

**TIDA-01621 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7 uF, 50 V,+/- 10%, X7R, 1210	1210
2	C2	1	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 uF, 10 V,+/- 10%, X7R, 0603	0603
3	C3	1	0.47uF	C0603C474K4RACTU	Kemet	CAP, CERM, 0.47 uF, 16 V,+/- 10%, X7R, 0603	0603
4	C4	1	100pF	06033C101KAT2A	AVX	CAP, CERM, 100 pF, 25 V,+/- 10%, X7R, 0603	0603
5	C5, C6	2	22uF	EMK316BB7226ML-T	Taiyo Yuden	CAP, CERM, 22 uF, 16 V,+/- 20%, X7R, 1206	1206
6	C7	1	0.1uF	C1608X7R1H104K080AA	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
7	C8, C12	2	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 uF, 16 V, +/- 10%, X7R, 0805	0805
8	C9, C10	2	0.1uF	06032C104KAT2A	AVX	CAP, CERM, 0.1 uF, 10 V,+/- 10%, X7R, 0603	0603
9	C11	1	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
10	C13	1	2.2uF	GRM31CR72A225KA73L	MuRata	CAP, CERM, 2.2 uF, 100 V, +/- 10%, X7R, 1206 190	1206_190
11	C14	1	0.022uF	GRM188R71C223KA01D	MuRata	CAP, CERM, 0.022 uF, 16 V, +/- 10%, X7R, 0603	0603
12	C15	1	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1 uF, 100 V, +/- 20%, X7R, 1206	1206
13	C16	1	1uF	GRM188R61H105KAALD	MuRata	CAP, CERM, 1 uF, 50 V,+/- 10%, X5R, 0603	0603
14	C17	1	2.2uF	EMK107BB7225MA-T	Taiyo Yuden	CAP, CERM, 2.2 uF, 16 V,+/- 10%, X7R, 0603	0603
15	C18	1	100pF	06035A101JAT2A	AVX	CAP, CERM, 100 pF, 50 V,+/- 5%, COG/NPO, 0603	0603
16	D1	1	Green	LNJ337W83RA	Panasonic	LED, Green, SMD	1.6x0.8mm
17	D2	1	50V	ES3AB-13-F	Diodes Inc.	Diode, Superfast Rectifier, 50 V, 3 A, SMB	SMB
18	D3	1	100V	MMBD914	Fairchild Semiconductor	Diode, P-N, 100 V, 0.2 A, SOT-23	SOT-23
19	J1, J2, J5	3		282834-2	TE Connectivity	Terminal Block, 2x1, 2.54mm, TH	Terminal Block, 2x1, 2.54mm, TH
20	J3, J4	2		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
21	L1	1	2.2uH	DFE252012F-2R2M=P2	MuRata Toko	Inductor, Shielded, Powdered Iron, 2.2 uH, 2.3 A, 0.082 ohm, SMD	2.5x1.2x2mm
22	L2	1	15uH	784773115	Wurth Elektronik	Inductor, Wirewound, Ferrite, 15 uH, 1.2 A, 0.204 ohm, AEC-Q200 Grade 1, SMD	Inductor, 4.5x3.2x4.0mm, SMD
23	Q1	1	60V	SI7414DN-T1-E3	Vishay-Siliconix	MOSFET, N-CH, 60 V, 5.6 A, PowerPAK 1212	PowerPAK 1212
24	R1	1	51.1k	RC0603FR-0751K1L	Yageo America	RES, 51.1 k, 1%, 0.1 W, 0603	0603
25	R2	1	22.1k	CRCW060322K1FKEA	Vishay-Dale	RES, 22.1 k, 1%, 0.1 W, 0603	0603
26	R3	1	0	5106	Keystone	RES, 0, 1%, 0.5 W, 0805	0805
27	R4, R5, R6, R17, R30	5	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
28	R7, R12, R20, R21, R29, R31	6	4.7k	CRCW06034K70JNEA	Vishay-Dale	RES, 4.7 k, 5%, 0.1 W, 0603	0603
29	R8	1	715k	RC0603FR-07715KL	Yageo America	RES, 715 k, 1%, 0.1 W, 0603	0603
30	R9	1	20.0k	RT0603DRE0720KL	Yageo America	RES, 20.0 k, 0.5%, 0.1 W, 0603	0603
31	R10	1	30.1k	CRCW060330K1FKEA	Vishay-Dale	RES, 30.1 k, 1%, 0.1 W, 0603	0603
32	R11	1	402k	CRCW0603402KFKFA	Vishay-Dale	RES, 402 k, 1%, 0.1 W, 0603	0603
33	R13	1	6.04k	CRCW06036K04FKFA	Vishay-Dale	RES, 6.04 k, 1%, 0.1 W, 0603	0603
34	R14	1	20.0k	CRCW060320K0FKFA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, 0603	0603
35	R16	1	1.60k	RC1206FR-071K6L	Yageo America	RES, 1.60 k, 1%, 0.25 W, 1206	1206
36	R18, R19	2	68.1k	RT0603BRD0768K1L	Yageo America	RES, 68.1 k, 0.1%, 0.1 W, 0603	0603
37	R22	1	47	CRCW080547R0JNEA	Vishay-Dale	RES, 47, 5%, 0.125 W, 0805	0805
38	R23	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, 0603	0603
39	R24	1	0.5	CSRN2010FKR500	Stackpole Electronics Inc	RES, 0.5, 1%, 1 W, 2010	2010
40	R25	1	2.4	CRCW20102R40JNEF	Vishay-Dale	RES, 2.4, 5%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
41	R27	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
42	R28	1	80.6	CRCW060380R6FKFA	Vishay-Dale	RES, 80.6, 1%, 0.1 W, 0603	0603
43	TP1, TP3, TP5, TP7, TP8, TP9, TP10, TP11, TP12	9		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
44	TP2, TP4, TP6	3		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
45	U1	1		LMR23610ADDAR	Texas Instruments	SIMPLE SWITCHER, 36V 1A Synchronous Step-Down Converter, DDA0008E (SOIC-8)	DDA0008E
46	U2	1		ISO7142CCDBQ	Texas Instruments	4242-Vpk Small Footprint and Low-Power 2/2 Quad Channel Digital Isolator with Noise Filter, DBQ0016A (SSOP-16)	DBQ0016A
47	U3	1		TPS7B6933QDBVRQ1	Texas Instruments	High Voltage Ultra Low Iq - Low Drop Out Regulator, DBV0005A (SOT-23-5)	DBV0005A
48	U4	1		TPS26600PWPR	Texas Instruments	4.5V-55V, 0.15A-2A, 150mOhm Industrial eFuse, PWP0016D	PWP0016D
49	U5	1		DRV110APWR	Texas Instruments	Single-Channel Relay, Solenoid, Valve Low-Side Controller With Current Regulation, PW0014A (TSSOP-14)	PW0014A
50	U6, U7	2		TVS3300DRVR	Texas Instruments	33V Precision Surge Protection Clamp, DRV0006A (WSON-6)	DRV0006A
51	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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