

Designator	Value	Comment	Description	Footprint	Quantity
		PWM_CONTROL	Header, 6-Pin	HDRTX6	1
AC1		US3DHTR	Accelerometer	US3DHTR	1
C1	0.047µF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C2	1µF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C3, C8, C20, C21, C22, C23, C24, C38, C39	0.1µF		C0805C103K8RAC7800 -10000pF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric) C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	9
C4, C5, C6	1000pF		C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	3
C7	4.7µF		CL21B105KPFNNNE 1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	1
C9, C19	1µF		C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric) CL21B105KPFNNNE 1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C10	10µF	100V Ceramic	Polarized Capacitor (Surface Mount)	CAPAE660X800N	1
C11, C12	2.2µF	10V	C0805C225K8RACAU1 0.22µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C13, C42, C43	10µF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	3
C14, C16	100µF	100V	Polarized Capacitor (Surface Mount)	CAPAE660X800N	2
C15, C25, C34, C37	0.1µF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	4
C17, C26, C33, C35	0.1µF	10V	C0805C104K8RACTU 0.1µF ±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	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	3
C30, C31	28pF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	2
C32, C36, C41	47nF	10V	C0805C104K8RACTU 0.1µF ±10% 10V Ceramic Capacitor XTR 0805 (2012 Metric)	C0805	3
C40	0.1µF	0603YC104UA72A	CAP, CERAM. 0.1 µF, 16 V, +/- 5%, XTR, 0603	0603L	1
D1	Red	1TST-C170RKT	LED, Red, SMD	LED-1TST-C170	1
IC1		TLA8712SPWR	Integrated Circuit	SOIC8P40X120-16N	1
P1		74650094R x2	Header, 2-Pin	HDRTX2	1
P2		CAN	Header, 6-Pin	HDRTX4	1
P3		74650094R x3	Header, 3-Pin	HDRTX3	1
P4		PHDGRAMMING	Header, 2-Pin	HDRTX7	1
P5		DMC0-SF	CONN MICRO SD CARD PUSH-PULL	FP-DMC0-SF-MFG	1
Q1, Q2, Q3, Q4, Q5, Q6		NMOS-2	N-Channel Power MOSFET	TO-220AB	6
R1, R2, R4, R5, R6, R10, R14, R24, R25, R26		10k	Resistor	0603 - Resistor	11
R3		130	Resistor	0603 - Resistor	1
R7, R8, R15, R17, R19		500Ω	Resistor	0603 - Resistor	5
R9, R34, R35, R36		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%	GR-SCE1029V 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	56	CRCW060356R01NEA	RES, 56 ohm, 5%, 0.1W, 0603	0603L	3
R31	0.007	CRE2512-FZ-8007E-3	RES SMD 0.007 OHM 1% .3W 2512	2512L	1
RT1, RT2, RT3, RT4, RT5, RT6, RT7, RT8		10k	NTC Thermistor for Temperature Sensor, SMD 0603, 10kΩ	ERT-1TVG1033A	8
S1		SW-PB	Switch	PT5636 SMD3 SMTR 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		DRV8323SRTAT	Multiphase Motor Driver Power MOSFET SPM 40- WOFN_6x6	QFN50P400X600X80- 41N415X415	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		TLV1117-33DCVR	Integrated Circuit	SO1230P700X180-4N	1
U6, U7		INA180	0V to 26V Current Sense Amplifier	INA180	2
Y1		CX5012GB00000KHFP Q21	8kHz ±20ppm Crystal 12µF 300 Ohms 2- SMD, No Load	CX5012GB00000KHFP Q21	1

