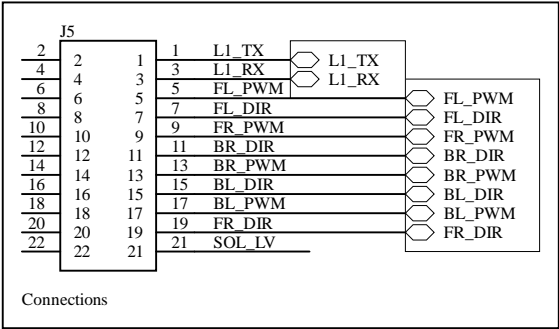
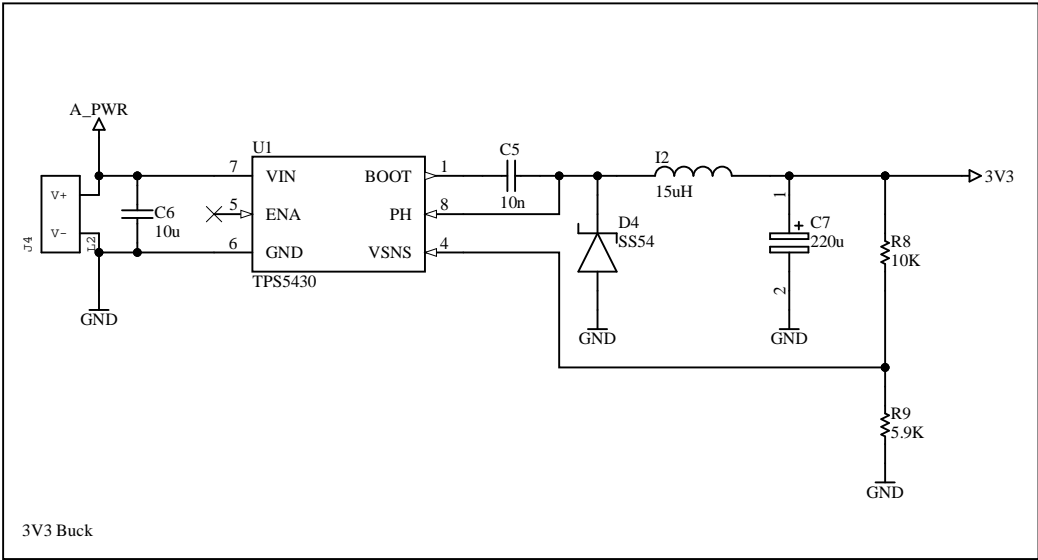
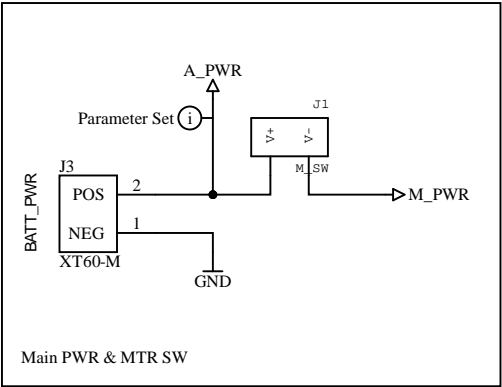
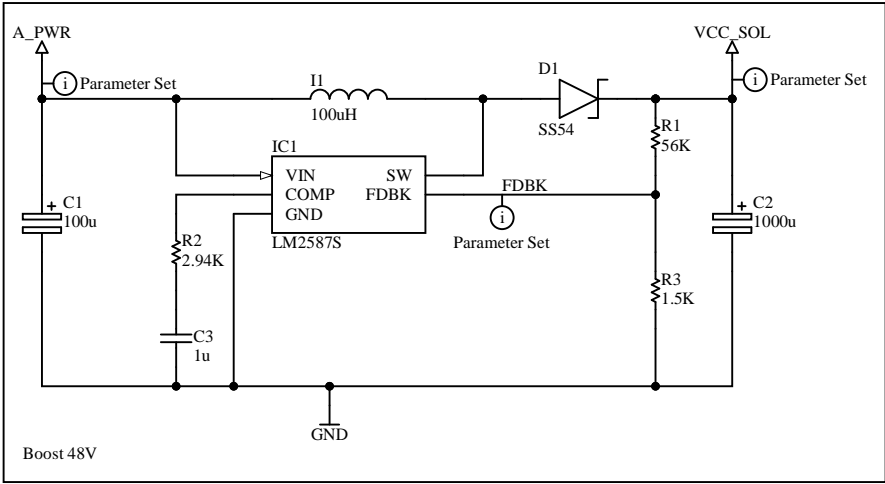
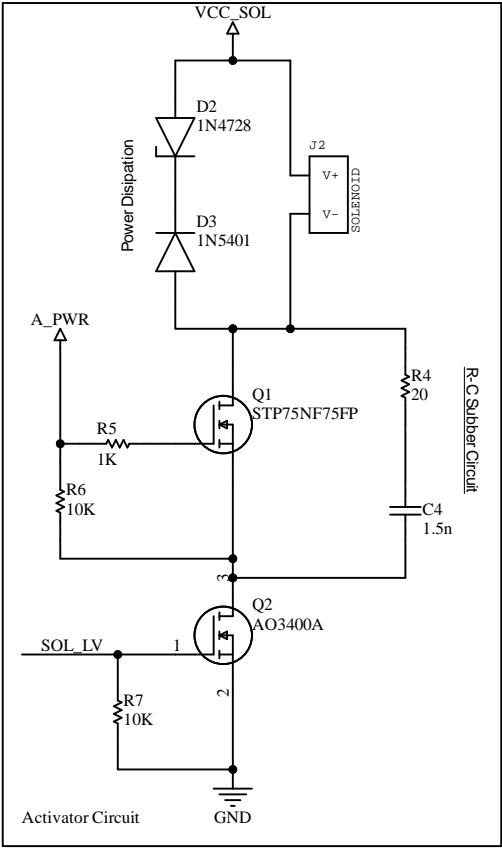


A

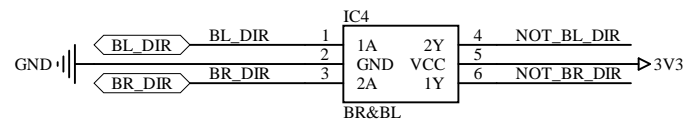
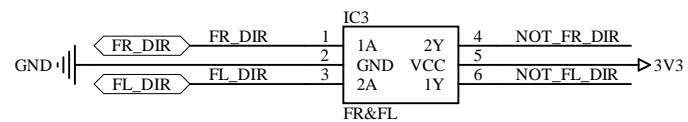
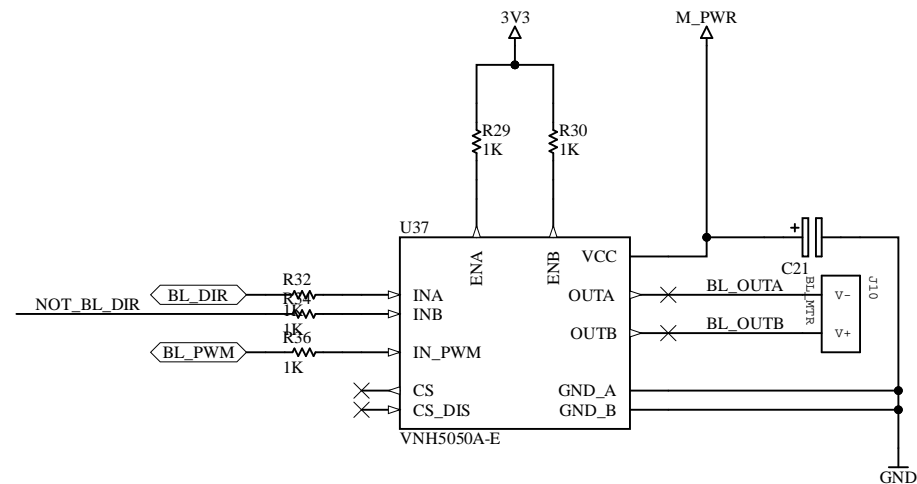
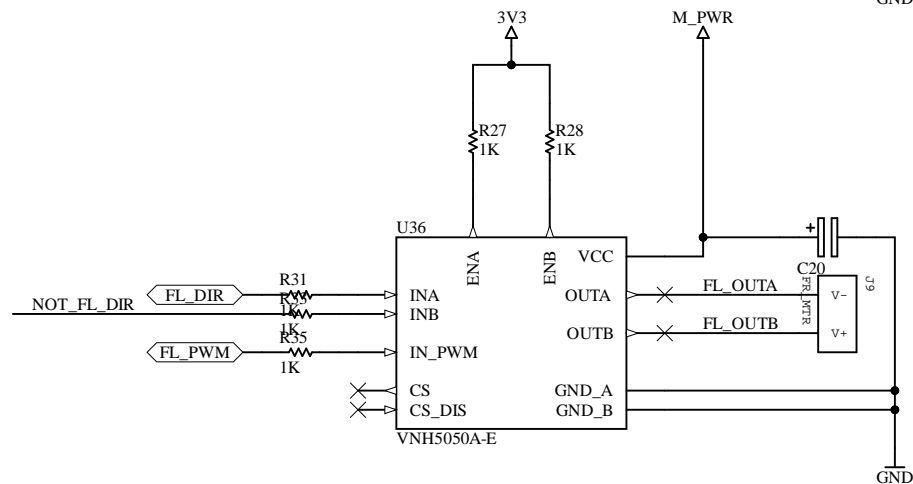
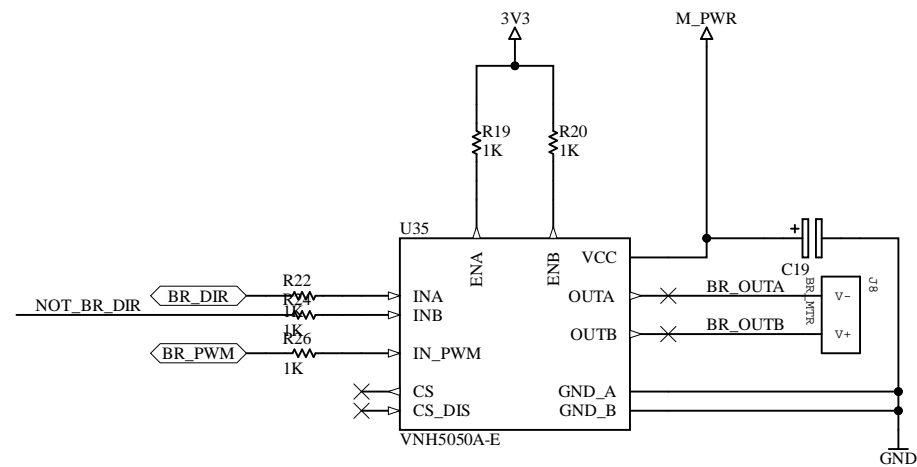
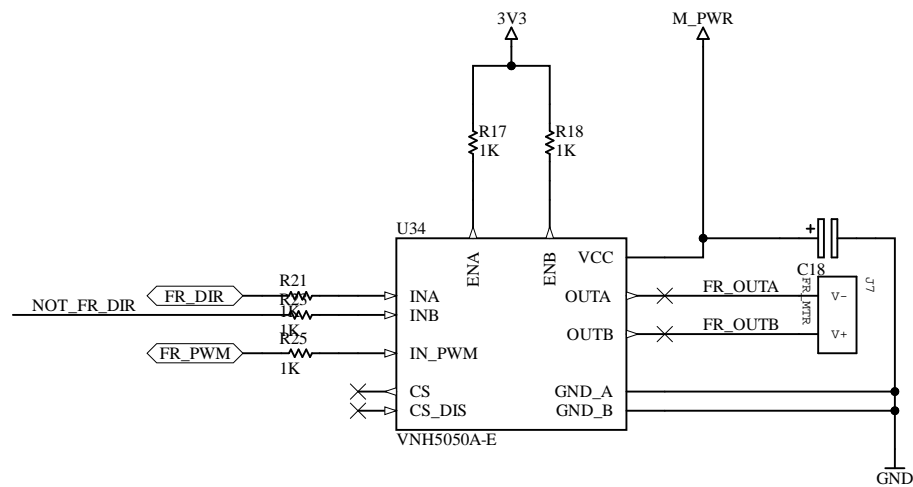
B

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D



Title		
Size	Number	Revision
A4		
Date:	2/03/2023	Sheet of
File:	C:\Users\vince\202311\Sheet1.SchDoc	Drawn By:



Title		
Size A4	Number	Revision
Date:	2/03/2023	Sheet of
File:	C:\Users\vince\202311\mdriver.SchDoc	Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
100u	100UF PANASONIC D	C1	100UF 10x10.5- Footprint-1	CMP-001-00009-3	1
1000u	Capacitor Polarised	C2	16x16.5	16x16.5 CAP	1
