

PILOT

project: PILOT
project nbr.: 760137

revision history see in table <https://confluence.fronius.com/display/SEPSC2020/Revision+History+PILOT>

PILOT variants:

RD-PILOT... RnD version

Variant	AVA2
4-071-452, RD_RD-PILOT_V08A	

Software	SOW5
4,063,115, RD	

PILOT... main version

Variant	AVA1
4-071-452_PILOT_V08A	

Software	SOW1
4,063,115	

PILOT-DYM... mech. dummy

Variant	AVA4
4-071-701_PILOT-DYM_V08A	

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H1	DIN3B-1C15-QA
Pressfit-QA-Holes	

Barcode_8x8	BAR2
42,0409,0168	

Barcode	BAR1
42,0409,3036	

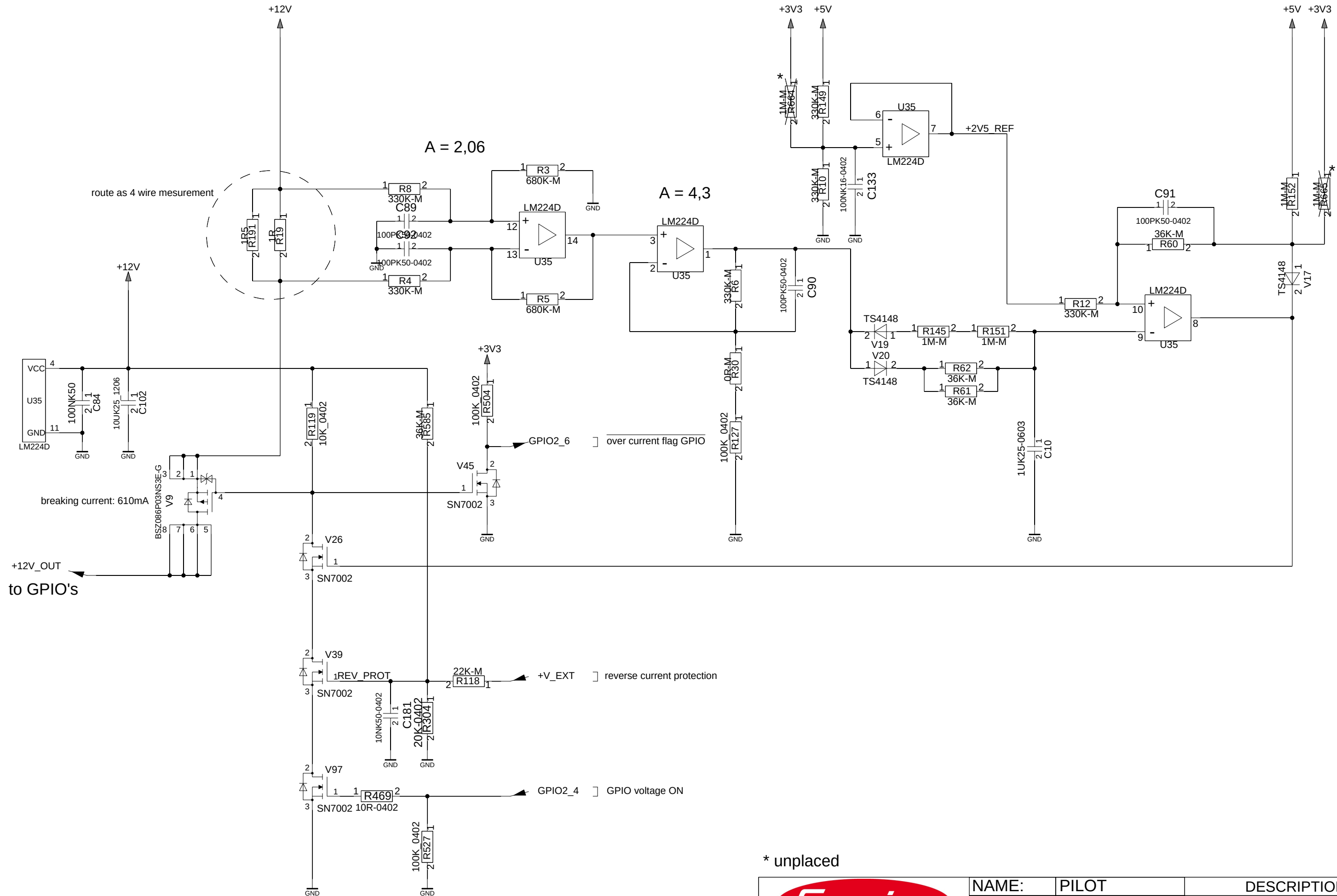
Leiterplatte	PCB1
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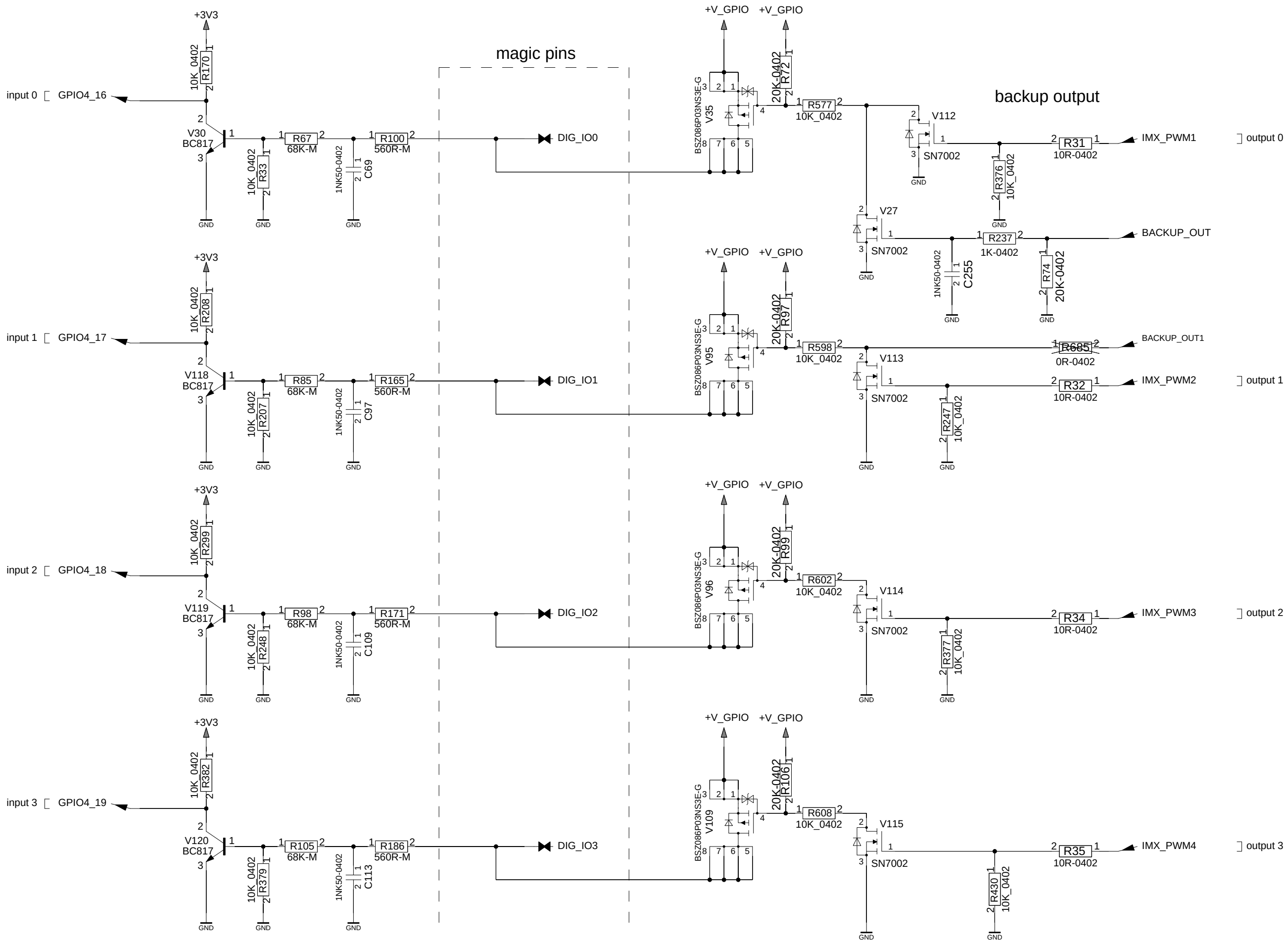
SHIFTING THE LIMITS

Geistiges Eigentum der Fronius Int. GmbH | Intellectual property of Fronius Int. GmbH

NAME:	PILOT	DESCRIPTION:
NUMBER:	4,071,452	title-page
VERSION:	V0.8A	
DESIGNER:	Gerstlacher, Eckstein	
VARIANTS:	4	DATE: 17/10/2024:07:33
		SHEET: 1 OF 38



 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	over-current-protection	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 18/09/2024:09:18	SHEET: 3 OF 38



 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	magic-pins	
	VERSION:	V0.8A	digital inputs and outputs	
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4		
		DATE: 12/11/2024:08:59	SHEET: 5 OF 38	

A

B

C

D

E

F

G

H

A

B

C

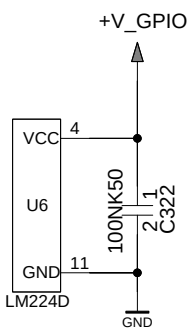
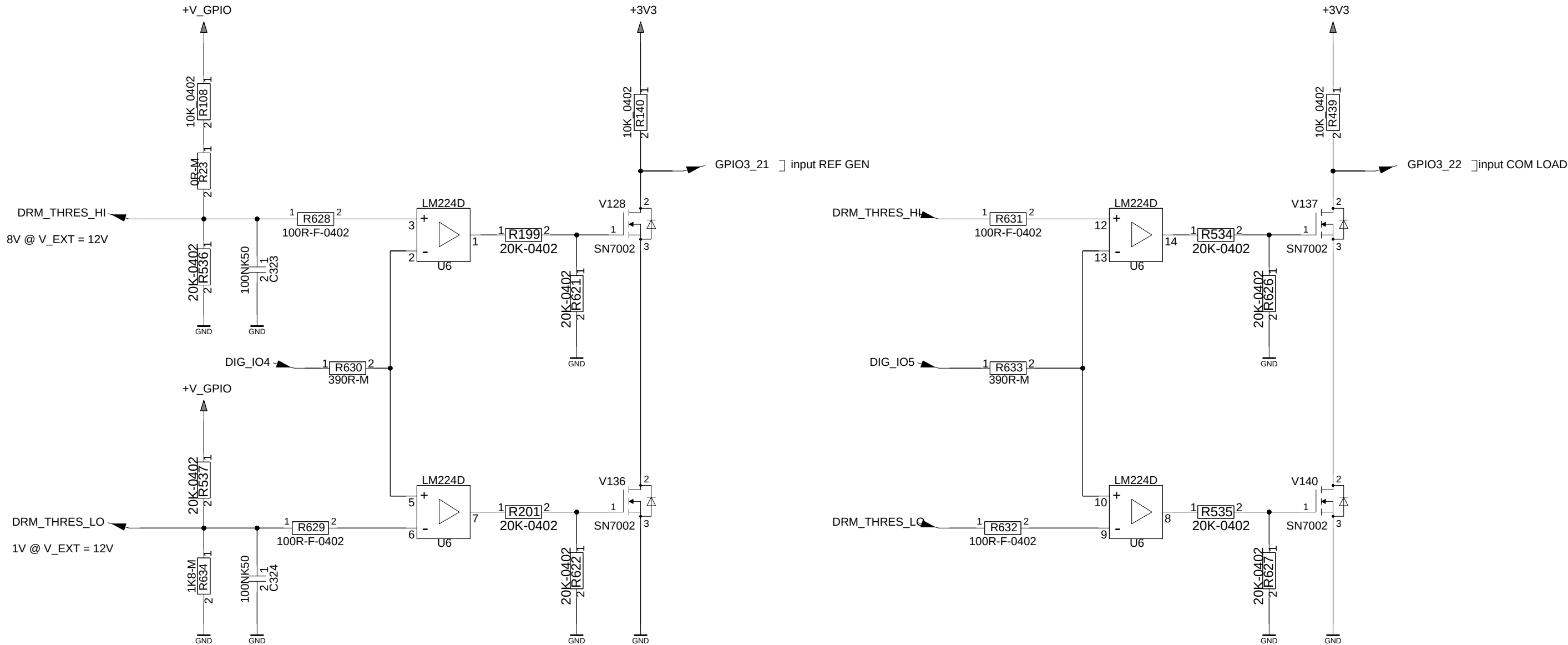
D

