

TIDA-00796 REV E2 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB1	1		TIDA-00796	Any	Printed Circuit Board	
2	C1	1	0.47uF	GCM21BR71H474KA55L	MuRata	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
3	C2, C3	2	2.2uF	GCM31CR71H225KA55L	MuRata	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
4	C4	1	0.47uF	GCM31MR71H474KA37L	MuRata	CAP, CERM, 0.47 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
5	C5, C6	2	22uF	GCM31CR71A226KE02	MuRata	CAP, CERM, 22 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
6	C7, C8, C13, C20, C22	5	0.1uF	GCM188R71H104KA57D	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, 0603	0603
7	C9, C10, C11	3	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
8	C12, C21	2	10uF	GCM21BR71A106KE22L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, 0805	0805
9	C14	1	10uF	GCM31CR71C106KA64L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
10	C15, C40	2	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
11	C16	1	10uF	GCM32ER71E106KA57L	MuRata	CAP, CERM, 10 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1210	1210
12	C17, C19, C23, C26, C29, C31, C35, C38	8	68pF	GCM1885C1H680JA16D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0603	0603
13	C25	1	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
14	C28, C37	2	1000pF	GCM2165C1H102JA16D	MuRata	CAP, CERM, 1000 pF, 50 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0805	0805
15	C33, C34	2	15pF	GCM1885C1H150JA16D	MuRata	CAP, CERM, 15 pF, 50 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0603	0603
16	D1, D5, D8	3	60V	SS16T3G	ON Semiconductor	Diode, Schottky, 60 V, 1 A, SMA	SMA
17	D2	1	43V	SMAJ43A	Littelfuse	Diode, TVS, Uni, 43 V, 400 W, SMA	SMA
18	D3, D4	2	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
19	D6	1	Super Red	150060SS75000	Würth Elektronik	LED, Super Red, SMD	LED_0603
20	D7	1	6V	SMAJ6.0A	Littelfuse	Diode, TVS, Uni, 6 V, 400 W, SMA	SMA
21	D9, D10, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21	12	70V	1PS79SB70,115	NXP Semiconductor	Diode, Schottky, 70 V, 0.07 A, SOD-523	SOD-523
22	F1	1		MF-NSMF050-2	Bourns	Fuse, Resettable, 1 A, 13.2 V, SMD	1206 (3216 Metric)
23	FB1	1	1000 ohm	BK2125HS102-T	Taiyo Yuden	Ferrite Bead, 1000 ohm @ 100 MHz, 0.3 A, 0805	0805
24	J1	1		1725656	Phoenix Contact	Terminal Block, 100mil, 2x1, 6A, 63V, TH	6.2x8.5x5.54 mm
25	J2, J6	2		5-146278-3	TE Connectivity	Header, 100mil, 3x1, Tin, TH	Header, 3x1, 100mil, TH
26	J3	1		GRPB122VWVN-RC	Sullins Connector Solutions	Header, 1.27mm, 12x2, Gold, TH	Header, 1.27mm, 12x2, TH
27	J4, J5	2		SSQ-108-02-G-D	Samtec	Receptacle, 100mil, 8x2, Gold, TH	Receptacle, 8x2, Body 21.08x4.95mm, Pitch 2.54mm
28	J7	1		1725698	Phoenix Contact	Terminal Block, 6x1, 2.54mm, TH	Terminal Block, 6x1, 2.54mm, TH
29	L1, L2	2	56uH	MSS7341T-563MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 56 uH, 0.94 A, 0.17 ohm, AEC-Q200 Grade 1, SMD	MSS7341
30	R1, R2, R11, R14, R19, R22, R23, R24, R25, R26, R27, R32, R33	13	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
31	R3	1	2.20k	RC0603FR-072K2L	Yageo America	RES, 2.20 k, 1%, 0.1 W, 0603	0603
32	R4	1	510	RC0603FR-07510RL	Yageo America	RES, 510, 1%, 0.1 W, 0603	0603
33	R5	1	1.80k	RC0603FR-071K8L	Yageo America	RES, 1.80 k, 1%, 0.1 W, 0603	0603
34	R6	1	750	RC0603FR-07750RL	Yageo America	RES, 750, 1%, 0.1 W, 0603	0603
35	R7, R8, R13, R20, R29, R36, R38	7	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
36	R9, R10	2	68.0k	RC0603FR-0768KL	Yageo America	RES, 68.0 k, 1%, 0.1 W, 0603	0603
37	R12, R28	2	51.0k	RC0603FR-0751KL	Yageo America	RES, 51.0 k, 1%, 0.1 W, 0603	0603
38	R15, R16, R17, R18, R30, R31, R34, R35	8	27.0k	RC0603FR-0727KL	Yageo America	RES, 27.0 k, 1%, 0.1 W, 0603	0603
39	R21, R37	2	20.0k	RC0603FR-0720KL	Yageo America	RES, 20.0 k, 1%, 0.1 W, 0603	0603
40	S1	1		434121025816	Würth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
41	U1	1		LM2842XQMKX/NOPB	Texas Instruments	600 mA 42V Input Step-Down DC/DC Regulator in Thin SOT, DDC0006A	DDC0006A
42	U2	1		SN74LVC1G97DCKR	Texas Instruments	Configurable Multiple-Function Gate, DCK0006A	DCK0006A
43	U3	1		TLV71333PQDBVRQ1	Texas Instruments	Capacitor-Free, 150-mA, Low-Dropout Regulator with Foldback Current Limit for Portable Devices, DBV0005A	DBV0005A
44	U4	1		PGA411PAP	Texas Instruments	PGA411PAP, PAP0064M	PAP0064M
45	Y1	1		NX3225GA-20MHZ-STD-CRA-1	NDK	Crystal, 20.000MHz, 8pF, SMD	3.2x0.75x2.5mm
46	C18, C27, C36	0	68pF	GCM1885C1H680JA16D	MuRata	CAP, CERM, 68 pF, 50 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0603	0603
47	C24, C30, C32, C39	0	470pF	GCM1885C1H471JA16D	MuRata	CAP, CERM, 470 pF, 50 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0603	0603
48	C41	0	0.01uF	GCM188R71H103KA37D	MuRata	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
49	D11	0	20V	MMSZ4707-V	Vishay-Semiconductor	Diode, Zener, 20 V, 500 mW, SOD-123	SOD-123
50	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
51	L3, L4	0	51uH	DLW43SH510XK2L	MuRata	Coupled inductor, 51 uH, 0.23 A, 1 ohm, SMD	4.5x3.2mm

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