

TIDA-00929 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-00929	Any	Printed Circuit Board	
2	C1, C10, C15	3	0.1uF	C1005X8R1A104K050BA	TDK	CAP, CERAM, 0.1 uF, 10 V, +/- 10%, XSR, 0402	0402
3	C2, C7	2	2.7uF	ULR2H2R7MNL1GS	Nichicon	CAP, AL, 2.7 uF, 500 V, +/- 20%, SMD	DBxL10mm
4	C3, C8, C23	3	1000pF	CC0805JRN09BNT01	Yageo America	CAP, CERAM, 100 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
5	C4	1	0.068uF	GRM155R61A683KA01D	MuRata	CAP, CERAM, 0.068 uF, 10 V, +/- 10%, XSR, 0402	0402
6	C5	1	1uF	GRM155R61A109KE15D	MuRata	CAP, CERAM, 1 uF, 10 V, +/- 10%, XSR, 0402	0402
7	C6	1	3.3uF	GRM188R61A335KE15D	MuRata	CAP, CERAM, 3.3 uF, 10 V, +/- 10%, XSR, 0603	0603
8	C9	1	68uF	UJUD1A68MCL1GS	Nichicon	CAP, AL, 68 uF, 10 V, +/- 20%, 0.44 ohm, SMD	6.3x5.8
9	C11, C14	2	100uF	TAJ106M010RNJ	AVX	CAP, TA, 10 uF, 10 V, +/- 20%, 3 ohm, SMD	3216-18
10	C16, C17	2	220pF	GOM2195C1H220B01D	MuRata	CAP, CERAM, 22 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
11	C18, C42	2	100pF	GOM2195C2A100B01D	MuRata	CAP, CERAM, 10 pF, 100 V, +/- 5%, COG/NP0, 0805	0805
12	C21, C25, C26, C32, C39, C40, C45	7	0.1uF	06033C104JA12A	AVX	CAP, CERAM, 0.1 uF, 25 V, +/- 5%, X7R, 0603	0603
13	C24, C31, C37, C38, C44	5	1uF	C1608X7R1C105K080AC	TDK	CAP, CERAM, 1 uF, 16 V, +/- 10%, X7R, 0603	0603
14	C29	1	220pF	GRM2165C1H221JA01D	MuRata	CAP, CERAM, 220 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
15	C35, C36, C43	3	1000pF	GRM216R71E102KA01D	MuRata	CAP, CERAM, 1000 pF, 25 V, +/- 10%, X7R, 0805	0805
16	C41	1	1300pF	06035C132JA12A	AVX	CAP, CERAM, 1300 pF, 50 V, +/- 5%, X7R, 0603	0603
17	D1	1	1000V	1N4007	Fairchild Semiconductor	Diode, P-N, 1000 V, 1 A, TH	DO-41
18	D2	1	800V	CD1408-FU1800	Bourns	Diode, Ultrafast, 800 V, 1 A, 1408 Diode	1408 Diode
19	D3	1	3.6V	1SMB5914BT3G	ON Semiconductor	Diode, Zener, 3.6 V, 550 mW, SMB	SMB
20	D4	1	400V	SMCJ4000CA	Littelfuse	Diode, TVS, Bi, 400 V, 648 Vc, DO-214AB (no polarity)	DO-214AB (no polarity)
21	D5	1	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
22	D6	1	600V	ES3J	Fairchild Semiconductor	Diode, Fast Rectifier, 600 V, 3 A, SMC	SMC
23	D8	1	Red	15080SS75000	Würth Elektronik	LED, Red, SMD	LED 0805
24	FID1, FID2, FID3	3	N/A	N/A	N/A	Physical mark. There is nothing to buy or mount.	Physical
25	H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
26	J2	1		800-10-004-10-001000	Mill-Max	Header, 100mil, 4x1, TH	Header, 4x1, 100mil, TH
27	J3, J4, J5, J6	4		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
28	J7	1		1715734	Phoenix Contact	TERM BLOCK 3POS 5.08MM, TH	15.24x13.8x9.8mm
29	L1	1	470uH	SDR0302-471KL	Bourns	Inductor, Drum Core, Ferrite, 470 uH, 0.11 A, 14.3 ohm, SMD	3x2.5x2.8mm
30	L2	1	1.2mH	MSS1210-125KE	Coilcraft	Inductor, Shielded, Ferrite, 1.2 mH, 0.84 A, 1.21 ohm, SMD	Inductor, 12.3x10x12.3mm
31	L3	1	330 ohm	BLM18SG331TND	MuRata	Ferrite Bead, 330 ohm @ 100 MHz, 1.5 A, 0603	0603
32	LBL1	1		TH1-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650" x 0.200" W
33	Q1	1	12V	CSD13201W10	Texas Instruments	MOSFET, N-CH, 12 V, 1.6 A, 1x0.62x1mm	1x0.62x1mm
34	R1	1	39.7k	RT0805BRD0739K7L	Yageo America	RES, 39.7 k, 0.1%, 0.125 W, 0805	0805
35	R2	1	10.2k	CRCW040210K2FKED	Vishay-Dale	RES, 10.2 k, 1%, 0.063 W, 0402	0402
36	R3, R5	2	300	CRCW0603300KJNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
37	R4	1	4.99k	CRCW04024K99FKED	Vishay-Dale	RES, 4.99 k, 1%, 0.063 W, 0402	0402
38	R6, R38	2	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
39	R7, R10, R44, R46, R49	5	47k	CRCW060347K0JNEA	Vishay-Dale	RES, 47 k, 5%, 0.1 W, 0603	0603
40	R11	1	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
