

...

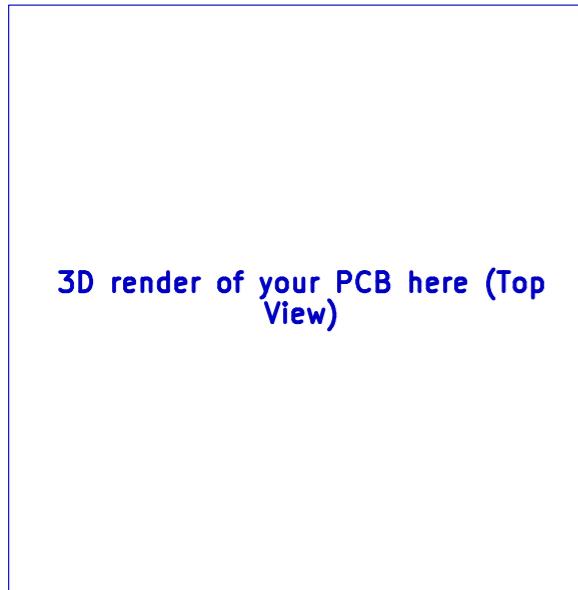
Variant: Draft

2024-03-27

Rev 1.0

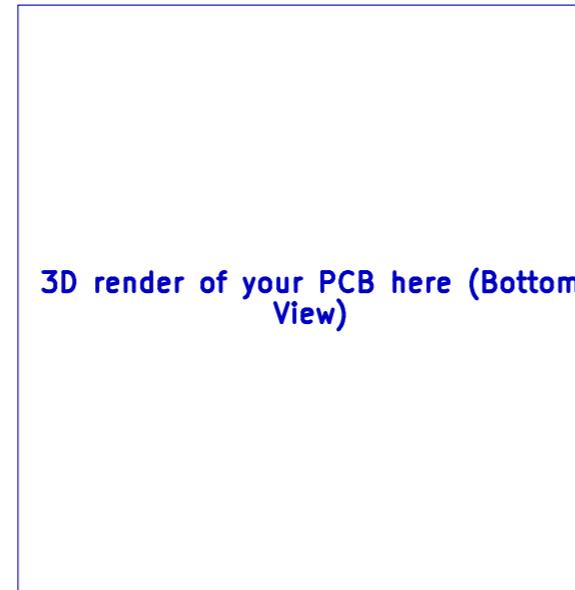
Page	Index	Page	Index	Page	Index	Page	Index
1	Cover Page	11	21	31
2	Block Diagram	12	22	32
3	Project Architecture	13	23	33
4	Power - Connector	14	24	34
5	Power - EMC input Filter	15	25	35
6	Power - Output Protection	16	26	36
7	Power - Converter	17	27	37
8	Mechanical Holes	18	28	38
9	Power - Sequencing	19	29	39
10	Revision History	20	30	40

TOP VIEW



3D render of your PCB here (Top View)

BOTTOM VIEW



3D render of your PCB here (Bottom View)

DESIGN CONSIDERATIONS

DESIGN NOTE:
Example text for informational design notes.

DESIGN NOTE:
Example text for debug notes.

DESIGN NOTE:
Example text for cautionary design notes.

DESIGN NOTE:
Example text for critical design notes.

LAYOUT NOTE:
Example text for critical layout guidelines.

NOTES

Add a comment here

Not fitted components are marked as

DRAFT - Very early stage of schematic, ignore details.

PRELIMINARY - Close to final schematic.

CHECKED - There shouldn't be any mistakes. Contact the engineer if you find any.

RELEASED - A board with this schematic has been sent to production.