E

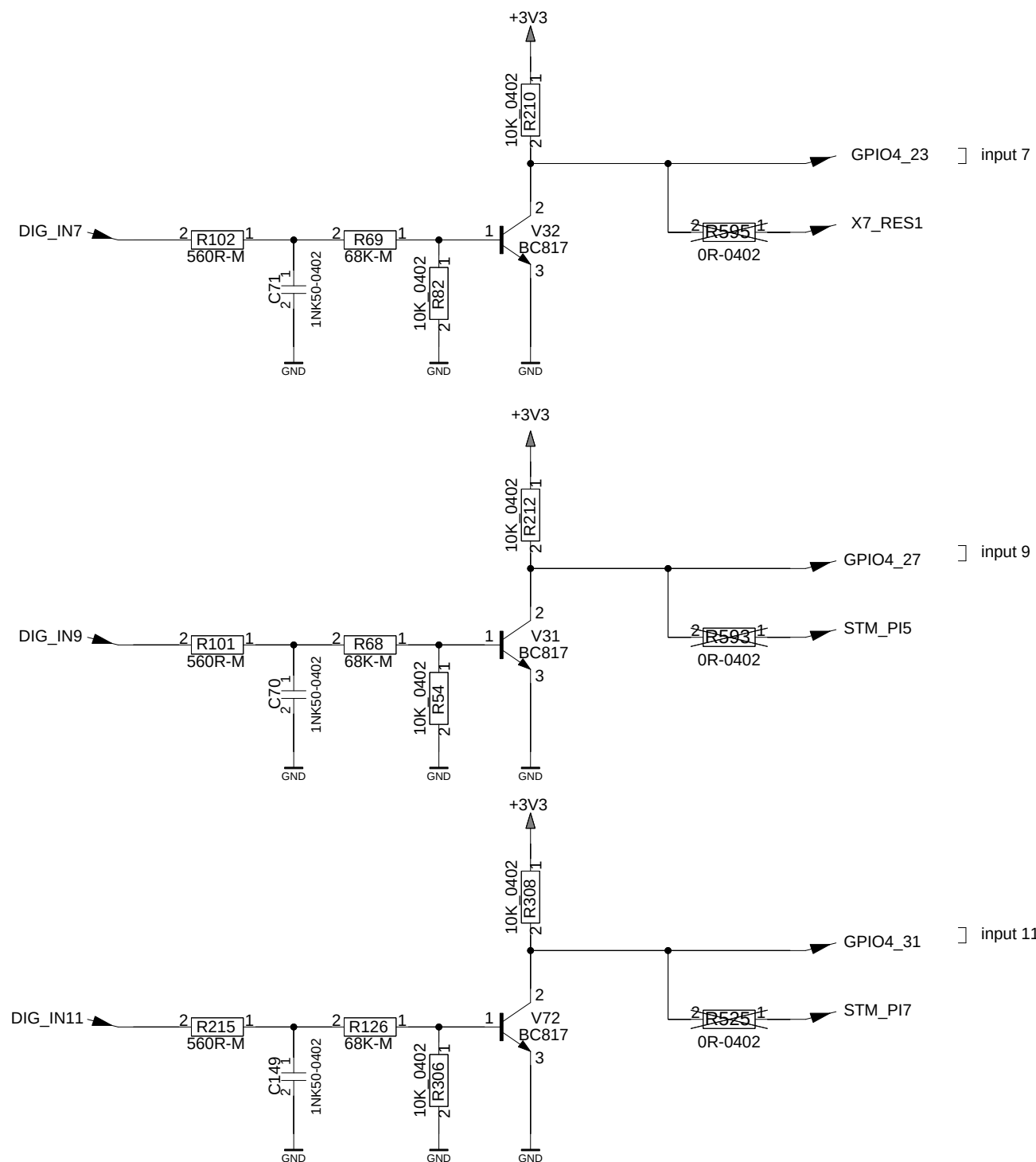
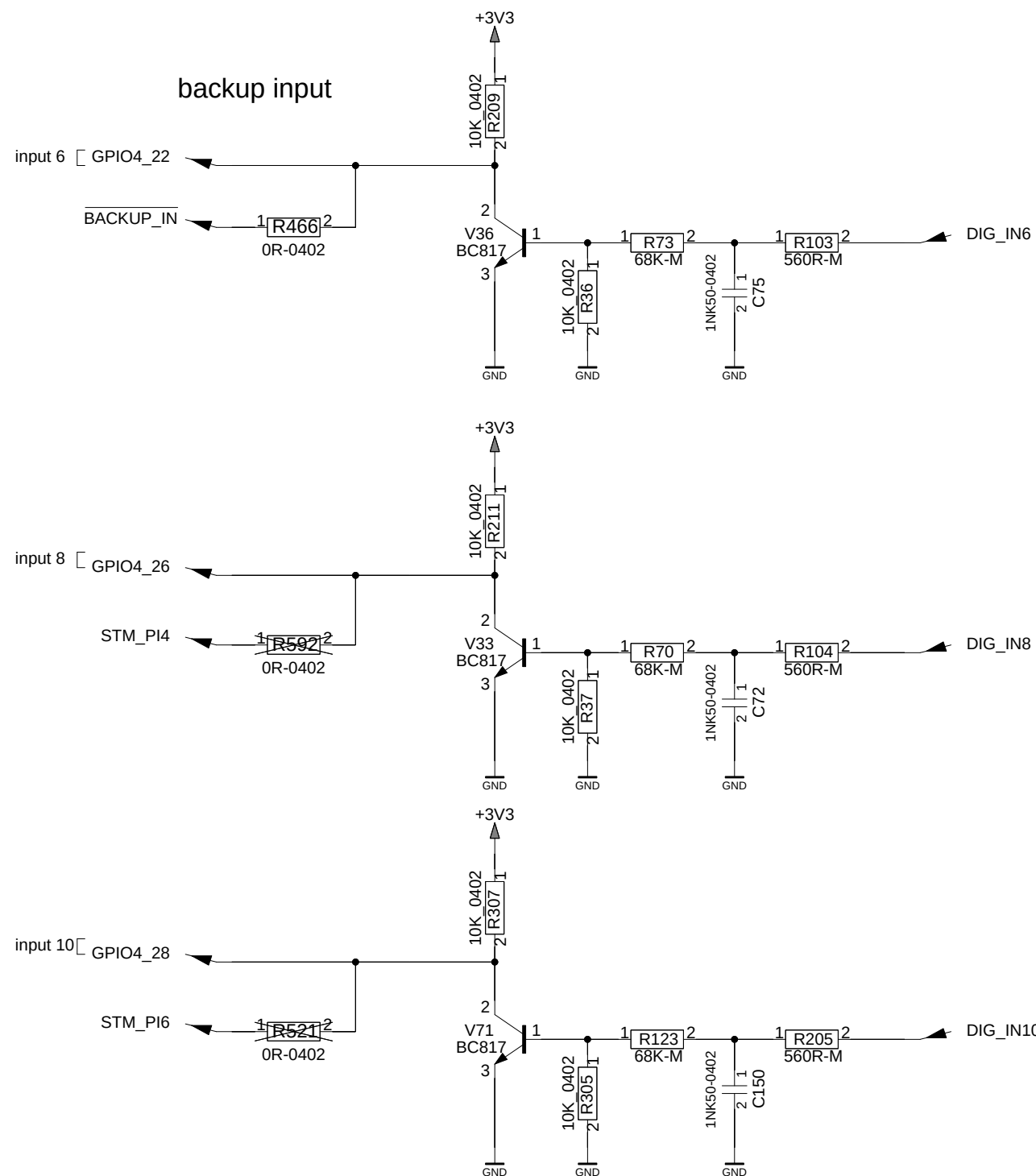
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G

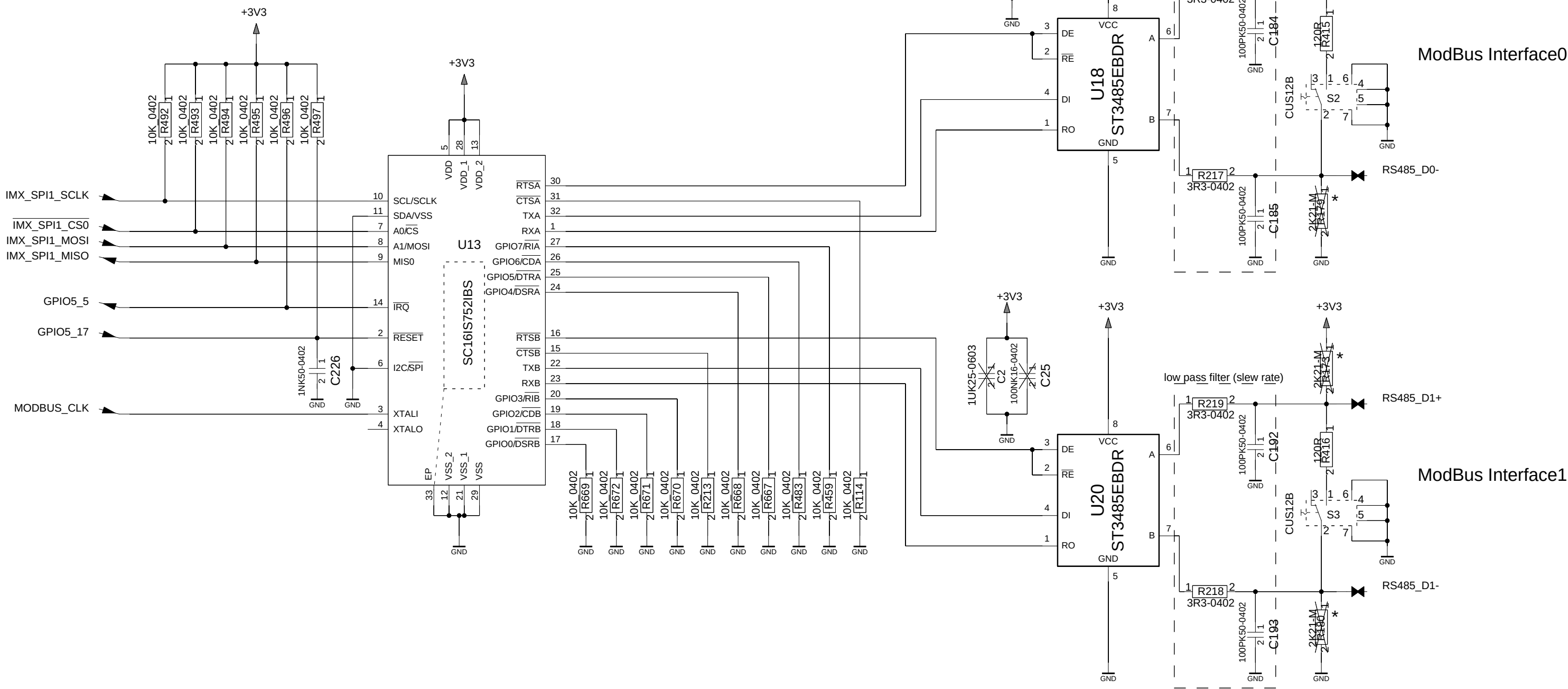
H



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	NUMBER:	4,071,452	DRM-Australia	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 18/09/2024:09:18	SHEET: 7 OF 38

