

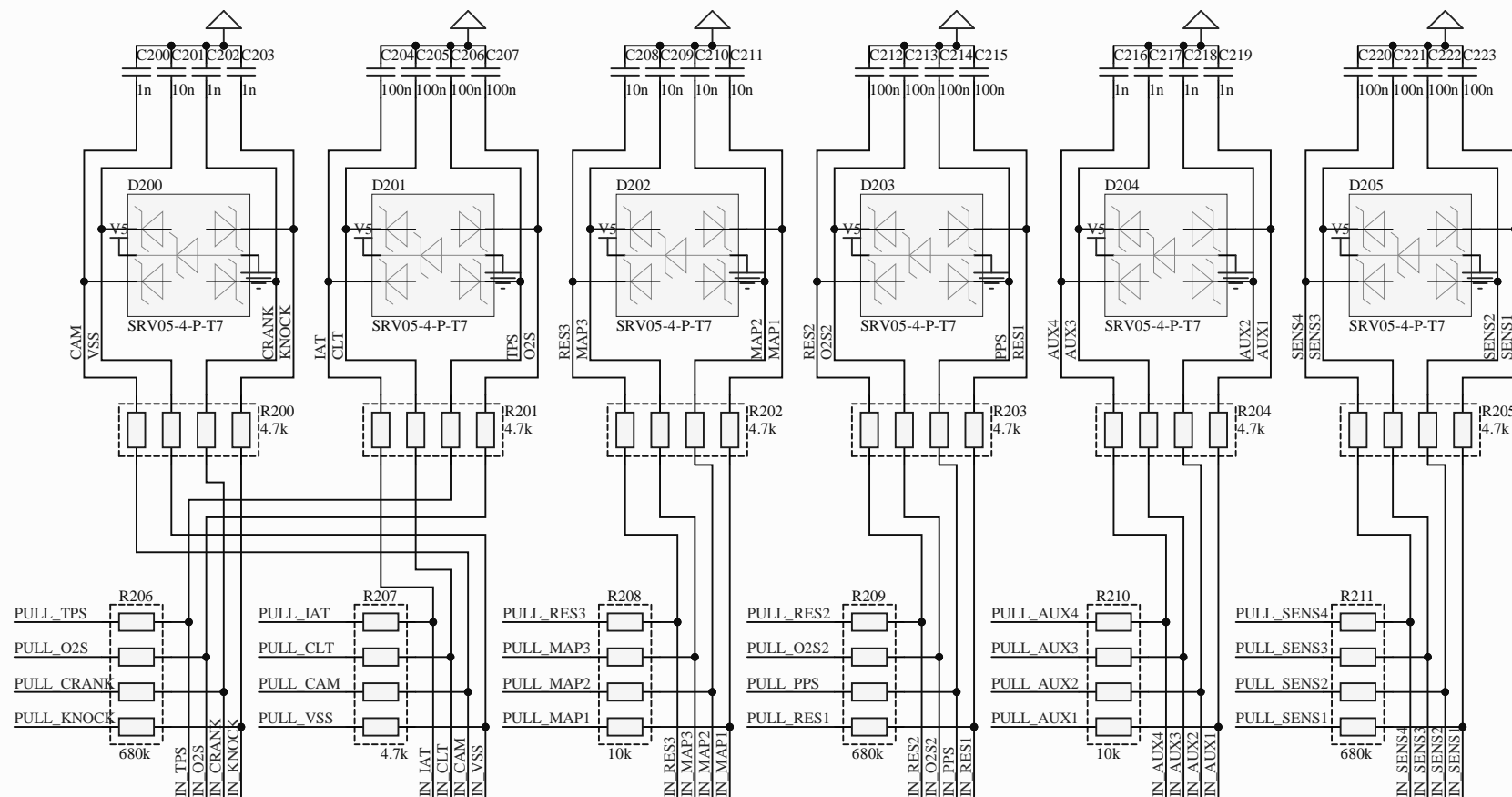
Board info

J11 - J18: FOR OFF ROAD PURPOSES ONLY. This is not for applications with emissions or safety regulations (AKA not for street uses). This is for closed stages, track and equipment.

Hellen-One-PCB-Logo

M200D			
PULL_CRANK J21	PULL_CRANK	PULL_MAP1	J14 PULL_MAP1
PULL_CAM J17	PULL_CAM	PULL_MAP2	J13 PULL_MAP2
PULL_VSS J18	PULL_VSS	PULL_MAP3	J12 PULL_MAP3
PULL_TPS J19	PULL_TPS	PULL_AUX1	J10 PULL_AUX1
PULL_PPS J5	PULL_PPS	PULL_AUX2	J9 PULL_AUX2
PULL_IAT J15	PULL_IAT	PULL_AUX3	J8 PULL_AUX3
PULL_CLT J16	PULL_CLT	PULL_AUX4	J7 PULL_AUX4
PULL_O2S J20	PULL_O2S	PULL_SENS1	J26 PULL_SENS1
PULL_O2S2 J4	PULL_O2S2	PULL_SENS2	J25 PULL_SENS2
		PULL_SENS3	J24 PULL_SENS3
		PULL_SENS4	J23 PULL_SENS4
PULL_RES1 J6	PULL_RES1	PULL_KNOCK	J22 PULL_KNOCK
PULL_RES2 J3	PULL_RES2		
PULL_RES3 J11	PULL_RES3		

