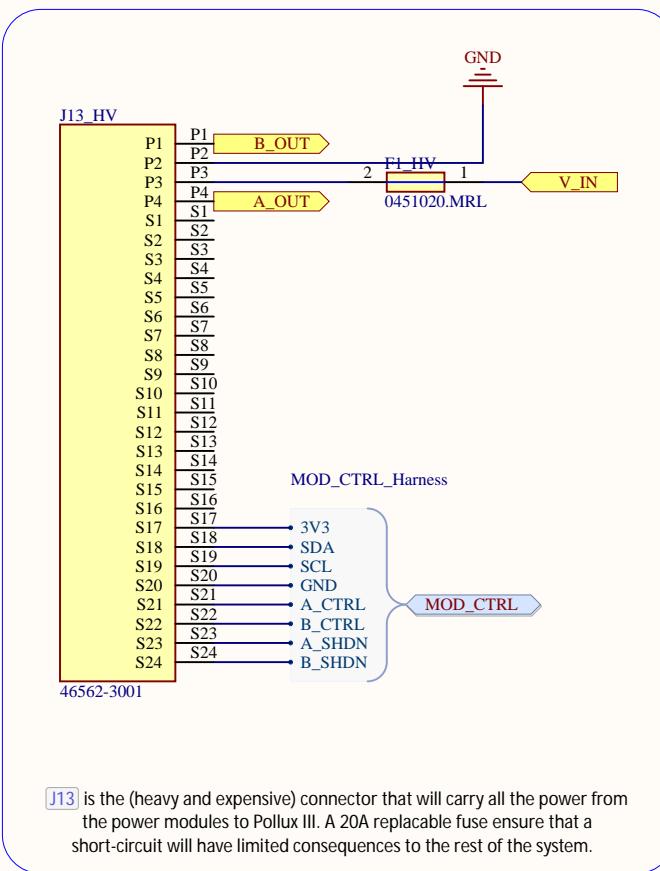
B

C

C

D

D



Title		
Interface to the Power Modules		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\ModuleCarrier.SchDoc	Drawn By: Arion Zimmermann