Draft Release Date

Comments:	Company: EPFL Xplore	Variant: Draft
Board Name: ...	Project Name: smps_legged_robot_module	Date: Last Modified Date 1.0
Sheet Title: Cover Page	File Name: SMPS_legged_robot_module.kicad_sch	Designer: Federico Bise
Sheet Path: /	Reviewer: Reviewer Name	Size: A3 Sheet: 1 of 9

1 2 3 4 5 6 7 8

[2] Block Diagram

A

B

C

D

E

A

B

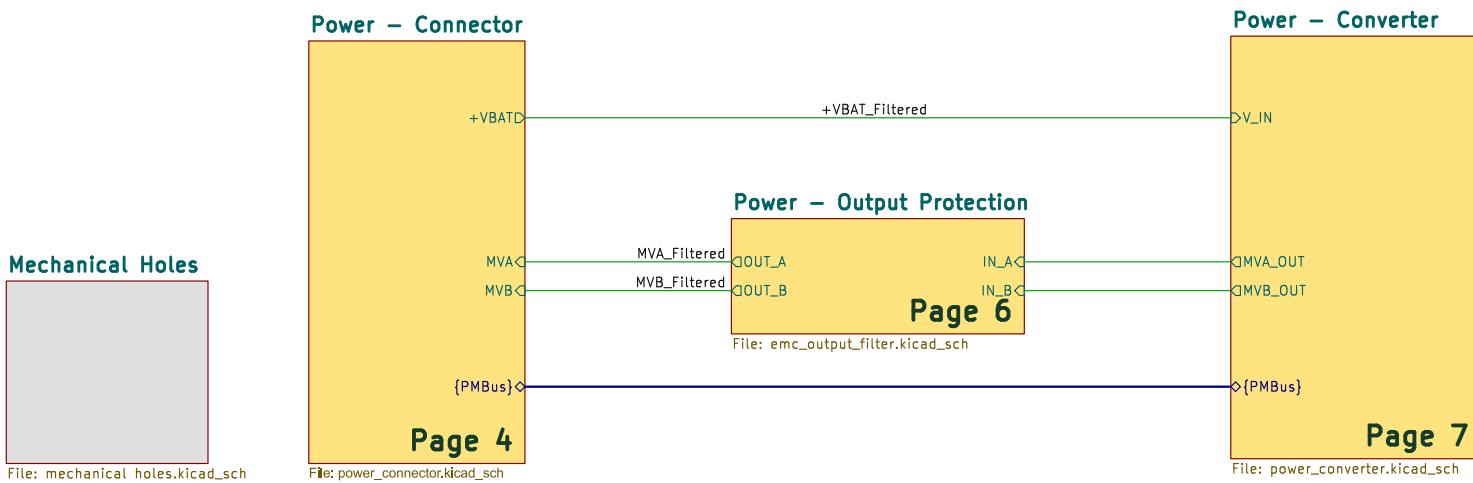
C

D

E

	Comments:	Company: EPFL Xplore		Variant: Draft	
		Board Name: ...		Project Name: smps_legged_robot_module	
		Sheet Title: Block Diagram	File Name: Block Diagram.kicad_sch	Designer: Federico Bise	Date: Last Modified Date 1.0
		Sheet Path: /Block Diagram/	Reviewer: Reviewer Name	Size: A3	Sheet: 2 of 9
1	2	3	4	5	6

[3] Project Architecture



	Comments:	Company: EFFL Xplore	Variant: Draft
	Board Name: ...	Project Name: smps_legged_robot_module	
	Sheet Title: Project Architecture	File Name: Project Architecture.kicad_sch	Designer: Federico Bise
	Sheet Path: /Project Architecture/	Reviewer: Reviewer Name	Date: Last Modified Date Revision: 1.0

