



TIDA-01227 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-01227	Any	Printed Circuit Board	
2	C1	1	100uF	ECA-2AHG101	Panasonic	CAP, AL, 100 uF, 100 V, +/- 20%, TH	10x20mm
3	C2	1	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
4	C3	1	0.01uF	885012205031	Würth Elektronik	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	0402
5	C4	1	5600pF	06031C562JAT2A	AVX	CAP, CERM, 5600 pF, 100 V, +/- 5%, X7R, 0603	0603
6	C5	1	1uF	C3216X7R2A105M160AA	TDK	CAP, CERM, 1 uF, 100 V, +/- 20%, X7R, 1206	1206
7	C6	1	0.1uF	C2012X7R2A104K125AA	TDK	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	0805
8	C7	1	10uF	CL21A106KAFN3NE	Samsung Electro-Mechanics	CAP, CERM, 10 uF, 25 V, +/- 10%, X5R, 0805	0805
9	C8, C9, C13	3	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
10	C10, C12, C23, C24, C25, C26	6	0.1uF	GRM188R72A104KA35D	MuRata	CAP, CERM, 0.1uF, 100V, +/-10%, X7R, 0603	0603
11	C11	1	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
12	C14	1	1000pF	C0603X102K5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
13	C15, C16, C17, C18, C19, C20, C21, C22	8	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 20%, X7R, 0402	0402
14	D1, D2	2	Red	150080SS75000	Würth Elektronik	LED, Red, SMD	LED_0805
15	J1, J2	2		61301011821	Würth Elektronik	Receptacle, 2.54mm, 10x1, Gold, TH	Receptacle, 2.54mm, 10x1, TH
16	J3, J4, J5	3		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
17	L1	1	220uH	744770222	Würth Elektronik	Inductor, Shielded Drum Core, Ferrite, 220 uH, 1.3 A, 0.39 ohm, SMD	SMD
18	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	8	100V	CSD19538Q3A	Texas Instruments	MOSFET, N-CH, 100 V, 5 A, VSONP-8	DNH0008A
19	Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16	8	30V	CSD17483F4T	Texas Instruments	MOSFET, N/P-CH, 30 V, 1.5 A, 1.0x0.35x0.6mm	1.0x0.35x0.6mm
20	R1	1	100k	3386P-1-104LF	Bourns	TRIMMER, 100k ohm, 0.5W, TH	375x190x375mil
21	R2	1	267k	CRCW0402267KFKED	Vishay-Dale	RES, 267 k, 1%, 0.063 W, 0402	0402
22	R3	1	51.1k	CRCW040251K1FKED	Vishay-Dale	RES, 51.1 k, 1%, 0.063 W, 0402	0402
23	R4	1	2.67k	CRCW04022K67FKED	Vishay-Dale	RES, 2.67 k, 1%, 0.063 W, 0402	0402
24	R5	1	9.09k	CRCW04029K09FKED	Vishay-Dale	RES, 9.09 k, 1%, 0.063 W, 0402	0402
25	R6	1	301	CRCW0402301RFKED	Vishay-Dale	RES, 301, 1%, 0.063 W, 0402	0402
26	R7	1	2.20	ERJ-6RQF2R2V	Panasonic	RES, 2.20, 1%, 0.125 W, 0805	0805
27	R8	1	3.3k	CRCW06033K30JNEA	Vishay-Dale	RES, 3.3k ohm, 5%, 0.1W, 0603	0603
28	R9, R12	2	0.05	CRA2512-FZ-R050ELF	Bourns	RES, 0.05 ohm, 1%, 3W, 2512	2512
29	R10, R11	2	330	CRCW0603330RJNEA	Vishay-Dale	RES, 330 ohm, 5%, 0.1W, 0603	0603
30	R13, R14, R25, R26	4	18.0k	CRCW040218K0FKED	Vishay-Dale	RES, 18.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R15, R17, R27, R29	4	3.01k	CRCW04023K01FKED	Vishay-Dale	RES, 3.01 k, 1%, 0.063 W, 0402	0402
32	R19, R20, R31, R32	4	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
33	R21, R22, R33, R34	4	14.0k	CRCW040214K0FKED	Vishay-Dale	RES, 14.0 k, 1%, 0.063 W, 0402	0402
34	R23, R24, R35, R36	4	6.98k	CRCW04026K98FKED	Vishay-Dale	RES, 6.98 k, 1%, 0.063 W, 0402	0402
35	U1	1		LM5017MRX/NOPB	Texas Instruments	100V, 600mA Constant On-Time Synchronous Buck Regulator, DDA0008B	DDA0008B
36	U2	1		DRV8711DCPR	Texas Instruments	STEPPER MOTOR CONTROLLER IC, DCP0038A	DCP0038A
37	U3, U4, U5, U6	4		LM5107SD/NOPB	Texas Instruments	100V / 1.4A Peak Half-Bridge Gate Driver, 8-pin LLP, Pb-Free	SDC08A
38	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
39	R16, R18, R28, R30	0	100	CRCW0603100RJNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603