A

A

B

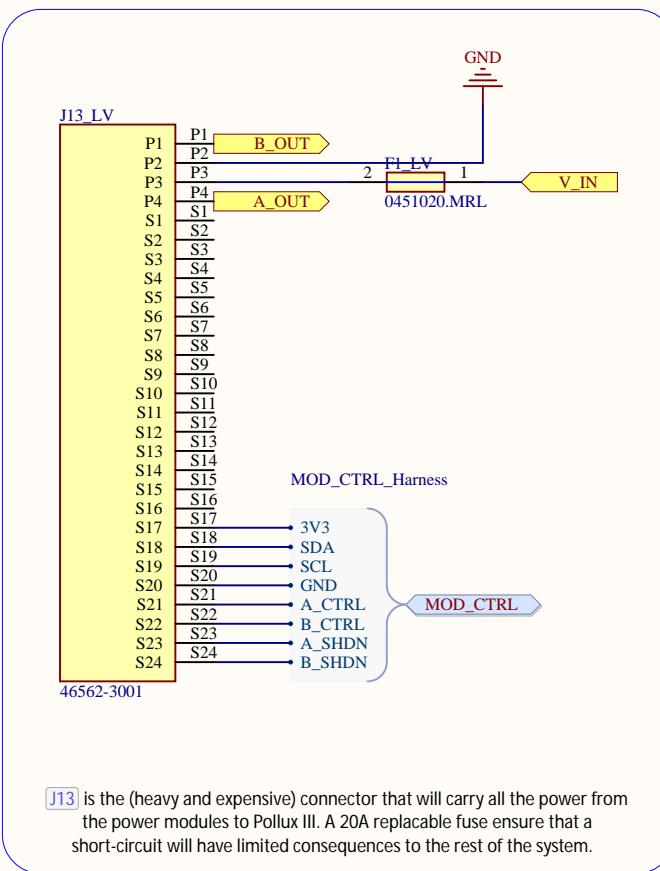
B

C

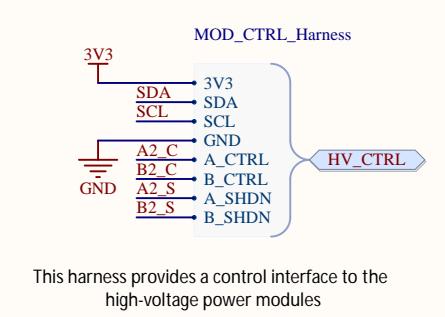
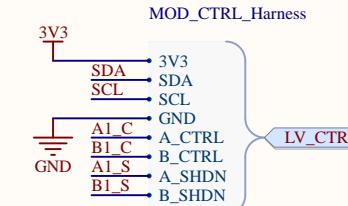
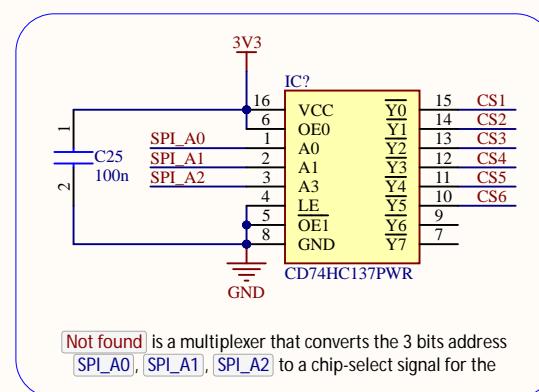
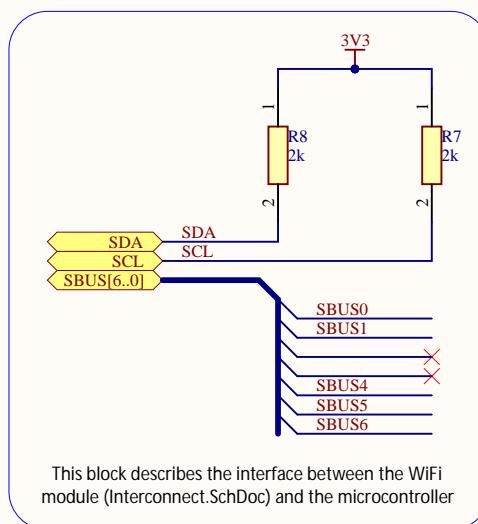
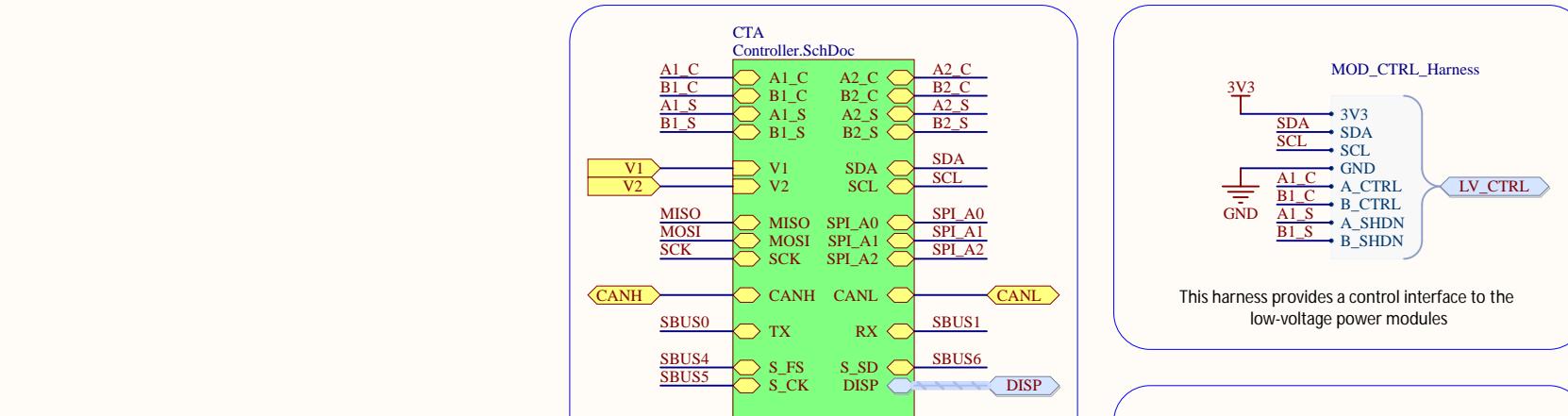
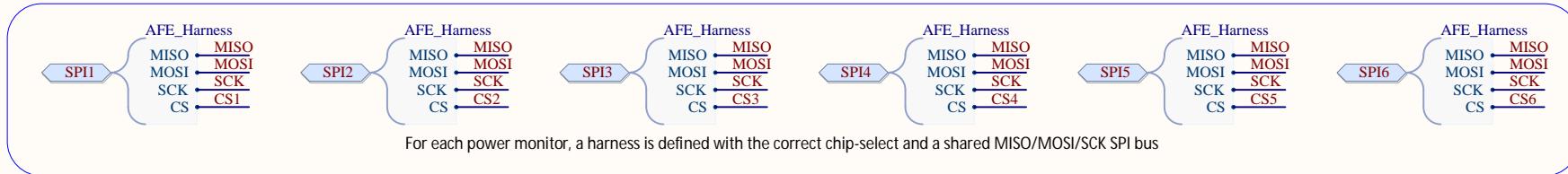
C

D

D



Title		
Interface to the Power Modules		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\ModuleCarrier.SchDoc	Drawn By: Arion Zimmermann



Title		
Control Unit Top Level		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\ControlUnit.SchDoc	Drawn By: Arion Zimmermann

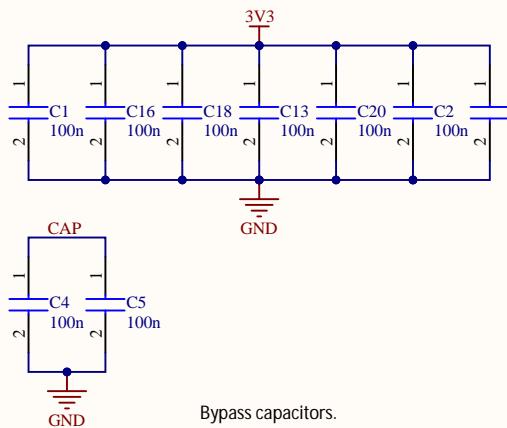
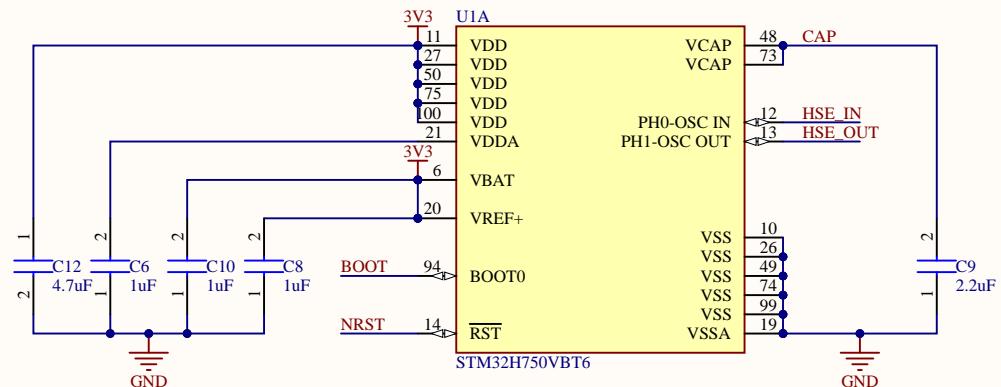
1