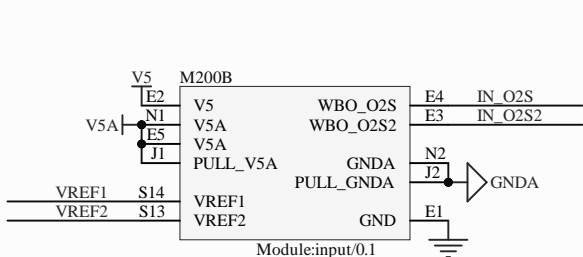
Module:input/0.1



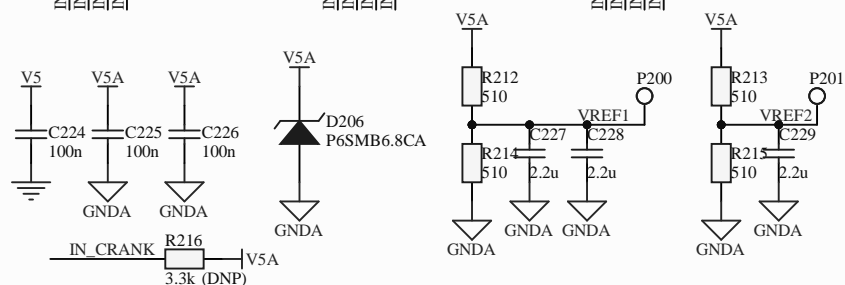
M200C		M200A	
IN_CRANK S8	IN_CRANK	N21 CRANK	
IN_CAM S5	IN_CAM	N19 CAM	
IN_VSS S6	IN_VSS	N20 VSS	
IN_TPS S10	IN_TPS	N17 TPS	
IN_PPS S24	IN_PPS	N5 PPS	
IN_IAT S16	IN_IAT	N15 IAT	
IN_CLT S15	IN_CLT	N16 CLT	
IN_O2S S9	IN_O2S	N18 O2S	
IN_O2S2 S25	IN_O2S2	N4 O2S2	
IN_RES1 S23	IN_RES1	N6 RES1	
IN_RES2 S26	IN_RES2	N3 RES2	
IN_RES3 S22	IN_RES3	N11 RES3	
IN_MAP1 S11	IN_MAP1	N14 MAP1	
IN_MAP2 S12	IN_MAP2	N13 MAP2	
IN_MAP3 S19	IN_MAP3	N12 MAP3	
IN_AUX1 S17	IN_AUX1	N10 AUX1	
IN_AUX2 S18	IN_AUX2	N9 AUX2	
IN_AUX3 S20	IN_AUX3	N8 AUX3	
IN_AUX4 S21	IN_AUX4	N7 AUX4	
IN_SENS1 S1	IN_SENS1	N26 SENS1	
IN_SENS2 S2	IN_SENS2	N25 SENS2	
IN_SENS3 S3	IN_SENS3	N24 SENS3	
IN_SENS4 S4	IN_SENS4	N23 SENS4	
IN_KNOCK S7	IN_KNOCK	N22 KNOCK	

