

Designator	Value	Comment	Description	Footprint	Quantity
		PWM_CONTROL	Header, 6-Pin	HDR1X6	1
AC1		US3DHTR	Accelerometer	US3DHTR	1
C1	0.047uF	C1408X752A473K080B	CAP, CERM, 0.047 uF, 10V V, +/- 10%, X7S, 0603	0603L	1
C2	1uF	10V	C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C3, C8, C20, C21, C22, C23, C24	0.1uF		C0805C103K8RAC7800, 10000pF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric) C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	7
C4, C5, C6	1000pF		C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	3
C7	4.7uF		CL21B105K0PFNNNE, 1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C9, C19	1uF		C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric) CL21B105K0PFNNNE, 1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C10	10uF	100V Ceramic	Polarized Capacitor (Surface Mount)	CAPAE660K800N	1
C11, C12	2.2uF	10V	C0805C225K8RACAUT, 0.22uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C13	10uF	10V	C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C14, C16	100uF	100V	Polarized Capacitor (Surface Mount)	CAPAE660K800N	2
C15, C25	0.1uF	10V	C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C17, C26, C33, C35	0.1uF	10V	C0805C104K8RACTU, 0.1uF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	4
C18	10nF		C0805C103K8RAC7800, 10000pF ±10%, 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C27, C28, C29	2200pF	GRM188R71C222A01D	CAP, CERM, 2200pF, 16V, +/- 10%, X7R, 0603	0603L	3
C30, C31	28pF	50V	CBR08C4085GAC, CBR08C4085GAC, 4pF ±0.1pF 50V Ceramic Capacitor COG, NP0 0805 (2012 Metric)	C0805	2
C32, C34, C36, C37, C38, C39, C40, C42, C43, C44	0.1uF	0603YC104UAT2A	CAP, CERM, 0.1 uF, 16 V, +/- 5%, X7R, 0603	0603L	10
D1	Red	LTST-C17000K1	LED, Red, SMD	LED, LTST-C170	1
IC1		TMUX1208PWR	Integrated Circuit	SOIPSP640X120-16N	1
P1		146500948 x2	Header, 2-Pin	HDR1X2	1
P2		CAN	Header, 4-Pin	HDR1X4	1
P3		146500948 x3	Header, 3-Pin	HDR1X3	1
P4		PHO2C8AMMING	Header, 2-Pin	HDR1X2	1
P5		DMGD-SF	CONN MICRO SD CARD PUSH-PULL	FP-DMGD-SF-MFG	1
Q1, Q2, Q3, Q4, Q5, Q6		NMOS-2	N-Channel Power MOSFET	TO-220AB	6
R1, R5, R6, R7, R10, R11, R12, R13, R14, R15, R17, R19, R23, R25, R26, R27, R28, R29, R30, R31, R32, R34, R35, R36, R37, R38, R40, R41	0.007	CRE2512-FZ-R007E-3	RES SMD 0.007 OHM 1% 3W 2512	2512L	28
R2, R3, R4	75k	CRCW060375K0JNEA	RES, 75 k, 5%, 0.1 W, 0603	0603L	3
R8	10k	CRCW060310K0JNEA	RES, 10 k, 5%, 0.1 W, 0603	0603L	1
R9	330	CRCW0603330JNEA	RES, 330 ohm, 5%, 0.1 W, 0603	0603L	1
R16	120	5%	BRJ-3GEV103V, 10 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1408 Metric) Automotive AEC-Q200 Thick Film	J1-0603	1
R18	10K	5%	BRJ-3GEV103V, 10 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1408 Metric) Automotive AEC-Q200 Thick Film	J1-0603	1
R20, R21, R22	56	CRCW060356R0JNEA	RES, 56 ohm, 5%, 0.1 W, 0603	0603L	3
R24	10K	CRCW060356R0JNEA	RES, 56 ohm, 5%, 0.1 W, 0603	0603L	1
RT1, RT2, RT3, RT4, RT5, RT6, RT7, RT8	10k		NTC Thermistor for Temperature Sensor, SMD 0603, 10kD	ERT-1TVG103JA	8
S1		SW-PB	Switch	PT5636 SMD3 SMT8 JFS	1
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14	White	5002	Test Point, Miniature, White, TH	Keystone5002	14
U		DRV8323SR1AT	Multiphase Motor Driver Power MOSFET SP48-WOFLN_6x6	QFN50P400X600X080-#1N415X415	1
U1, U5		LM324AMX/NOPB	Gen Purp 4Ch Opamp	LM324AMX/NOPB	4
U2		TJA1051T_3_118	Integrated Circuit	SOIC127P600X175-8N	1
U3		STM32F405RC616TR		STM32F405RC616TR	1
U4		TLV1117-33DCYR	Integrated Circuit	SO233P700X180-4N	1
U6, U7		INA180	0V to 26V Current Sense Amplifier	INA180	2
Y1		CX5032GBR00000KHFP Q21	8MHz ±20ppm Crystal 12pF 300 Ohms 2-SMD, No Load	CX5032GBR00000KHFP Q21	1