2

3

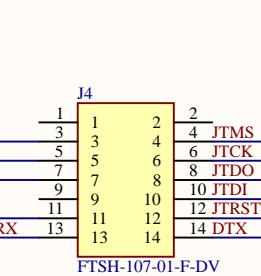
4

A

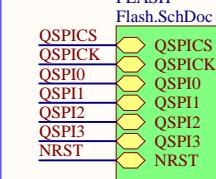
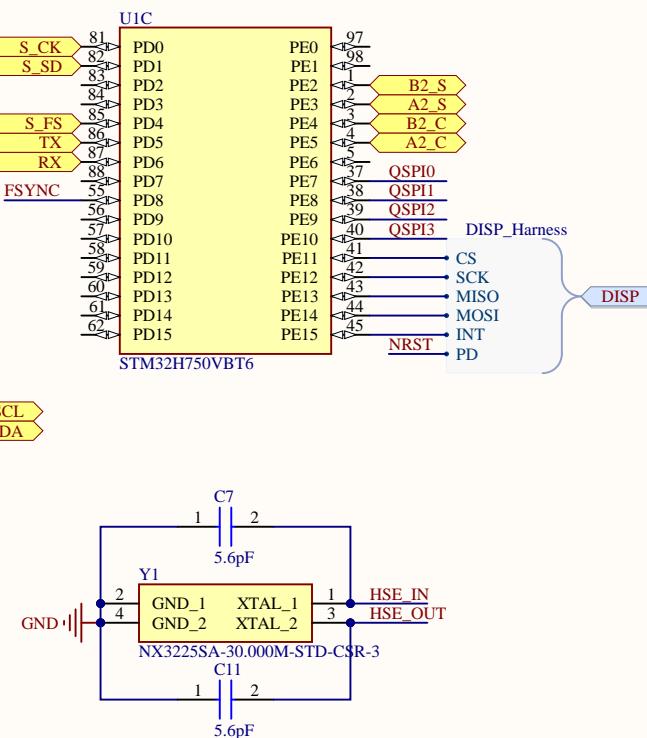
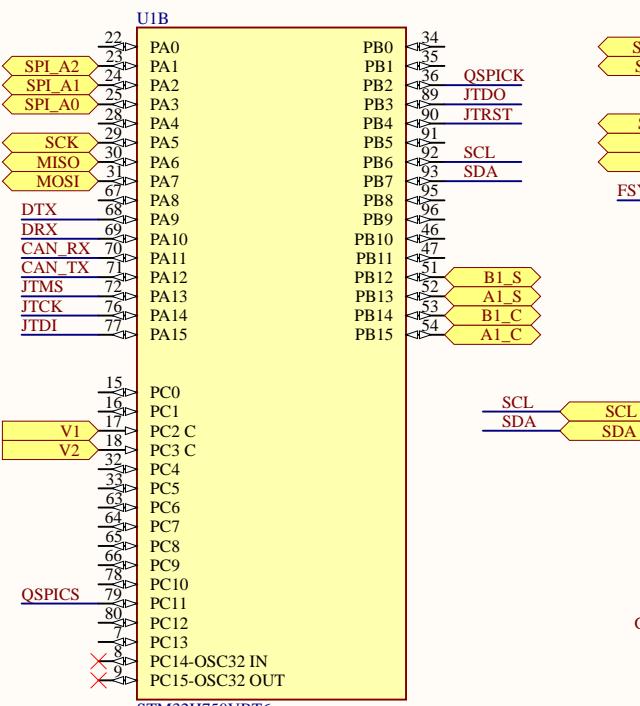


A

JTAG connector.



B



Title: Digital Signal Processor (STM32H750VBT6)
 Date: 4.04.2023
 File: \Controller.SchDoc

Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\Controller.SchDoc	Drawn By: Arion Zimmermann

D

1

2

3

4

A

A

B

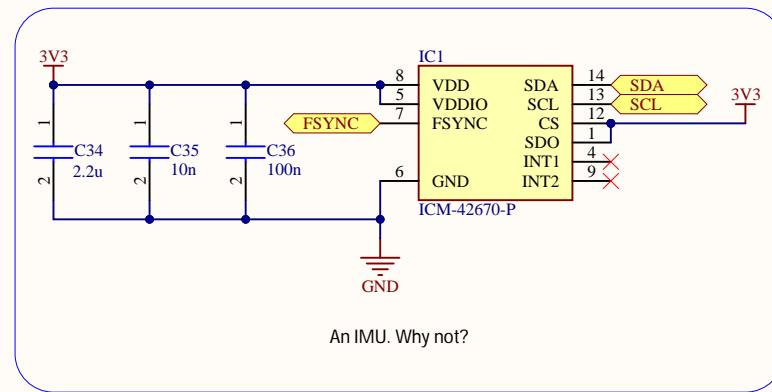
B

C

C

D

D



Title IMU		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\IMU.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

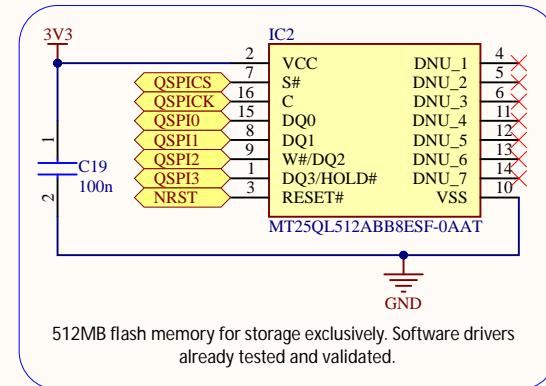
B

C

C

D

D



Title Flash Memory		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\Flash.SchDoc		Drawn By: Arion Zimmermann

A

A

B

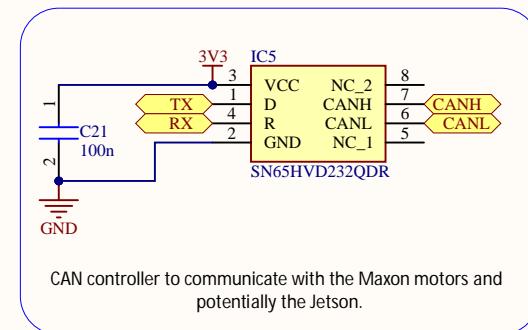
B

C

C

D

D



Title CAN Bus Controller		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\CAN.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

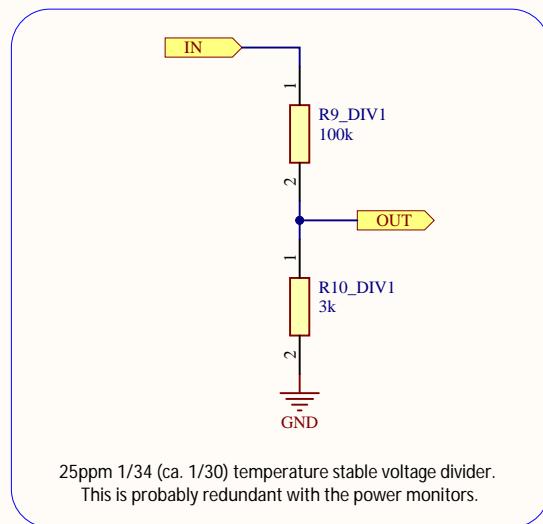
B

C

C

D

D



Title 1/30 Stable Voltage Divider		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \\..\\DIV30.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