1u	0603 Capacitor	C3	CAP0603	CAP0603	1
1.5n	0603 Capacitor	C4	CAP0603	CAP0603	1
10n	0603 Capacitor	C5	CAP0603	CAP0603	1
10u	0603 Capacitor	C6	CAP0603	CAP0603	1
220u	Capacitor Polarised	C7	16SVPG220M	16SVPG220M	1
0.1u	0603 Capacitor	C8, C9, C10, C11, C13, C14	CAP0603	CAP0603	6
100n	0603 Capacitor	C12	CAP0603	CAP0603	1
22p	0603 Capacitor	C15, C17	CAP0603	CAP0603	2
8Mhz	8/16Mhz	C16	CRYSTAL-8MHZ	Crystal	1
47u	Cap Aluminum Lytic 47uF 50V 20% (6.3 X 7.7mm) SMD 63mA 2000h 105C Automotive T/R	C18, C19, C20, C21	EEE0JA331XP	CMP-092-000001-4	4
SS54	SMD Schottky Diode	D1, D4	SMDSC	Schottky Diode	2
1N4728	Zener Diode	D2	1N4728	1N4728	1
1N5401	Rectifier Diode	D3	1N5401	1N5401	1
LED3528	3528-LED	D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34	LED-3528	CMP-066-000002-5	30
100uH	10uH INDUCTOR	I1	SWPA8040	SWPA8040	1
15uH	10uH INDUCTOR	I2	SWPA8040	SWPA8040	1
