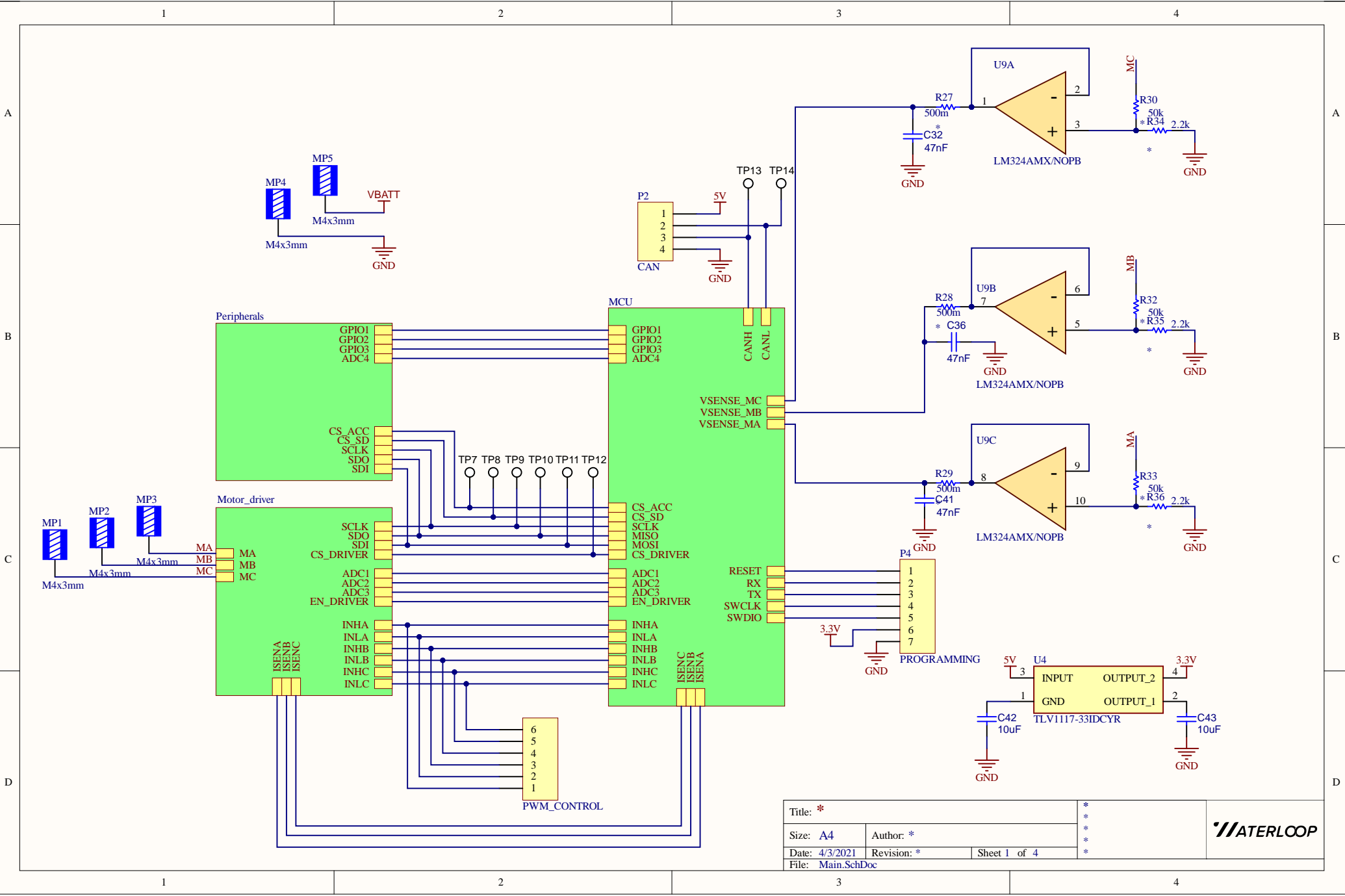
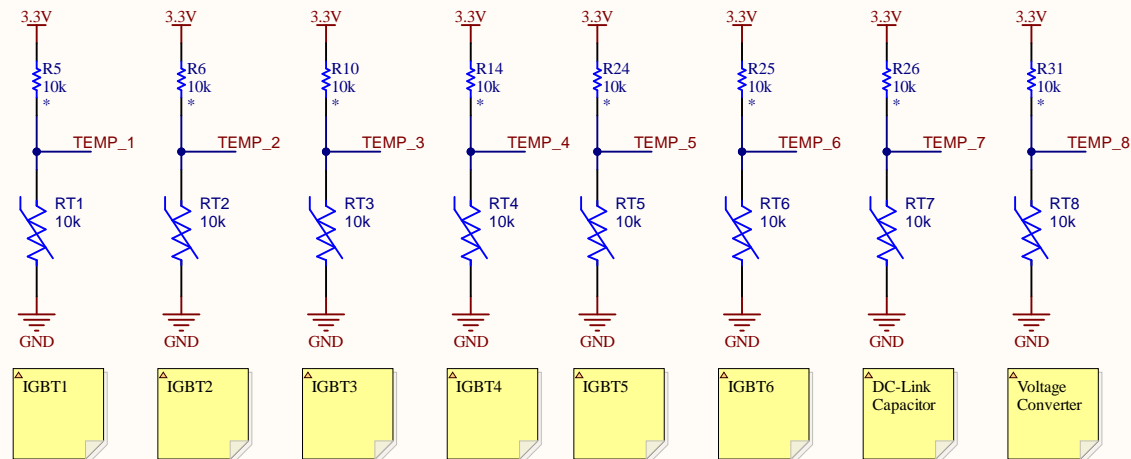
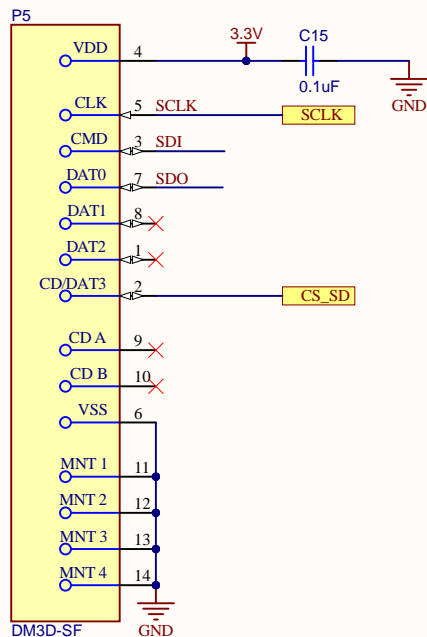
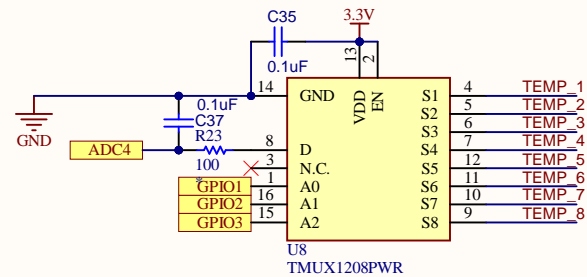
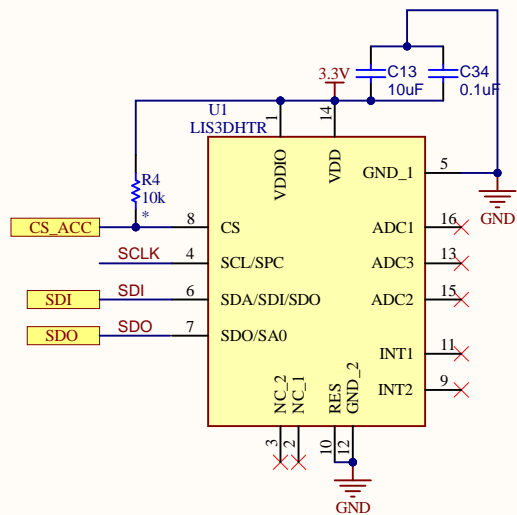



Designator	Value	Comment	Description	Footprint	Quantity
		PWM CONTROL	Header, 6-Pin	HER1x6	1
C1, C32, C36, C40, C41	47nF	10V	C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	5
C2	1µF	100V	TDK C2012X7SA105K1000 N, 1µF ±10% 100V X7S 0805 MULTILAYER CERAMIC CAPACITORS MLCC - SMD/SMT ROHS	C0805	1
C3, C8, C15, C17, C20, C21, C22, C23, C24, C25, C34, C35, C38, C39	0.1µF	100V	CL21B104RCFN9NNE, MULTILAYER CERAMIC CAPACITORS MLCC - SMD/SMT 100NF 100V 0805 ROHS	C0805	14
C4, C5, C6	1000µF		C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	3
C7	4.7µF	100V	CL21B105KPFNNNE, 1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	1210 Cap	1
C9	1µF	100V	TDK C2012X7SA105K1000 N, 1µF ±10% 100V X7S 0805 MULTILAYER CERAMIC CAPACITORS MLCC - SMD/SMT ROHS	C0805	1
C10, C14	100µF	100V	100X110MMETC10K2 0, Aluminum Electrolytic Capacitors Radial, Can - 10000 Hrs @ 105°C, 100UF, 20% TOL	Electrolytic Cap	2
C11, C12	2.2µF	10V	C0805C225KBRACAUT 0.22µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	2
C13, C42, C43	10µF	10V	C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	3
