

Legend:

- General purpose bus
- Ignition
- Injection
- Outputs
- Analog inputs (sensors)
- Discrete inputs

Board Info

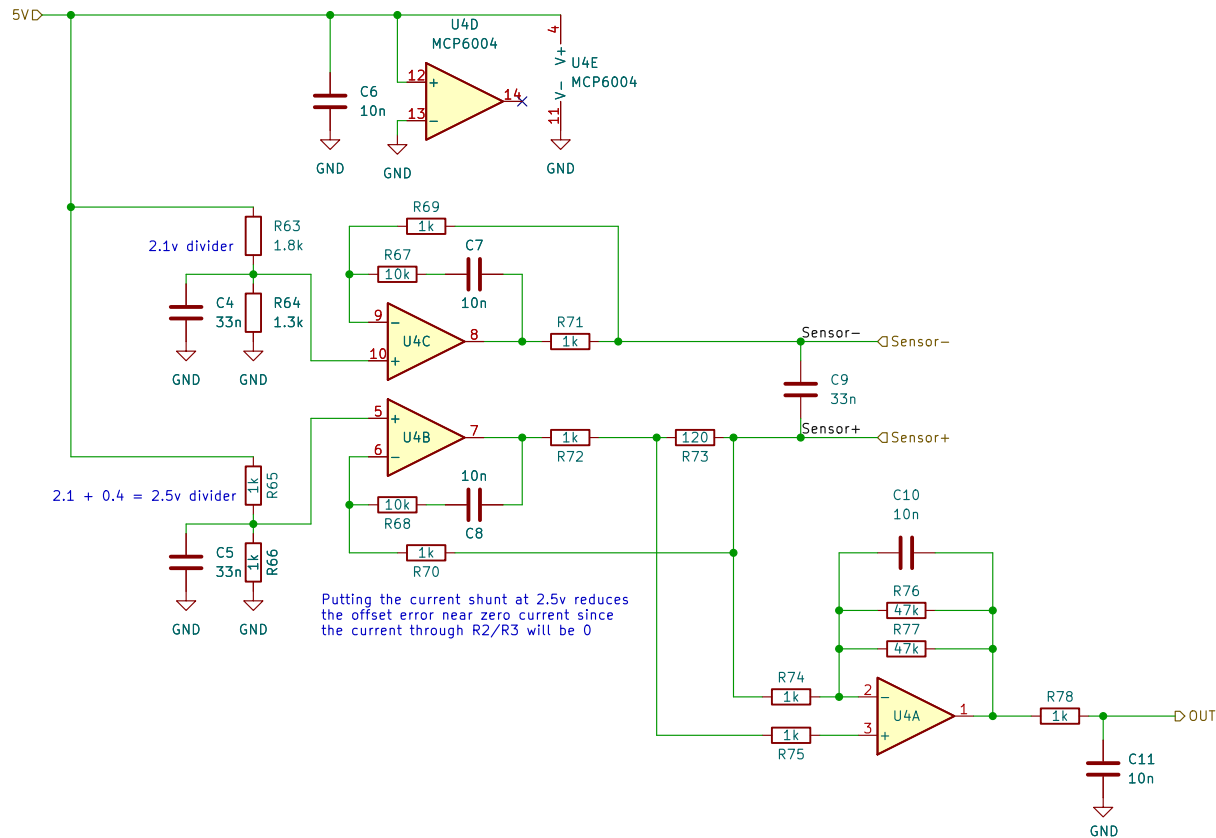
FOR OFF ROAD PURPOSES ONLY
 This is not for applications with
 emissions or safety regulations
 (AKA not for street use). This is
 for closed stages, track
 and equipment.

<https://rusefi.com/s/hellen12shonda>

EF1

Hellen-One-PCB-logo

rusEFI
 Sheet: /
 File: hellen12shonda.kicad_sch
Title: hellen12shonda
 Size: A2 Date: 2023-03-12 Rev: b
 KiCad E.D.A. kicad (6.0.9) Id: 1/2



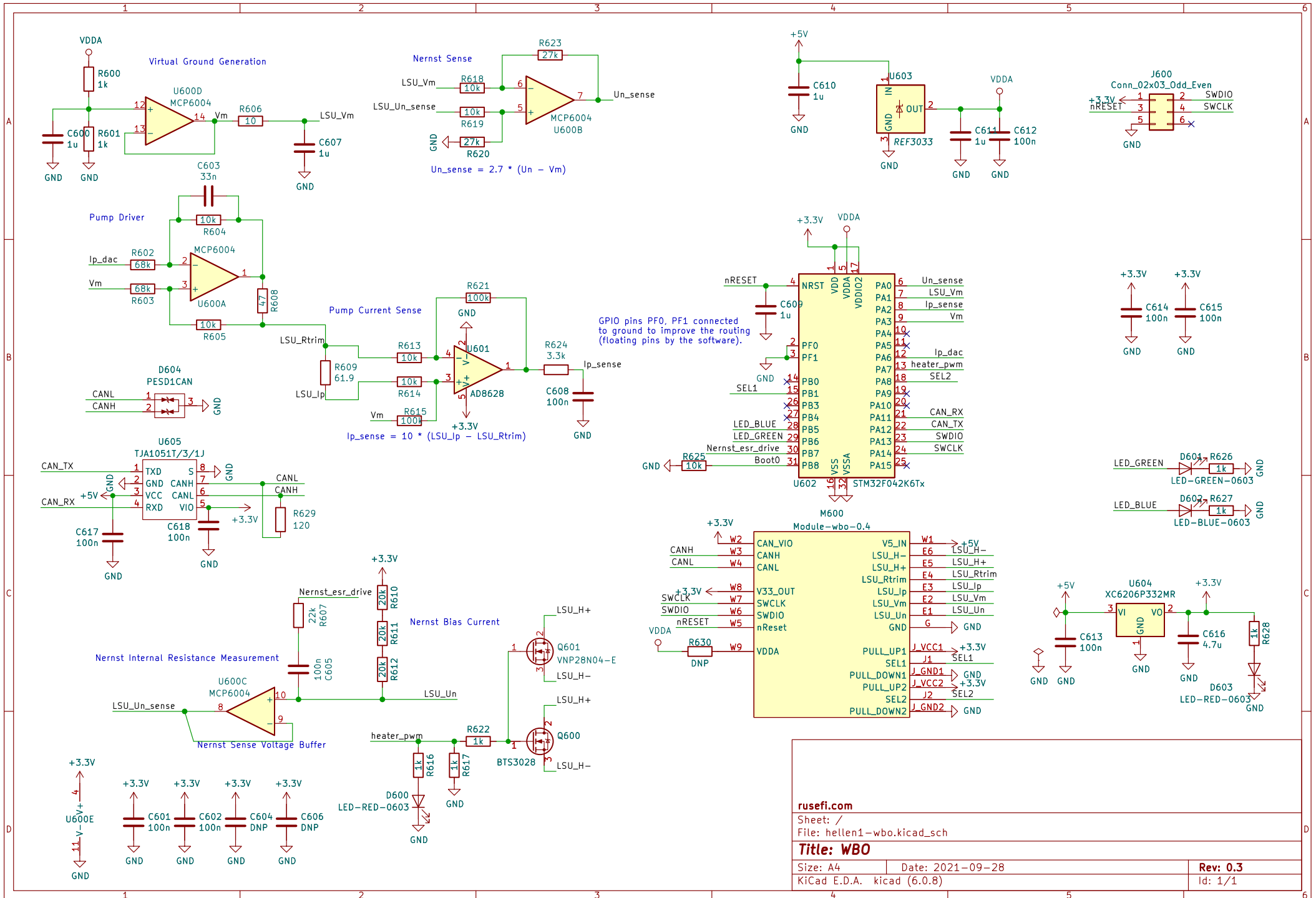
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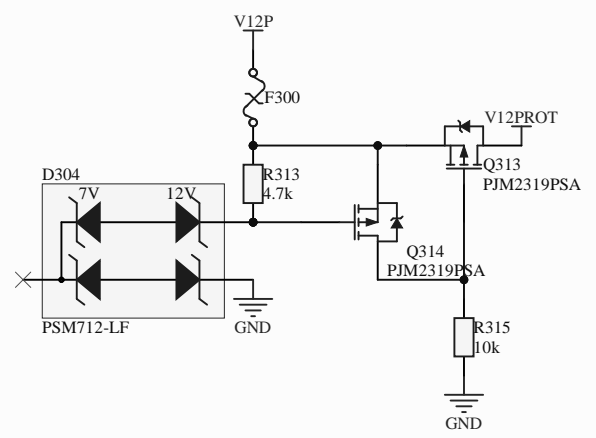
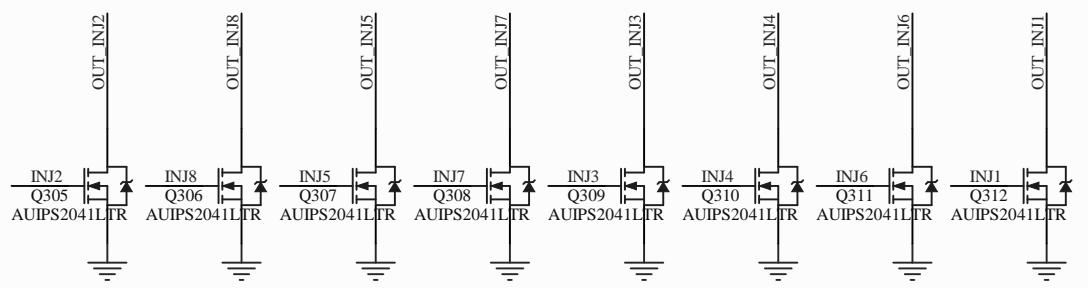
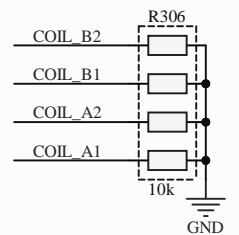
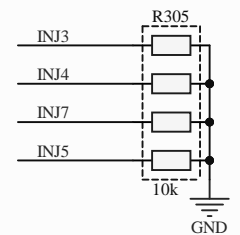
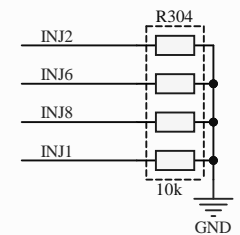
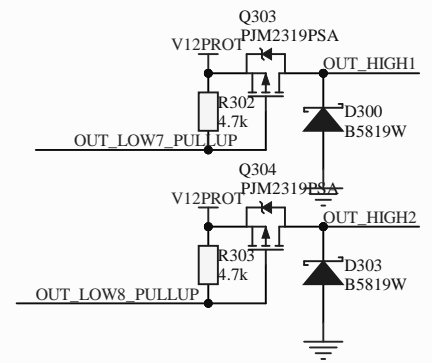
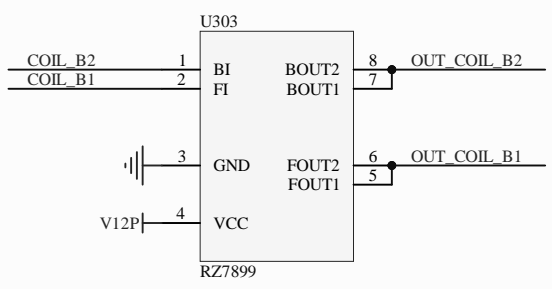
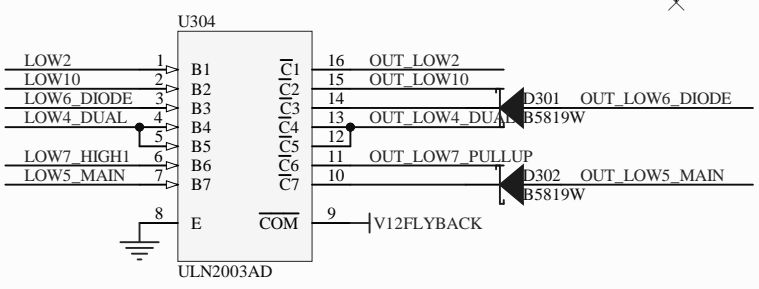
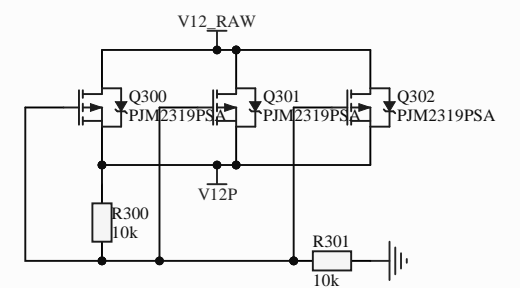
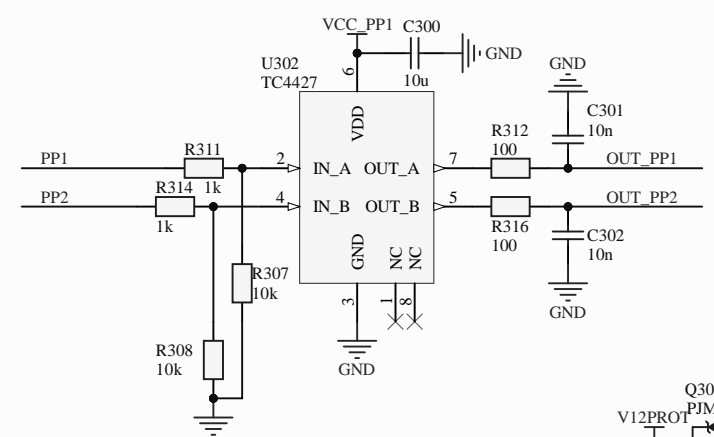
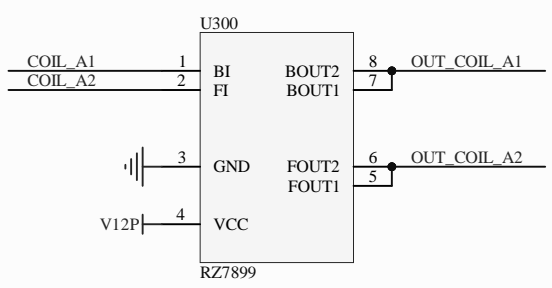
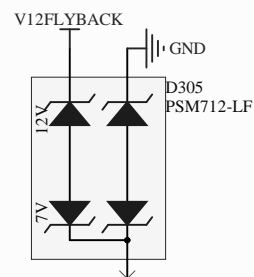
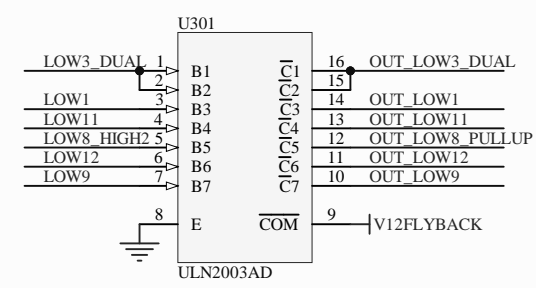
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Date:

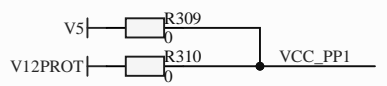
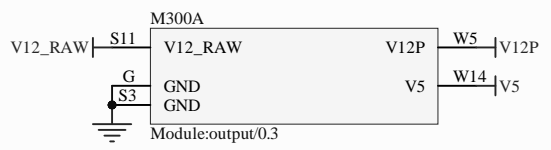
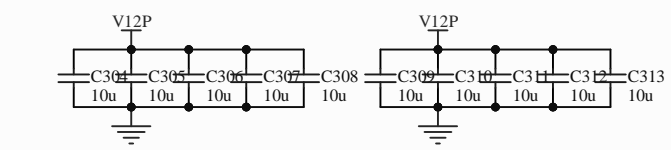
Rev:
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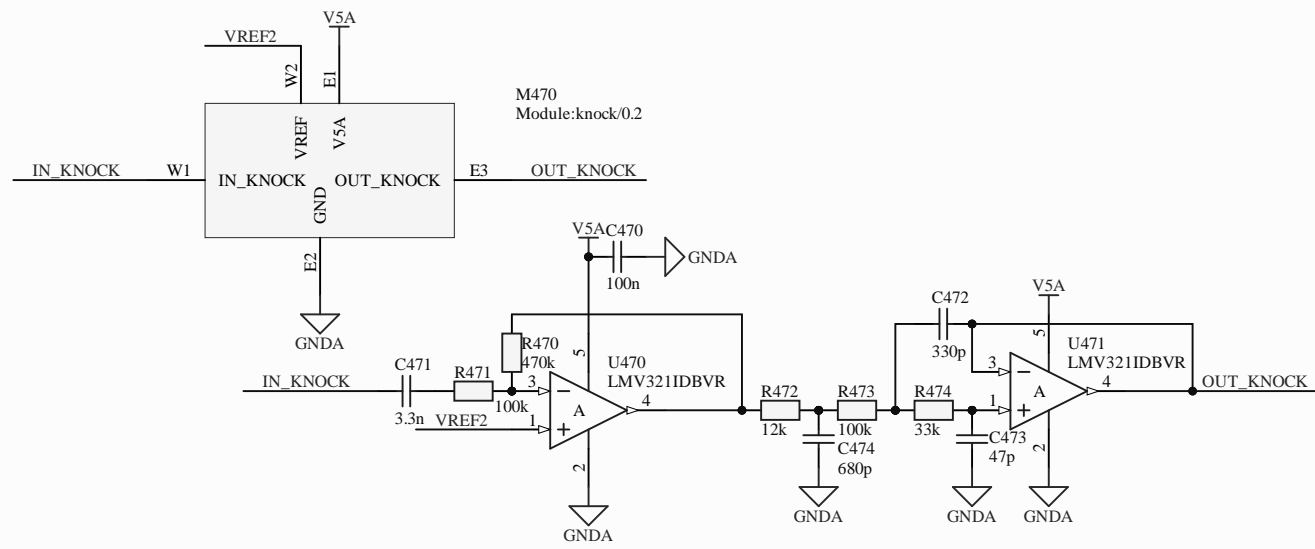
rusefi.com	
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KiCad E.D.A. kicad (6.0.8)	Rev: 0.3
	Id: 1/1

