

TIDA-00803	REV E1	Bill of	Materials

ltem #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReferenc
1	IPCB	1	4 705	TIDA-00803 GRM31CR71H475KA12L	Any	Printed Circuit Board CAP, CERM, 4.7 µF, 50 V, +/- 10%, X7R, 1206	1206
2	C1 C2	1	4.7uF 220uF	EEV-FK1J221Q	MuRata Panasonic	CAP, CERM, 4.7 μF, 50 V, +/- 10%, X/R, 1206 CAP, AL, 220 μF, 63 V, +/- 20%, 0.16 ohm, SMD	1206 SMT Radial H13
4	C3, C9, C13,	5	0.1uF	GRM188R71H104KA93D	MuRata	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
_	C15, C16						1000
5 6	C4, C19 C5, C6	2	1uF 22pF	GRM31MR71H105KA88L 06035A220JAT2A	MuRata AVX	CAP, CERM, 1 μF, 50 V, +/- 10%, X7R, 1206 CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0603	1206 0603
7	C7	1	1.3pF	GJM1555C1H1R3CB01D	MuRata	CAP, CERM, 22 pr, 30 V, +/- 3%, COG/NP0, 0003	0402
8	C8	1	430pF	GRM1555C1H431JA01D	MuRata	CAP, CERM, 430 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
9	C10	1	0.15uF	GRM21BR71H154KA01L	MuRata	CAP, CERM, 0.15 µF, 50 V, +/- 10%, X7R, 0805	0805
10	C11 C12	1	0.18uF	GRM21BR71H184KA01L	MuRata	CAP, CERM, 0.18 µF, 50 V, +/- 10%, X7R, 0805	0805
12	C12 C14	1	220pF 100uF	C1005X7R1H221K C1210C107M8PACTU	TDK Wurth Elektronik	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0402 CAP, CERM, 100 μF, 10 V, +/- 20%, X5R, 1210	1210
13	C17, C18	2	100pF	CC0402JRNPO9BN101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
14	C20, C30, C35	3	22uF	C2012X7S1A226M125AC	TDK	CAP, CERM, 22 µF, 10 V, +/- 20%, X7S, 0805	0805
15	C21	1	2200pF	GRM188R71C222KA01D	MuRata AVX	CAP, CERM, 2200 pF, 16 V, +/- 10%, X7R, 0603	0603
16 17	C22, C25 C23, C26	2	0.1uF 0.01uF	0603YC104JAT2A 0603ZC103KAT2A	AVX	CAP, CERM, 0.1 μF, 16 V, +/- 5%, X7R, 0603 CAP, CERM, 0.01 μF, 10 V, +/- 10%, X7R, 0603	0603
18	C24, C27	2	2.2uF	GRM188R71A225KE15D	MuRata	CAP, CERM, 2.2 µF, 10 V, +/- 10%, X7R, 0603	0603
19	C28, C36	2	4.7uF	C1608X7S1A475K080AC	TDK	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X7S, 0603	0603
20	C29, C38	2	10uF	C2012X7R1A106K125AC GCM155R71C104KA55D	TDK MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
21	C31 C32	1	0.1uF 2700pF	CC0805KRX7R9BB272	MuRata Yageo America	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402 CAP, CERM, 2700 pF, 50 V, +/- 10%, X7R, 0805	0402 0805
23	C33	1	5600pF	CC0805KRX7R9BB562	Yageo America	CAP, CERM, 5600 pF, 50 V, +/- 10%, X7R, 0805	0805
24	C34	1	270pF	C0603C271J5GACTU	Kemet	CAP, CERM, 270 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
25	C37	1	0.018uF	CC0805KRX7R9BB183	Yageo America	CAP, CERM, 0.018 µF, 50 V, +/- 10%, X7R, 0805	0805
26 27	D1 D2	1	60V 45V	PDS360-13 PMEG045V150EPDAZ	Diodes Inc. NXP Semiconductor	Diode, Schottky, 60 V, 3 A, PowerDI5 Diode, Schottky, 45 V, 15 A, AEC-Q101, CFP15	PowerDI5 CFP15
27	D2 D3	1	45V 20V	PMEG045V150EPDAZ PMEG2010AEH, 115	NXP Semiconductor	Diode, Schottky, 45 V, 15 A, AEC-Q101, CFP15 Diode, Schottky, 20 V, 1 A, SOD-123F	SOD-123F
29	FID4, FID5, FID6	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
30	H1, H2, H3, H4	4		SJ61A2	3M	Bumpon, Hemisphere, 0.375 X 0.235, Black	Black Bumpon
31	H5, H6	2		3218	Keystone	WASHER FLAT 1/4 NYLON	0.260"ID x 0.437"OI
32	J1	1		SPC15363	Tenma	BANANA JACK, SOLDER LUG, RED, TH	x 0.062"THK Red Insulated
-						Land Stor, Colder 200, NED, III	Banana Jack
33	J2	1		SPC15354	Tenma	BANANA JACK, SOLDER LUG, BLACK, TH	Black Insulated
	10			000000000000000000000000000000000000000			Banana Jack
34	J3	1		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
35	L1	1	22uH	MSS1210-223ME	Coilcraft	Inductor, Shielded, Ferrite, 22 µH, 6.7 A, 0.026 ohm, SMD	Inductor,
00			22011		Contrait		12.3x10x12.3mm