1

2

3

4

A

A

B

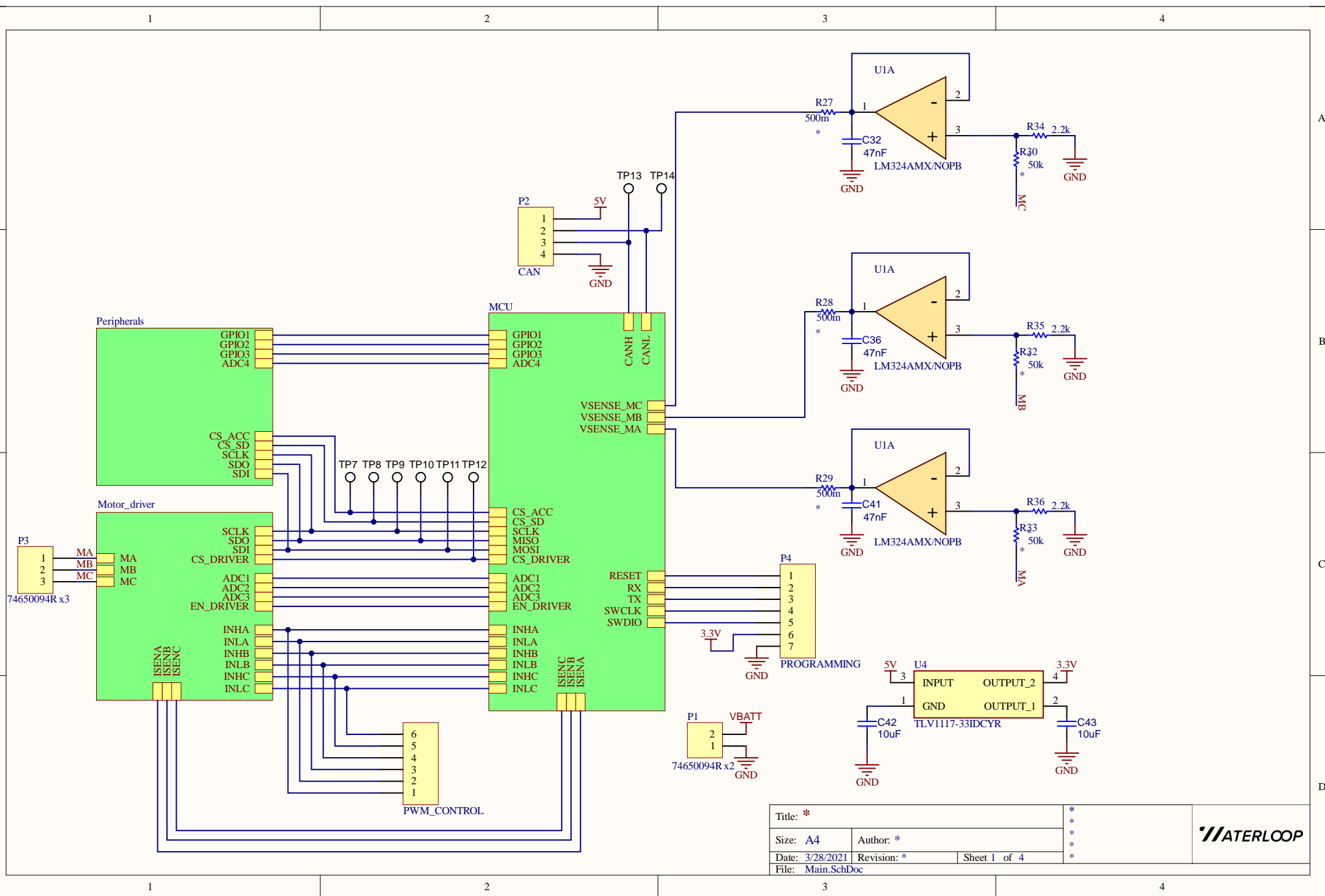
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C