1

2

3

4

A

A

B

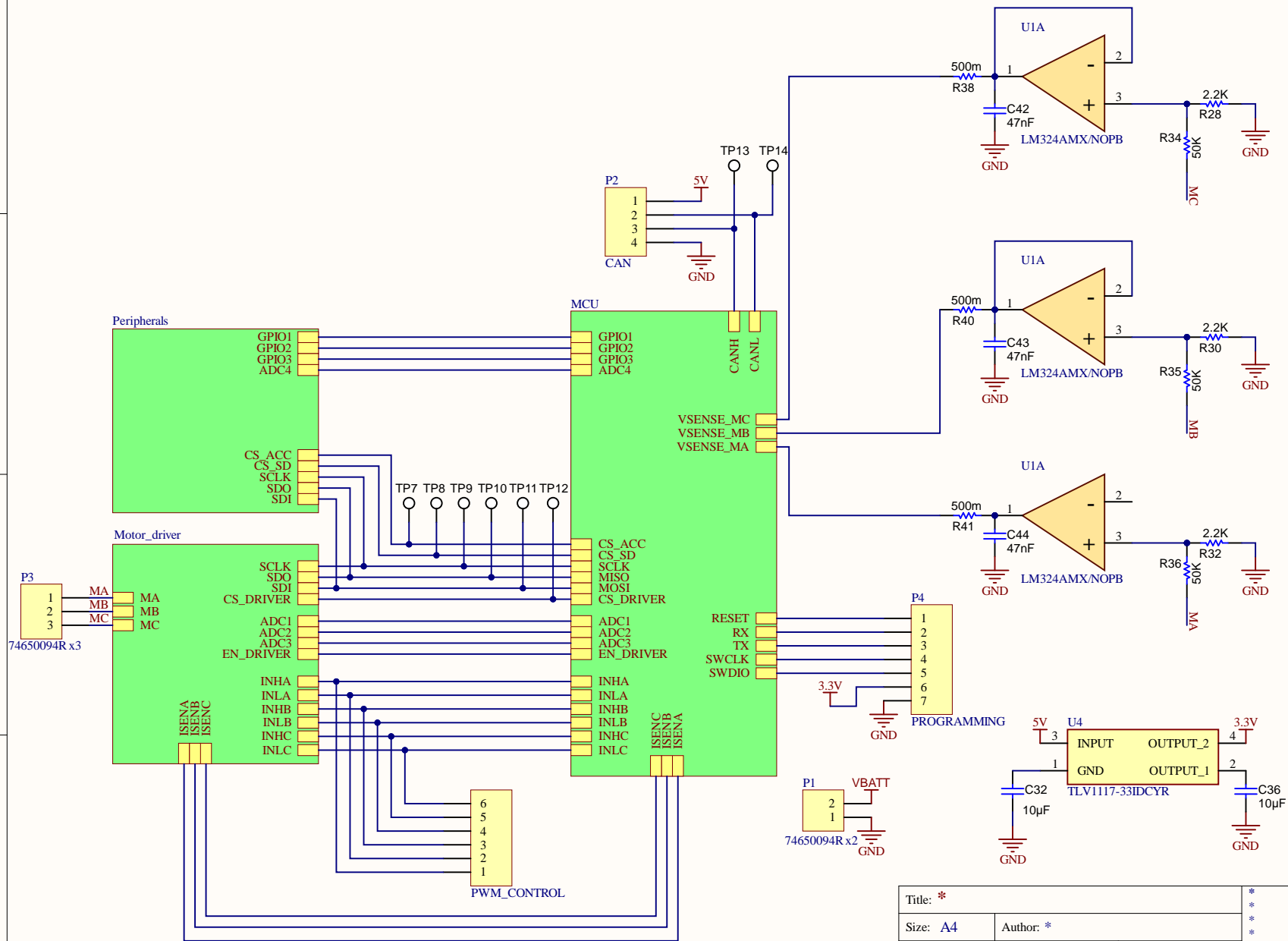
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C