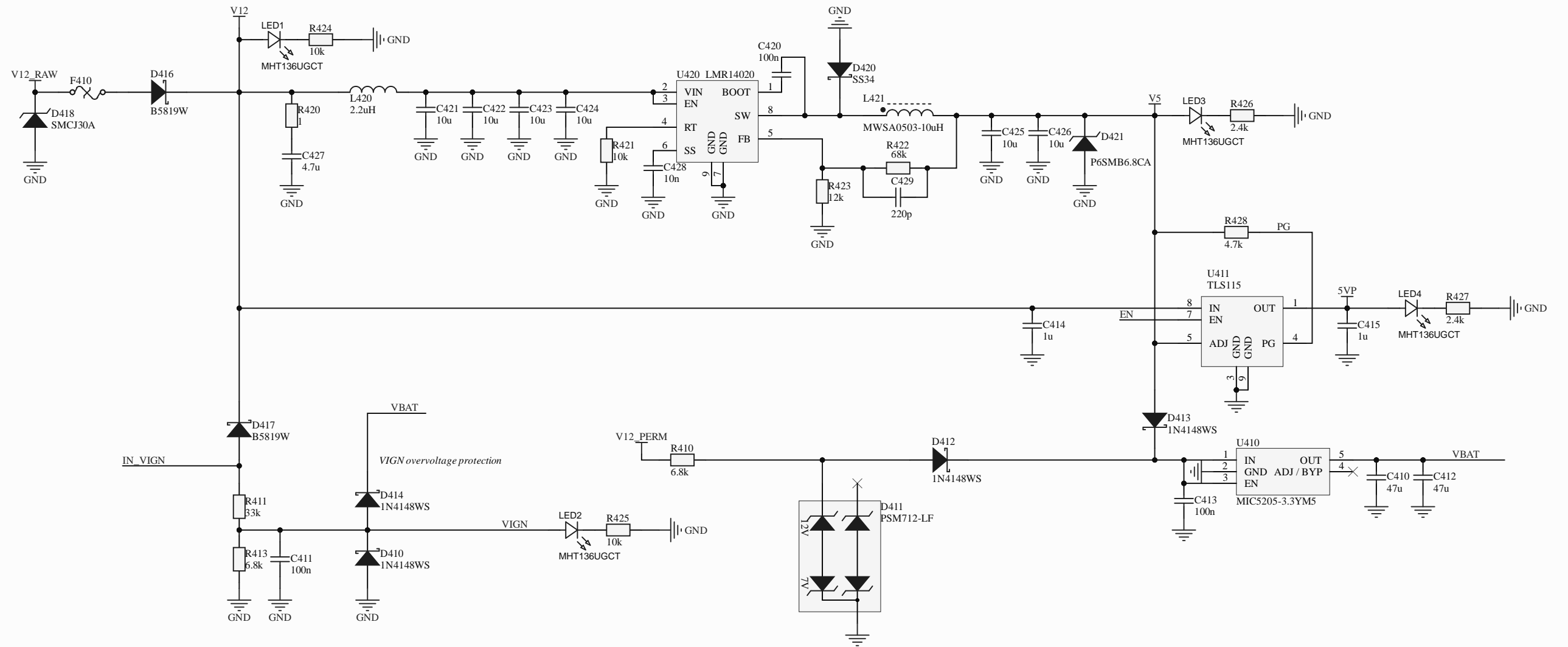
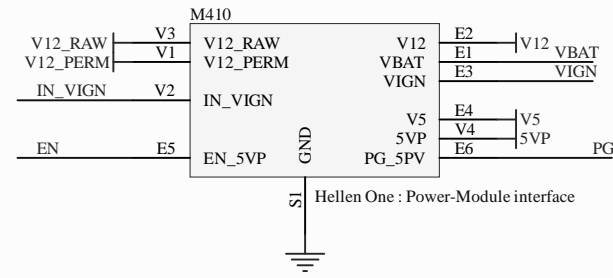


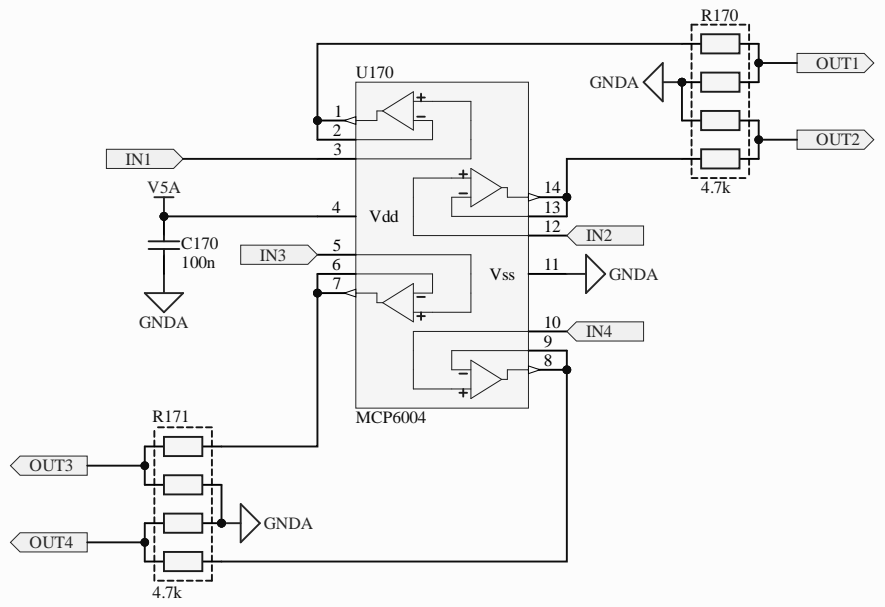
M300B		M300C	
INJ1	W24	OUT_INJ1	S18
INJ2	W23	OUT_INJ2	S16
INJ3	W20	OUT_INJ3	S17
INJ4	W19	OUT_INJ4	W7
INJ5	W18	OUT_INJ5	W10
INJ6	W17	OUT_INJ6	S15
INJ7	W16	OUT_INJ7	W12
INJ8	W15	OUT_INJ8	W11
PP1	W28	OUT_PP1	W6
PP2	W22	OUT_PP2	S6
COIL_A1	W33	OUT_SOLENOID_A1	S1
COIL_A2	W32	OUT_SOLENOID_A2	S2
COIL_B1	W31	OUT_SOLENOID_B1	S4
COIL_B2	W30	OUT_SOLENOID_B2	S5
LOW1	W21	OUT_LOW1	S8
LOW2	W29	OUT_LOW2	W1
LOW3_DUAL	W38	OUT_LOW3_DUAL	S7
LOW4_DUAL	W34	OUT_LOW4_DUAL	W4
LOW5_MAIN	W40	OUT_LOW5_MAIN	W13
LOW6_DIODE	W25	OUT_LOW6_DIODE	W3
LOW7_HIGH1	W39	OUT_LOW7_PULLUP	W9
LOW8_HIGH2	W37	OUT_LOW8_PULLUP	S12
LOW9	W27	OUT_LOW9	S14
LOW10	W26	OUT_LOW10	W2
LOW11	W35	OUT_LOW11	S10
LOW12	W36	OUT_LOW12	S13
		OUT_HIGH1	W8
		OUT_HIGH2	S9

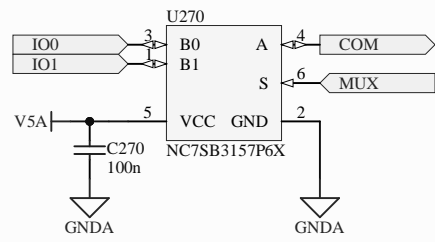


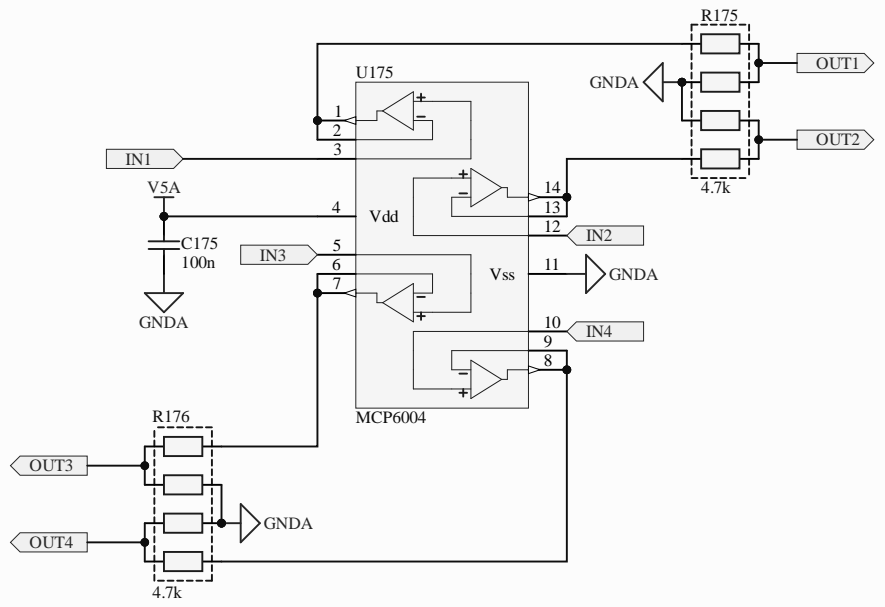
* These can be removed in the board compilation file