Module:input/0.1

Module:input/0.1



Module:input/0.1



A

A

B

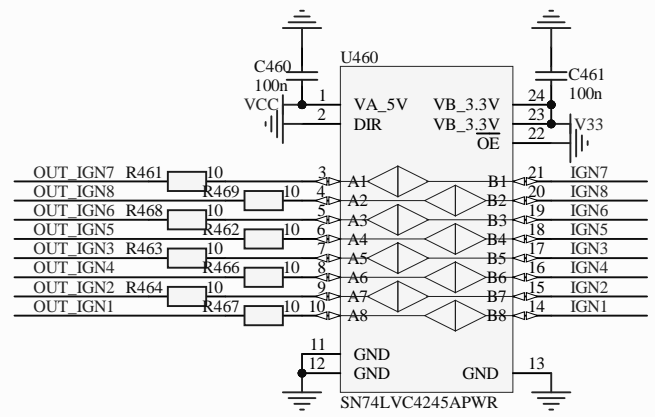
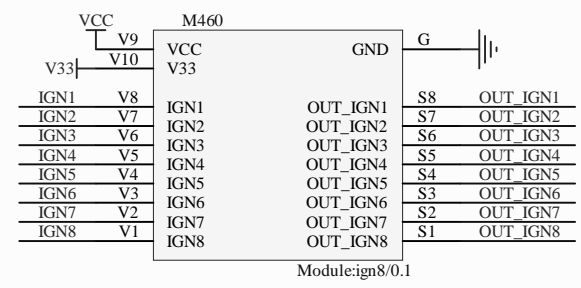
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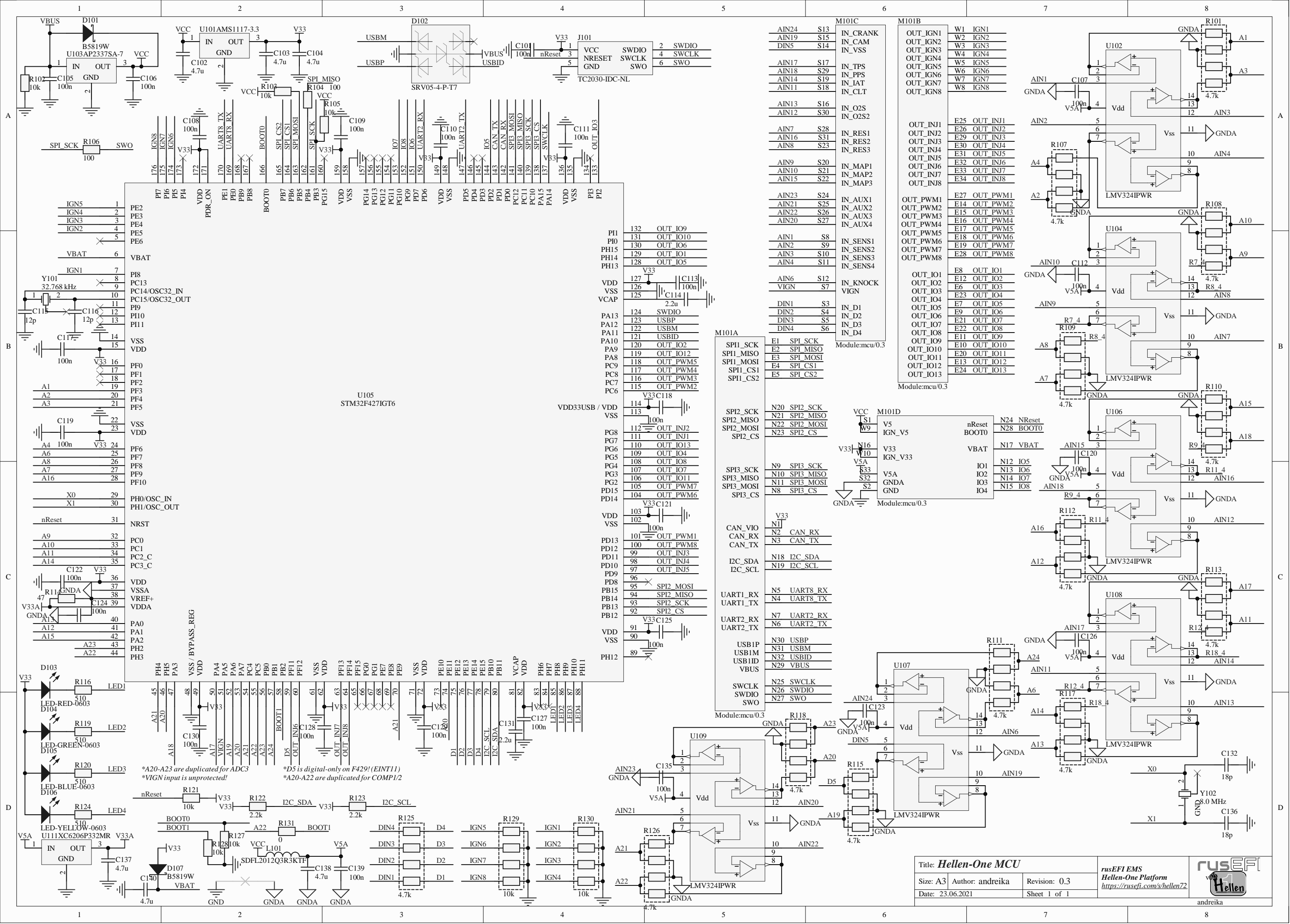
C