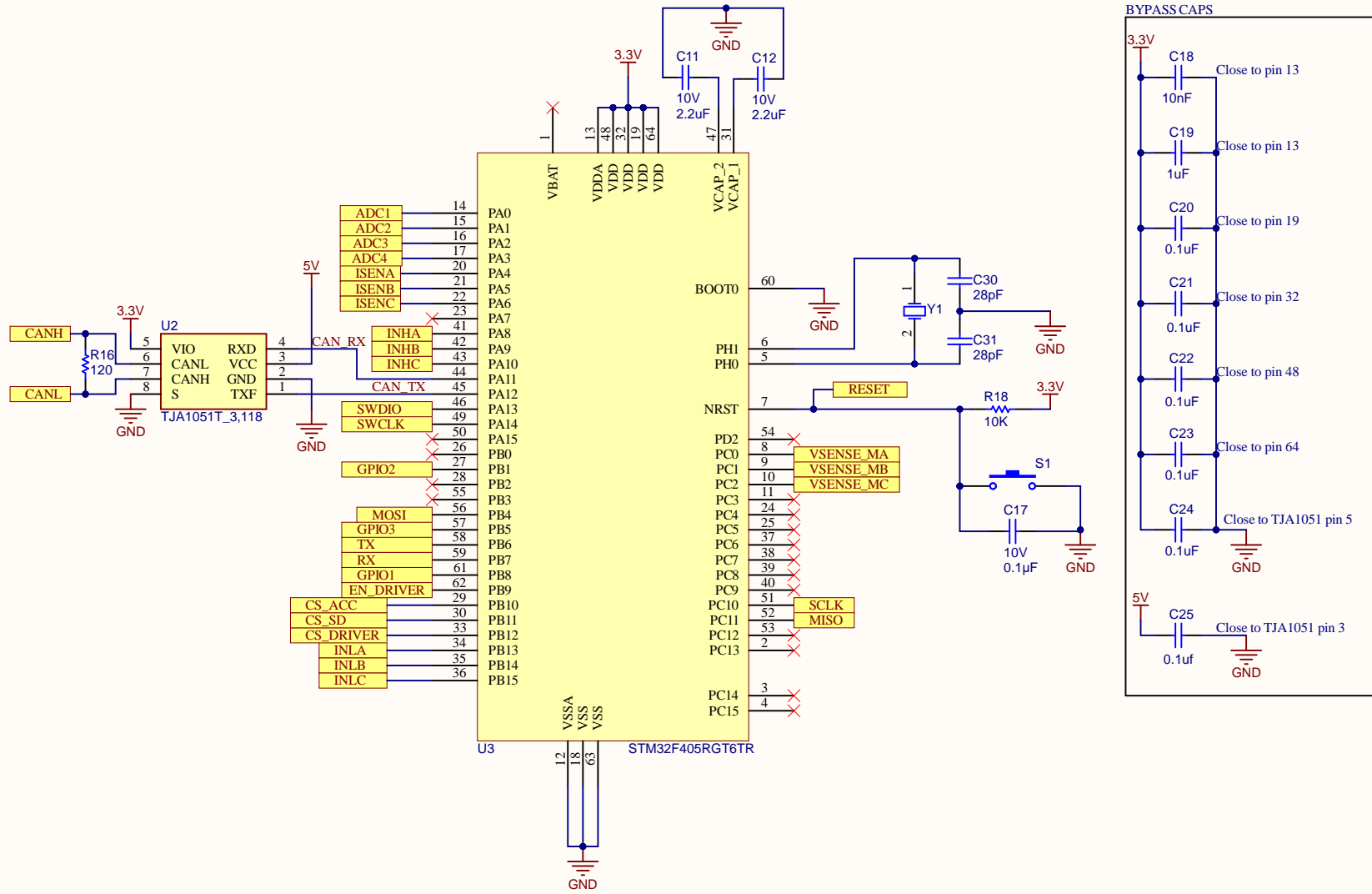
C

D

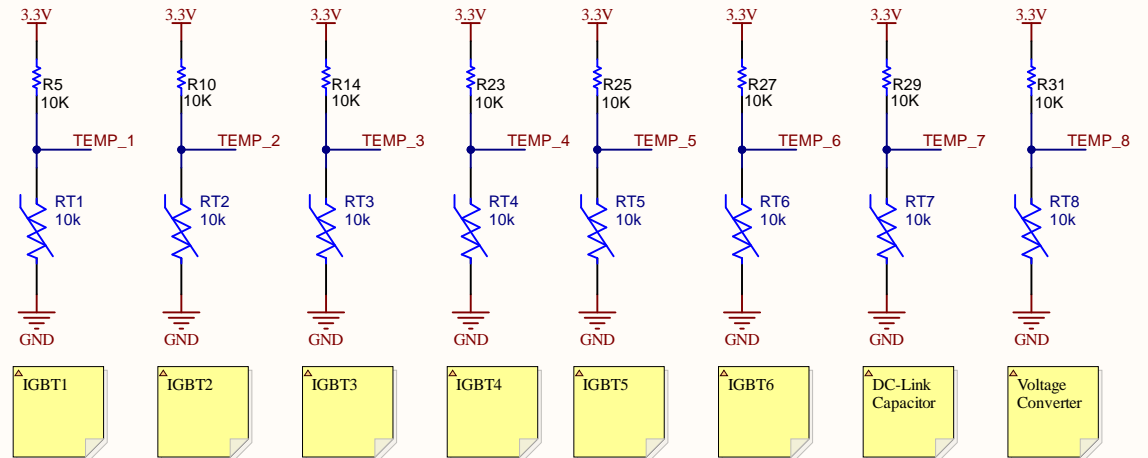
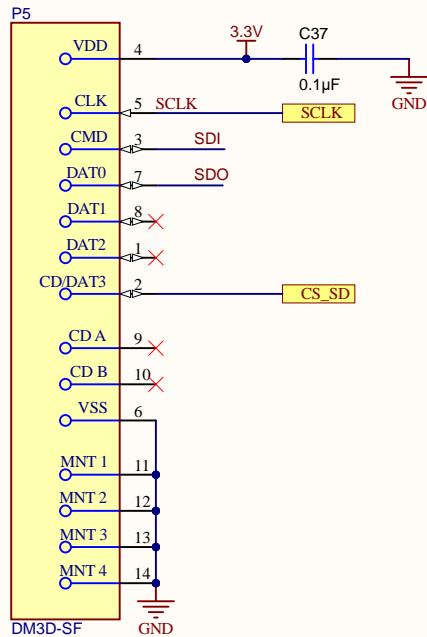