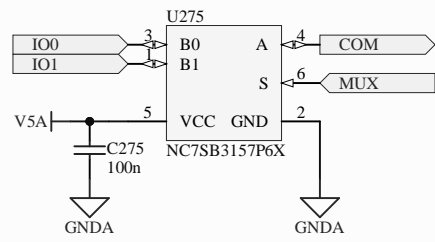


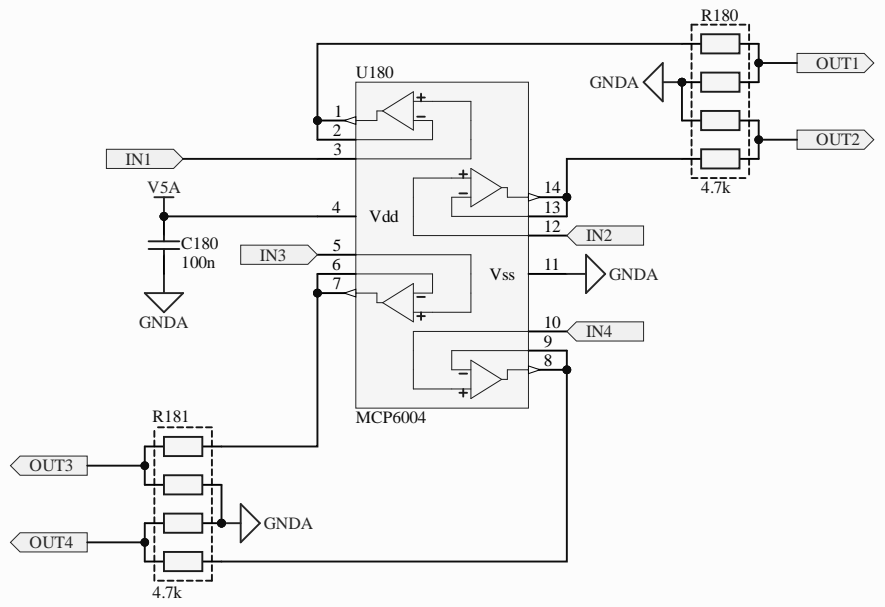


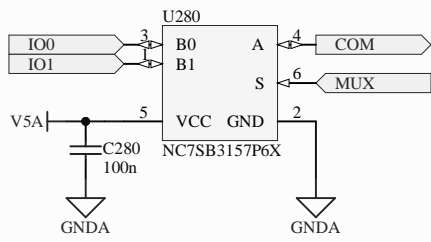


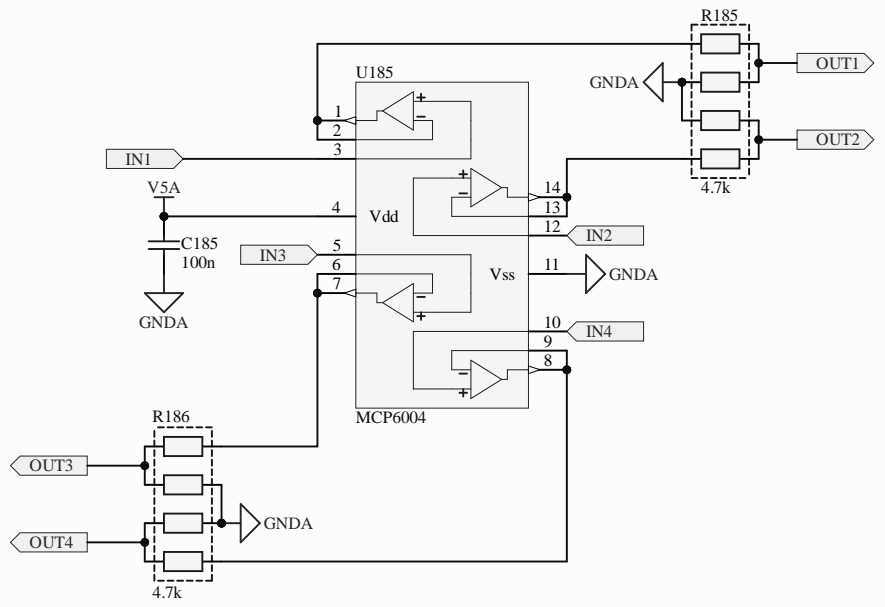


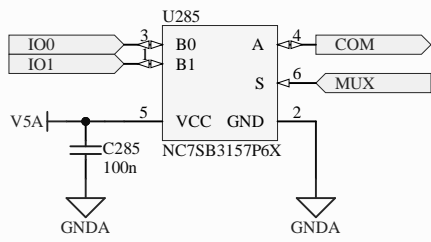


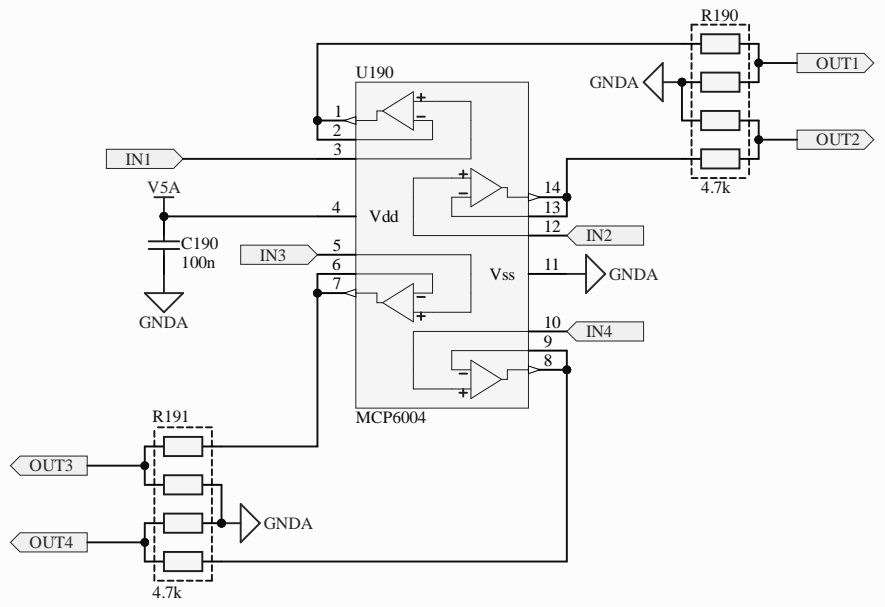


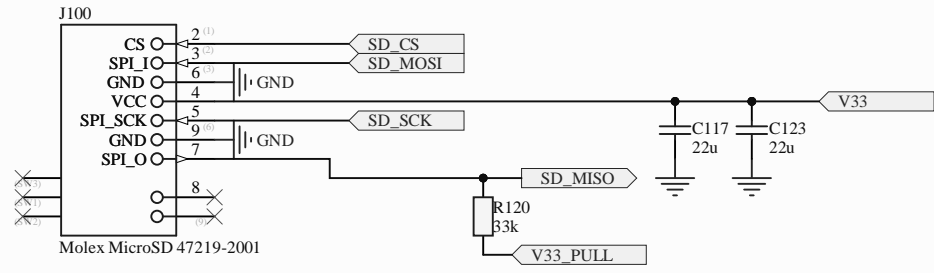


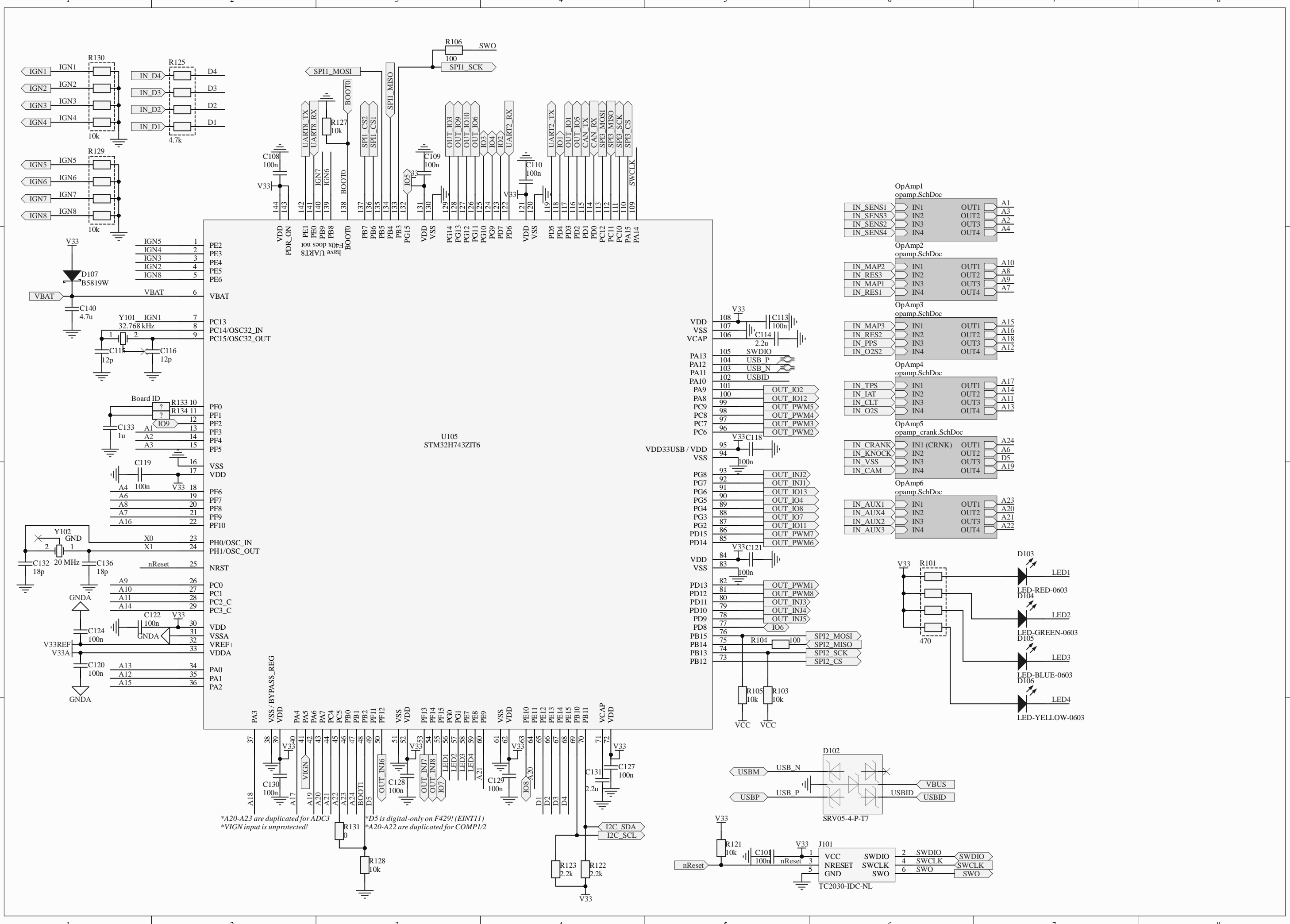