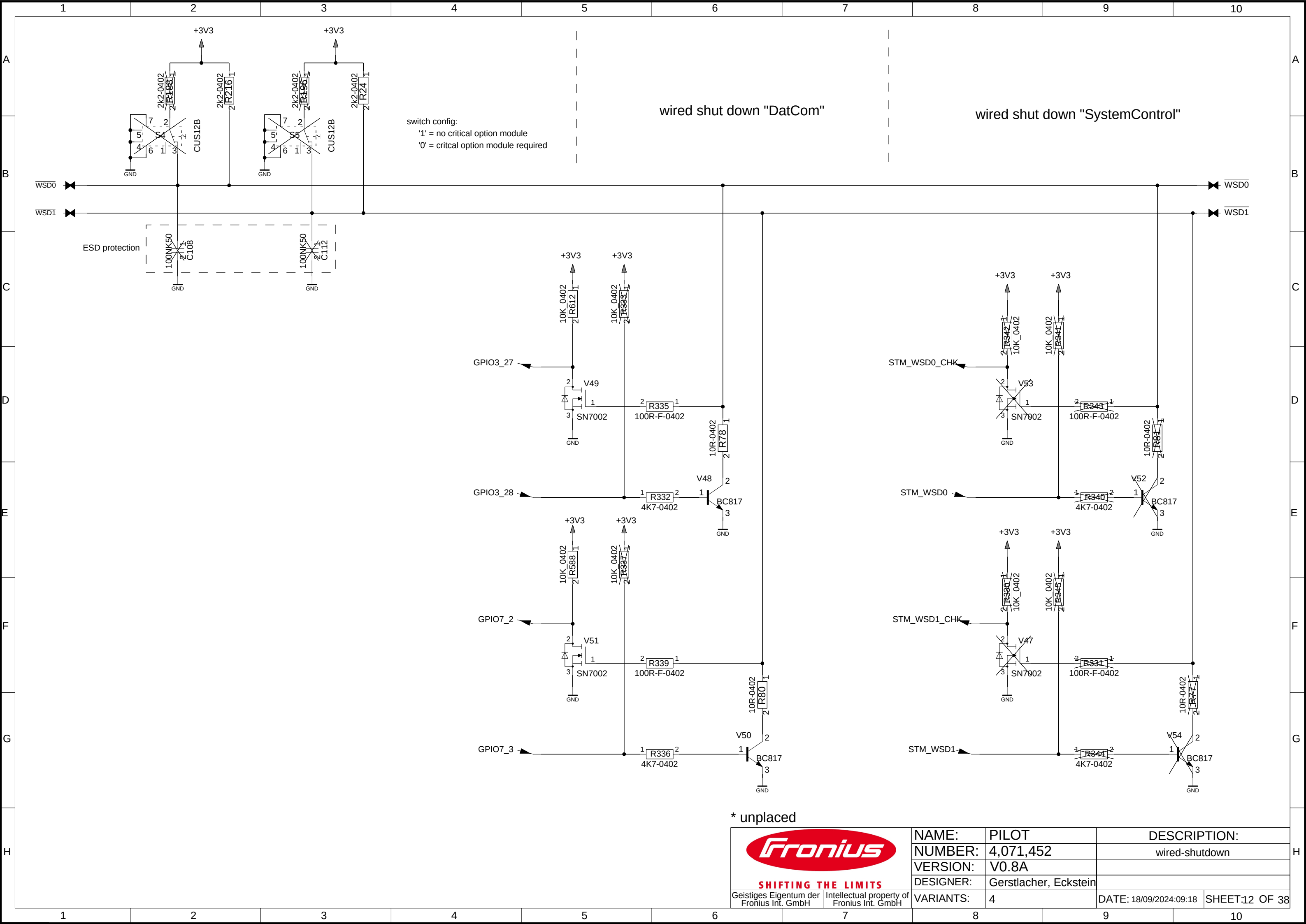


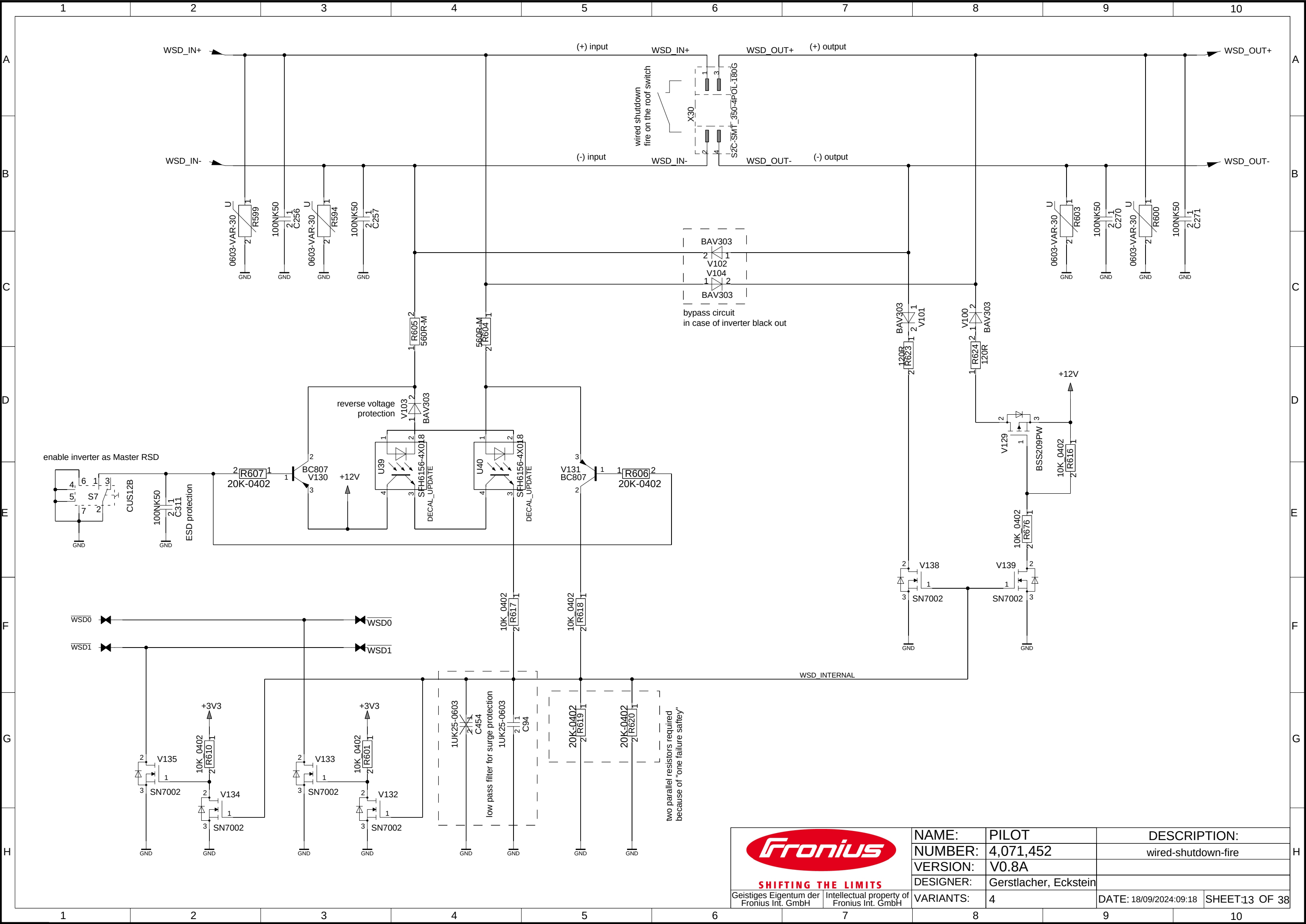
 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	digital-inputs	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
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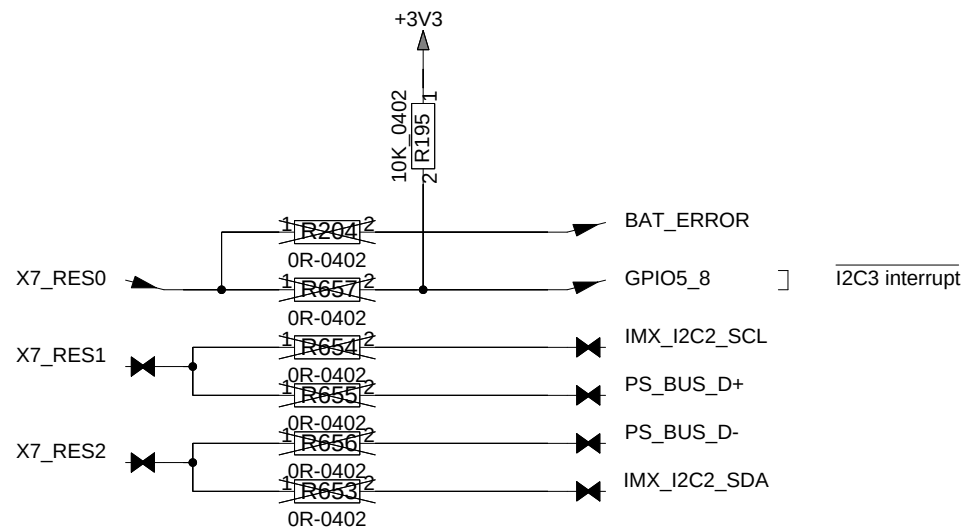
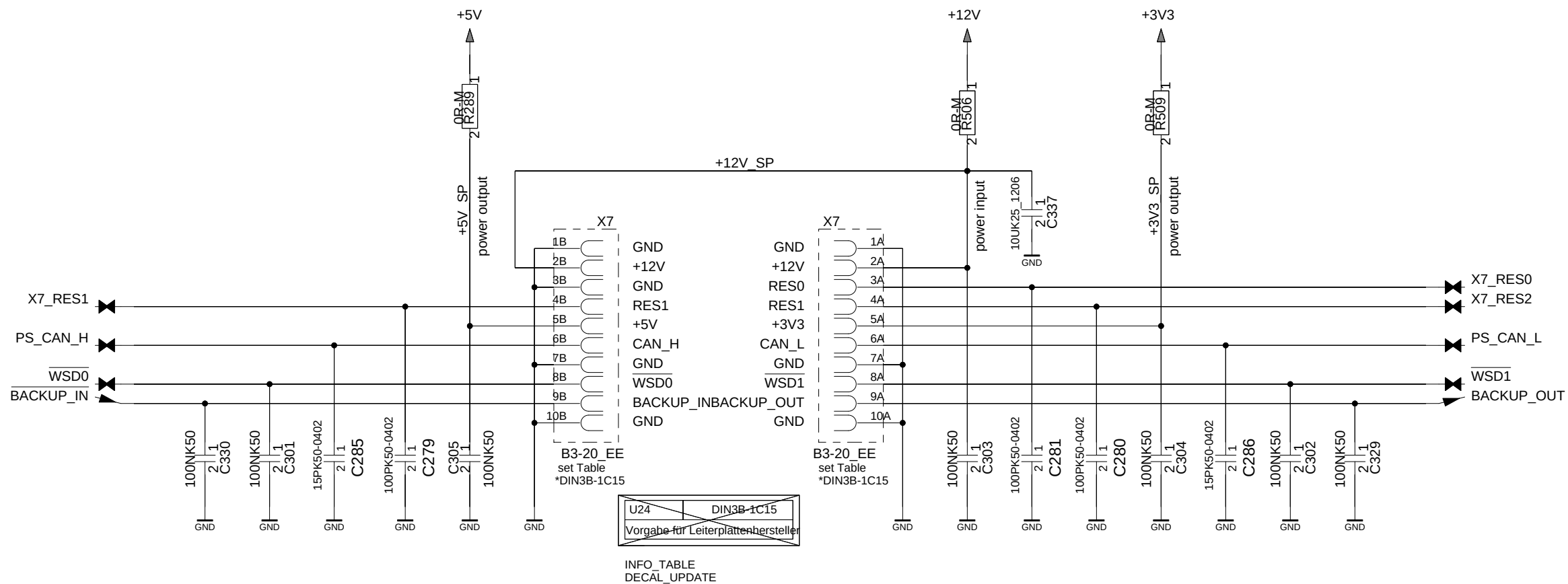


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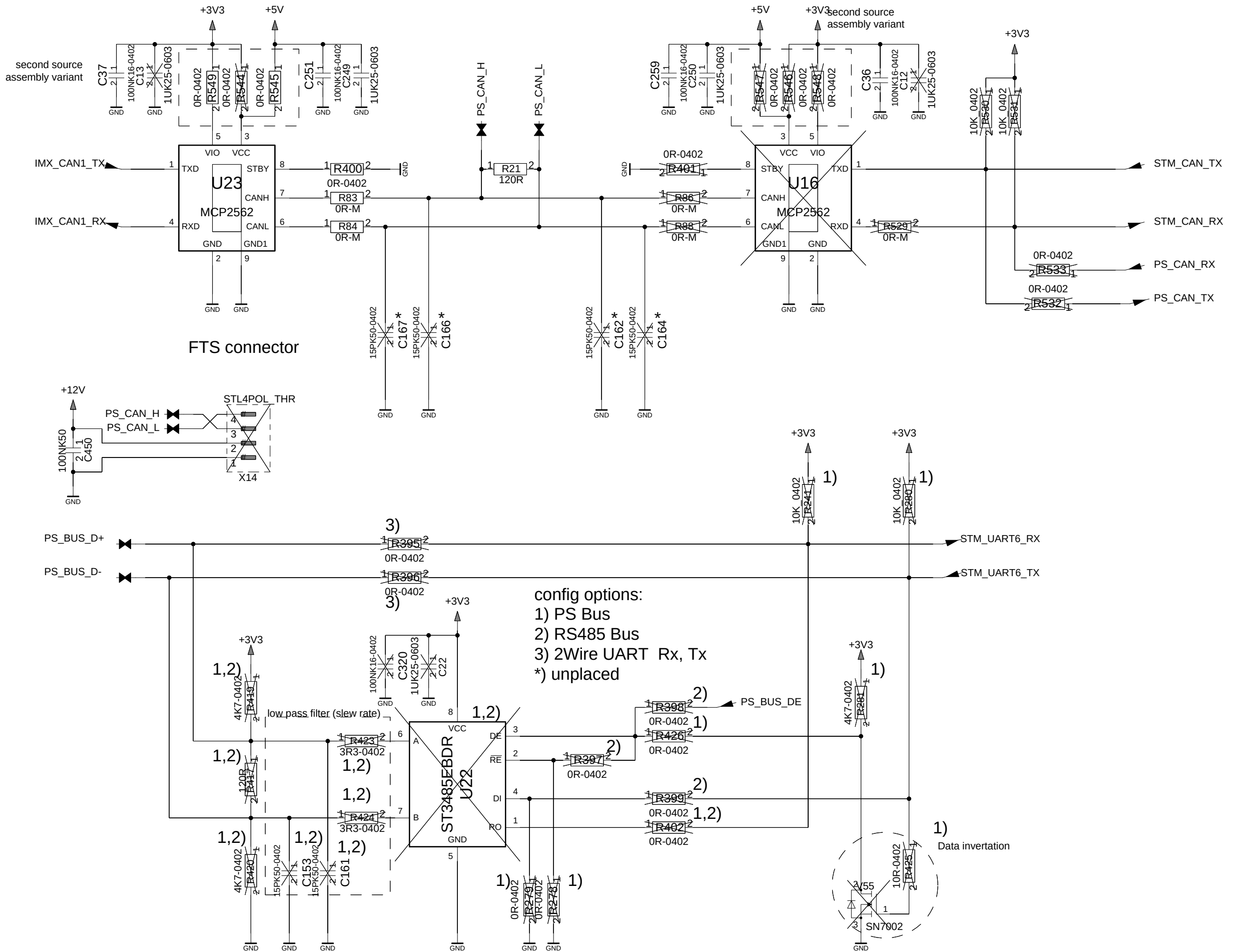
 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	ModBus-RTU	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 12/11/2024:08:56	SHEET:10 OF 38