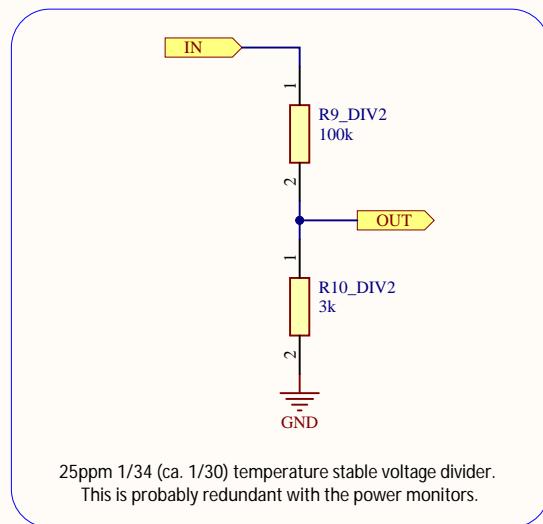
B

C

C

D

D



Title 1/30 Stable Voltage Divider		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \\..\\DIV30.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

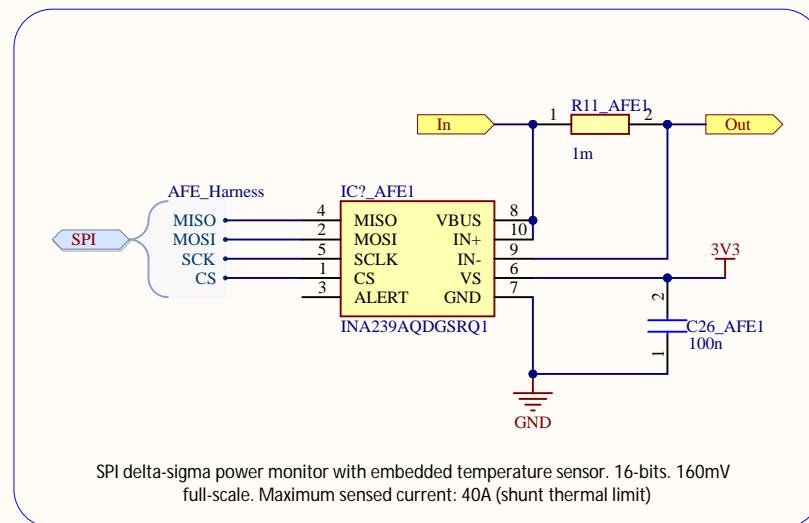
B

C

C

D

D



Title Power Monitor		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\AnalogFrontEnd.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

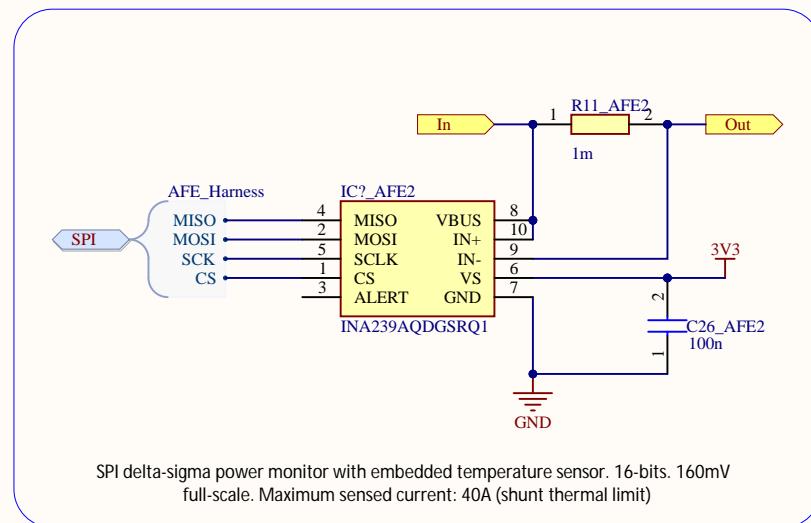
B

C

C

D

D



Title		
Power Monitor		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\AnalogFrontEnd.SchDoc	Drawn By: Arion Zimmermann

A

A

B

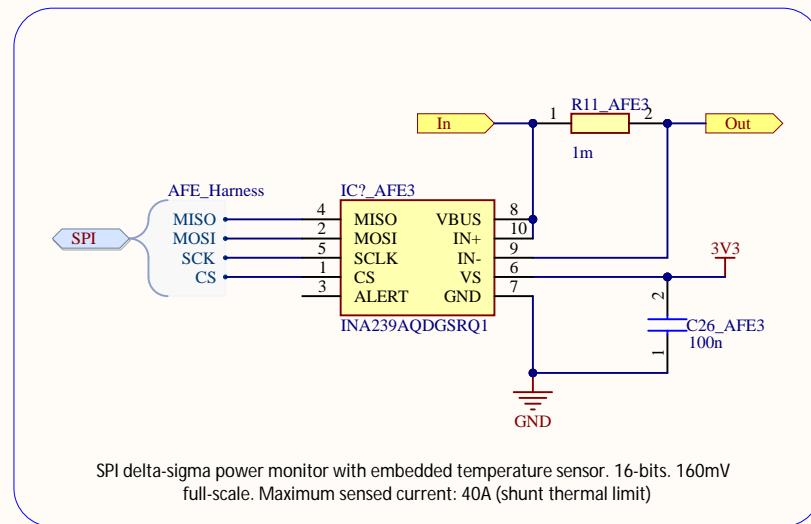
B

C

C

D

D



Title Power Monitor		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\AnalogFrontEnd.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