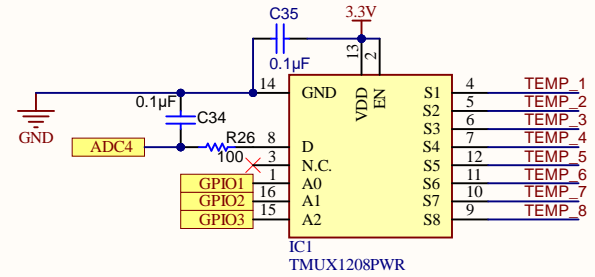
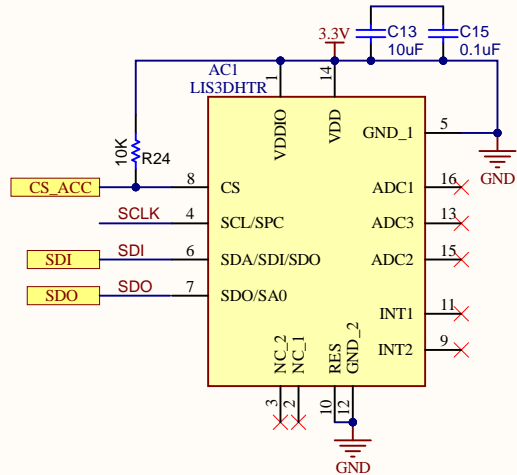
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