

Change in menu Project

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC	1		Printed Circuit Board		XX###	Any	-	-
C2, C3	2	330uF	CAP, OS-CON, 330uF, 10V, +/-20%, 0.017 ohm, 8x10 SMD	8x10	10SVP330M	Sanyo	-	-
C4	1	10uF	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805	GRM21BR71A106KE51L	MuRata		
C5, C6, C7	3	2.2uF	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210	HMK325B7225KN-T	Taiyo Yuden	-	-
C8	1	1uF	CAP, CERM, 1uF, 100V, +/-20%, C Series, 1206	1206	C3216X7R2A105M	TDK	-	-
C9	1	0.01uF	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0603	0603	C1608C0G1E103J	TDK		
C10	1	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603	06035A101JAT2A	AVX		
C11	1	10uF	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206	GRM31CR71E106KA12L	MuRata		
C12	1	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	C1608X7R1C105K	TDK		
C13	1	1uF	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603	0603	C1608X7R1E105K080A B	TDK		
C14	1	100pF	CAP, CERM, 100pF, 25V, +/-10%, X7R, 0603	0603	06033C101KAT2A	AVX		
C16	1	1000pF	CAP, CERM, 1000pF, 250V, +/-5%, C0G/NP0, 0805	0805	C2012C0G2E102J	TDK		
C17	1	0.47uF	CAP, CERM, 0.47uF, 10V, +/-10%, X5R, 0603	0603	GRM188R61A474KA61D	MuRata		
C18	1	10uF	CAP, CERM, 10uF, 6.3V, +/-10%, X7R, 0805	0805	GRM21BR70J106KE76L	MuRata		
D1, D3, D8, D8x	4	1.25V	Diode, Ultrafast, 100V, 0.15A, SOD-123	SOD-123	1N4148W-7-F	Diodes Inc.	-	-
D2	1	45V	Diode, Schottky, 45V, 15A, DDPAK	DDPAK	MBRB1545CT-T	Diodes Inc.		
D7	1	12V	Diode, Zener, 12V, 1W, PowerDI123	PowerDI123	DFLZ12-7	Diodes Inc.		
FID1, FID2, FID3	3		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
H1, H2, H3, H4	4		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H5, H6, H7, H8	4		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
LBL1	1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W	THT-14-423-10	Brady	-	-
Q1	1	150V	MOSFET, N-CH, 100V, 60A, PowerPAK SO-8	PowerPAK SO-8	SI7178DP	Vishay-Siliconix	-	-
R2	1	3.32	RES, 3.32 ohm, 1%, 0.25W, 1206	1206	CRCW12063R32FKEA	Vishay-Dale	-	-
R3	1	21.0k	RES, 21.0k ohm, 1%, 0.125W, 0805	0805	CRCW080521K0FKEA	Vishay-Dale		
R4	1	3.48k	RES, 3.48k ohm, 1%, 0.1W, 0603	0603	CRCW06033K48FKEA	Vishay-Dale		
R5	1	10	RES, 10 ohm, 5%, 0.125W, 0805	0805	CRCW080510R0JNEA	Vishay-Dale		
R6	1	100	RES, 100 ohm, 1%, 0.1W, 0603	0603	CRCW0603100RFKEA	Vishay-Dale		
R7	1	0.1	RES, 0.1 ohm, 1%, 2W, 2512	2512	RHC2512FTR100	Stackpole Electronics Inc		
R8, R10	2	1.00k	RES, 1.00k ohm, 1%, 0.1W, 0603	0603	CRCW06031K00FKEA	Vishay-Dale		
R9	1	49.9k	RES, 49.9k ohm, 1%, 0.1W, 0603	0603	CRCW060349K9FKEA	Vishay-Dale	-	-
R11	1	4.75k	RES, 4.75k ohm, 1%, 0.1W, 0603	0603	CRCW06034K75FKEA	Vishay-Dale		
R12	1	3.01k	RES, 3.01k ohm, 1%, 0.1W, 0603	0603	CRCW06033K01FKEA	Vishay-Dale		
R13	1	1.82k	RES, 1.82k ohm, 1%, 0.1W, 0603	0603	CRCW06031K82FKEA	Vishay-Dale		
R16	1	49.9	RES, 49.9 ohm, 1%, 0.25W, 1206	1206	CRCW120649R9FKEA	Vishay-Dale		
R17	1	28.0k	RES, 28.0k ohm, 1%, 0.1W, 0603	0603	CRCW060328K0FKEA	Vishay-Dale		
T1	1		3:2.25:1:1 Transformer, 21uH Primary Inductance	eg: 0603, used in PnP report	PA3855.005NL	Pulse Electronics	-	-
TP1, TP2, TP3, TP4	4	Double	Terminal, Turret, TH, Double	Keystone1503-2	1503-2	Keystone		
TP5, TP6	2	Yellow	Test Point, Multipurpose, Yellow, TH	Yellow Multipurpose Testpoint	5014	Keystone		
U1	1		60V Low Side Controller for Boost and SEPIC, 10-pin MSOP	MUB10A	LM5022MM	National Semiconductor		
U2	1		High Isolation Voltage Single Transistor Type OptoCoupler	PS2501L	PS2501L-1-A	California Eastern Laboratories		
U3	1		Low-Voltage (1.24V) Adjustable Precision Shunt Regulator, 5-pin SOT-23	MF05A	LMV431ACM5	National Semiconductor		
C1	0	470pF	CAP, CERM, 470pF, 50V, +/-10%, X7R, 0805	0805	08055C471KAT2A	AVX		
C15	0	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	C1608X7R1C105K	TDK		
D4	0		Diode, Zener, 20V, 550mW, SMB	SMB	1SMB5932BT3G	ON Semiconductor	-	-
D5	0		Diode, Schottky, 100V, 1A, SMB	SMB	MBRS1100T3G	ON Semiconductor	-	-
R1	0	121	RES, 121 ohm, 1%, 0.125W, 0805	0805	CRCW0805121RFKEA	Vishay-Dale		
R14	0	2.05k	RES, 2.05k ohm, 1%, 0.1W, 0603	0603	CRCW06032K05FKEA	Vishay-Dale		
R15	0	0	RES, 0 ohm, 5%, 0.125W, 0805	0805	CRCW08050000Z0EA	Vishay-Dale		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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