C

D

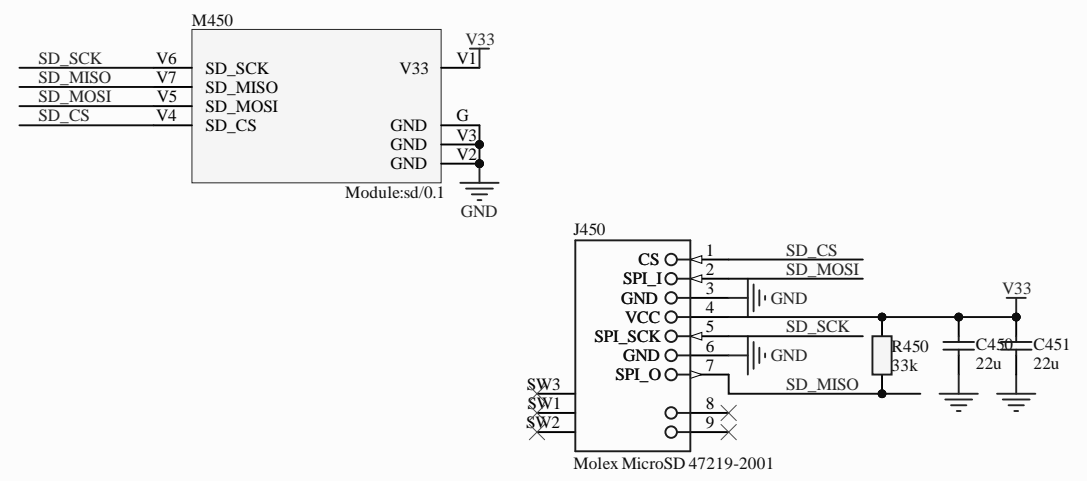
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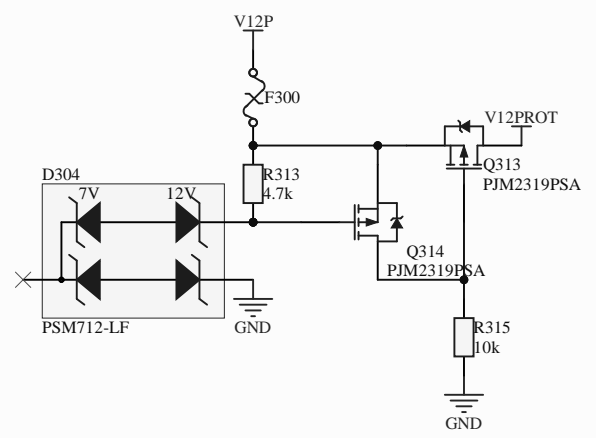
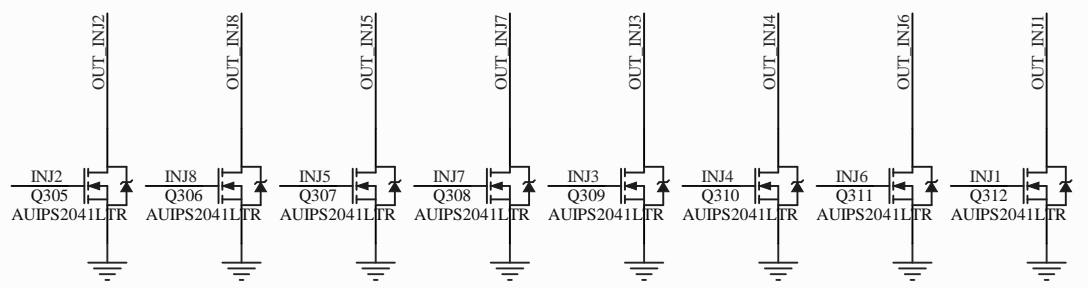
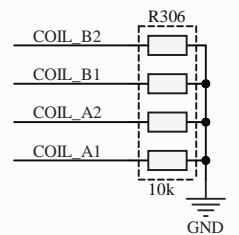
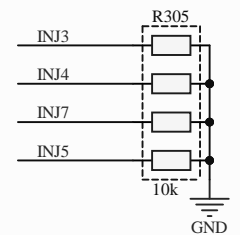
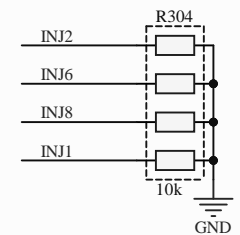
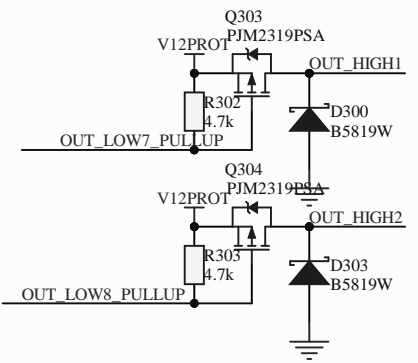
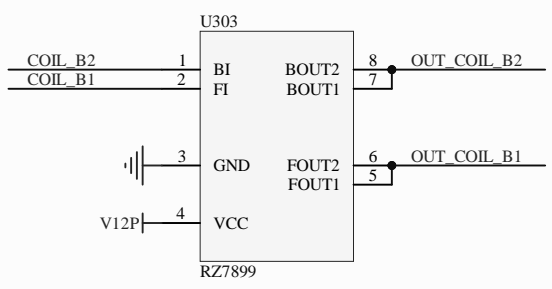
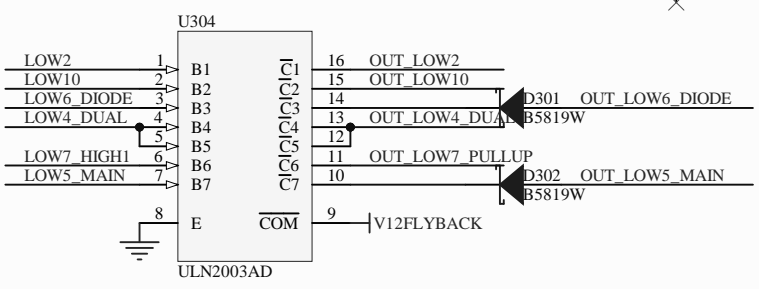
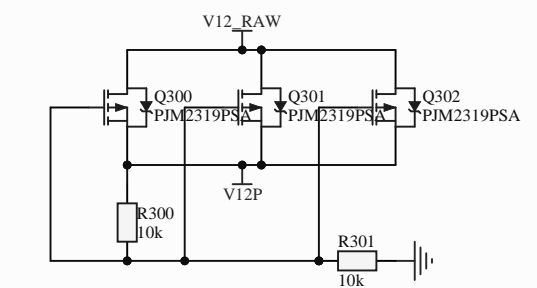
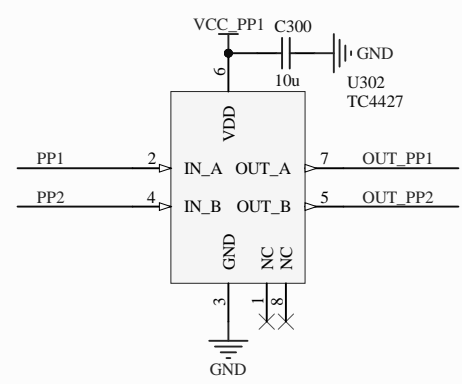
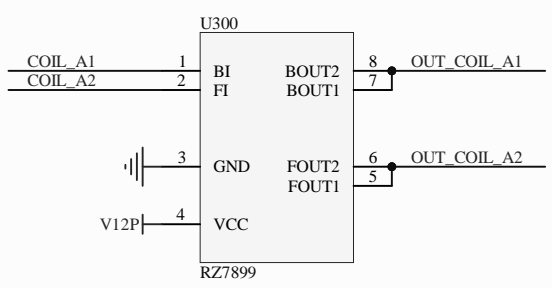
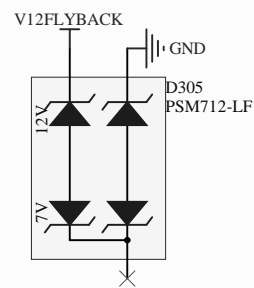
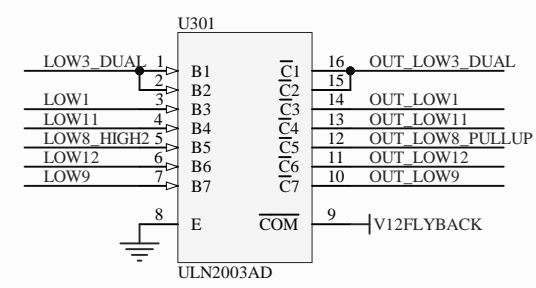