 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	power-stack-connector	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
Intellectual property of Fronius Int. GmbH	VARIANTS:	4	DATE: 15/10/2024:12:43	SHEET:14 OF 38



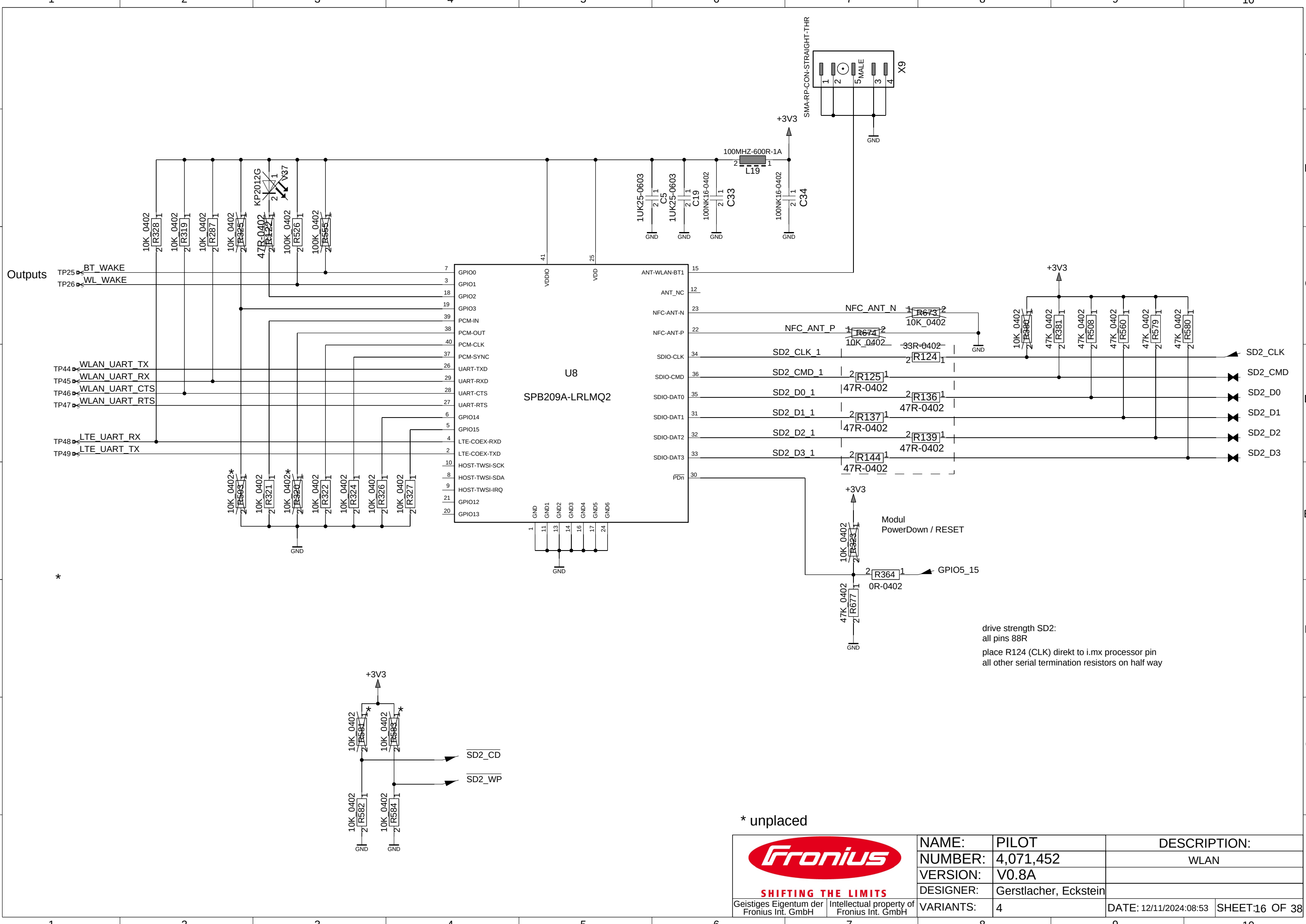
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SHIFTING THE LIMITS

Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH

NAME:	PILOT	DESCRIPTION:
NUMBER:	4,071,452	power-stack-interfaces
VERSION:	V0.8A	
DESIGNER:	Gerstlacher, Eckstein	
VARIANTS:	4	DATE: 12/11/2024:08:56 SHEET:15 OF 38

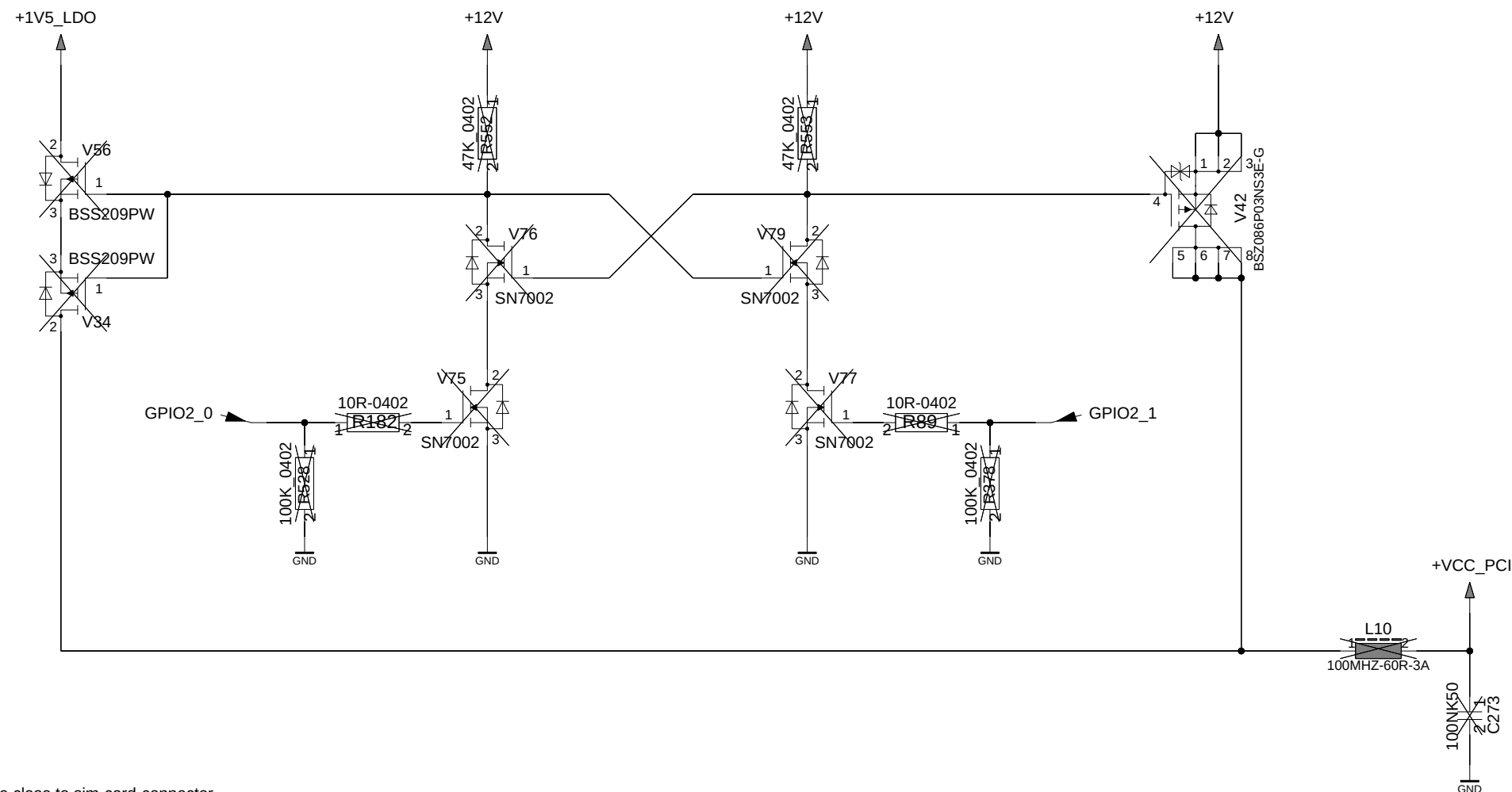


drive strength SD2:
all pins 88R
place R124 (CLK) direkt to i.mx processor pin
all other serial termination resistors on half way

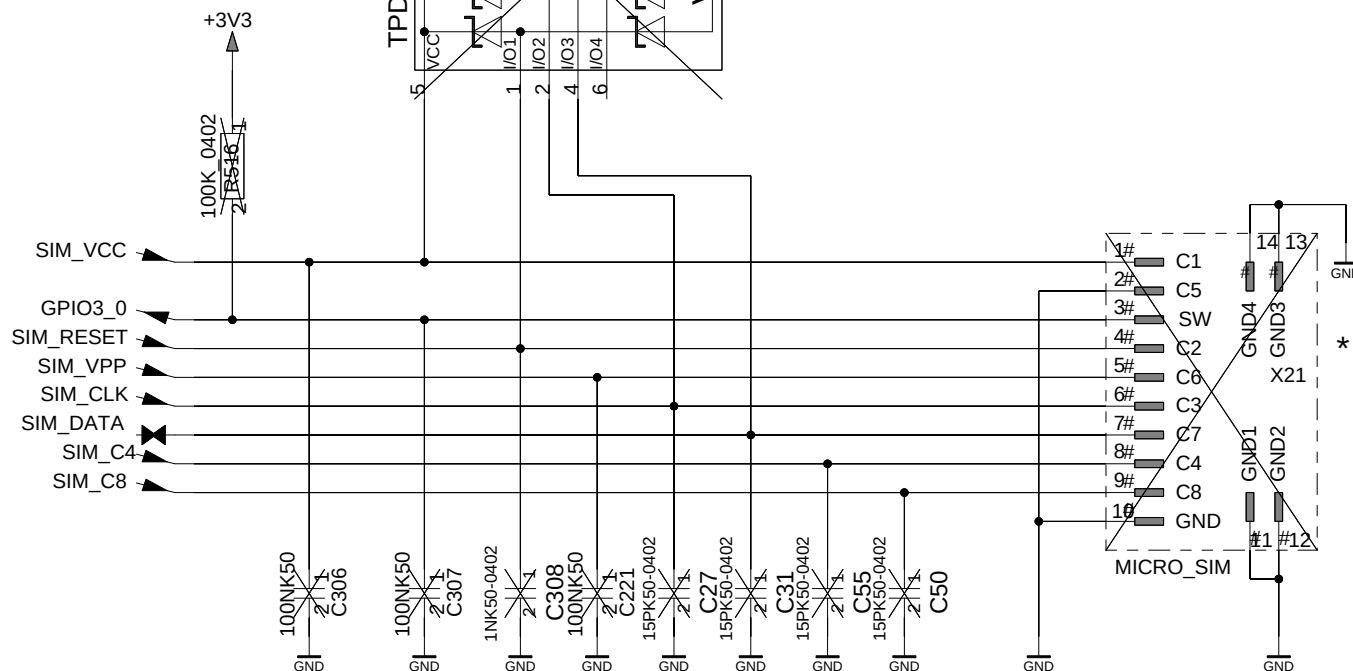
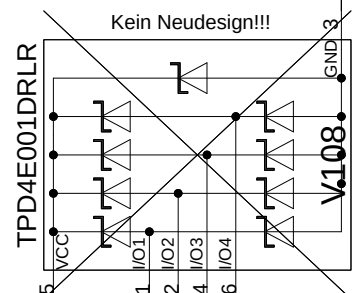
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 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	WLAN	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 12/11/2024:08:53	SHEET:16 OF 38