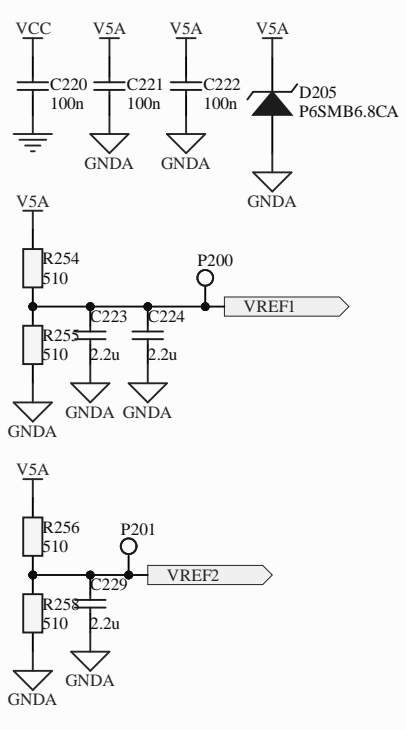
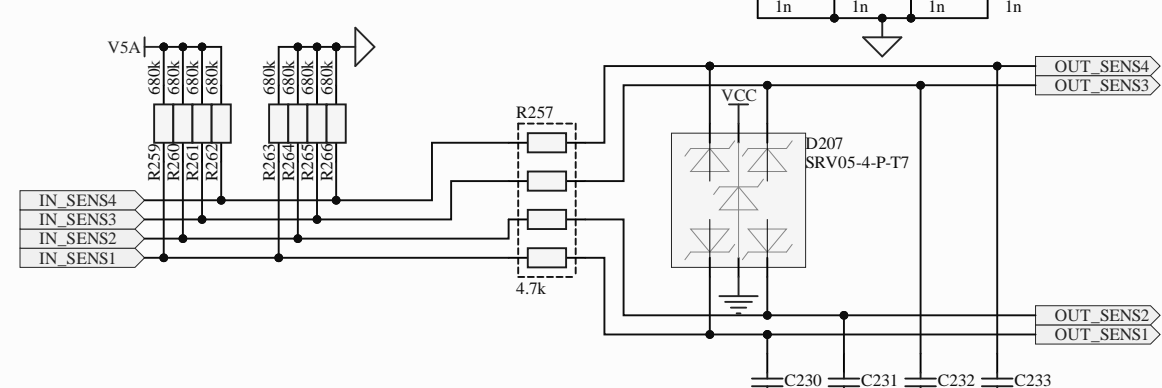
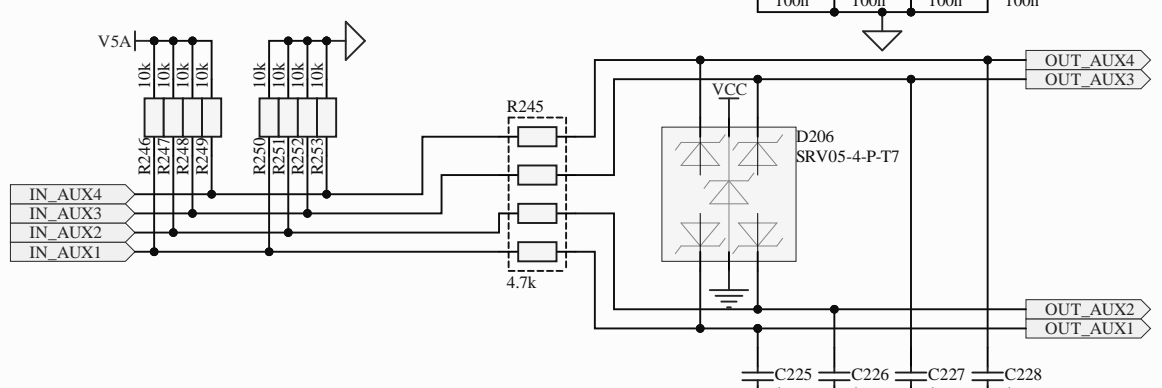
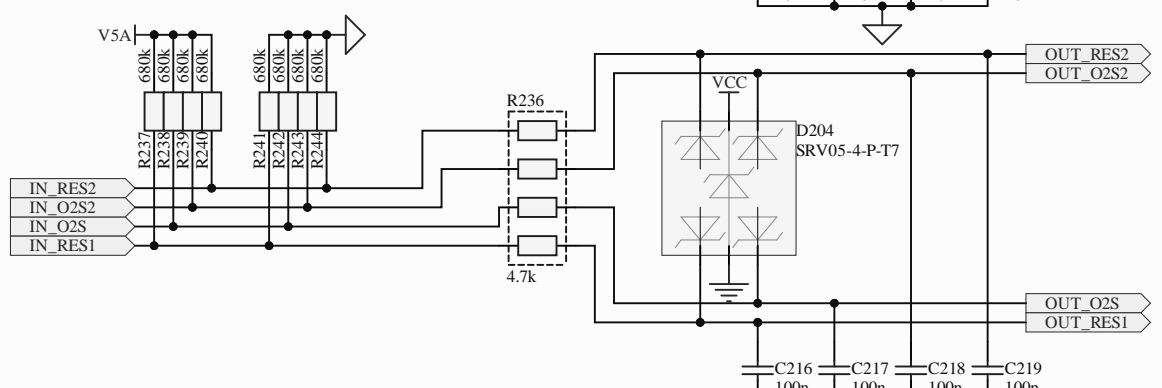
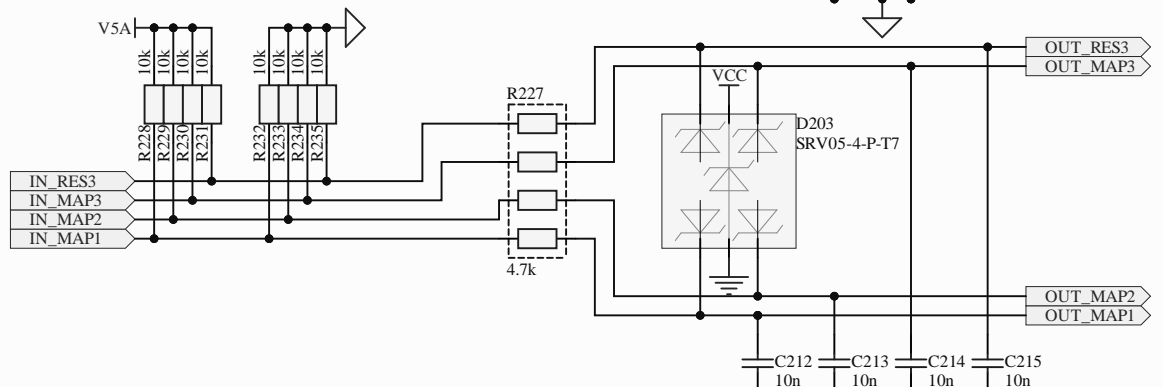
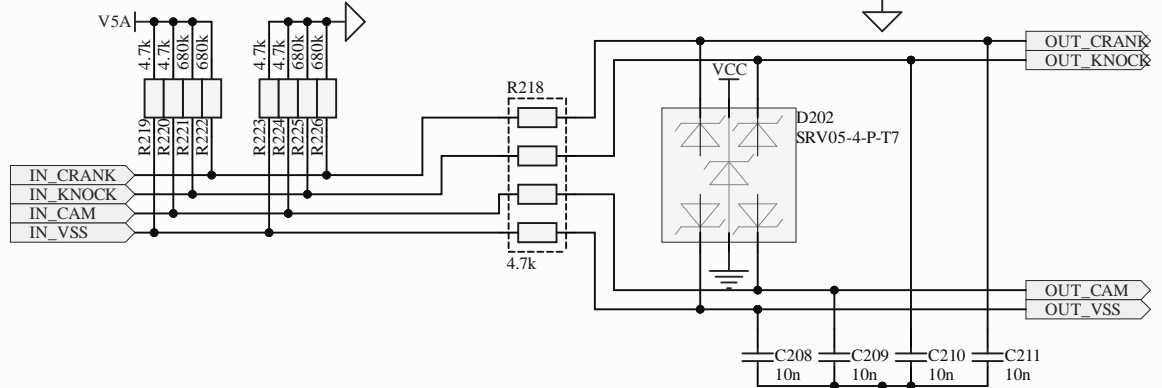
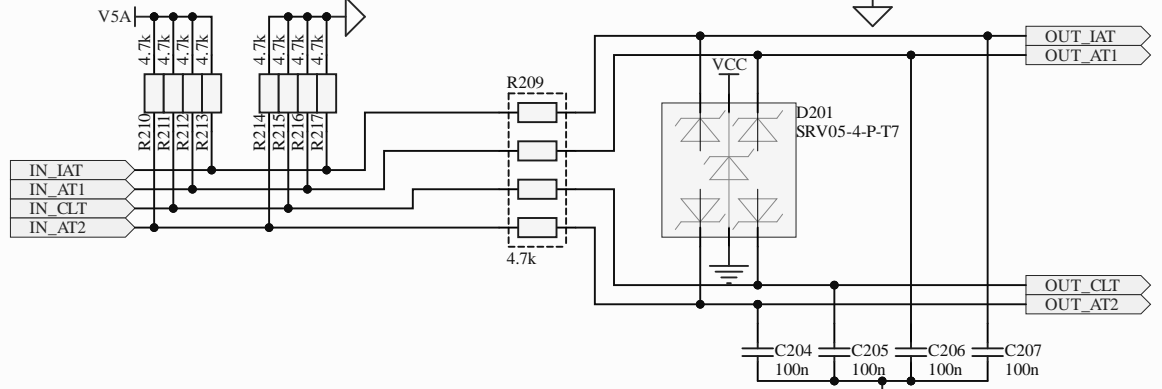
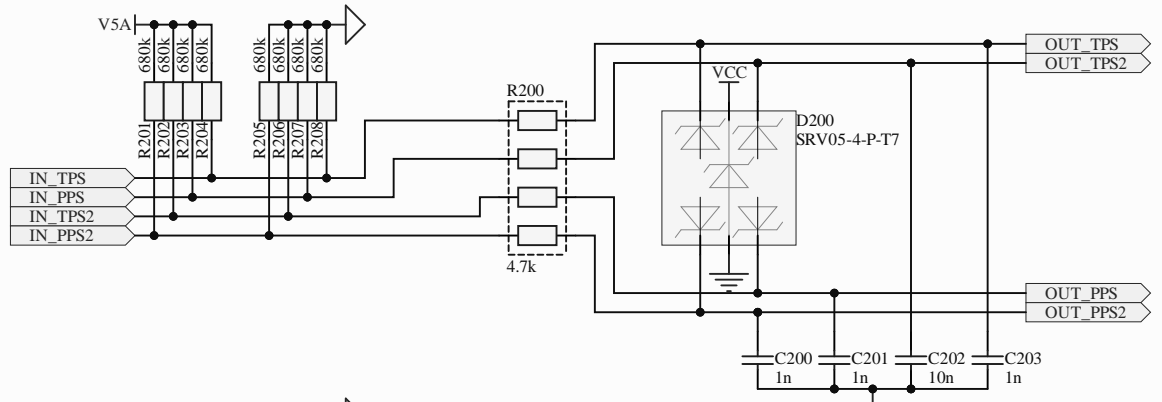


