

Nothing fancy passives, any brand will do							
<u>Designator</u>	<u>Type</u>	<u>Notes</u>					
C1, C15, C17	100nF 25V 0603 X7R						
C28	10uF 25V 0805 X5R	The pad is 0603, my bad					
C16, C18	1uF 25V 0603 X7R						
C2	10uF 6V3 0603 X5R						
C3, C5, C7, C9, C12, C13, C21, C22, C23, C25, C26, C30	100nF 6V3 0603 X7R						
C4, C6, C8, C10, C11, C14, C24, C27, C29	1uF 6V3 0603 X7R						
R1, R2	5k6 0603 1%						
R4, R6	1k 0603 1%						
R5	82k 0603 1%						
R7	15k 0603 1%						
R8, R9	1k8 0603 1%						
R10, R11, R12, R13	100R 0603 1%						
R14, R15, R16	10k 0603 1%						
Specific parts							
<u>Designator</u>	<u>Type</u>	<u>Manufacturer</u>	<u>MFG part no</u>	<u>Digikey part no</u>	<u>Price/100 USD</u>	<u>Qty</u>	<u>Notes</u>
C19, C20	1mF 80V 10mm cap	CDE	381LX102M080H012	338-3690-ND	1.7	2	
D1, D8	SOT23 Schottky	Fairchild	BAT54C	BAT54CFSTR-ND	0.09	2	
D4, D5, D6, D7	TVS diode 3.3V	Semtech	UCLAMP3301H.TCT	UCLAMP3301HCT-ND	0.48	4	
D2	Big SlimDPAK schottky	Vishay	V35PWM12-M3/I	V35PWM12-M3/IGITR-ND	0.88	1	
J1	SMT USB micro	Amphenol	10118192-0001LF	609-4613-1-ND	0.3	1	
L1	10uH 21A inductor	Würth	74435581000	732-4235-2-ND	6.6	1	
Q1, Q2	Power MOSFET	NXP	PSMN034-100BS,118	568-9702-2-ND	0.71	2	
Q3, Q4	Signal MOSFET	NXP	2N7002P,215	568-5818-1-ND	0.07	2	
U1	MCU	Atmel	ATSAMD21G18A-AUT	ATSAMD21G18A-AUTCT-ND	4.15	1	
U2	LDO	ST Micro	LD1117S33CTR	497-1241-1-ND	0.25	1	
U3, U4	MOSFET driver	Microchip	MCP1416T-E/OT	MCP1416T-E/OTTR-ND	0.49	2	
U5, U6, U7	Temp sensor	TI	LM73CIMK-1/NOPB	LM73CIMK-1/NOPBCT-ND	1.48	3	
U8, U9, U10	Steering / TVS	NXP	IP4220CZ6,125	568-3529-2-ND	0.23	3	
R3	Shunt resistor 15mR	TE Connectivity	RLP73V3AR015FTDF	A109674CT-ND	0.25	1	
D3	The COB 13 klm (!)	CREE	CXA3590-0000-000N00CD0E3	CXA3590-0000-000N00CD0E3-ND	37.18	1	Any <40V <4A COB is ok