supply current interlock 1V5 or 12V for PCIe

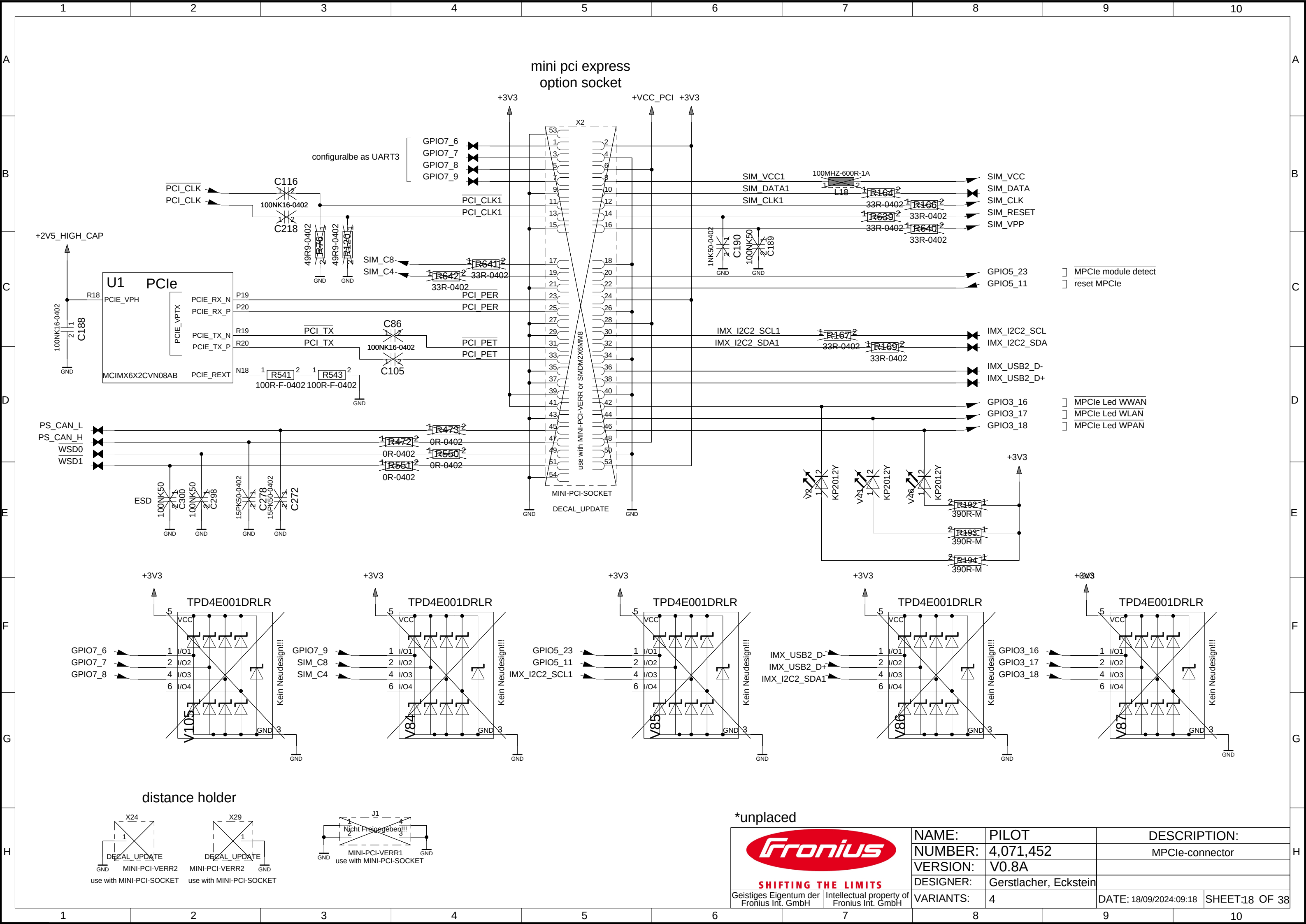


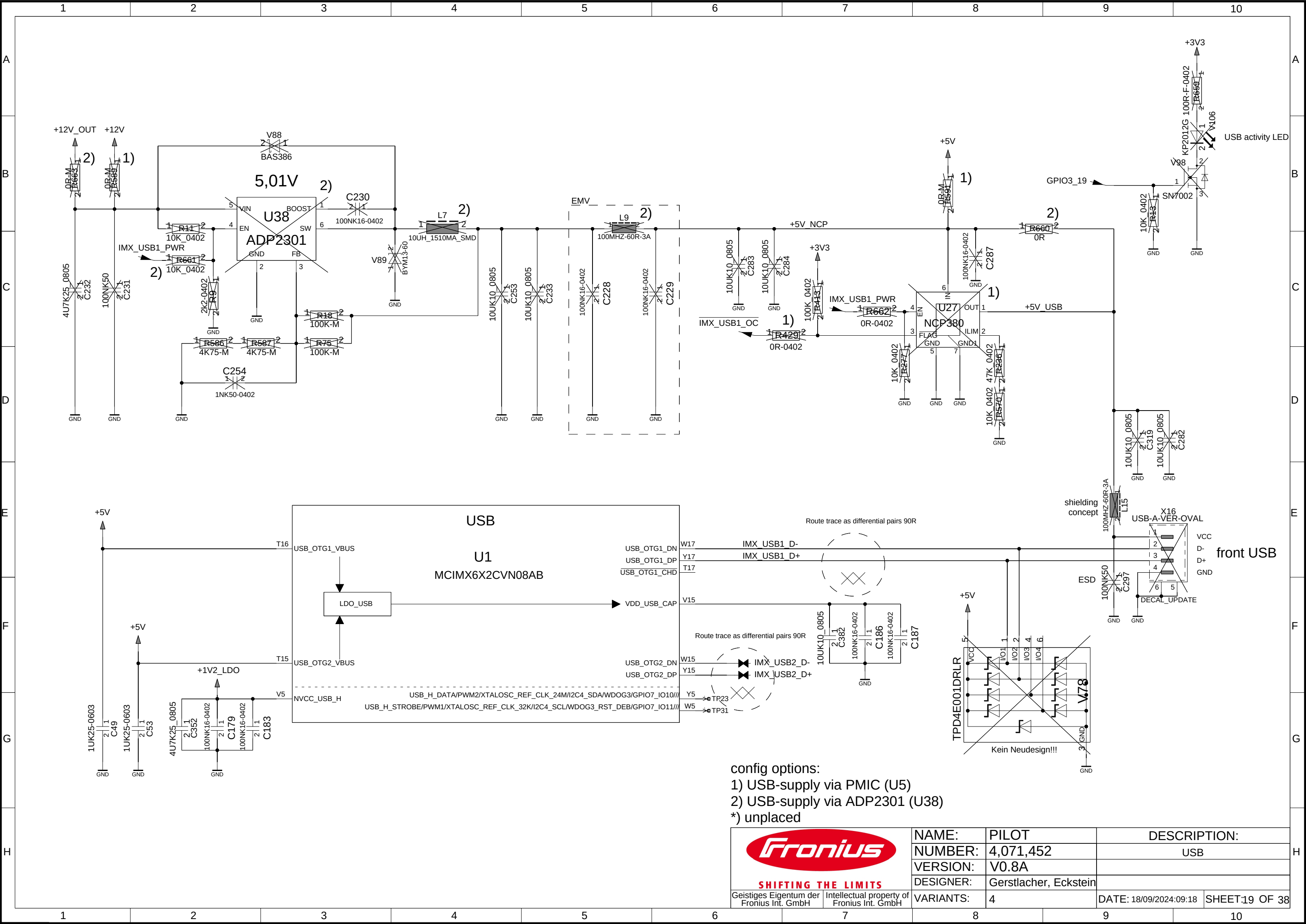
place close to sim-card-connector

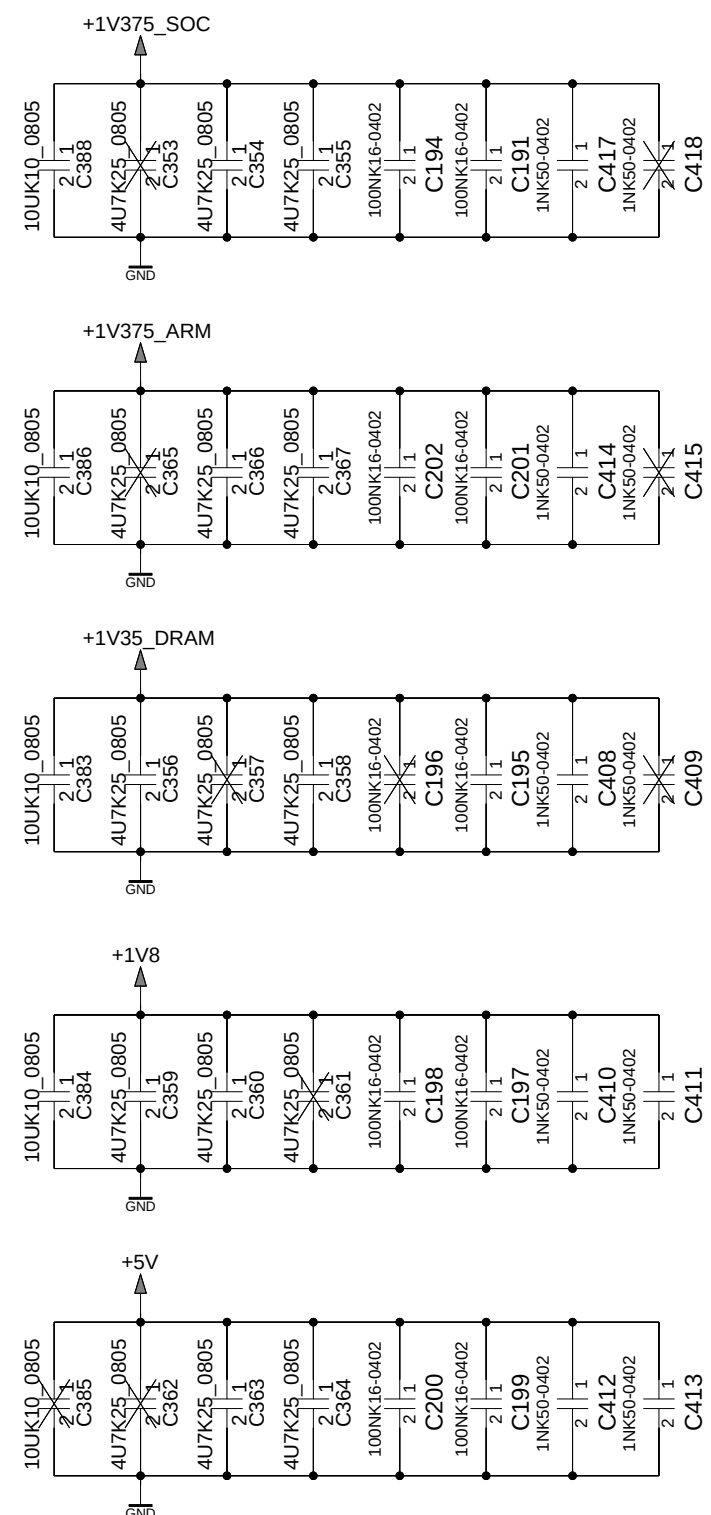


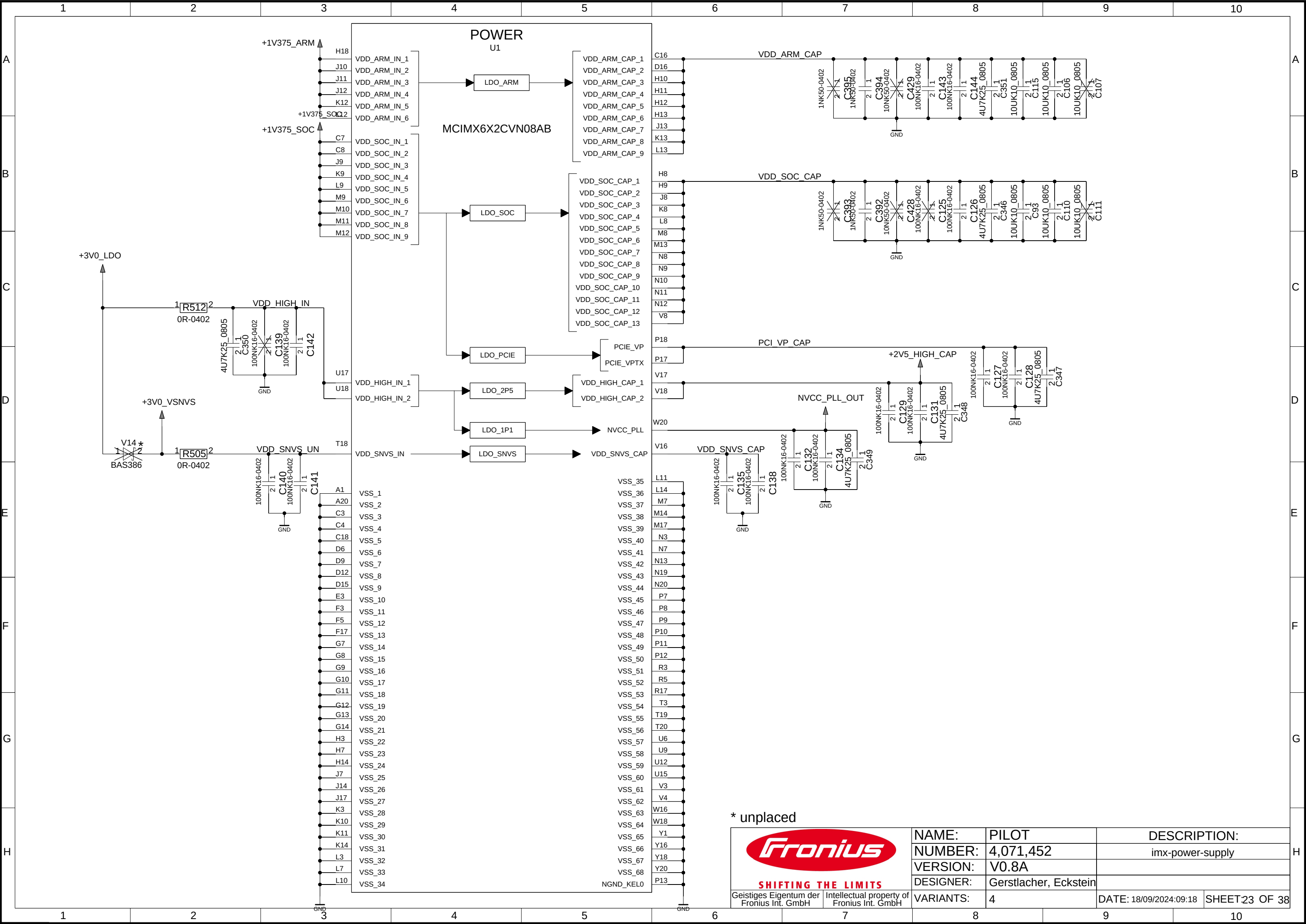
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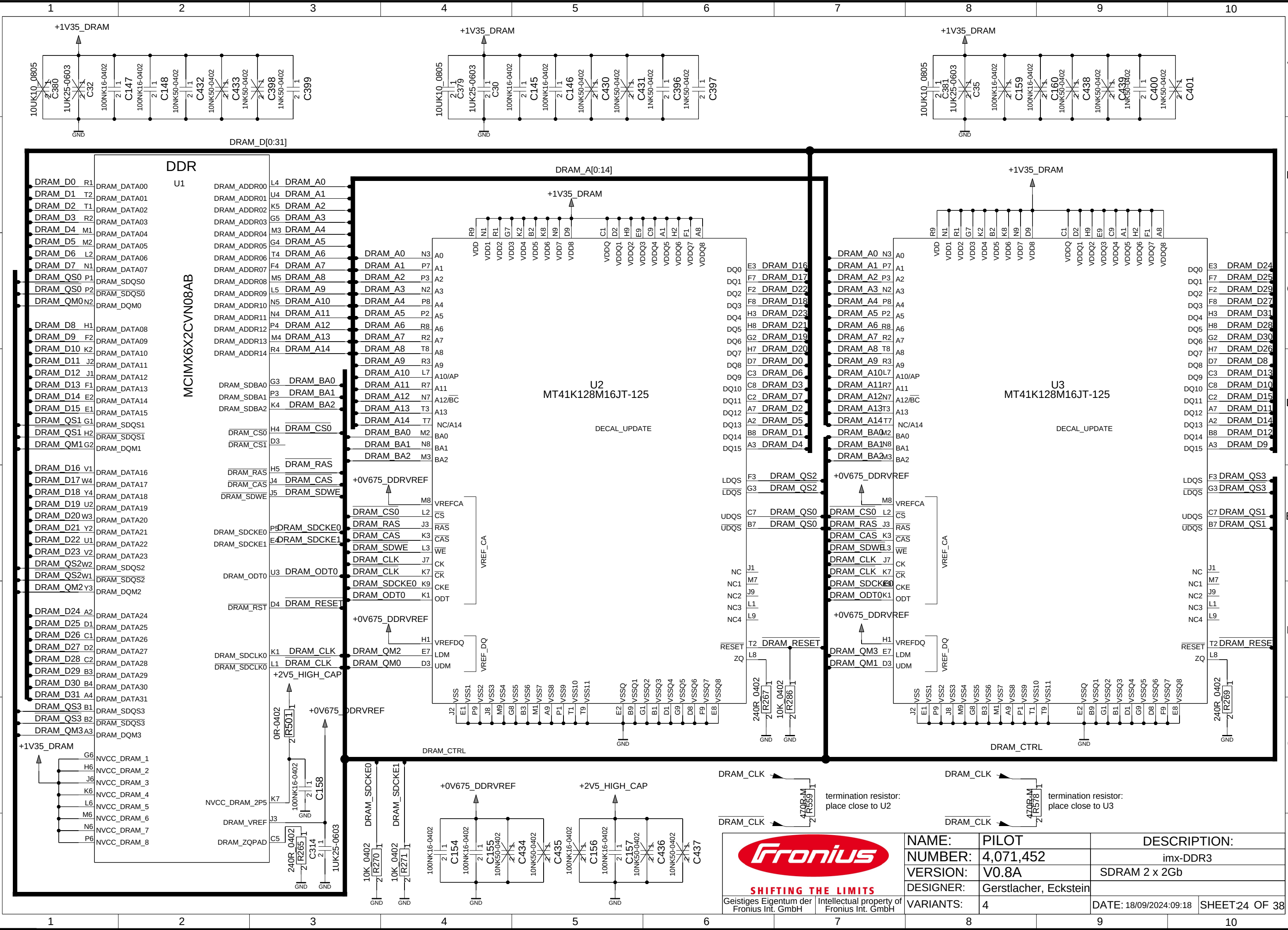
 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	MPCle-power-supply	
	VERSION:	V0.8A	sim card socket	
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 18/09/2024:09:18	SHEET:17 OF 38