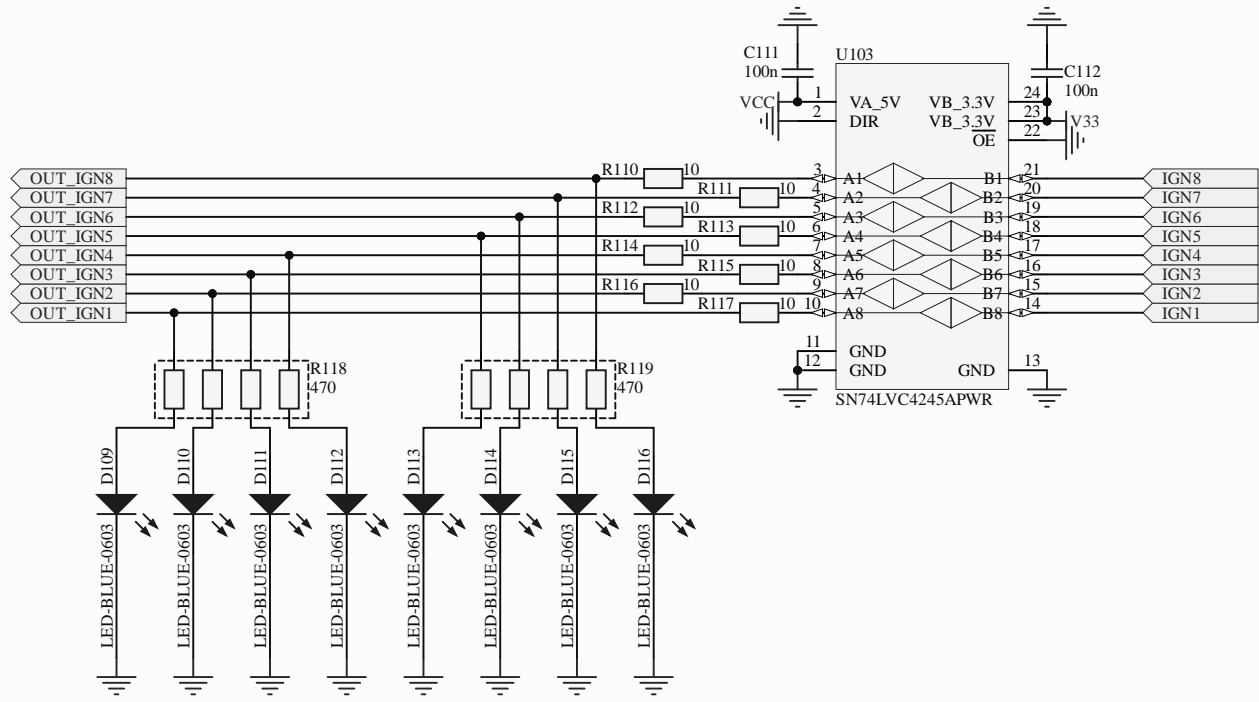
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 *VIGN input is unprotected!

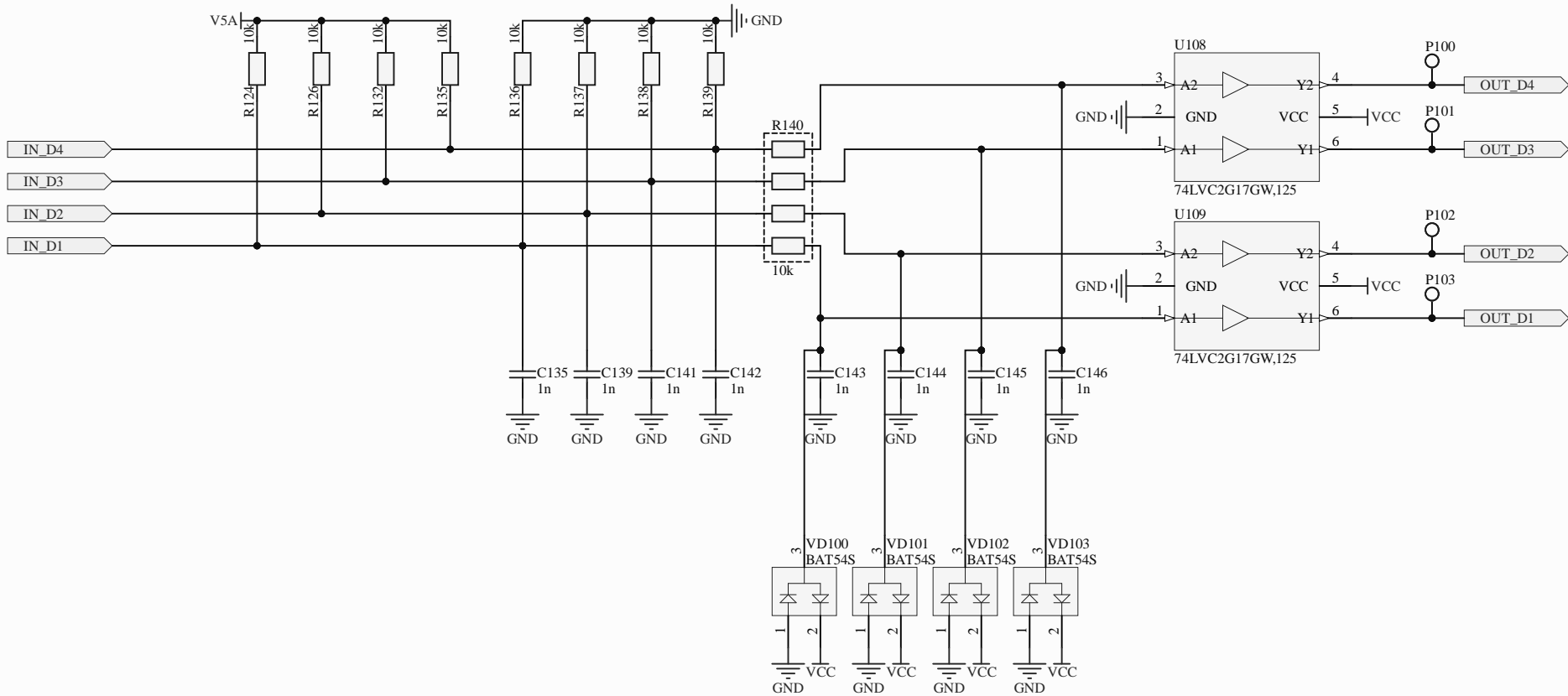
*D5 is digital-only on F429! (EINT11)
 *A20-A22 are duplicated for COMP1/2

