

Variant: 001
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Cascode_TPSI3050 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		Cascode_TPSI3050	Any	Printed Circuit Board	
2	C1, C6	2	0.1uF	C0603X104K3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	603
3	C2, C7	2	1uF	CGJ3E1X7R1E105K080AC	TDK	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	603
4	C4, C5, C8, C10	4	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
5	H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
6	J1, J4	2		571-0500	DEM Manufacturing	Standard Banana Jack, insulated, 10A, red	571-0500
7	J2, J7	2		571-0400	DEM Manufacturing	Standard Banana Jack, insulated, 10A, green	571-0400
8	J3, J6	2		571-0100	DEM Manufacturing	Standard Banana Jack, insulated, 10A, black	571-0100
9	J5	1		TSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	2x1 Header
10	J8	1		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
11	L1, L2	2	2200 ohm	742792094	Würth Elektronik	Ferrite Bead, 2200 ohm @ 100 MHz, 0.2 A, 0805	805
12	R1, R2, R6, R7, R9, R10, R12, R13	8	4.7	ERJ-6RQF4R7V	Panasonic	RES, 4.70, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805
13	R3, R15	2	100	RC0603FR-07100RL	Yageo	RES, 100, 1%, 0.1 W, 0603	603
14	R5, R16	2	11.0k	RC0603FR-07111KL	Yageo	RES, 11.0 k, 1%, 0.1 W, 0603	603
15	R17, R18	2	0	CRCW1206000020EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
16	SH-J1, SH-J2	2	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
17	TP1, TP2, TP3, TP4, TP5, TP7, TP11, TP15, TP20, TP21, TP22, TP23	12		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
18	TP6, TP12	2		5013	Keystone	Test Point, Multipurpose, Orange, TH	Orange Multipurpose Testpoint
19	TP8, TP16, TP17, TP18, TP19	5		5129	Keystone	Test Point, Multipurpose, Purple, TH	Purple Multipurpose Testpoint
20	TP9, TP10, TP24, TP25, TP26, TP27	6		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
21	TP13, TP14	2		5127	Keystone	Test Point, Multipurpose, Blue, TH	Blue Multipurpose Testpoint
22	U1, U2	2		TPSI3050QDWZRQ1	Texas Instruments	Automotive Reinforced Isolated Switch Driver With Integrated 10-V Gate Supply	SOIC8
23	C3, C9	0	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V, +/- 10%, X7R, 0603	603
24	D1, D3, D4, D5	0	40V	BAT165E6327HTSA1	Infineon Technologies	Diode, Schottky, 40 V, 0.75 A, AEC-Q101, SOD-323	SOD-323
25	D2, D6	0	36V	5.0SMDJ36A	Littelfuse	Diode, TVS, Uni, 36 V, 58.1 Vc, SMC	SMC
26	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
27	Q1, Q2, Q3	0	600 V	STGB7NC60HDT4	STMicroelectronics	Transistor, IGBT, 600 V, 25 A, DDPAK	DDPAK
28	Q4	0		NGTB40N120LWG	On Semiconductor	IGBT, 40 A, 1200 V, 3-Pin TO-247, Pb-Free, Tube	TO-247-3-340L-02
29	R4, R8, R11, R14	0	4.7	ERJ-6RQF4R7V	Panasonic	RES, 4.70, 1%, 0.125 W, AEC-Q200 Grade 0, 0805	805