C16	15µF	100V	ELL-EE2V150, Aluminum Electrolytic Capacitors Radial, Can - 8000 Hrs @ 105°C, CAP ALUM 15UF 20% 350V RADIAL	Electrolytic Cap	1
C18	10nF		C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	1
C19	1µF		CL21B105KPFNNNE, 1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	1
C26, C33	0.1µF	100V	CL21B104RCFN9NNE, MULTILAYER CERAMIC CAPACITORS MLCC - SMD/SMT 100NF 100V 0805 ROHS	C0805	2
C27, C28, C29	2200µF	10V	C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	3
C30, C31	20µF	10V	C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	2
C37	0.1µF	10V	C0805C104KBRACU 0.1µF ±10% 10V Ceramic Capacitor XTR0805 (2012 Metric)	C0805	1
LED1		RED	Typical RED, GREEN, YELLOW, AMBER GaAs LED	3.2X1.6X1.1	1
MP1, MP2, MP3, MP4, MP5	Max3mm		MP-THRU8UREDOUBE THR Internal through- hole thread 10x10mm, Max3mm, 8 pins, BSA	74650094	5
P2	CAN		Header, 4-Pin	HER1x4	1
P4	PROGRAMMING		Header, 7-Pin	HER1x7	1
P5	OMSD-SF		CONN MICRO SD CARD PUSH PLUG	FF QMSD-SF-MFG	1
Q1, Q2, Q3, Q4, Q5, Q6		NMOS-2	N-Channel Power MOSFET	102254P1651X1067X47 0-3	6
R1, R2, R4, R5, R6, R10, R14, R24, R25, R26, R27, R27		10k	Resistor	0603 - Resistor	12
R3		330	Resistor	0603 - Resistor	1
R7, R8, R15, R17, R19		500u	Resistor	RES26430464N	5
R9, R24, R25, R26		2.2k	Resistor	0603 - Resistor	4