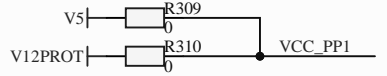
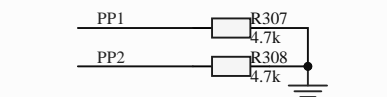
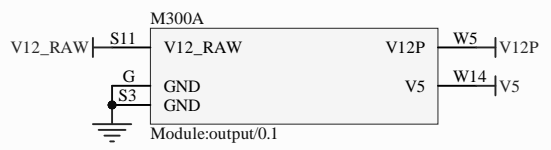
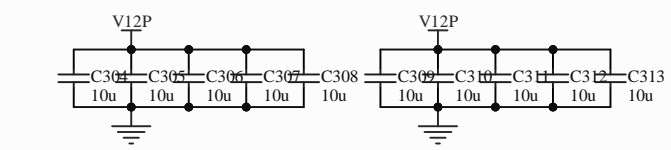
IGN5	1	PE2	132	OUT_IO9
IGN4	2	PE3	131	OUT_IO10
IGN3	3	PE4	130	OUT_IO6
IGN2	4	PE5	129	OUT_IO1
	5	PE6	128	OUT_IO5
VBAT	6	VBAT	VDD	126
IGN1	7	PI8	VSS	125
	8	PC13	VCAP	124
	9	PC14/OSC32_IN	PA13	SWDIO
	10	PC15/OSC32_OUT	PA12	USBP
	11	PI9	PA11	USBM
	12	PI10	PA10	USBID
	13	PI11	PA9	OUT_IO2
	14		PA8	OUT_IO12
	15	VSS	PA9	OUT_PWM5
	16	VDD	PC9	OUT_PWM4
	17	PF0	PC8	OUT_PWM3
	18	PF1	PC7	OUT_PWM2
	19	PF2	PC6	
	20	PF4		
	21	PF5		
	22	VSS		
	23	VDD		
	24	PF6		
	25	PF7		
	26	PF8		
	27	PF9		
	28	PF10		
	29	PH0/OSC_IN		
	30	PH1/OSC_OUT		
	31	NRST		
	32	PC0		
	33	PC1		
	34	PC2_C		
	35	PC3_C		
	36	VDD		
	37	VSSA		
	38	VREF+		
	39	VDDA		
	40	PA0		
	41	PA1		
	42	PA2		
	43	PH2		
	44	PH3		
	45	PH4		
	46	PH5		
	47	PA3		
	48	VSS / BYPASS_REG		
	49	VDD		
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	51	PA5		
	52	PA6		
	53	PA7		
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	128	PG61		
	129	PG62		
	130	PG63		
	131	PG64		
	132	PG65		

*A20-A23 are duplicated for ADC3
 *VIGN input is unprotected!
 *D5 is digital-only on F429! (EINT11)
 *A20-A22 are duplicated for COMP1/2

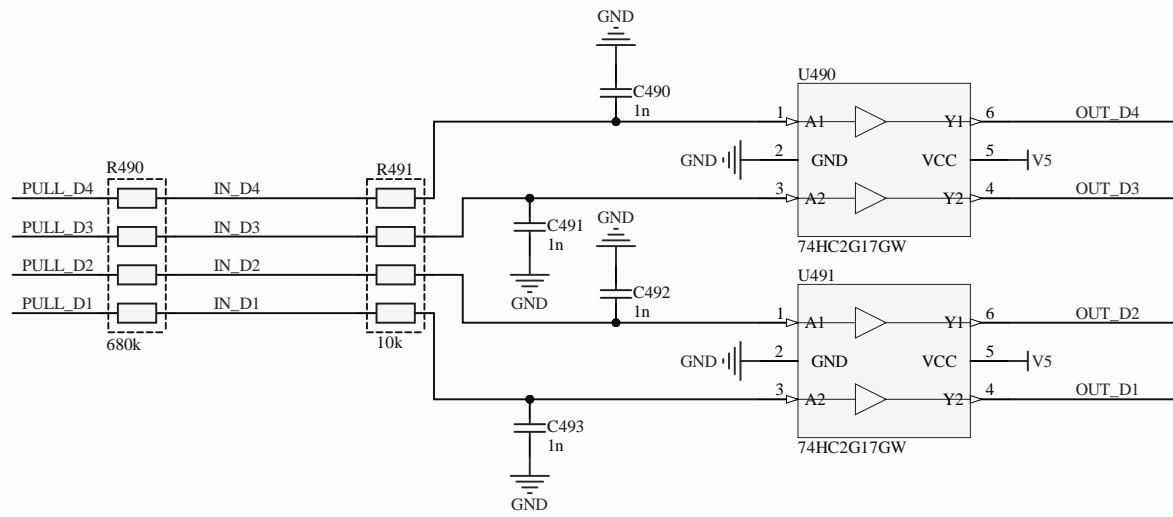
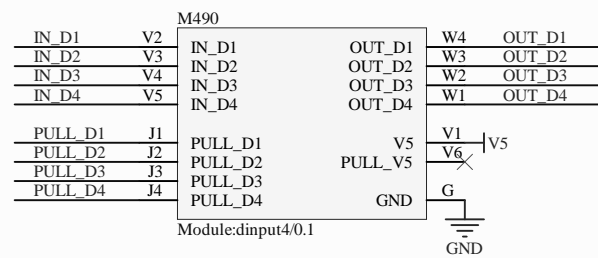