LM2587S	Integrated Circuit	IC1	TO170P1435X465-6N	LM2587S-ADJ_NOPB	1
STM32F103CBT6	ARMA* CortexA*-M3 STM32F1 Microcontroller IC 32- Bit 72MHz 128KB 128K x 8, FLASH	IC2	QFP50P900X900X160- 48N	STM32F103CBT6	1
FR&FL	Integrated Circuit	IC3	SOT-23-6	SN74LVC2G04DRLR	1
BR&BL	Integrated Circuit	IC4	SOT-23-6	SN74LVC2G04DRLR	1
M_SW		J1	XT30PB-F	XT30PB-F	1
SOLENOID		J2	XT30PB-F	XT30PB-F	1
XT60-M	Plug: DC supply; XT60: male; PIN- 2; for cable; soldered; 30A; 500V	J3	AMASS_XT60-M	CMP-062-000000-4	1
L2		J4	XT30PB-F	XT30PB-F	1
52610-1133	Connector	J5	526101133	52610-1133	1
BM05B-SRSS- TB_LF_SN_	Connector	J6	BM05BSRSSBTLFSN	BM05B-SRSS- TB_LF_SN_	1
FR_MTR		J7, J9	XT30PB-F	XT30PB-F	2
BR_MTR		J8	XT30PB-F	XT30PB-F	1
BL_MTR		J10	XT30PB-F	XT30PB-F	1
LED-WHITE	LED-0603	L1	LED0603	LED-0603	1
STP75NF75FP	STMICROELECTRONIC S - STP75NF75FP - MOSFET	Q1	TO255P460X1020X20 30-3P	CMP-096-000001-2	1
AO3400A	MOSFET (N-Channel)	Q2	SOT95P280X125-3N	AO3400A	1
56K	Resistor	R1	RES0603	RES0603	1
2.94K	Resistor	R2	RES0603	RES0603	1
1.5K	Resistor	R3	RES0603	RES0603	1
20	Resistor	R4	RES0603	RES0603	1
1K	Resistor	R5, R12, R13, R14, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36	RES0603	RES0603	24
10K	Resistor	R6, R7, R8, R10, R11	RES0603	RES0603	5
5.9K	Resistor	R9	RES0603	RES0603	1
3K	Resistor	R15, R16	RES0603	RES0603	2
Push Botton Switch	Push Botton Switch	S1	MOMENTARY_SWITC H_4X3	Push Botton Switch	1
TPS5430	TPS5430 3-A, Wide Input Range, Step- Down Converter	U1	FP-DDA0008J-MFG	TPS5430	1
LIGHT_SENSOR_ALS	Photo Resistor	U2, U3, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29, U30, U31	ALS-PT19	CMP-071-000008-4	30
74HC4067SSOP-24	16 Channel Analog MUX	U32, U33	SSOP24	CMP-071-000007-3	2
VNH5050A-E	Motor Driver Power MOSFET Parallel, PWM PowerSSO-36	U34, U35, U36, U37	SOP50P1030X247-39N	CMP-117-000002-12	4