[4] Power - Connector

A

A

B

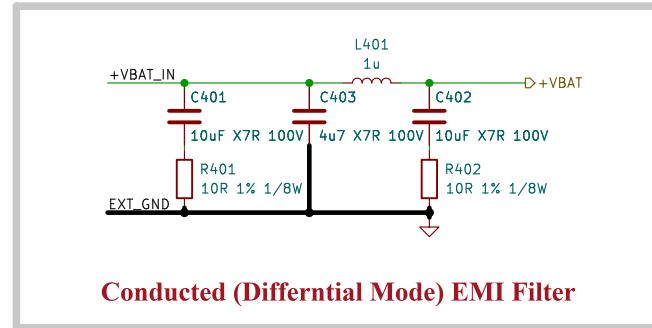
B

C

C

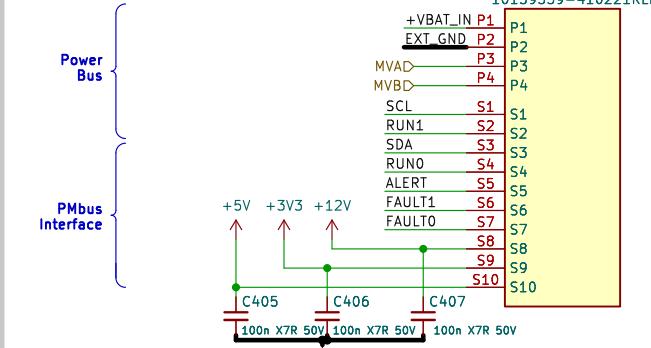
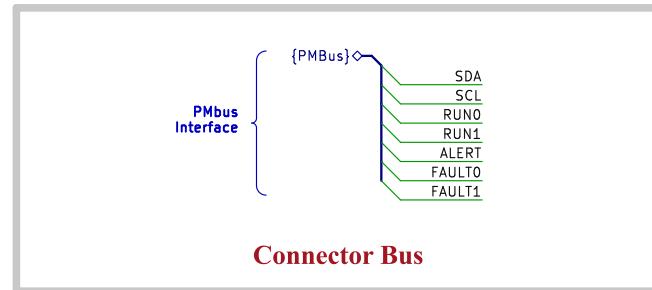
D

D



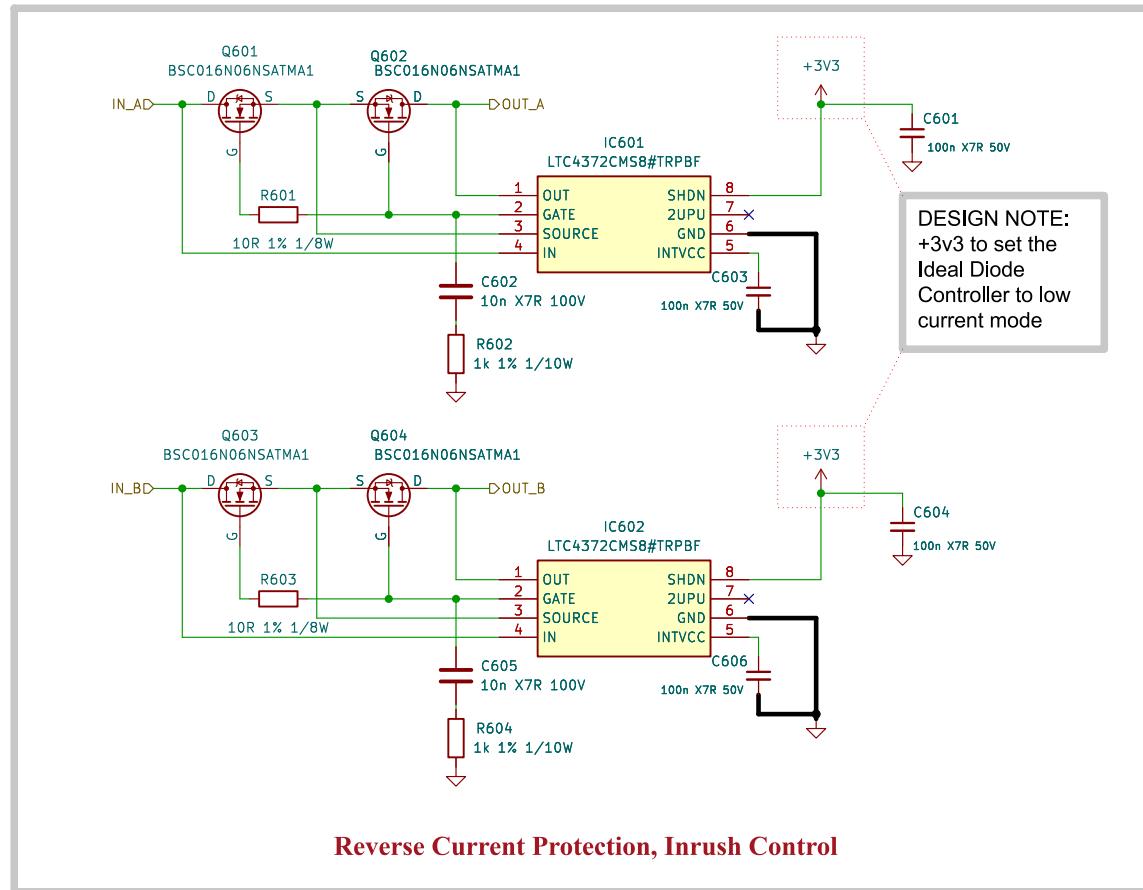
DESIGN NOTE:
Place additional bus for fault management over the module.
Checkout datasheet : LTC3889 (p. 1-13)