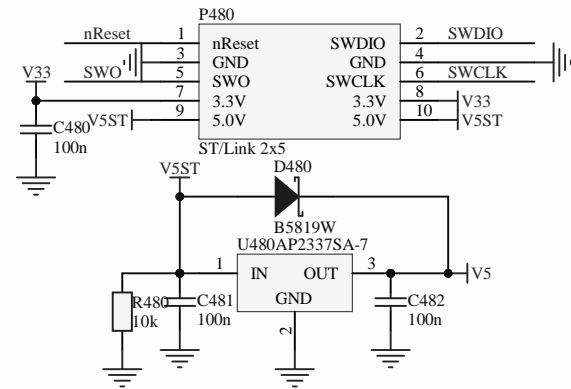
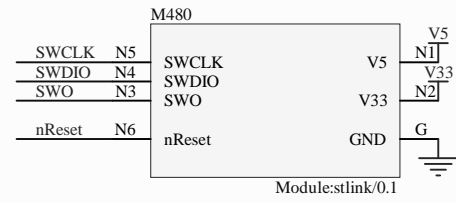


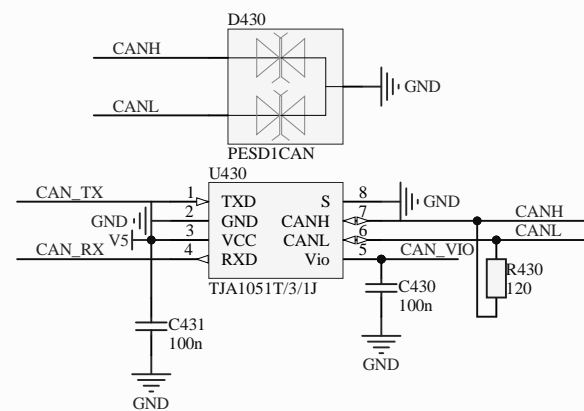
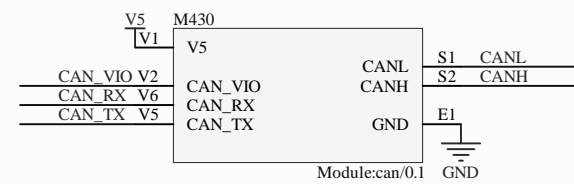
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INJ1	W24	OUT_INJ1	S18
INJ2	W23	OUT_INJ2	S16
INJ3	W20	OUT_INJ3	S17
INJ4	W19	OUT_INJ4	W7
INJ5	W18	OUT_INJ5	W10
INJ6	W17	OUT_INJ6	S15
INJ7	W16	OUT_INJ7	W12
INJ8	W15	OUT_INJ8	W11
PP1	W28	OUT_PP1	W6
PP2	W22	OUT_PP2	S6
COIL_A1	W33	OUT_SOLENOID_A1	S1
COIL_A2	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_LOW4_DUAL	W13
LOW6_DIODE	W25	OUT_LOW5_MAIN	W3
LOW7_HIGH1	W39	OUT_LOW6_DIODE	W9
LOW8_HIGH2	W37	OUT_LOW7_PULLUP	S12
LOW9	W27	OUT_LOW8_PULLUP	S14
LOW10	W26	OUT_LOW9	W2
LOW11	W35	OUT_LOW10	S10
LOW12	W36	OUT_LOW11	S13
		OUT_LOW12	
		OUT_HIGH1	W8
		OUT_HIGH2	S9