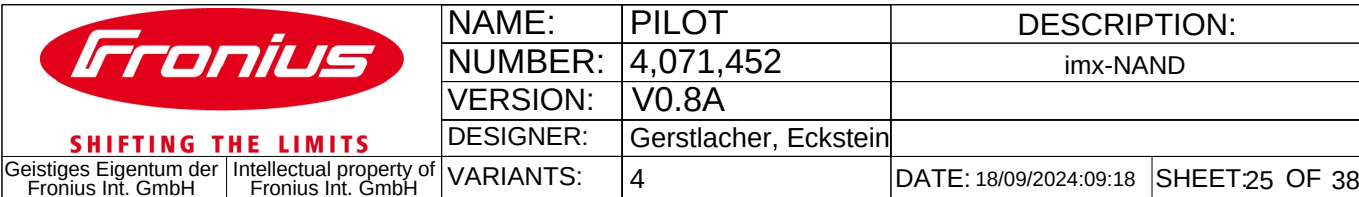


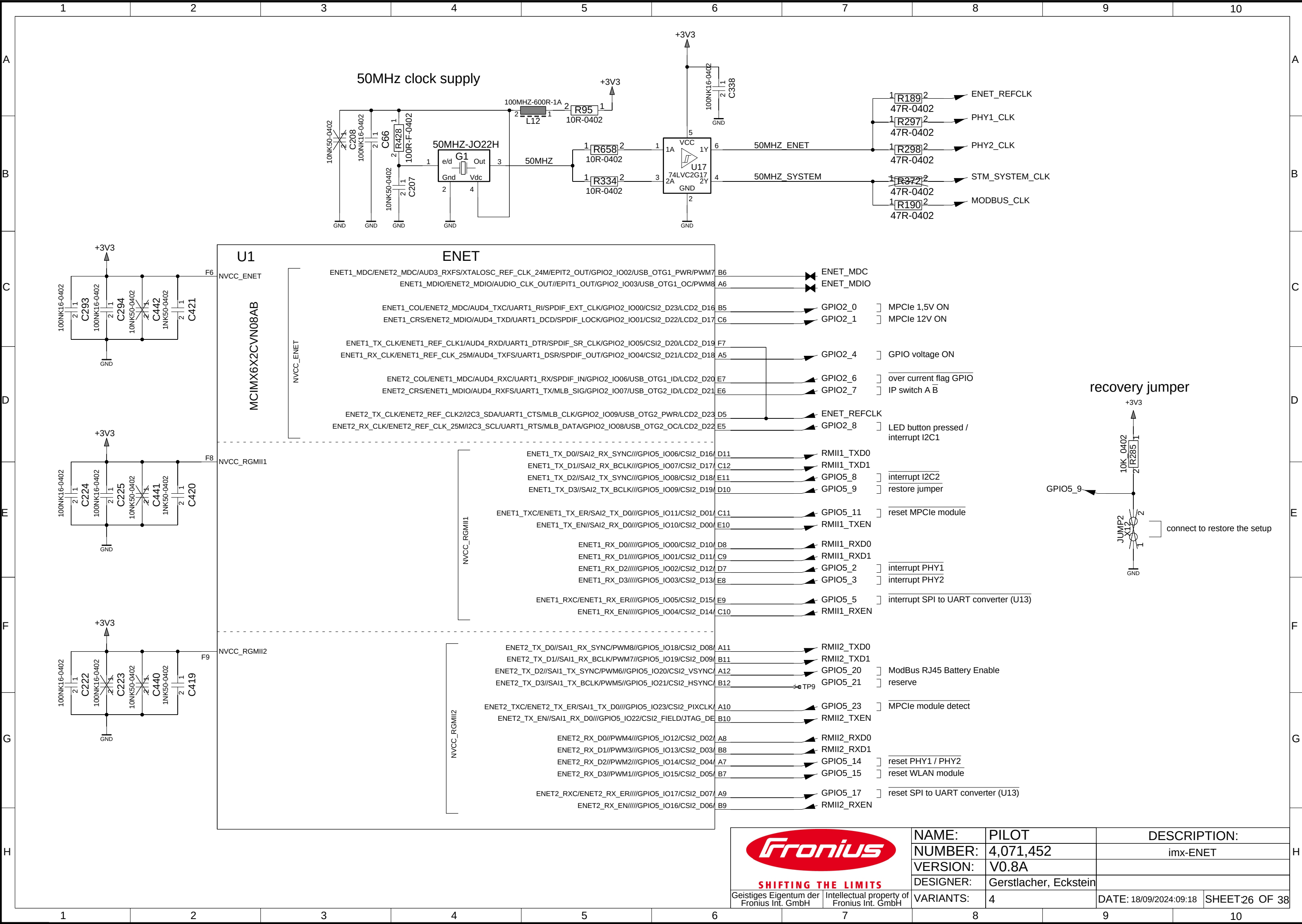


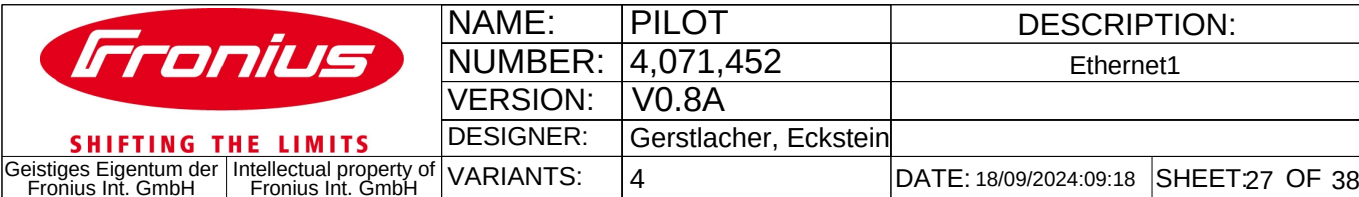


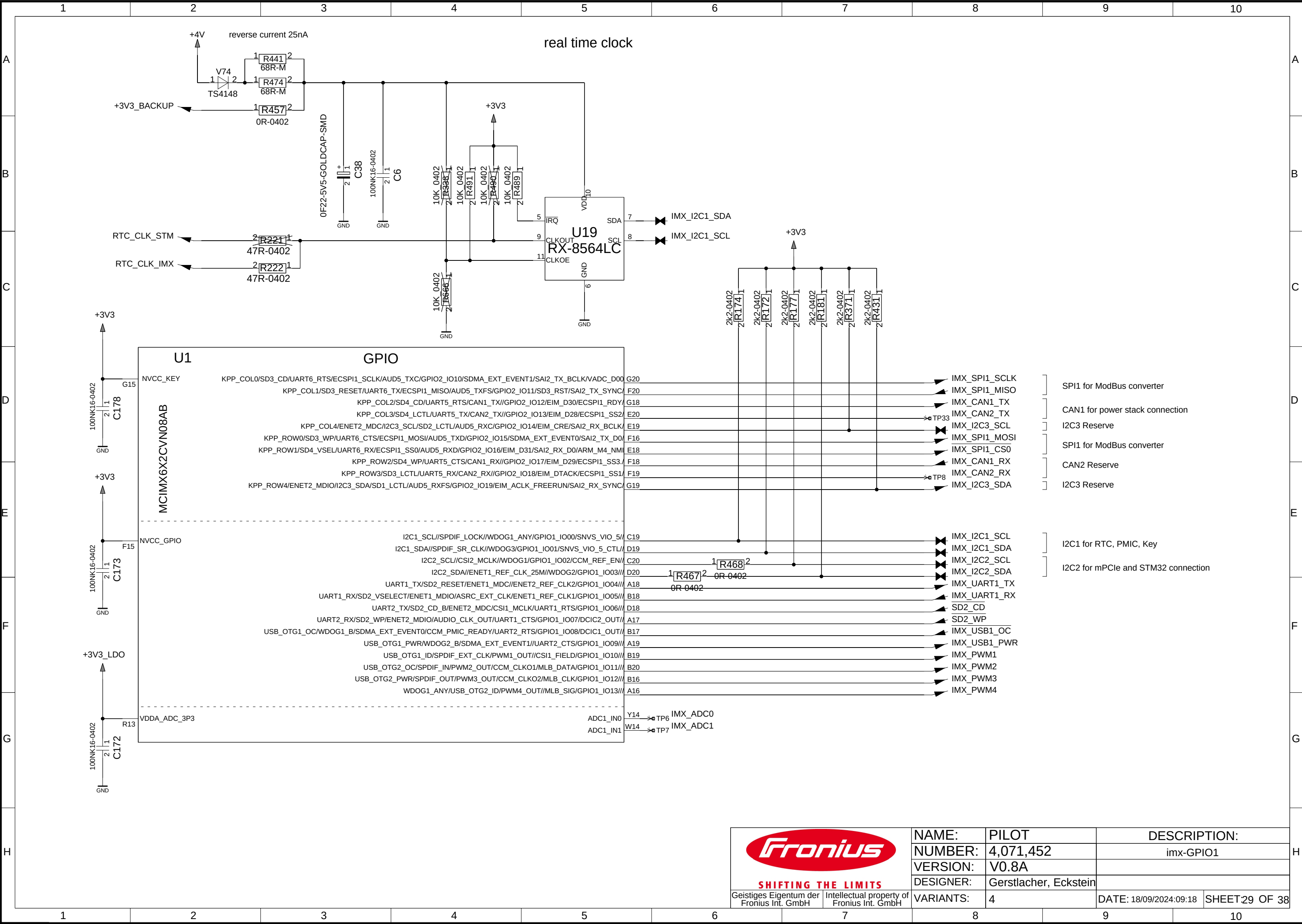


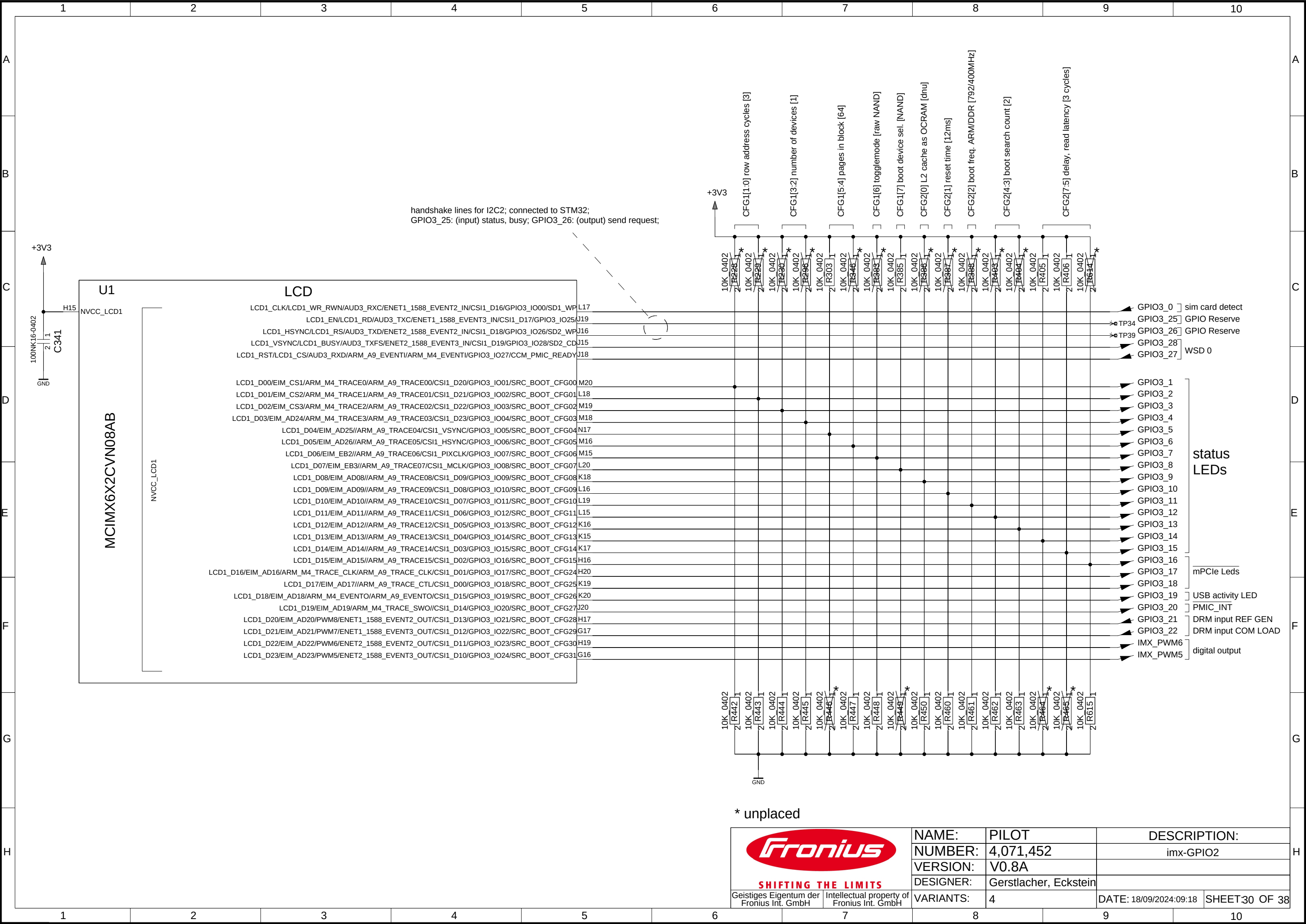


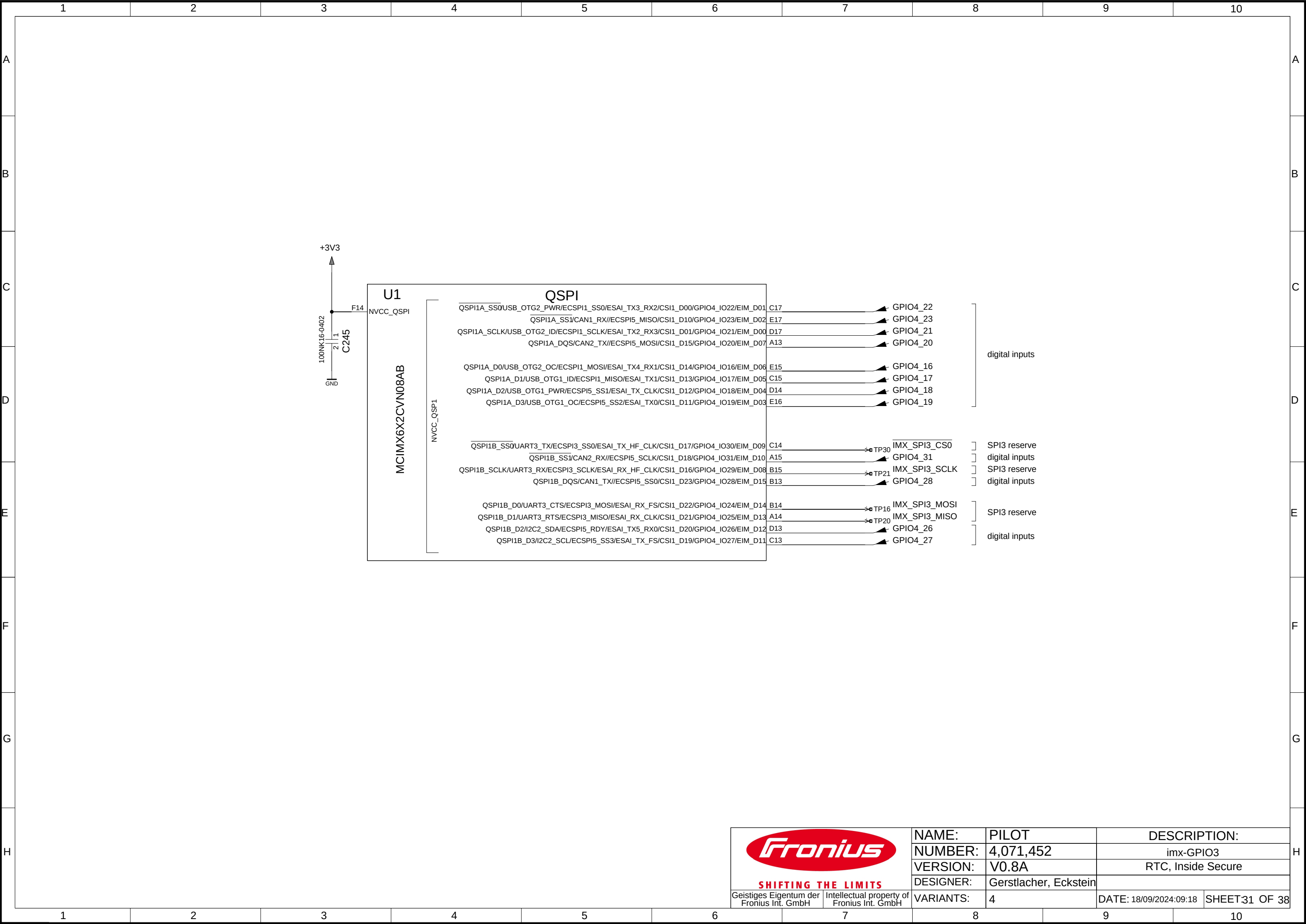


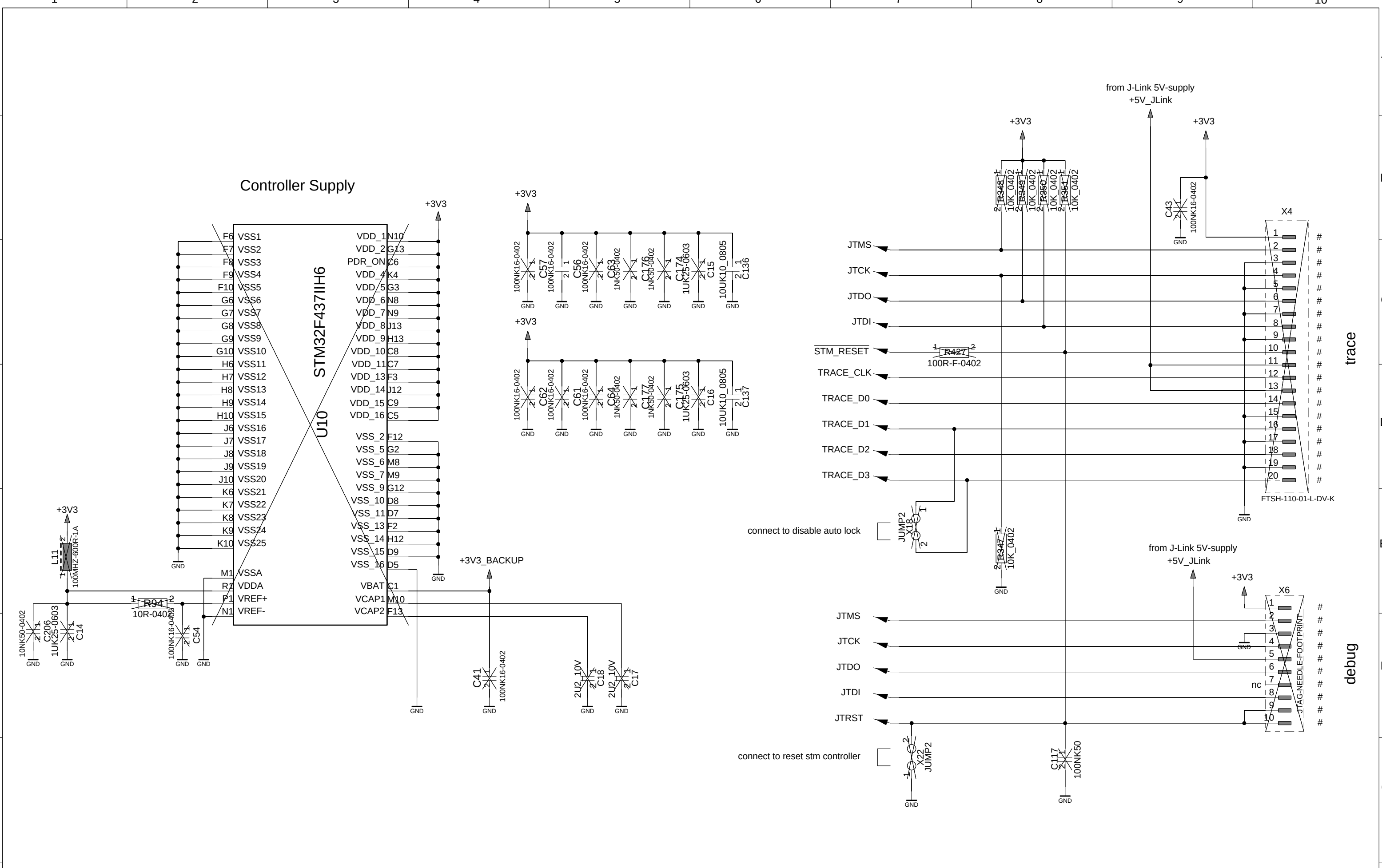






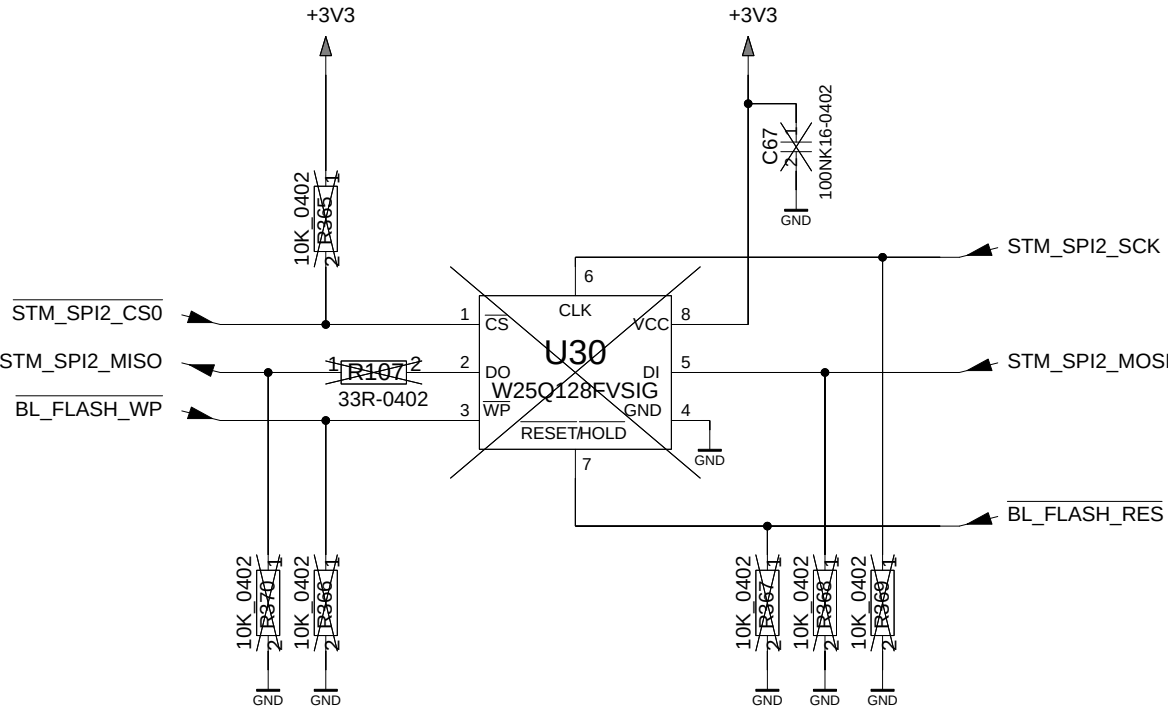




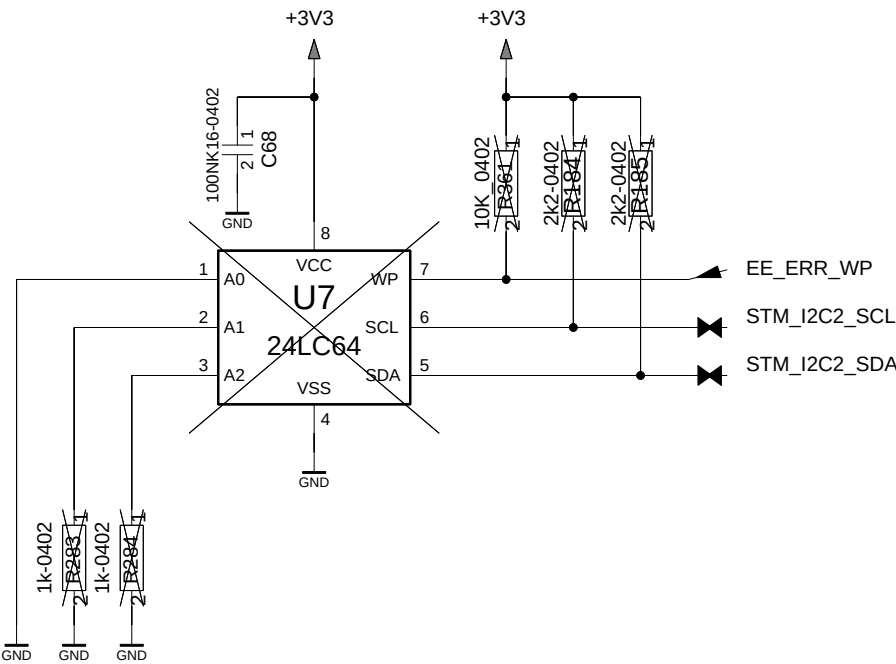


 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	stm-power-supply	