DESIGN NOTE:
Do not exceed absolute maximum ratings ! Maximum input voltage is 60V.



	Comments: AN5346 STM32G474 Datasheet p.81 J. Pieper ADC investigation	Company: EFEL Xplore	Variant: Draft
	Sheet Title: Sheet Title A	File Name: power_connector.kicad_sch	Project Name: smps_legged_robot_module
	Sheet Path: /Project Architecture/Power - Connector /	Designer: Federico Bise	Date: Last Modified Date Revision: 1.0
		Reviewer: Reviewer Name	Size: A4 Sheet: 4 of 9

[6] Power - Output Protection



A

A

B

B

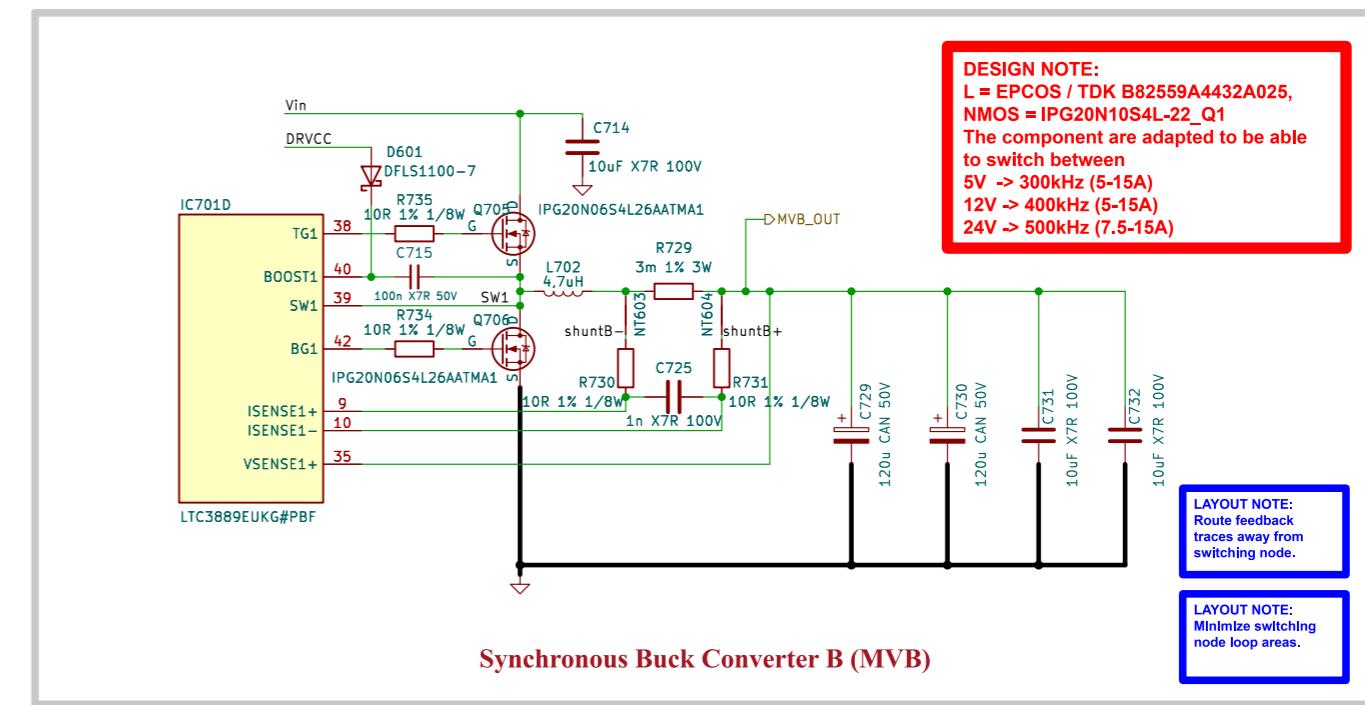
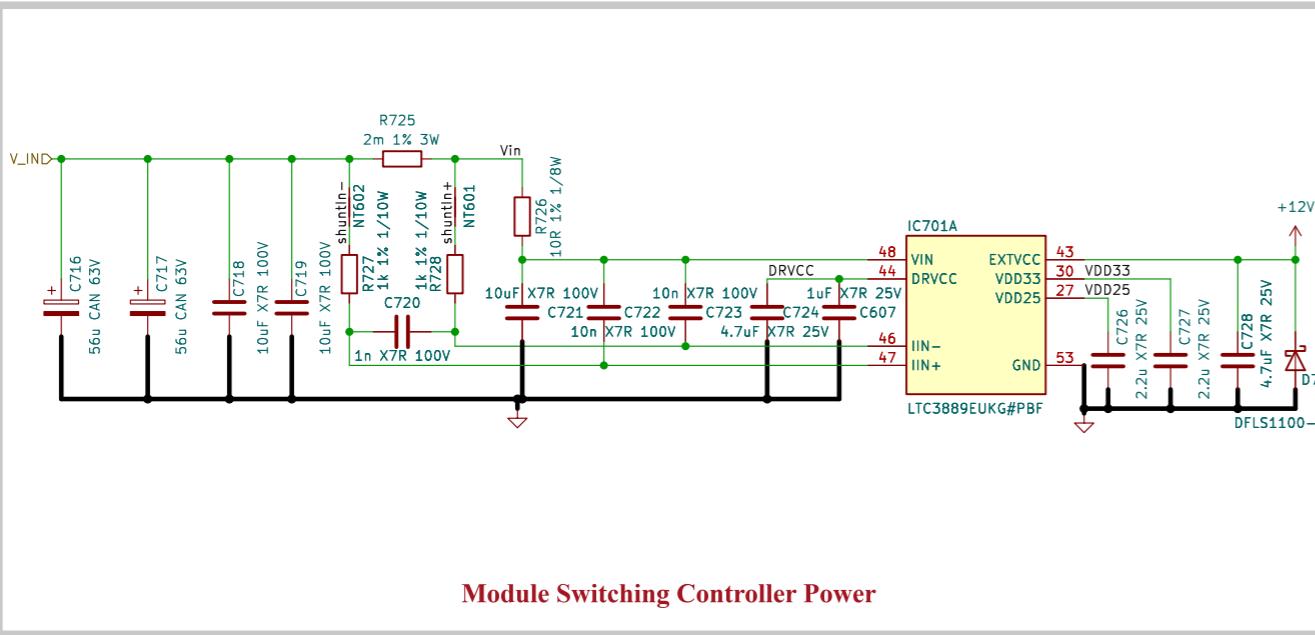
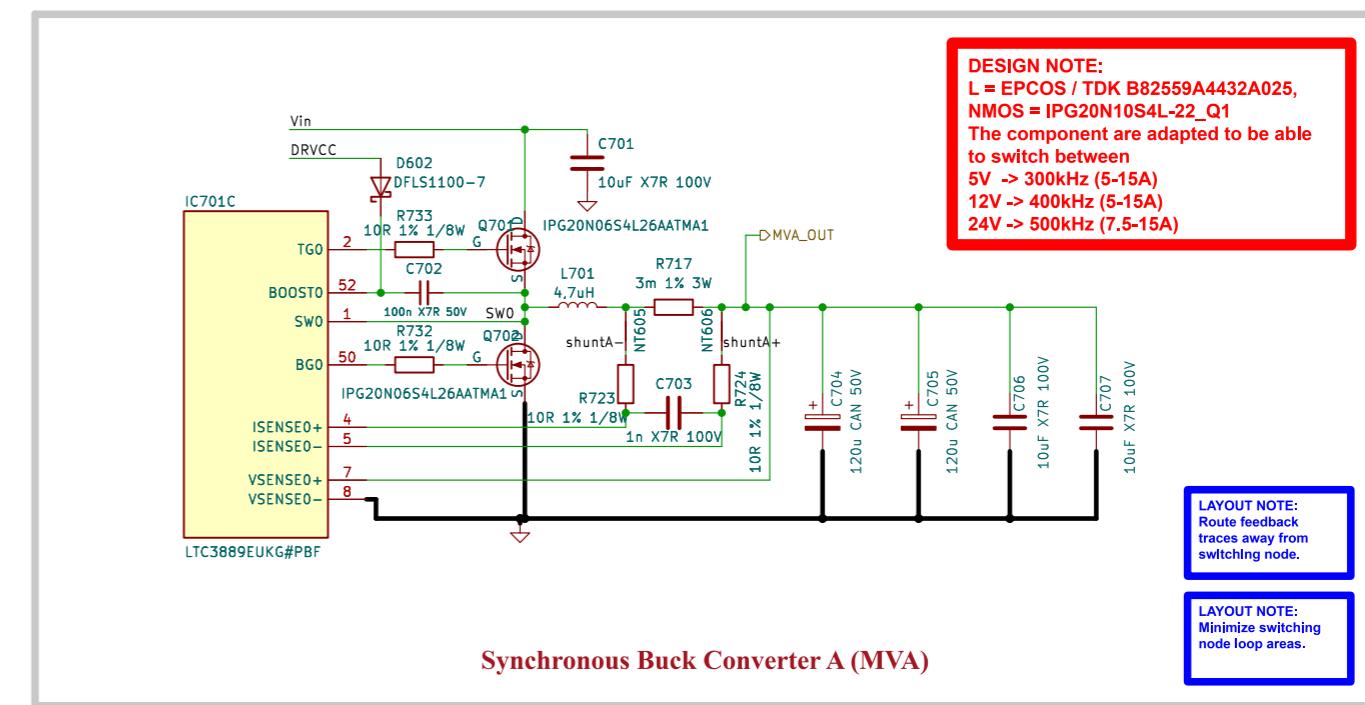
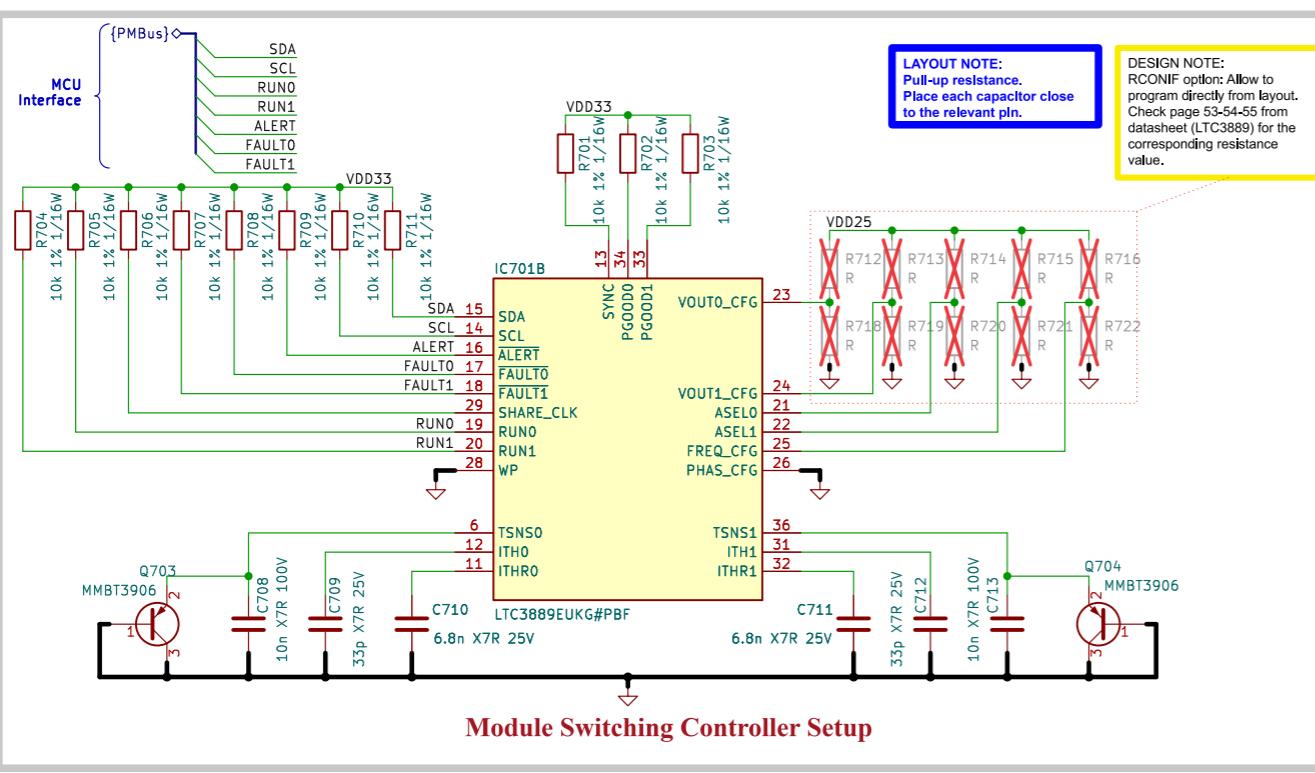
C