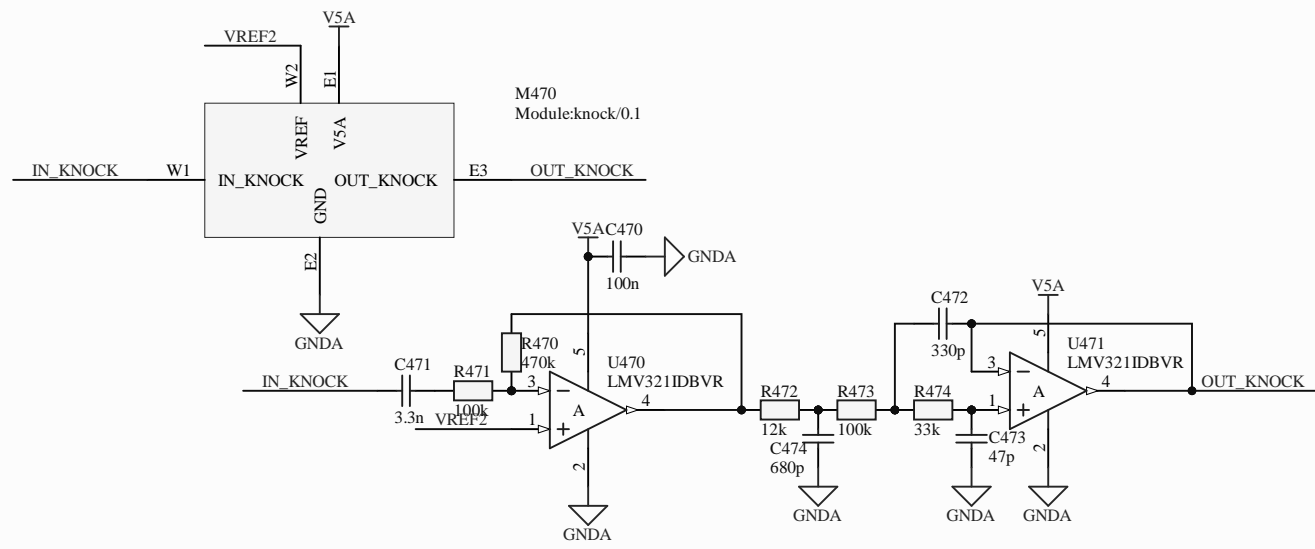


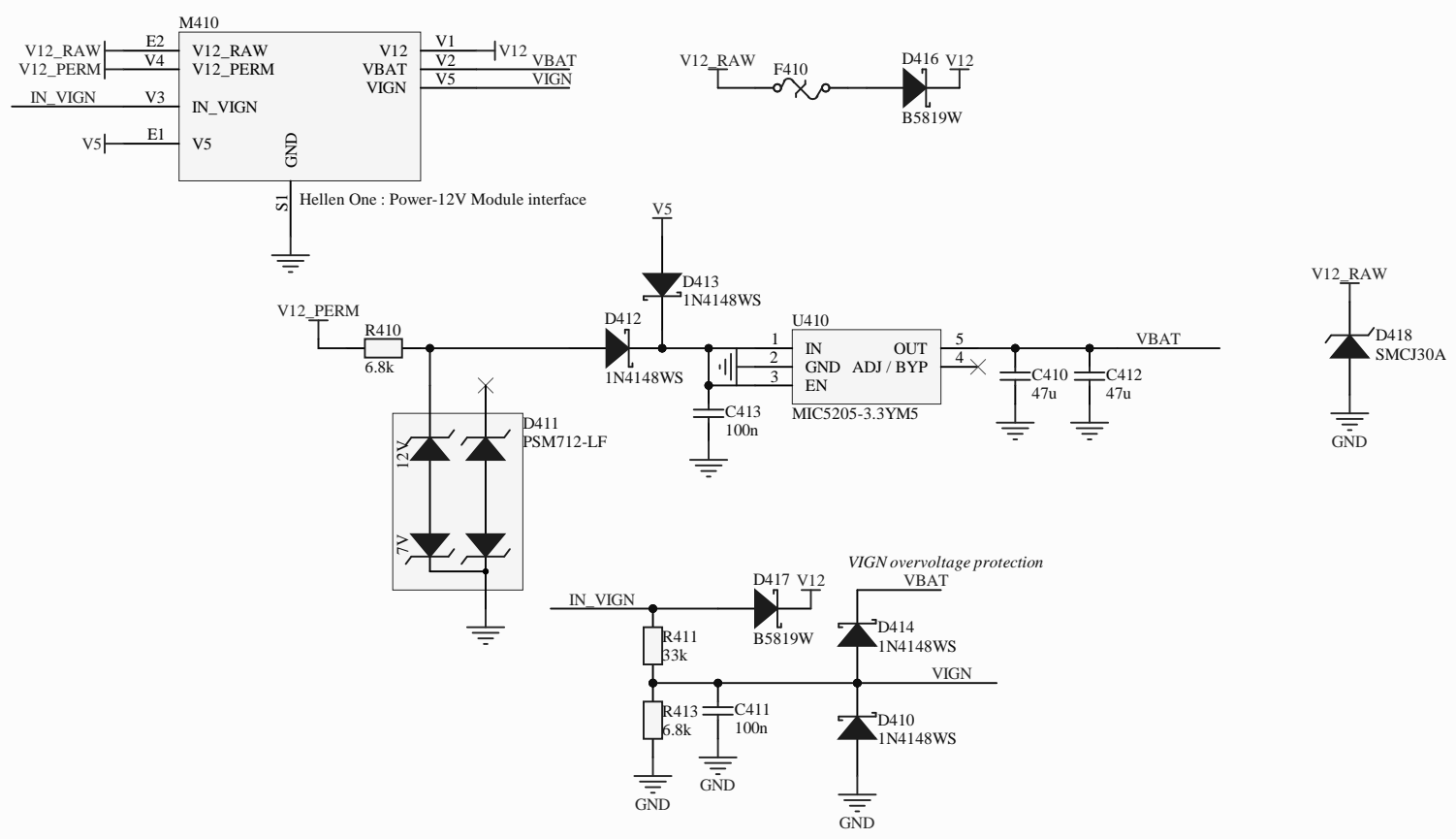
* These can be removed in the board compilation file

