Variant: 001 Generated: 11/10/2015 11:36:46 AM TID #: TIDA-00675

## TIDA-00675 REV E1 Bill of Materials



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReferenc
1	!PCB	1		TIDA-00675	Any	Printed Circuit Board	
3	C1, C3 C1 1, C1 2	2	3.3uF 10uF	GRM188R61A335KE15D GRM21BR71A106KE51L	MuRata MuRata	CAP, CERM, 3.3 µF, 10 V, +/- 10%, X5R, 0603 CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0603
4	C2, C4	2	0.01uF	GRM188R71H103KA01D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0603	0603
5	C2_1, C2_2, CO2, CO3	4	22uF	GRM31CR71A226KE15L	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, 1206	1206
6	C3_1, C3_2,	4	0.01uF	GRM155R71H103KA88D	MuRata	CAP, CERM, 0.01 µF, 50 V, +/- 10%, X7R, 0402	0402
7	C4_1, C4_2 C5_1_C5_2	4	470pF	GRM155R71H471KA01D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 10%, X7R, 0402	0402
	C6_1, C6_2						1
8	CB1, CB2, CB3, CB4, CIN1, CIN2,	8	1uF	C1608X7R1E105K080AB	TDK	CAP, CERM, 1 µF, 25 V, +/- 10%, X7R, 0603	0603
	CIN3, CIN4						
9	CCOMP	1	8200pF	GRM188R72A822KA01D	MuRata	CAP, CERM, 8200 pF, 100 V, +/- 10%, X7R, 0603	0603
10 11	CCS CFT	1	0.1uF 75pF	C1608X7R1H104K GRM1885C1H750JA01D	TDK MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603 CAP, CERM, 75 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603 0603
12	CHB	1	0.47uF	GRM21BR72A474KA73L	MuRata	CAP, CERM, 0.47 µF, 100 V, +/- 10%, X7R, 0805	0805
13	CHF CIN1 3	1	8pF 68uF	GQM2195C2A8R0CB01D 50SVPF68M	MuRata Panasonic	CAP, CERM, 8 pF, 100 V, +/- 5%, C0G/NP0, 0805  CAP, Aluminum Polymer, 68 uF, 50 V, +/- 20%, 0.02 ohm, F12, SMD.	0805 2-F12, SMD, 2-Leads,
						Leads, Body 10.5x10.5mm, Height 12.7mm SMD	Body 10.5x10.5mm,
15	CIN2 3, CIN3 3	2	10uF	GRM32FR61H106KA12I	MuRata	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1210	Height 12.7mm 1210
16	CIN5, CL1, CL2,	6	0.1uF	C1608X8R1E104K	TDK	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X8R, 0603	0603
17	CL3, CL4, CL6 CIN6	1	22uF	EMVH101ADA220MJA0G	Chemi-Con	CAP, AL, 22 µF, 100 V, +/- 20%, 0.55 ohm, SMD	JAO
18	CL5	1	4.7uF	C2012X7R1A475M	TDK	CAP, CERM, 4.7 µF, 10 V, +/- 20%, 0.55 01111, 5MD	0805
19	CO1	1	470uF	APXE100ARA471MJ80G	Chemi-Con	CAP, AL, 470 µF, 10 V, +/- 20%, 0.019 ohm, SMD	J80
20	CRAMP CRES, CSS	2	820pF 0.68uF	GRM188R72A821KA01D GRM31MR71H684KA88L	MuRata MuRata	CAP, CERM, 820 pF, 100 V, +/- 10%, X7R, 0603 CAP, CERM, 0.68 µF, 50 V, +/- 10%, X7R, 1206	0603 1206
22	CVCC	1	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 µF, 50 V, +/- 10%, X7R, 0805	0805
23	D1, D2 D3, D4, D5, D6,	6	15V Green	LSM115JE3/TR13 LTST-C170KGKT	Microsemi Lite-On	Diode, Schottky, 15 V, 1 A, DO-214BA LED, Green, SMD	DO-214BA LED_0805
	D3, D4, D5, D6, D7, D8						
25 26	DHB	1	20V	RSX501L-20TE25	Rohm N/A	Diode, Schottky, 20 V, 5 A, SMA	SMA
26	FID4, FID5, FID6 H1, H2, H3, H4	3		N/A SJ-5303 (CLEAR)	N/A 3M	Fiducial mark. There is nothing to buy or mount.  Bumpon, Hemisphere, 0.44 X 0.20, Clear	Fiducial Transparent Bumpor