C

D

D

[7] Power - Converter



	Comments:	Company: Draft	Variant:
		Board Name: ...	Project Name: smps_legged_robot_module
	Sheet Title:	File Name: power_converter.kicad_sch	Designer: Federico Bise
	Sheet Path: /Project Architecture/Power - Converter/	Reviewer: Reviewer Name	Date: Revision: A3 7 of 9

[8] Mechanical Holes

A

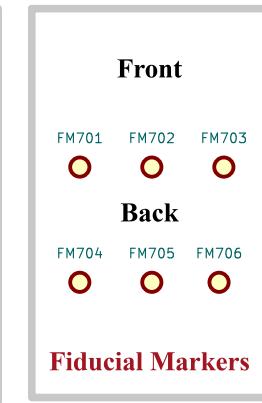
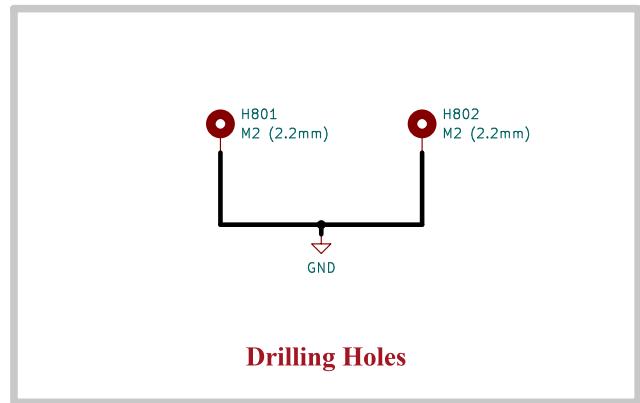
A