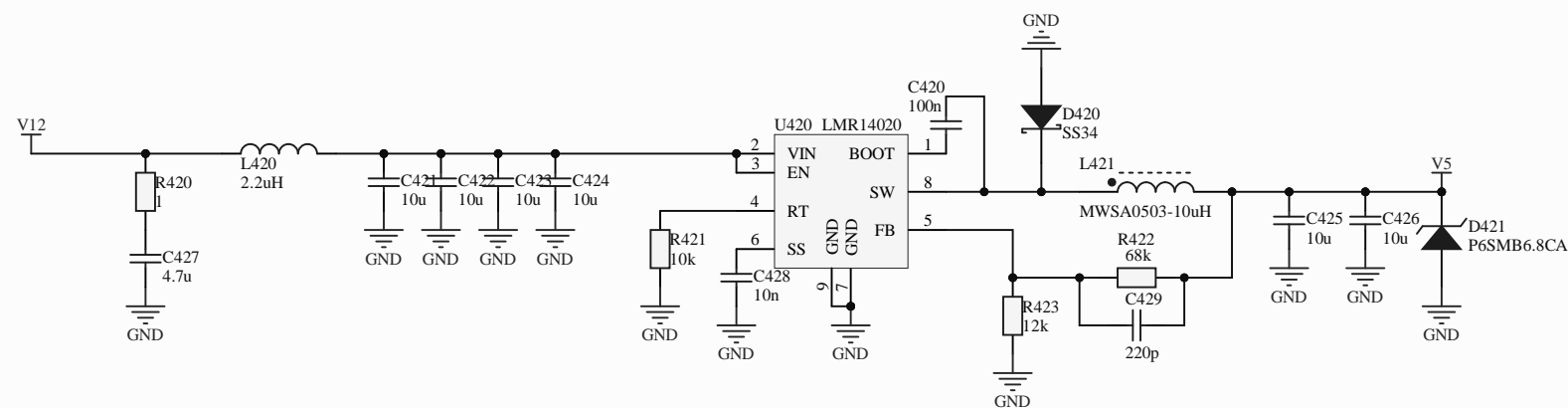
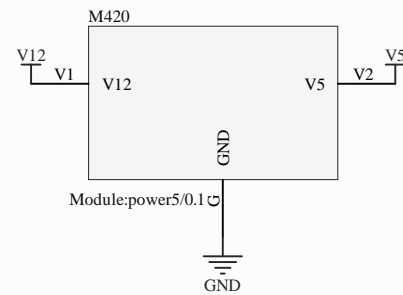


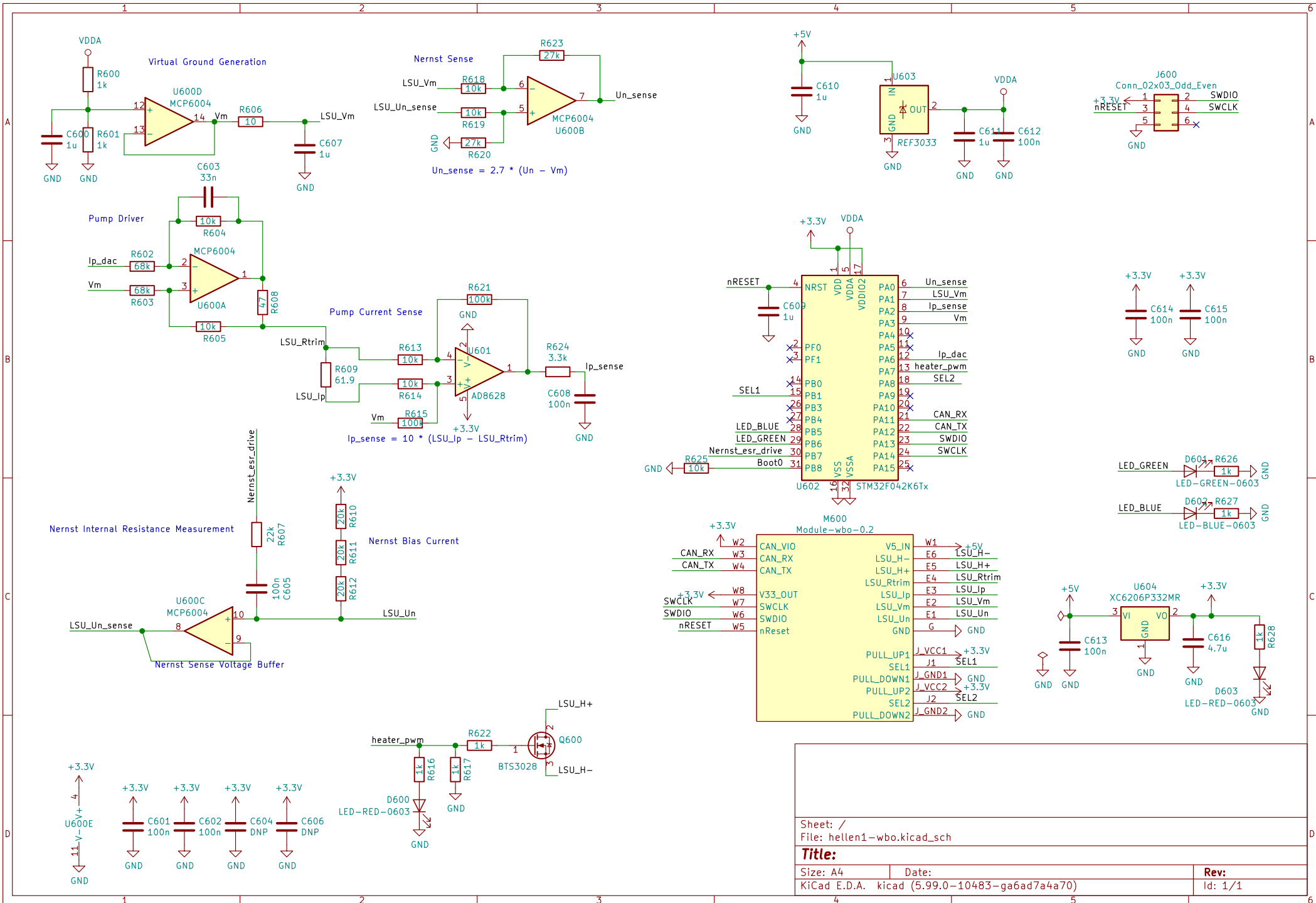












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Rev:	Id: 1/1