28	J1	1		SPC15363	Tenma	BANANA JACK, SOLDER LUG, RED, TH	Red Insulated
29	J2	1		SPC15354	Tenma	BANANA JACK, SOLDER LUG, BLACK, TH	Banana Jack Black Insulated
						, , ,	Banana Jack
30	J3, J4, J5, J6	4		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5
31	J7, J8, J9, J10,	12		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	mm, 2x1, TH Header, 2.54mm,
	J19, J21, TPC1,						2x1, TH
	TPC2, TPC3, TPC4, TPC5,						
	TPC6						
32	J11, J12, J13, J14, J15, J16,	10		61300311121	Wurth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
	J17, J18, J20, J22						SX I, IFI
	14.4.14.0	_	4 11	V41 4000 40014FD	0.7	1,	
33 34	L1_1, L1_2 L3	2	1uH 10uH	XAL4020-102MEB PM2110-100K-RC	Coilcraft Bourns	Inductor, Shielded, Composite, 1 µH, 8.75 A, 0.01 ohm, SMD Inductor, Toroid, 10 µH, 11.7 A, 0.007 ohm, SMD	4x2.1x4mm 30.5x15.75x25.4mm
35	QH, QL	2	60V	CSD18563Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 15 A, SON 5x6mm	SON 5x6mm
36	R1, R2, R3, R4, R5, R6	6	150	CRCW0603150RJNEA	Vishay-Dale	RES, 150, 5%, 0.1 W, 0603	0603
37	R1_1	1	499k	CRCW0603499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.1 W, 0603	0603
38 39	R1_2 R2_1, R2_2	1 2	200k 160k	RC0603FR-07200KL CRCW0603160KFKEA	Yageo America	RES, 200 k, 1%, 0.1 W, 0603	0603 0603
40	R4_1, R4_2	2	200k	CRCW0603100KFKEA	Vishay-Dale Vishay-Dale	RES, 160 k, 1%, 0.1 W, 0603 RES, 200 k, 5%, 0.1 W, 0603	0603
41	RB1, RB2, RT1,	4	110	CRCW0603110RJNEA	Vishay-Dale	RES, 110, 5%, 0.1 W, 0603	0603
42	RT2 RBA1, RBA2.	4	50k	3352T-1-503LF	Bourns	Trimming Potentiometer, 50K, 0.5W, TH	9.53x8.89mm
	RTA1, RTA2						
43	RC1, RC2, RC3,	6	0.005	PMR25HZPFU5L00	Rohm	RES, 0.005, 1%, 1 W, 1210	1210
44	RC4, RC5, RC6 RCOMP	1	60.4k	RC0603FR-0760K4L	Yageo America	RES, 60.4 k, 1%, 0.1 W, 0603	0603
45	RCS1, RCS2	2	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
46	RD1, RD2, RD3, RD4, RD5, RD6	6	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
47	RFB1_3	1	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.1 W, 0603	0603
48	RFB2_3 RGH. RGL	2	5.23k	RC0603FR-075K23L CRCW08050000Z0EA	Yageo America Vishay-Dale	RES, 5.23 k, 1%, 0.1 W, 0603 RES, 0, 5%, 0.125 W, 0805	0603
50	RPU1, RPU2	2	10k	RC0603JR-0710KL	Yageo America	RES, 10 k, 5%, 0.1 W, 0603	0603
51 52	RRAMP RS1, RS2, RS3	3	102k 0.004	RC0603FR-07102KL KRL6432E-M-R004-F-T1	Yageo America Susumu Co Ltd	RES, 102 k, 1%, 0.1 W, 0603 RES, 0.004, 1%, 3 W, 2512 WIDE	0603 2512 WIDE
53	RT_3	1	16.5k	CRCW060316K5FKEA	Vishay-Dale	RES, 16.5 k, 1%, 0.1 W, 0603	0603
54	RUV1	1	14.0k	RC0603FR-0714KL	Yageo America	RES, 14.0 k, 1%, 0.1 W, 0603	0603
55 56	RUV2 SH-J7, SH-J8, SH-	10	49.9k 1x2	RC0603FR-0749K9L 969102-0000-DA	Yageo America 3M	RES, 49.9 k, 1%, 0.1 W, 0603 Shunt, 100mil, Gold plated, Black	0603 Shunt
	J9, SH-J10, SH-						
	J11, SH-J13, SH- J15, SH-J17, SH-						
	J20, SH-J22						
57	TP1, TP2, TP3, TP4, TP5, TP6,	16	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
	TP7, TP8, TP9,						restpoint
	TP10, TP11, TP12_TP13						
	TP12, TP13, TP14, TP15.						