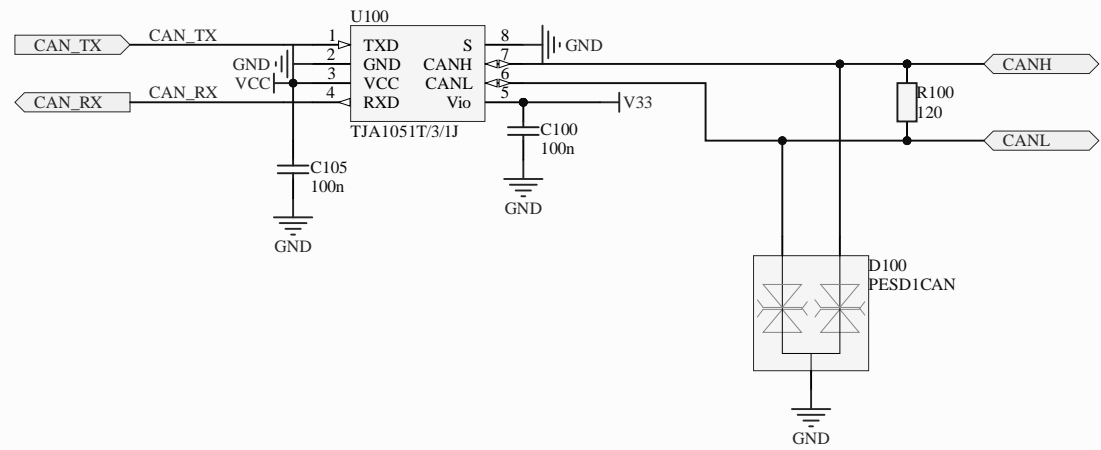
A
B
C
D
E
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G
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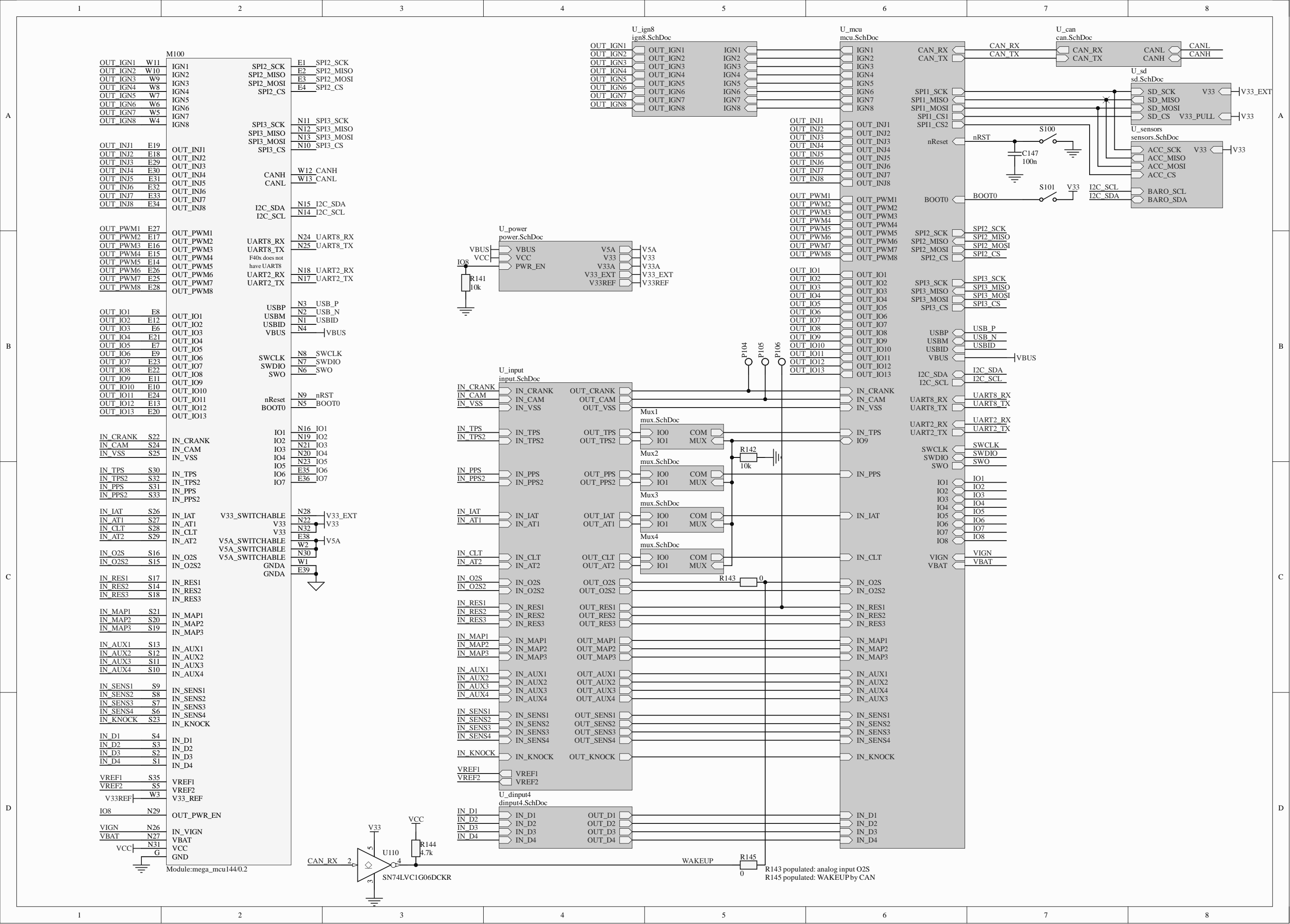
A
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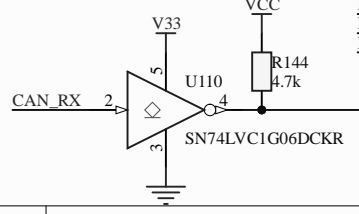
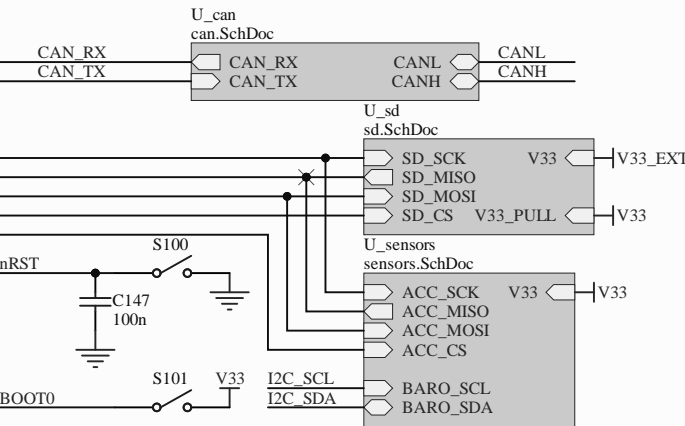
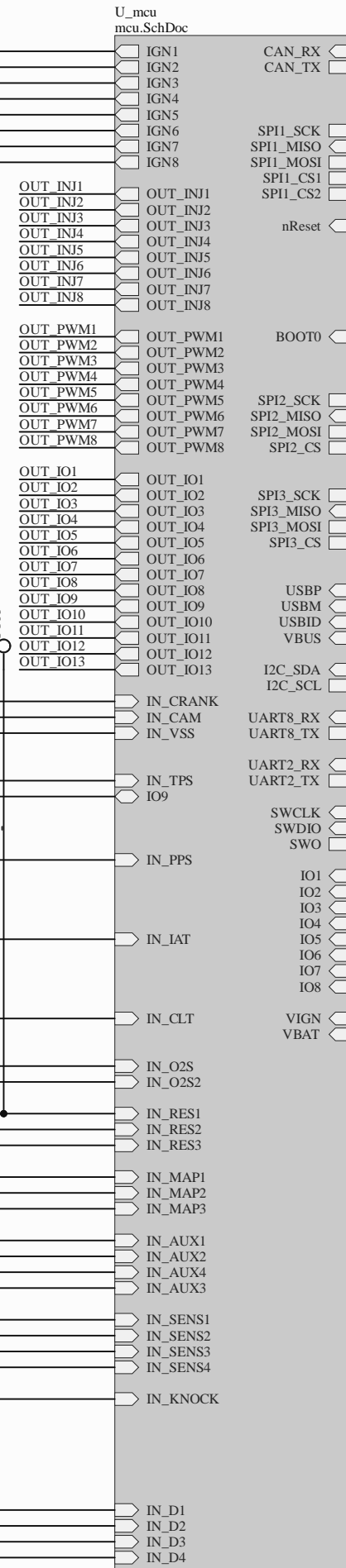
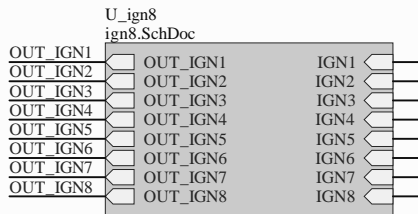
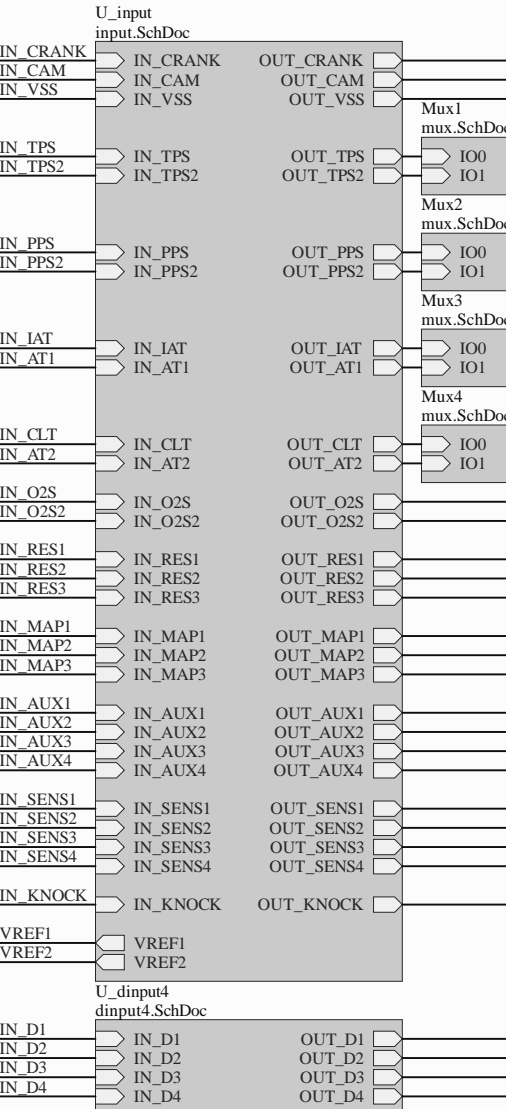
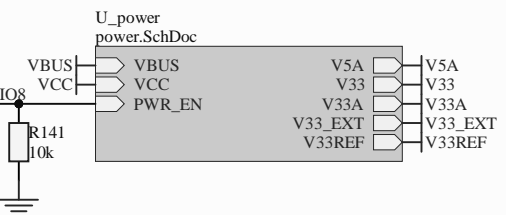