R11, R12, R23		100	Resistor	0603 - Resistor	3
R13, R30, R32, R33		50k	Resistor	0603 - Resistor	4
R16	120	5%	ERO-32E17102V, 10 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive AEC- Q200 Thick Film	J1-0603	1
R18, R27, R28, R29		500m	Resistor	0603 - Resistor	4
R20, R21, R22		5k	Resistor	0603 - Resistor	3
RT1, RT2, RT3, RT4, RT5, RT6, RT7, RT8		10k	NTC Thermistor for Temperature Sensor SMD 0603, 10k	ERT-JTVG103IA	8
S1		SW-PB	Switch	PT5A369M43MTRLF5	1
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14	White	5002	Test Point, Miniature, White, TH	Keystone5002	14
U1		US30HTR	Accelerometer	US30HTR	1
U2		1A1951T1-A-118	Integrated Circuit	1A1951T1-A-118	1
U3		STM32F4096C16TR	STM32F4096C16TR	STM32F4096C16TR	1
U4		TLV1117-33DCVR	Integrated Circuit	TLV1117-33DCVR	1
U5		DRV8323SR1AT	Multiphase Motor Driver Power MOSFET SPI 4b- WOFN_646_	DRV8323SR1AT	1
U6, U7		INA180	Op to 26V Current Sense Amplifier	INA180	2
U8		TLV61209PW	Integrated Circuit	SOP66P408120-16N	1
U9		LM244MM/NOPB	Gen Purp 4-Ch Opamp	LM244MM/NOPB	1
Y1		ABMD-16.000MHZ-82- I	16MHz Ac20ppm Crystal 18pf 40 Ohm 2-SMD, No Lead	ABMD-16.000MHZ-82- I	1



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WATERLOOP



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Date: 4/3/2021	Revision: *	Sheet 4 of 4		
File: Peripherals.SchDoc				