B

B

C

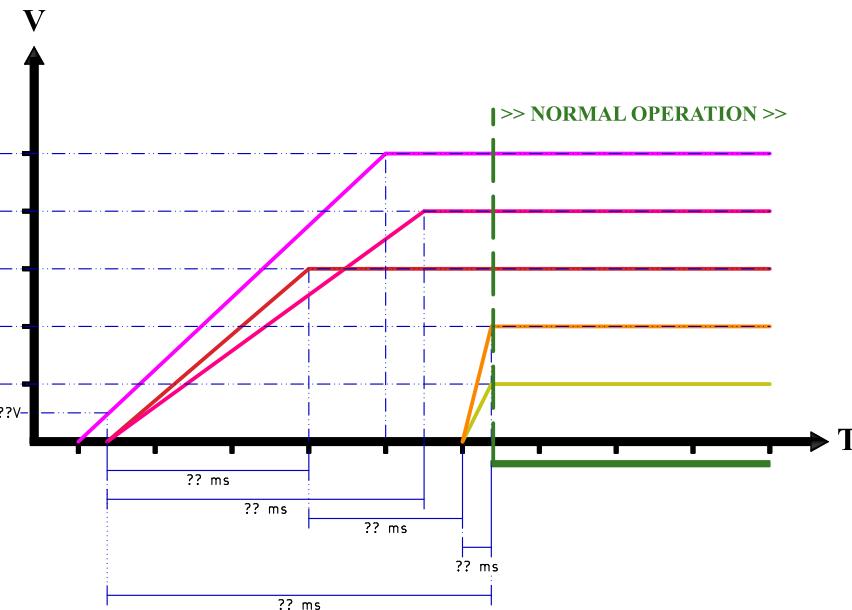
C



	Comments:	Company:	Variant: Draft	
	Board Name: ...	Project Name: smps_legged_robot_module		
	Sheet Title: mechanical holes.kicad_sch	File Name: mechanical holes.kicad_sch	Designer: Federico Bise	Date: Revision:
	Sheet Path: /Project Architecture/Mechanical Holes/	Reviewer: Reviewer Name	Size: A5	Sheet: 8 of 9

[9] Power - Sequencing

NAME	SOURCE	LEVEL
+??V	SOURCE NAME	??V ± ??%
+??V	SOURCE NAME	??V ± ??%
+??V	SOURCE NAME	??V ± ??%
+??V	SOURCE NAME	??V ± ??%
+??V	SOURCE NAME	??V ± ??%



			Comments:	Company:	Variant:	
			EFFL Xplore			
			Board Name:			
			...			
Sheet Title:		File Name:	Designer:	Date:	Revision:	
Power - Sequencing		Power - Sequencing.kicad_sch	Federico Bise	Last Modified Date	1.0	
Sheet Path:		Reviewer:		Size:	Sheet:	
/Power - Sequencing/		Reviewer Name		A4	9 of 9	

[10] Revision History

A	DD.MM.YYYY - xxx Revision Variant: xxx	A			
B	-	-	-	-	B
C	-	-	-	-	C
D	-	-	-	-	D

	Comments:	Company: EFFL Xplore		Variant: Draft	
		Board Name: ...		Project Name: smps_legged_robot_module	
		Sheet Title: Revision History	File Name: Revision History.kicad_sch	Designer: Federico Bise	Date: Last Modified Date Revision: 1.0
		Sheet Path: /Revision History/		Reviewer: Reviewer Name	Size: A4 Sheet: 10 of 9