C

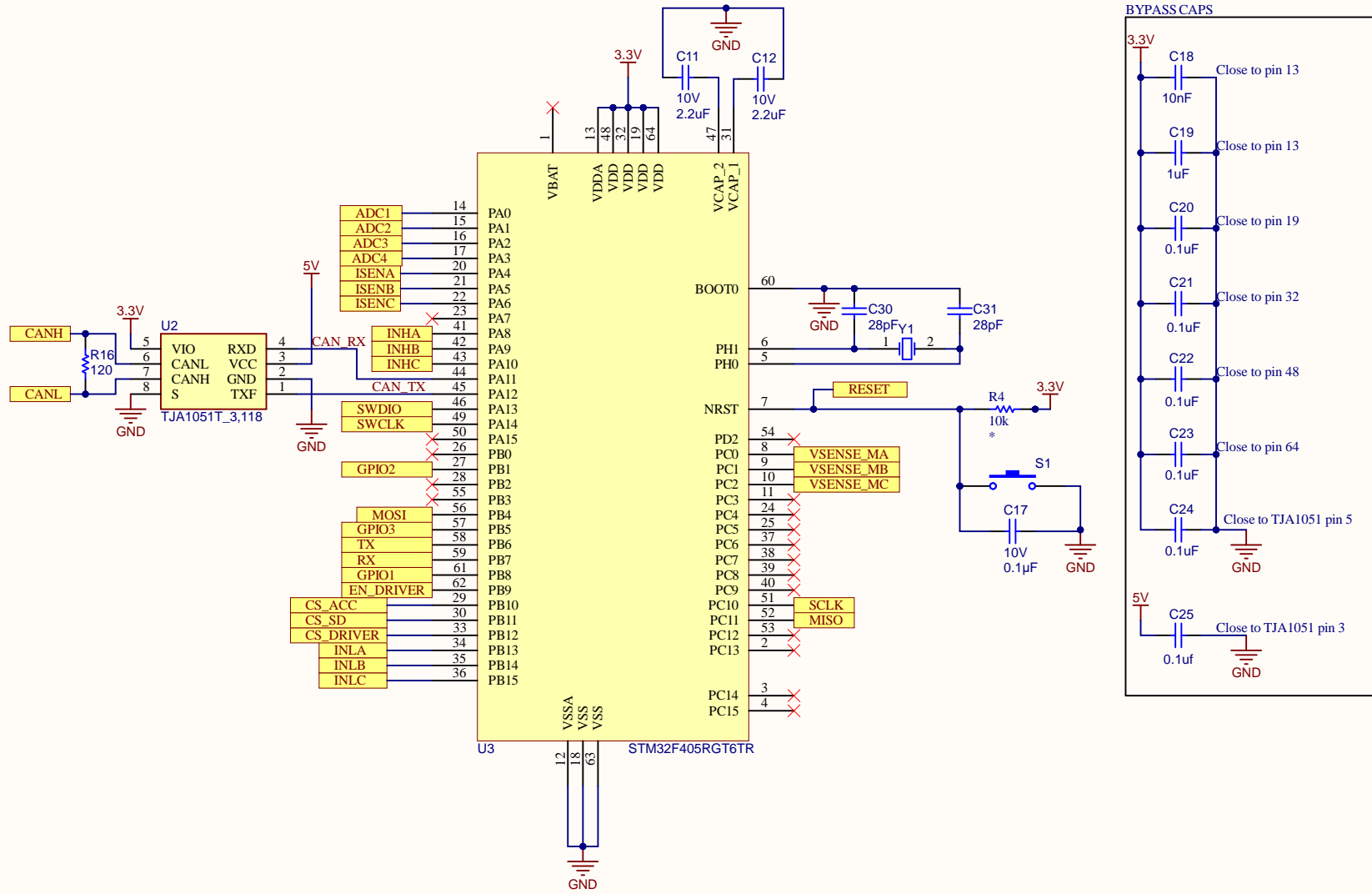
D

D



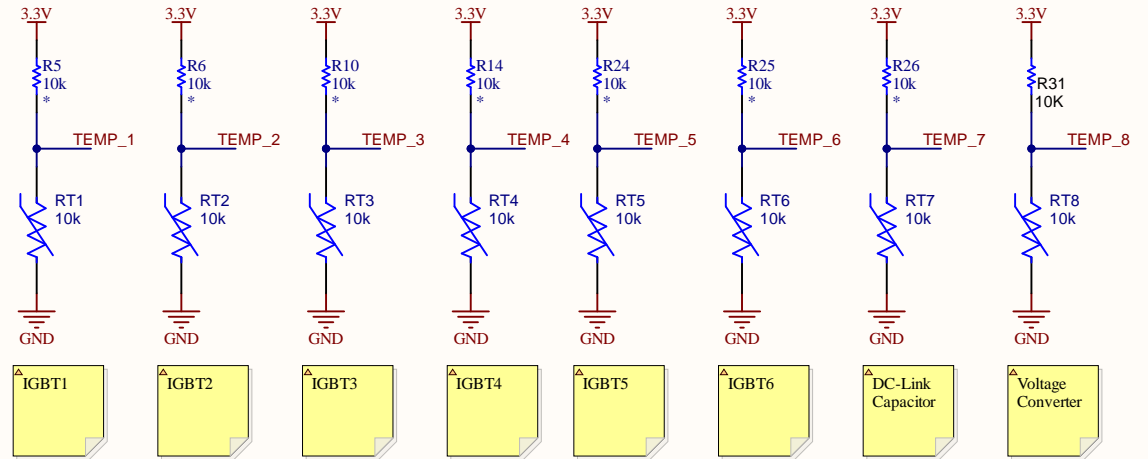
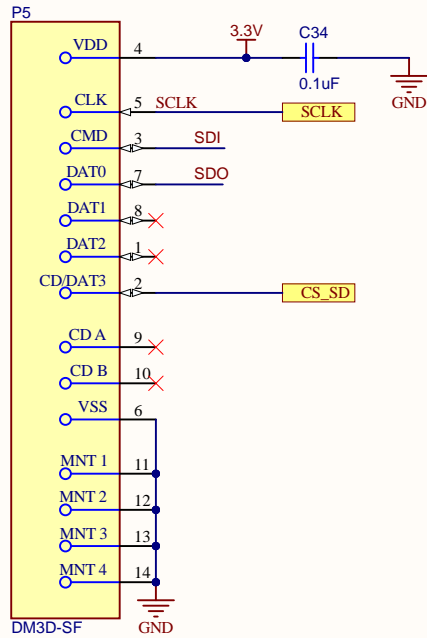