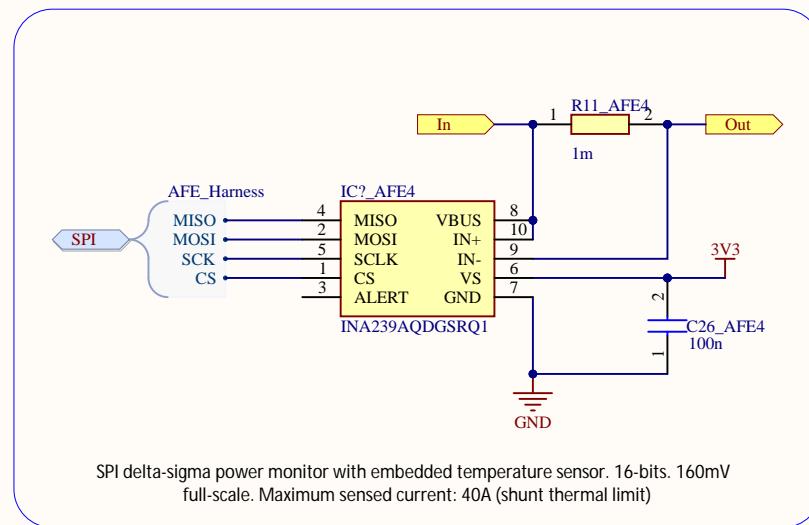
B

C

C

D

D



Title Power Monitor		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\AnalogFrontEnd.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

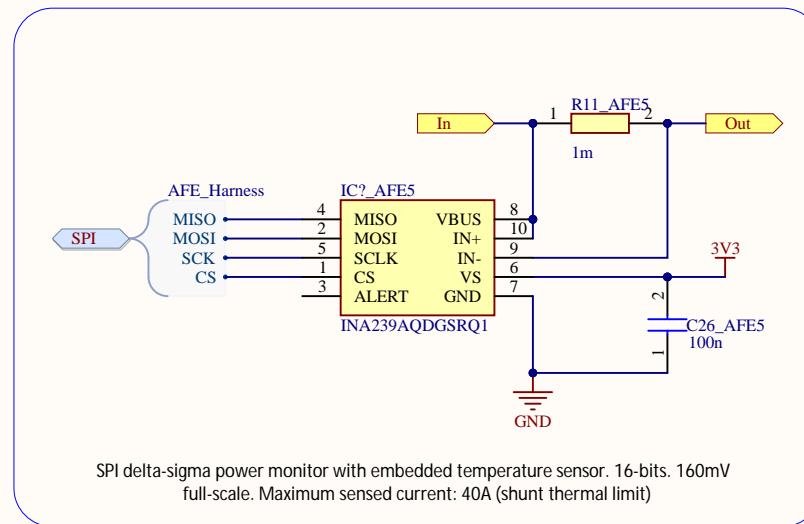
B

C

C

D

D



Title Power Monitor		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\AnalogFrontEnd.SchDoc		Drawn By: Arion Zimmermann

A

A

B

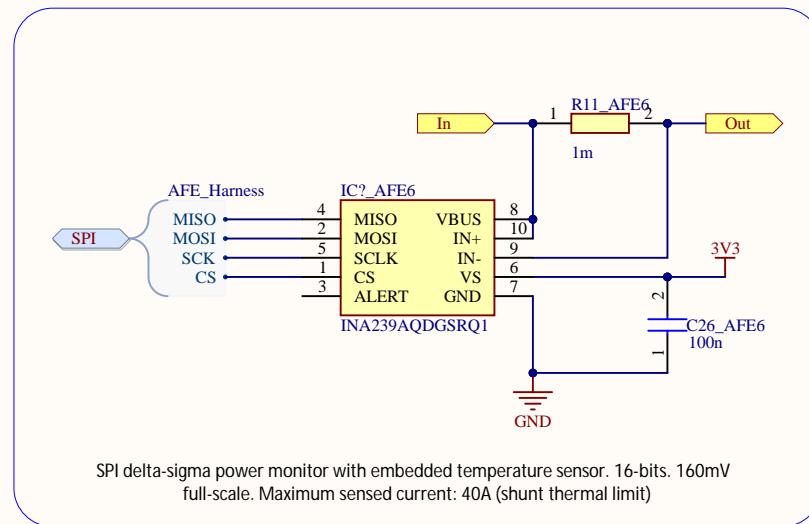
B

C

C

D

D



Title Power Monitor		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\AnalogFrontEnd.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

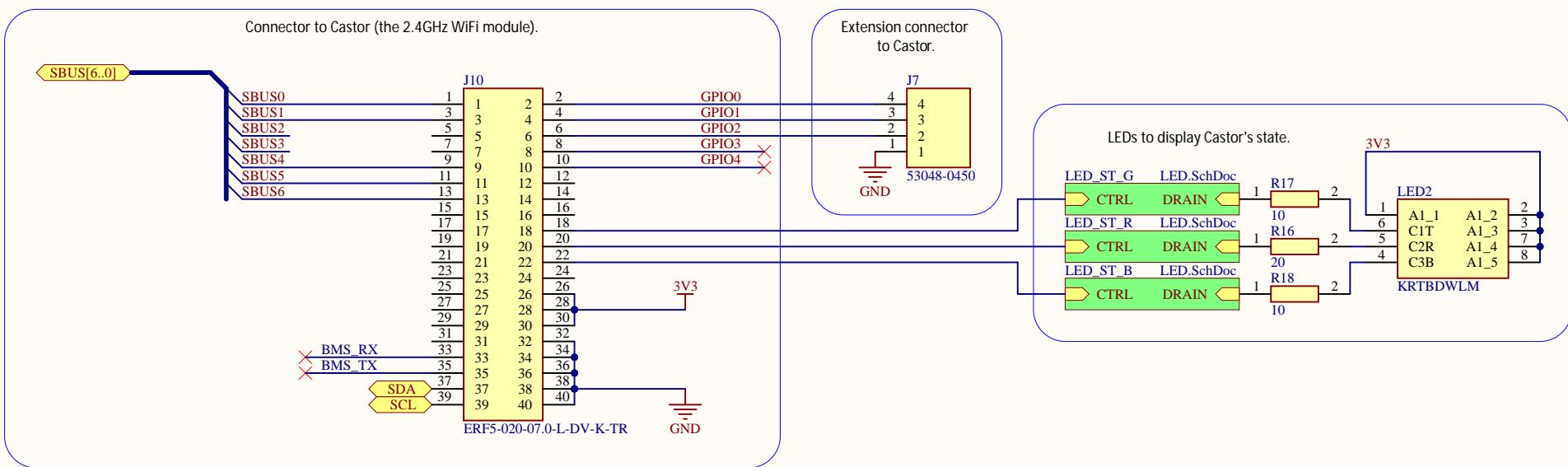
B

C

C

D

D



Title		
Interface to Castor		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\Interconnect.SchDoc	Drawn By: Arion Zimmermann

