

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C17	1	100pF	885012006057	Würth Elektronik	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603	603
C15	1	0.01uF	885012206089	Würth Elektronik	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	603
C3, C21	2	0.1uF	885012206071	Würth Elektronik	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
C13	1	1uF	885012206076	Würth Elektronik	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
C1	1	680pF	CC0805KRX7RBBB681	Yageo America	CAP, CERM, 680 pF, 500 V, +/- 10%, X7R, 0805	805
C14	1	3300pF	GRM2165C2A332JA01D	MuRata	CAP, CERM, 3300 pF, 100 V, +/- 5%, C0G/NP0, 0805	805
C12	1	4.7uF	C2012X7R1E475K125AB	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	805
C18	1	2.2uF	CL31B225KCHSNNE	Samsung Electro-Mechanics	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1206_190	1206_190
C8, C9, C10, C11	4	22uF	C1210C226K3RAC7800	Kemet	CAP, CERM, 22 µF, 25 V, +/- 10%, X7R, 1210	1210
C4, C5, C6, C7	4	4.7uF	GCM32DC72A475KE02L	MuRata	CAP, CERM, 4.7 µF, 100 V, +/- 10%, X7S, AEC-Q200 Grade 1, 1210	1210
C22	1	1000pF	GR443QR73D102KW01L	MuRata	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	1812
C2	1	150uF	EEV-FK1J151Q	Panasonic	CAP, AL, 150 uF, 63 V, +/- 20%, 0.16 ohm, AEC-Q200 Grade 2, SMD	SMT Radial H13
D1	1	400V	PDU540-13	Diodes Inc.	Diode, Ultrafast, 400 V, 5 A, PowerDI5	PowerDI5
D2, D8	2	100V	MMSD4148T1G	ON Semiconductor	Diode, Switching, 100 V, 0.2 A, SOD-123	SOD-123
D4	1	43V	1SMB5940BT3G	ON Semiconductor	Diode, Zener, 43 V, 550 mW, SMB	SMB
D5	1	100V	ES3BB-13-F	Diodes Inc.	Diode, Superfast Rectifier, 100 V, 3 A, SMB	SMB
D7	1	75V	BAV99W-7-F	Diodes Inc.	Diode, Switching, 75 V, 0.15 A, SOT-323	SOT-323
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
L1	1	3.3uH	SRR6028-3R3Y	Bourns	Inductor, Drum Core, Ferrite, 3.3 uH, 2.5 A, 0.028 ohm, SMD	Inductor, 6.8x2.8x6.8mm
Q1	1	20 V	FMMT618TA	Diodes Inc.	Transistor, NPN, 20 V, 2.5 A, AEC-Q101, SOT-23	SOT-23
Q2, Q3	2	100V	CSD19531Q5A	Texas Instruments	MOSFET, N-CH, 100 V, 16 A, DQJ0008A (VSONP-8)	DQJ0008A
Q4	1	20 V	FMMT718TA	Diodes Inc.	Transistor, PNP, 20 V, 1.5 A, SOT-23	SOT-23
R3, R16	2	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R13	1	1.5	CRCW06031R50FKFA	Vishay-Dale	RES, 1.50, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R6	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R15	1	499	CRCW0603499RFKEA	Vishay-Dale	RES, 499, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R18	1	1.13k	CRCW06031K13FKFA	Vishay-Dale	RES, 1.13 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R12	1	3.24k	CRCW06033K24FKFA	Vishay-Dale	RES, 3.24 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R5, R14	2	10.0k	CRCW060310K0FKFA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R4	1	66.5k	CRCW060366K5FKFA	Vishay-Dale	RES, 66.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R7	1	174k	CRCW0603174KFKFA	Vishay-Dale	RES, 174 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R105	1	287k	CRCW0603287KFKFA	Vishay-Dale	RES, 287 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R2	1	3.3	CRCW08053R30JNEA	Vishay-Dale	RES, 3.3, 5%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R10, R104	2	10.0k	CRCW080510K0FKFA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R11, R17	2	47.5k	CRCW080547K5FKFA	Vishay-Dale	RES, 47.5 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
R103	1	4.7	RPC1206JT4R70	Stackpole Electronics Inc	RES, 4.7, 5%, 0.33 W, 1206	1206
R8, R100	2	20	CRCW201020R0JNEF	Vishay-Dale	RES, 20, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
R1, R101	2	100	CRCW2010100R0JNEF	Vishay-Dale	RES, 100, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
T1	1	8.3uH	PA4826NL	Pulse Engineering	Transformer, 8.3 uH, TH	39.5x31.5mm
T2	1		PA1005.100NL	Pulse Engineering	SMT Current Sense Tranformer	P82xx
TP1, TP2, TP7, TP11	4		1502-2	Keystone	Terminal, Turret, TH, Double	Keystone1502-2
TP3, TP5	2		5000	Keystone Electronics	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP4, TP8, TP9	3		5002	Keystone Electronics	Test Point, Miniature, White, TH	White Miniature Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP6, TP10	2		5001	Keystone Electronics	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		LM5022MME/NOPB	Texas Instruments	60V Low Side Controller for Boost and SEPIC, 10-pin MSOP, Pb-Free	DGS0010A
U2	1		PS2501L-1-F3-L-A	California Eastern Laboratorie	Optocoupler, 5 kV, 200-400% CTR, SMT	PS2501L
U3	1		LMV431BIMFX/NOPB	Texas Instruments	Low-Voltage (1.24V) Adjustable Precision Shunt Regulators, 3-pin SOT-23, Pb-Free	DBZ0003A
C16	0	1uF	885012207103	Wurth Elektronik	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	805
C19	0	3300pF	885012206086	Wurth Elektronik	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, 0603	603
C20	0	0.1uF	885012206071	Wurth Elektronik	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
C100	0	0.22uF	C0805C224K5RACTU	Kemet	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, 0805	805
C101, C102	0	270uF	EEHZC1V271V	Panasonic	CAP, Aluminum Polymer, 270 µF, 35 V, +/- 20%, 0.02 ohm, AEC-Q200 Grade 1, SMD	D10xL10.2mm
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
R19	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
R102	0	5.1k	CRCW25125K10JNEG	Vishay-Dale	RES, 5.1 k, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512

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