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 18/09/2024:09:18	SHEET:32 OF 38

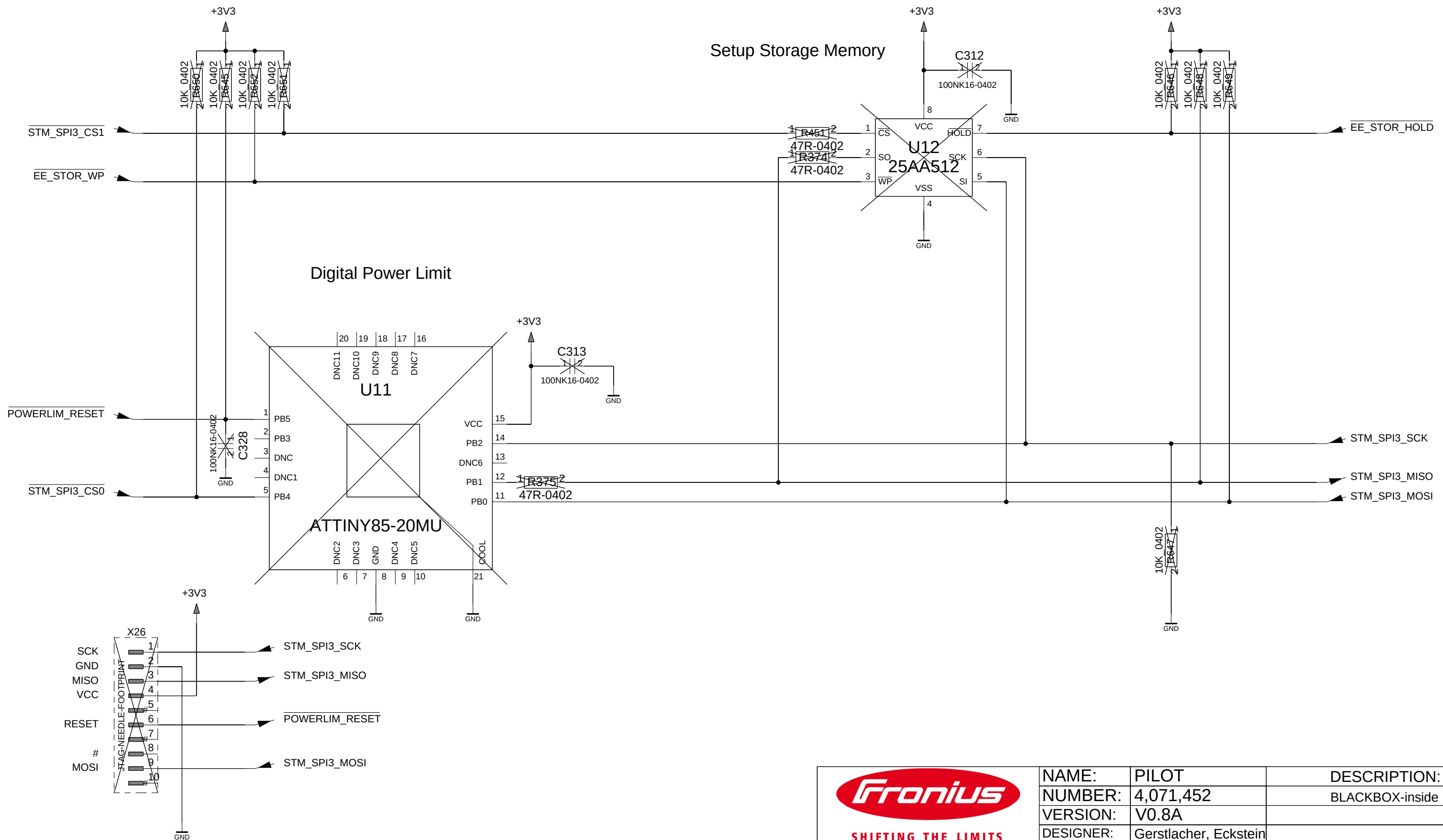
Bootloading Flash 128Mbit



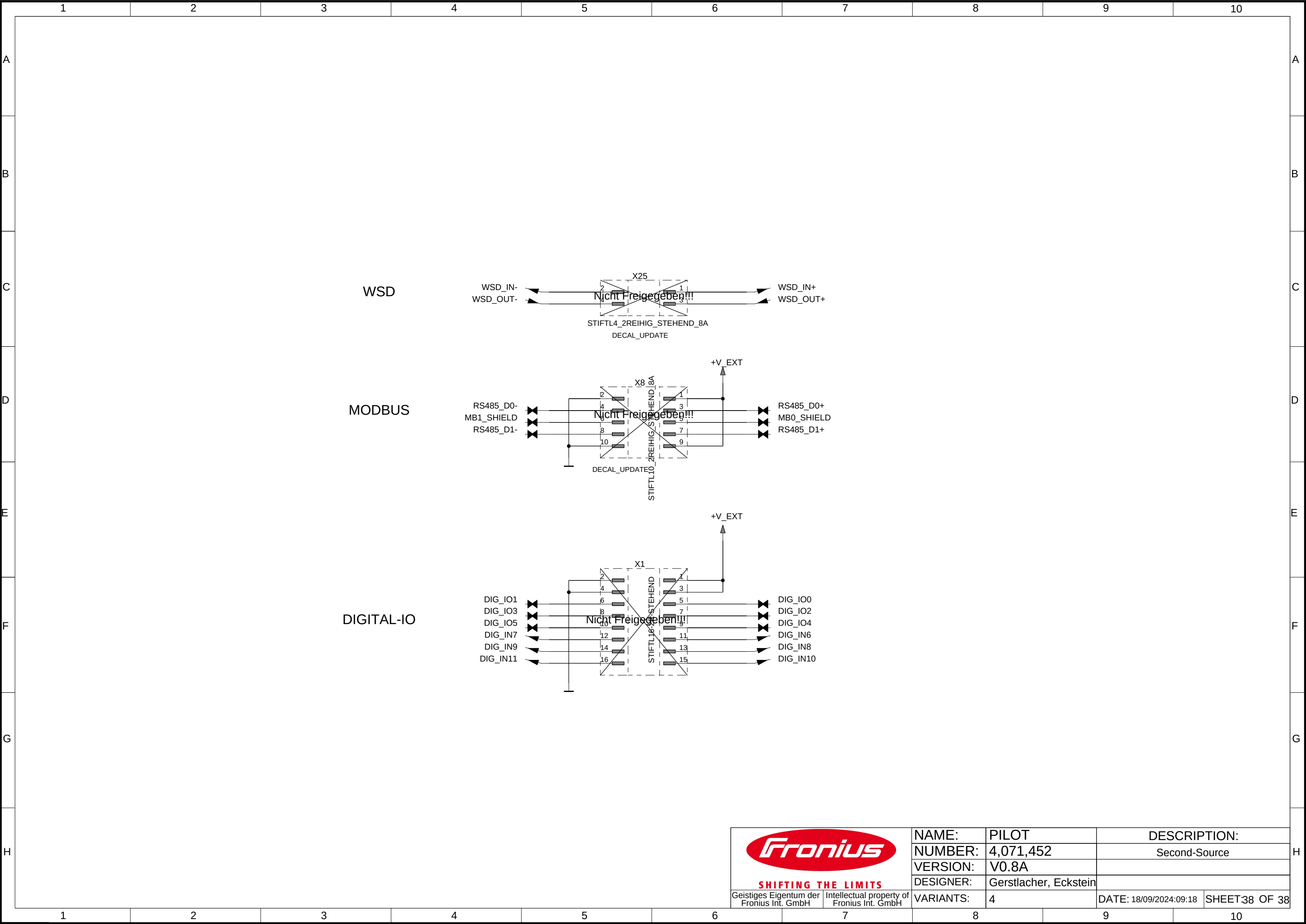
Errorlogging EEPROM



 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	stm-memories	
	VERSION:	V0.8A	system control memorys	
	DESIGNER:	Gerstlacher, Eckstein		
	VARIANTS:	4	DATE: 18/09/2024:09:18	SHEET:36 OF 38



 SHIFTING THE LIMITS Geistiges Eigentum der Fronius Int. GmbH Intellectual property of Fronius Int. GmbH	NAME:	PILOT	DESCRIPTION:	
	NUMBER:	4,071,452	BLACKBOX-inside	
	VERSION:	V0.8A		
	DESIGNER:	Gerstlacher, Eckstein		
VARIANTS:	4	DATE: 18/09/2024:09:18		SHEET:37 OF 38



SHIFTING THE LIMITS

Geistiges Eigentum der Fronius Int. GmbH | Intellectual property of Fronius Int. GmbH

NAME:	PILOT	DESCRIPTION:
NUMBER:	4,071,452	Second-Source
VERSION:	V0.8A	
DESIGNER:	Gerstlacher, Eckstein	
VARIANTS:	4	DATE: 18/09/2024:09:18
		SHEET 38 OF 38