A

A

B

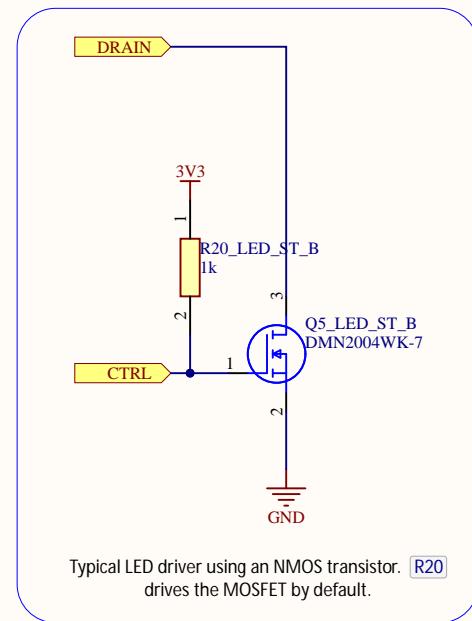
B

C

C

D

D



Title		
LED Driver		
Size		Number
A4		1
Revision		
1		
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\LED.SchDoc	Drawn By: Arion Zimmermann

A

A

B

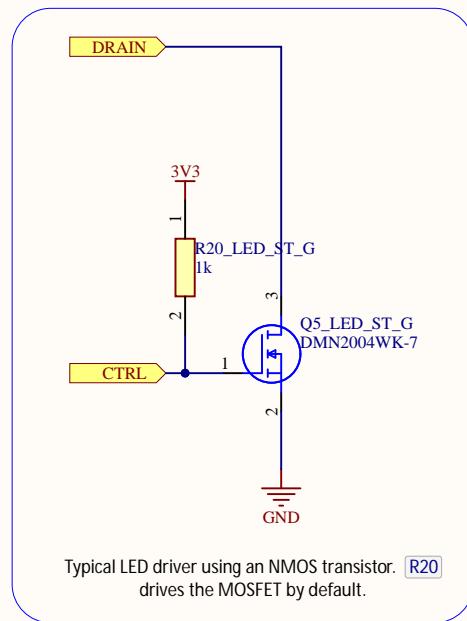
B

C

C

D

D



Typical LED driver using an NMOS transistor. R20 drives the MOSFET by default.

Title		
LED Driver		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\LED.SchDoc	Drawn By: Arion Zimmermann

A

A

B

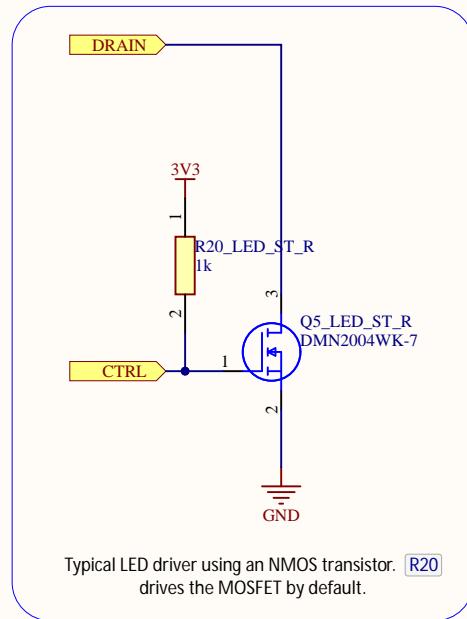
B

C

C

D

D



Title		
LED Driver		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\LED.SchDoc	Drawn By: Arion Zimmermann

A

A

B

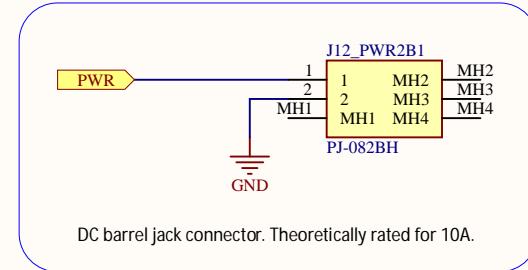
B

C

C

D

D



DC barrel jack connector. Theoretically rated for 10A.

Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

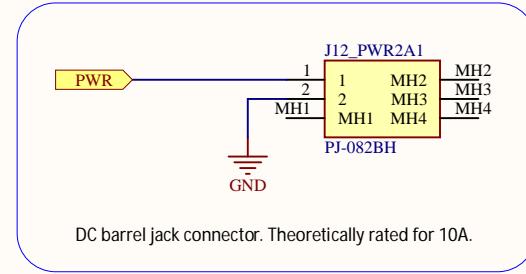
B

C

C

D

D



Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

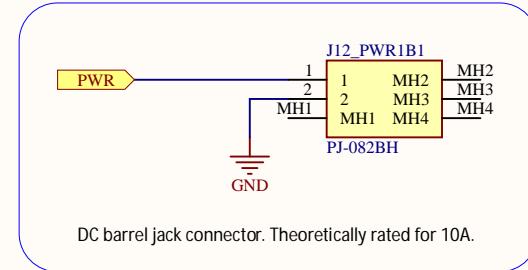
B

C

C

D

D



DC barrel jack connector. Theoretically rated for 10A.

Title		
Power Connector		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann

A

A

B

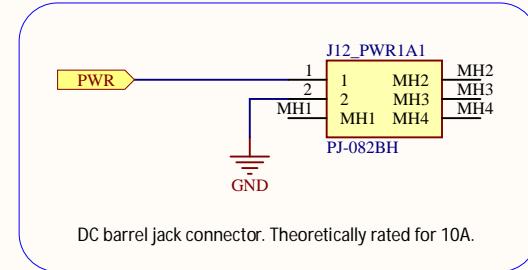
B

C

C

D

D



Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

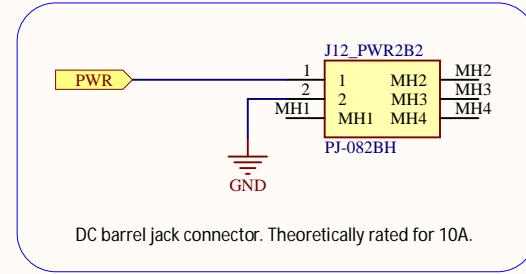
B

C

C

D

D



Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

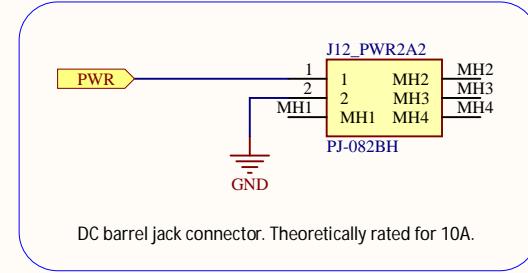
B

C

C

D

D



DC barrel jack connector. Theoretically rated for 10A.

Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

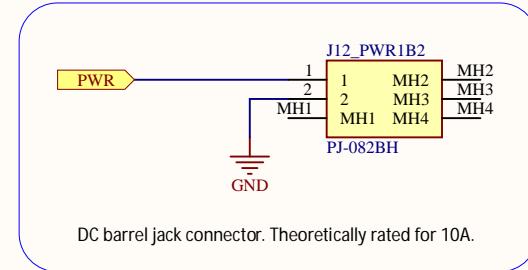
B

C

C

D

D



DC barrel jack connector. Theoretically rated for 10A.

Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \..\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

A

A

B

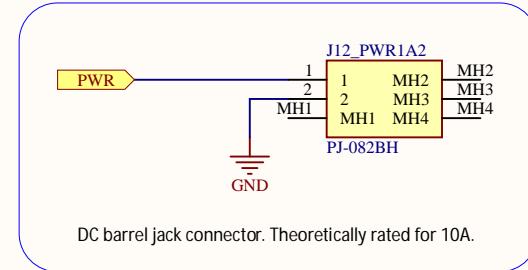
B

C

C

D

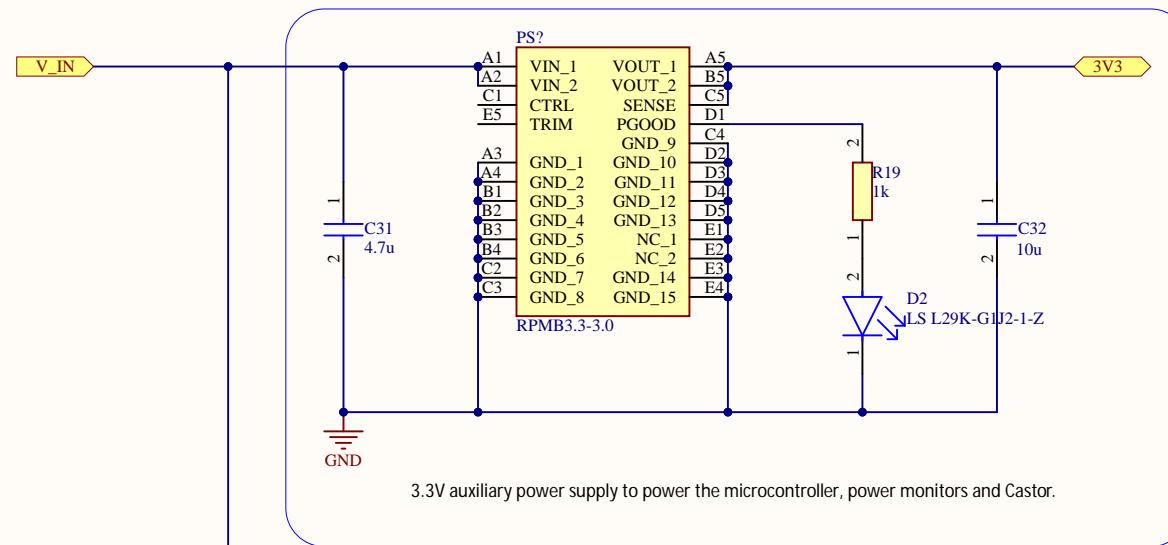
D



Title Power Connector		
Size A4	Number 1	Revision 1
Date: 4.04.2023	Sheet of EPFL Xplore	
File: \\.\PowerConnector.SchDoc	Drawn By: Arion Zimmermann	

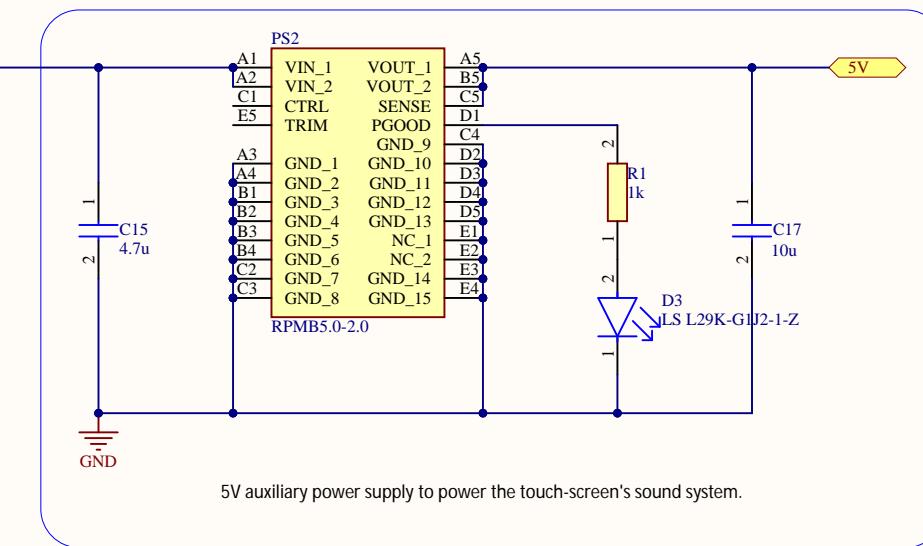
A

A



B

B



C

C

D

D

Title
Auxiliary Power Supplies

Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of DC/DC converters
File:	\..\AuxiliaryPowerSupply.SchDoc	Drawn By: Arion Zimmermann