Pin	Signal	Module
W11	IGN1	M100
W10	IGN2	M100
W9	IGN3	M100
W8	IGN4	M100
W7	IGN5	M100
W6	IGN6	M100
W5	IGN7	M100
W4	IGN8	M100
E19	OUT_INJ1	M100
E18	OUT_INJ2	M100
E29	OUT_INJ3	M100
E30	OUT_INJ4	M100
E31	OUT_INJ5	M100
E32	OUT_INJ6	M100
E33	OUT_INJ7	M100
E34	OUT_INJ8	M100
E27	OUT_PWM1	M100
E17	OUT_PWM2	M100
E16	OUT_PWM3	M100
E15	OUT_PWM4	M100
E14	OUT_PWM5	M100
E26	OUT_PWM6	M100
E25	OUT_PWM7	M100
E28	OUT_PWM8	M100
E8	OUT_IO1	M100
E12	OUT_IO2	M100
E6	OUT_IO3	M100
E21	OUT_IO4	M100
E7	OUT_IO5	M100
E9	OUT_IO6	M100
E23	OUT_IO7	M100
E22	OUT_IO8	M100
E11	OUT_IO9	M100
E10	OUT_IO10	M100
E24	OUT_IO11	M100
E13	OUT_IO12	M100
E20	OUT_IO13	M100
S22	IN_CRANK	M100
S24	IN_CAM	M100
S25	IN_VSS	M100
S30	IN_TPS	M100
S32	IN_TPS2	M100
S31	IN_PPS	M100
S33	IN_PPS2	M100
S26	IN_IAT	M100
S27	IN_AT1	M100
S28	IN_CLT	M100
S29	IN_AT2	M100
S16	IN_O2S	M100
S15	IN_O2S2	M100
S17	IN_RES1	M100
S14	IN_RES2	M100
S18	IN_RES3	M100
S21	IN_MAP1	M100
S20	IN_MAP2	M100
S19	IN_MAP3	M100
S13	IN_AUX1	M100
S12	IN_AUX2	M100
S11	IN_AUX3	M100
S10	IN_AUX4	M100
S9	IN_SENS1	M100
S8	IN_SENS2	M100
S7	IN_SENS3	M100
S6	IN_SENS4	M100
S23	IN_KNOCK	M100
S4	IN_D1	M100
S3	IN_D2	M100
S2	IN_D3	M100
S1	IN_D4	M100
S35	VREF1	M100
S5	VREF2	M100
W3	V33REF	M100
N29	OUT_PWR_EN	M100
N26	IN_VIGN	M100
N27	VBAT	M100
N31	VCC	M100
G	GND	M100

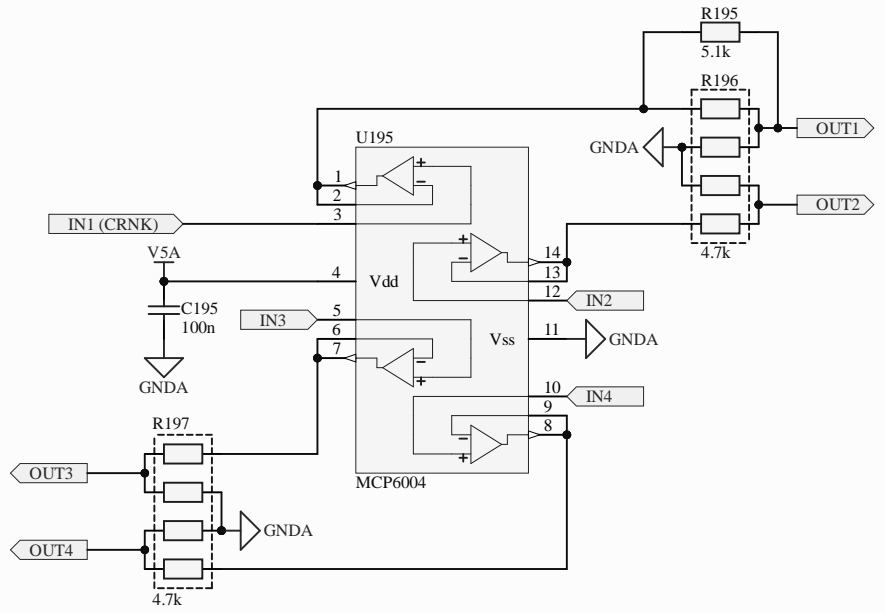
Pin	Signal	Module
E1	SPI2_SCK	M100
E2	SPI2_MISO	M100
E3	SPI2_MOSI	M100
E4	SPI2_CS	M100
N11	SPI3_SCK	M100
N12	SPI3_MISO	M100
N13	SPI3_MOSI	M100
N10	SPI3_CS	M100
W12	CANH	M100
W13	CANL	M100
N15	I2C_SDA	M100
N14	I2C_SCL	M100
N24	UART8_RX	M100
N25	UART8_TX	M100
N18	UART2_RX	M100
N17	UART2_TX	M100
N3	USB_P	M100
N2	USB_N	M100
N1	USBID	M100
N4	VBUS	M100
N8	SWCLK	M100
N7	SWDIO	M100
N6	SWO	M100
N9	nRST	M100
N5	BOOT0	M100
N16	IO1	M100
N19	IO2	M100
N21	IO3	M100
N20	IO4	M100
N23	IO5	M100
E35	IO6	M100
E36	IO7	M100
N28	V33_SWITCHABLE	M100
N22	V33	M100
N32	V33	M100
E38	V5A_SWITCHABLE	M100
W2	V5A	M100
N30	V5A_SWITCHABLE	M100
W1	GND	M100
E39	GND	M100

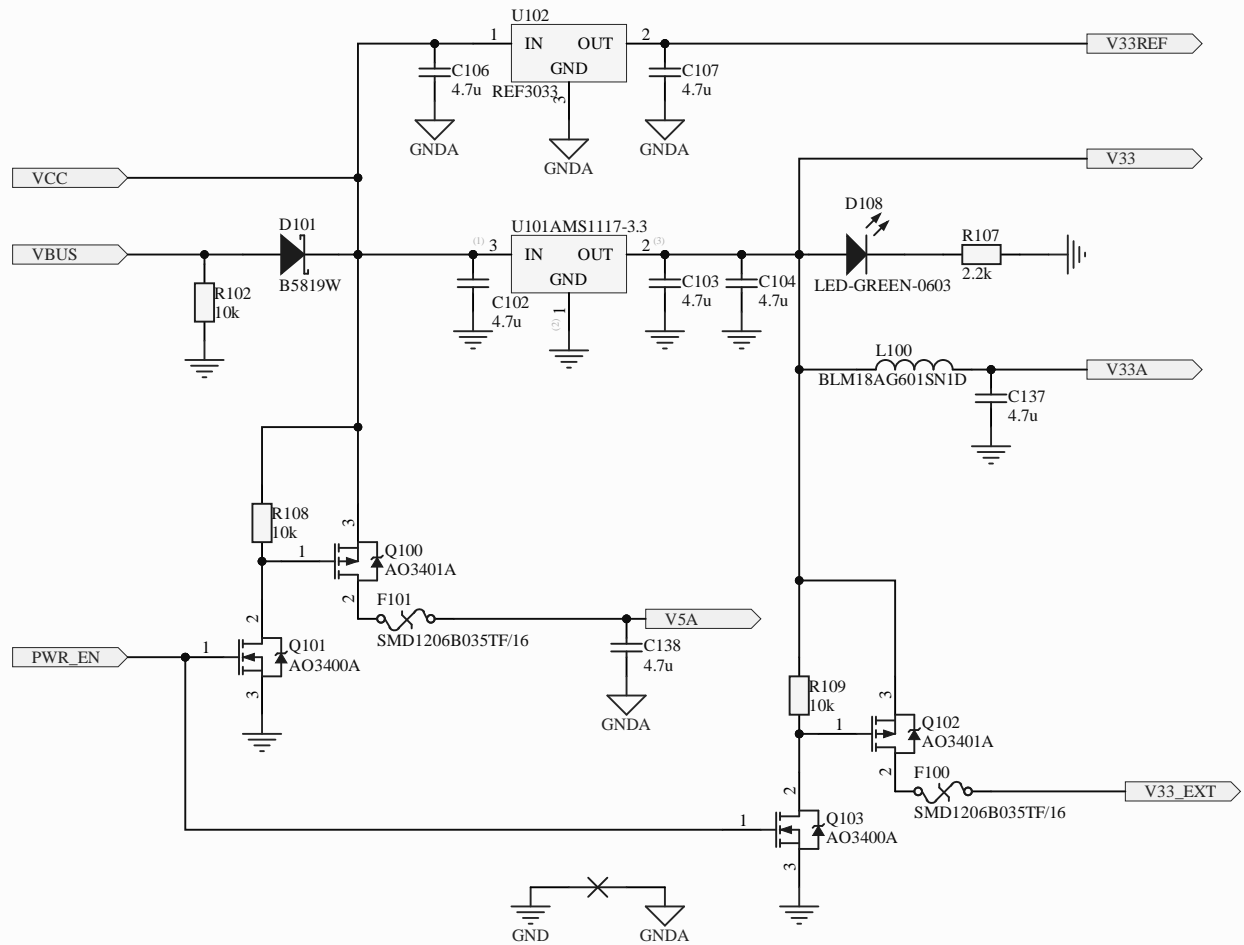


R143 populated: analog input O2S
R145 populated: WAKEUP by CAN

Module: mega_mcu144/0.2

More accurate threshold for "raw" connection of VR sensors





Title		
Size	Number	Revision
A4		
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