	TP16						
58	TPG1, TPG2, TPG3, TPG4,	8	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
	TPG5, TPG6,						Corponit
59	TPG7, TPG8 U1, U2	2		TPS62090QRGTRQ1	Texas Instruments	3-A High-Efficient Synchronous Step-Down Converter with DCS-Control	, RGT0016C
- 38	J., 02				rakas moduments	RGT0016C	
60	U3	1		LM25117QPMH/NOPB	Texas Instruments	Wide Input Range Synchronous Buck Controller with Analog Current	PWP0020A
61	U4, U6	2		TPS22965TDSGRQ1	Texas Instruments	Monitor, PWP0020A 5.5-V, 4-A, 16-mO On-Resistance Load Switch, DSG0008A	DSG0008A
62	U5, U7	2		TPS22965NTDSGRQ1	Texas Instruments	5.5-V, 4-A, 16-mO On-Resistance Load Switch, DSG0008A	DSG0008A
63 64	U8, U9 U10	2		LMC555CM TPS7A6550QKVURQ1	Texas Instruments Texas Instruments	CMOS Timer, 8-pin Narrow SOIC Single Output Automotive LDO, 300 mA, Fixed 5 V Output, 4 to 40 V	M08A KVU0003A
04						Input, 3-pin PFM (KVU), -40 to 125 degC, Green (RoHS & no Sb/Br)	
65	U11, U12, U13,	6		TPS22915BYFP	Texas Instruments	Single Channel Ultra-Low Resistnace Load Switch, YFP0004AAAA	YFP0004AAAA
66	U14, U15, U16 CL1A, CL2A,	0	10uF	GRM21BR6YA106KE43L	MuRata	CAP, CERM, 10 uF, 35 V, +/- 10%, X5R, 0805	0805
	CL3A, CL4A					. , . , . , , ,	
67	CSNB	0	10uF	C2012X7R1A106M125AC C0402C102J3RACTU	TDK Komet	CAP, CERM, 10 µF, 10 V, +/- 20%, X7R, 0805	0805
68	CT1, CT2, CT3, CT4	0	1000pF	CO402C102J3RAC1U	Kemet	CAP, CERM, 1000 pF, 25 V, +/- 5%, X7R, 0402	0402
69	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
70	RL1_1, RL1_2, RI 1 3 RI 1 4	0	3.30	CRCW25123R30FKEG	Vishay-Dale	RES, 3.30, 1%, 1 W, 2512	2512
	RL1_3, RL1_4, RL2_1, RL2_2,						
	RL2_3, RL2_4						
	RL3_1, RL3_2,	0	1.80	CRCW25121R80FKEG	Vishay-Dale	RES, 1.80, 1%, 1 W, 2512	2512
71	DI 2 2 DI 2 4						
71	RL3_3, RL3_4, RL4_1, RL4_2, RL4_3, RL4_4						

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