36	L2	1	10uH	MSS1278T-103MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 10 µH, 5.7 A, 0.02 ohm, SMD	MSS1278T
37	L3	1	2.2uH	LQM2HPN2R2MJ0L	MuRata	Inductor, Multilayer, Ferrite, 2.2 µH, 1 A, 0.12 ohm, SMD	SMD, Body
							2.5x2mm, Height 1.2mm
38	L4	1	1uH	XFL4020-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 µH, 5.4 A, 0.01 ohm, SMD	4x2x4mm
39	L5	1	1uH	SDR0403-1R0ML	Bourns	Inductor, Drum Core, Ferrite, 1 µH, 3.8 A, 0.033 ohm, SMD	4.5x3.2x4mm
40	R1	1	49.9k	CRCW060349K9FKEA	Vishay-Dale	RES, 49.9 k, 1%, 0.1 W, 0603	0603
41	R2	1	2.32k	RC0603FR-072K32L	Yageo America	RES, 2.32 k, 1%, 0.1 W, 0603	0603
42	R3 R4, R10	1	15.0k 147k	RC0603FR-0715KL CRCW0603147KFKEA	Yageo America Vishay-Dale	RES, 15.0 k, 1%, 0.1 W, 0603 RES, 147 k, 1%, 0.1 W, 0603	0603
44	R5, R8	2	30.1k	RC0603FR-0730K1L	Yageo America	RES, 30.1 k, 1%, 0.1 W, 0603	0603
45	R6	1	2.00k	CRCW06032K00FKEA	Vishay-Dale	RES, 2.00 k, 1%, 0.1 W, 0603	0603
46	R7	1	221k	RC0603FR-07221KL	Yageo America	RES, 221 k, 1%, 0.1 W, 0603	0603
47 48	R9 R11	1	3.3k 47k	CRCW06033K30JNEA RC0603JR-0747KL	Vishay-Dale Yageo America	RES, 3.3 k, 5%, 0.1 W, 0603 RES, 47 k, 5%, 0.1 W, 0603	0603
49	R12, R13, R14,	6	100k	RC0603ER-07100KI	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
	R15, R16, R17	-					
50	R18	1	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
51 52	R19	1	82.5k	ERJ-6ENF8252V	Panasonic	RES, 82.5 k, 1%, 0.125 W, 0805	0805
52	R20 R21	1	3.32k 40.2k	CRCW04023K32FKED CRCW040240K2FKED	Vishay-Dale Vishay-Dale	RES, 3.32 k, 1%, 0.063 W, 0402 RES, 40.2 k, 1%, 0.063 W, 0402	0402
54	R22	1	80.6k	CRCW040240K2FKED	Vishay-Dale	RES, 80.6 k, 1%, 0.063 W, 0402	0402
55	R23	1	4.7	CRCW06034R70JNEA	Vishay-Dale	RES, 4.7, 5%, 0.1 W, 0603	0603
56	R24	1	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
57	R25	1	3.74k	CRCW04023K74FKED	Vishay-Dale	RES, 3.74 k, 1%, 0.063 W, 0402	0402
58 59	R26 R27	1	32.4k 10.5k	CRCW040232K4FKED CRCW040210K5FKED	Vishay-Dale Vishay-Dale	RES, 32.4 k, 1%, 0.063 W, 0402 RES, 10.5 k, 1%, 0.063 W, 0402	0402
60	S1	1	10.0K	100SP1T1B4M2QE	E-Switch	Switch, SPDT, On-On, 2 Pos, TH	12.7x6.86mm
61	TP1, TP2, TP3, TP4, TP5, TP6, TP11, TP12, TP13, TP14, TP15, TP16, TP23, TP26, TP23, TP26,	16	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
62	TP27, TP28 TP7, TP8, TP9, TP10, TP17, TP18, TP19, TP20, TP21, TP22, TP24, TP25, TP29, TP30, TP31	15		2505-2-00-44-00-00-07-0	Mill-Max	PCB Pin, Swage Mount, TH	PCB Pin(2505-2)
63	U1	1		TPS54362BQPWPRQ1	Texas Instruments	3-A, 60-V Step-Down DC-DC Converter With Low I(q), PWP0020N	PWP0020N
64 65	U2, U3 U4	2		LM3880QMFX-1AE/NOPB TPS22966TDPURQ1	Texas Instruments Texas Instruments	Power Sequencer, 6-pin SOT-23, Pb-Free Dual-Channel, Ultra-Low Resistance Load Switch, DPU0014A	MF06A DPU0014A
66	U5	1		TPS71718QDRVRQ1	Texas Instruments	Low-Noise, High-Bandwidth PSRR, Low-Dropout, 150-mA Linear Regulator, DRV0006A	DRV0006A
67 68	U6 U7	1		TPS71728QDRVRQ1 TPS62261TDRVRQ1	Texas Instruments Texas Instruments	Low-Noise, High-Bandwidth PSRR, Low-Dropout, 150-mA Linear Regulator, DRV0006A 2.25-MHz 600-mA STEP-DOWN CONVERTER, DRV0006A	DRV0006A DRV0006A
68 69	U7 U8	1		TPS57114QRTERQ1	Texas Instruments	2.95 V to 6 V Input, 4-A Output, 2MHz, Synchronous Step Down Switcher, RTE0016F	RTE0016F
70	U9	1		TPS61170QDRVRQ1	Texas Instruments	1.2A High Voltage Boost Converter in 2x2mm SON Package, DRV0006A	DRV0006A
	U10	1	1	SN74AHC1G32TDCKRQ1	Texas Instruments	Single 2-Input Positive-OR Gate, DCK0005A	DCK0005A
71 72	U11, U12	2		SN74LVC1G08QDCKRQ1	Texas Instruments	Single 2-Input Positive-AND Gate, DCK0005A	DCK0005A

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