

Bill of Materials

TI DESIGNS

TIDA-00429

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	!PCB		Printed Circuit Board	Any	PWR635			
2	1	C1	0.1uF	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	AVX	06033C104KAT2A		0603	
3	4	C2, C3, C8, C9	4.7uF	CAP, CERM, 4.7uF, 25V, +/-10%, X7R, 1206	TDK	C3216X7R1E475K		1206	
4	2	C4, C10	330uF	CAP, AL, 330uF, 25V, +/-20%, 0.16 ohm, SMD	Nippon Chemi-Con	EMZA250ADA331MHA0G		HA0	
5	2	C5, C11	330pF	CAP, CERM, 330pF, 100V, +/-5%, X7R, 0603	AVX	06031C331JAT2A		0603	
6	2	C6, C12	1000pF	CAP, CERM, 1000pF, 100V, +/-20%, X7R, 0603	AVX	06031C102MAT2A		0603	
7	1	C7	1uF	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	TDK	C1608X5R1E105K080A C		0603	
8	1	D1	30V	Diode, Schottky, 30V, 0.2A, SOT-23	Diodes Inc.	BAT54C-7-F		SOT-23	
9	2	D2, D6	Red	LED, Red, SMD	OSRAM	LS E63F-DBFA-1-Z		Power TOPLED w/lens	
10	2	D3, D7	Green	LED, Green, SMD	OSRAM	LT E63C-CADB-35-L-Z		Power TOPLED w/lens	
11	2	D4, D8	20V	Diode, Schottky, 20V, 3A, SMA	Diodes Inc.	B320A-13-F		SMA	
12	2	D5, D9	16V	Diode, TVS, Uni, 16V, 600W, SMB	Diodes Inc.	SMBJ16A-13-F		SMB	
13	0	FID1, FID2, FID3		Fiducial mark. There is nothing to buy or mount.	N/A	N/A		Fiducial	
14	4	H1, H2, H3, H4		Bumpon, Cylindrical, 0.312 X 0.200, Black	3M	SJ61A1		Black Bumpon	
15	5	J1, J4, J6, J9, J10	1x3	Header, TH, 100mil, 1x3, Gold plated, 230 mil above insulator	Sullins Connector Solution	PBC03SAAN		PBC03SAAN	
16	4	J2, J3, J7, J8		Terminal Block, 2x1, 5.08mm, TH	TE Connectivity	282841-2		10.16x15.2x9mm	
17	1	J5		Header, TH, 100mil, 2x2, Gold plated, 230 mil above insulator	Samtec, Inc.	TSW-102-07-G-D		TSW-102-07-G-D	
18	1	LBL1		Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10		PCB Label 0.650"H x 0.200"W	
19	1	Q1	30V	MOSFET, N-CH, 30V, 100A, SON 5x6mm	Texas Instruments	CSD17301Q5A		SON 5x6mm	
20	2	Q2, Q3	60V	MOSFET, N-CH, 60V, 0.31A, SOT-323	Fairchild Semiconductor	2N7002KW		SOT-323	
21	4	R1, R2, R16, R17	100k	RES, 100k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW0603100KJNEA		0603	
22	5	R3, R4, R18, R19, R20	475k	RES, 475k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603475KFKEA		0603	
23	1	R5	10.0k	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA		0603	
24	1	R6	0.1	RES, 0.1 ohm, 1%, 3W, 2512	Bourns	CRA2512-FZ-R100ELF		2512	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
25	3	R9, R10, R25	16.9k	RES, 16.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060316K9FKEA		0603	
26	2	R11, R23	47k	RES, 47k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060347K0JNEA		0603	
27	2	R12, R27	24.9k	RES, 24.9k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060324K9FKEA		0603	
28	2	R13, R26	32.4k	RES, 32.4k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060332K4FKEA		0603	
29	2	R14, R28	16.2k	RES, 16.2k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060316K2FKEA		0603	
30	2	R15, R24	100k	RES, 100k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603100KFKEA		0603	
31	2	R21, R29	10k	RES, 10k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW060310K0JNEA		0603	
32	2	S1, S2		Switch, Push Button, SMD	Alps	SKRKAEE010		2.9x2x3.9mm	
33	3	SH-J1, SH-J4, SH-J9	1x2	Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA		Shunt	
34	11	TP1, TP4, TP5, TP8, TP9,	White	Test Point, TH, Multipurpose, White	Keystone	5012		Keystone5012	
35	4	TP2, TP3, TP15, TP16	Red	Test Point, TH, Multipurpose, Red	Keystone	5010		Keystone5010	
36	3	TP6, TP19, TP23	Orange	Test Point, Multipurpose, Orange, TH	Keystone	5013		Orange	
37	1	TP7	White	Test Point, Multipurpose, White, TH	Keystone	5012		White	
38	3	TP10, TP14, TP26	Black	Test Point, TH, Multipurpose, Black	Keystone	5011		Keystone5011	
39	4	TP12, TP13, TP24, TP25	SMT	Test Point, SMT, Compact	Keystone	5016		Testpoint_Keysto	
40	1	U1		2.7V-18V eFuse with True Reverse Blocking	Texas Instruments	TPS25940ARVC		RVC0020A	
41	1	U2		2.7V-18V eFuse with True Reverse Blocking	Texas Instruments	TPS25940LRVC		RVC0020A	
42	0	R7	0.003	RES, 0.003 ohm, 1%, 1W, 2512	CTS Resistor	73M1R003F		2512	
43	0	R8	324k	RES, 324k ohm, 1%, 0.1W, 0603	Yageo America	RC0603FR-07324KL		0603	
44	0	R22	48.7k	RES, 48.7k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060348K7FKEA		0603	
45	0	SH-J5, SH-J6, SH-J10	1x2	Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA		Shunt	

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