A

A

B

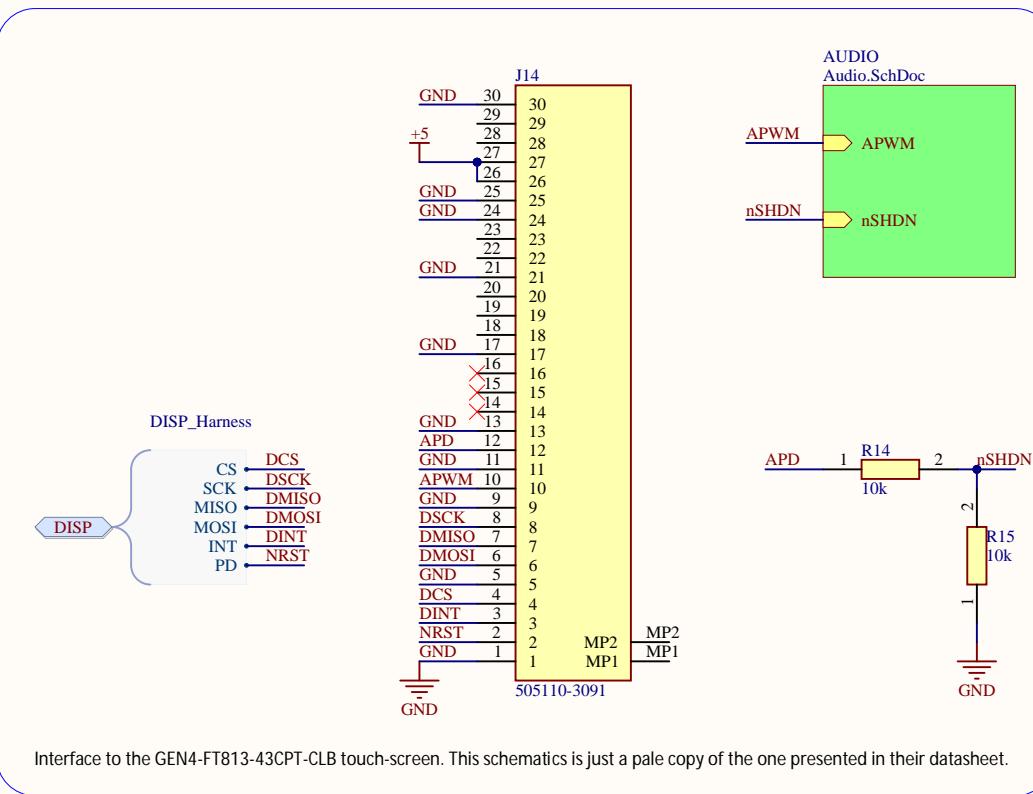
B

C

C

D

D



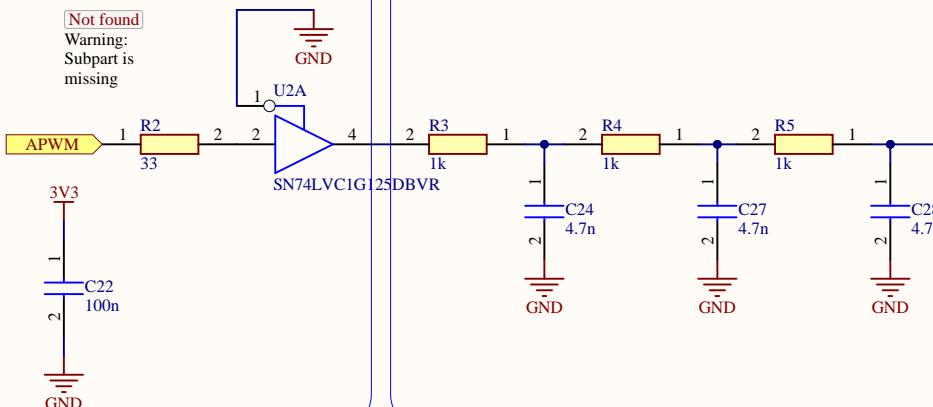
Title		
Interface to the Touch-Screen		
Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\Display.SchDoc	Drawn By: Arion Zimmermann

A

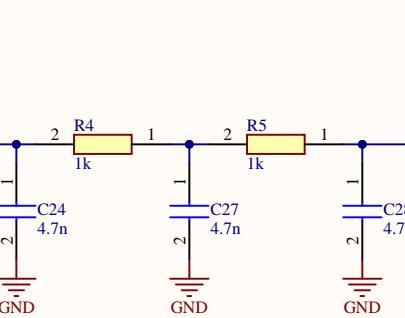
A

Pre-amplifier

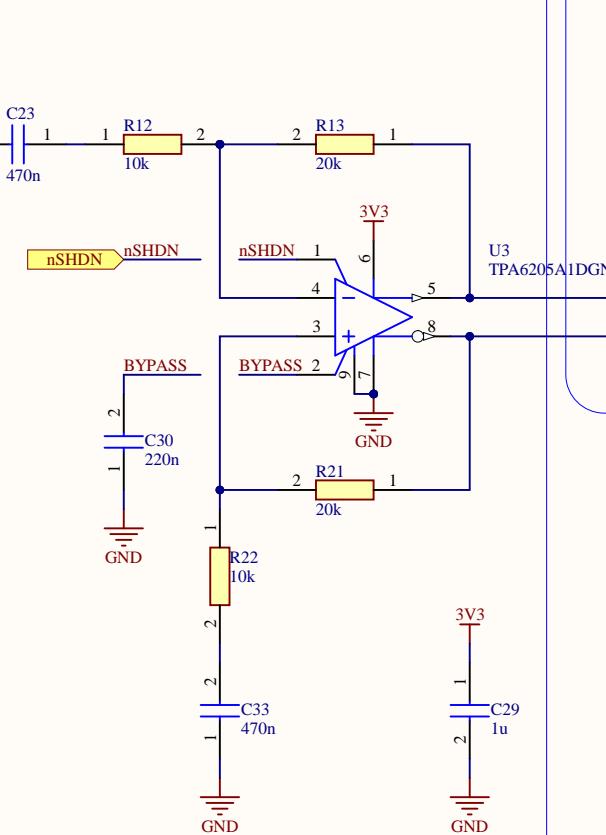
Not found
Warning:
Subpart is missing



60dB RC low-pass at 33kHz cut-off



60dB RC low-pass at 33kHz cut-off



Output molex micro-fit connector



B

B

C

C

D

D

Title
Audio Amplifier

Size	Number	Revision
A4	1	1
Date:	4.04.2023	Sheet of EPFL Xplore
File:	\..\Audio.SchDoc	Drawn By: Arion Zimmermann