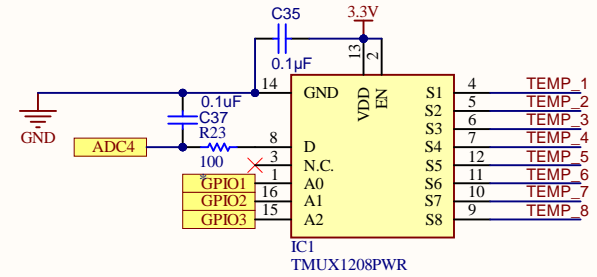
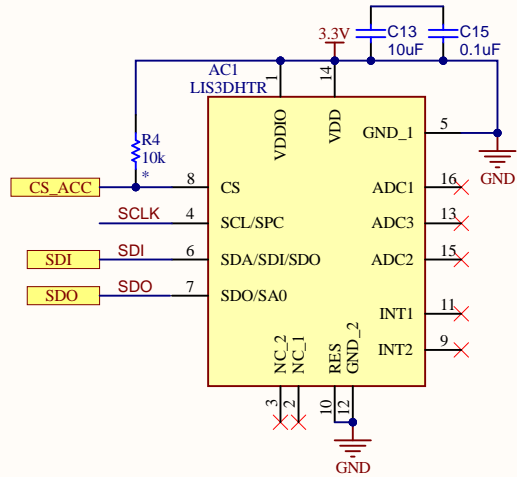
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