41	R15, R16, R19, R20	4	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
42	R17, R22, R30	3	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
43	R25, R29	2	20.0k	CRCW080520K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.125 W, 0805	0805
44	R27	1	180k	CRCW0805180KJNEA	Vishay-Dale	RES, 180 k, 5%, 0.125 W, 0805	0805
45	R32	1	200k ohm	EVM-3YSX0B25	Panasonic	TRIMMER, 200k ohm, 0.15W, SMD	3.1x3.45mm
46	R33	1	3.40k	CRCW06033K40FKEA	Vishay-Dale	RES, 3.40 k, 1%, 0.1 W, 0603	0603
47	R34	1	3.83Meg	CRCW06033M83FKEA	Vishay-Dale	RES, 3.83 M, 1%, 0.125 W, 0805	0805
48	R35	1	120k	CRCW0805120KJNEA	Vishay-Dale	RES, 120 k, 5%, 0.125 W, 0805	0805
49	R36	1	200k	CRCW0805200KJNEA	Vishay-Dale	RES, 200 k, 5%, 0.125 W, 0805	0805
50	R37	1	29.4k	CRCW060329K4FKEA	Vishay-Dale	RES, 29.4 k, 1%, 0.1 W, 0603	0603
51	R41	1	402	CRCW0805402KFKEA	Vishay-Dale	RES, 402, 1%, 0.125 W, 0805	0805
52	R42	1	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
53	R43	1	1.0k	CRCW08051K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.125 W, 0805	0805
54	R45	1	300k	CRCW2010300KFKEF	Vishay-Dale	RES, 300 k, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	2010
55	R47	1	10.0	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
56	R48	1	1.10k	CRCW08051K10FKEA	Vishay-Dale	RES, 1.10 k, 1%, 0.125 W, 0805	0805
57	RF1	1	10	AC03000001009JACCS	Vishay-Bcomponents	RES, 10, 5%, 3 W, TH, 2-Leads, Axial, Dia 5.5mm, Pin Spacing 23.8mm	TH, 2-Leads, Axial, Dia 5.5mm, Pin Spacing 23.8mm
58	S1	1		EVQ-21506R	Panasonic	Switch, Tactile, SPST-NO, 0.02A, 15V, TH	6.0x3.0x6mm
59	TP4, TP5, TP6, TP7, TP8, TP9	6		0253-0-15-15-30-27-10-0	Mill-Max	Pin Receptacle, Dia 0.015-0.025", Length 0.173", Gold, TH	Pin Receptacle, Dia 0.015-0.025 inch, Length 0.173 inch, TH
60	U1	1		UCC2880DR	Texas Instruments	700-V Lowest Quiescent Current Off-Line Switcher, D0007A	D0007A
61	U2	1		LP5907MFX-3/NOPB	Texas Instruments	ULTRA LOW-NOISE, 250-mA LINEAR REGULATOR FOR RF AND ANALOG CIRCUITS REQUIRES NO BYPASS CAPACITOR, DBV0005A	DBV0005A
62	U3	1		MSP430F5994IRG2R	Texas Instruments	Mixed-Signal Microcontroller, RGZ0048A	RGZ0048A
63	U4	1		TPS3828-330DBVRQ1	Texas Instruments	Voltage Monitor With Watchdog Timer, DBV0005A (SOT-5)	DBV0005A
64	U5	1		TLV318IDBVR	Texas Instruments	10-MHz, Rail-to-Rail Input/Output, Low-Voltage, 1.8-V CMOS Operational Amplifier, DBV0005A	DBV0005A
65	U6	1		SN74LVC1G157DRYR	Texas Instruments	SINGLE-POLE DOUBLE-THROW ANALOG SWITCH, DRY0006A	DRY0006A
66	U7	1		OPA835IDBVR	Texas Instruments	Ultra Low Power, Rail-to-Rail Out, Negative Rail In, VFB Amplifier, 2.5 to 5.5 V, -40 to 125 degC, 6-pin SOT23 (DBV6), Green (RoHS & no Sb/Br)	DBV0006A
67	U8	1		OPA836IDBVR	Texas Instruments	Very Low Power, Rail to Rail Out, Negative Rail In, VFB Operational Amplifier, 2.5 to 5.5 V, -40 to 125 degC, 6-pin SOT23 (DBV6), Green (RoHS & no Sb/Br)	DBV0006A
68	U9	1		TLV3201AIDBVR	Texas Instruments	40-ns, microPOWER, Push-Pull Output Comparators, DBV0005A	DBV0005A
69	U10	1		TLV431AIDBZR	Texas Instruments	Low Voltage Adjustable Precision Shunt Regulator, 39 ppm / degC, 15 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
70	U11	1		LMV612MA	Texas Instruments	Dual 1.4 MHz, Low Power General Purpose, 1.8V Op Amp, D0008A	D0008A
71	C12, C13	0	1uF	LMK212B7105KD-T	Taiyo Yuden	CAP, CERAM, 1 uF, 10 V, +/- 10%, X7R, 0805	0805
72	C19	0	100pF	GOM2195C2A100B01D	MuRata	CAP, CERAM, 10 pF, 100 V, +/- 5%, COG/NP0, 0805	0805
73	C20, C27, C30	0	22pF	GOM2195C1H220B01D	MuRata	CAP, CERAM, 22 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
74	C22	0	100pF	CC0805JRN09BNT01	Yageo America	CAP, CERAM, 100 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
75	C28	0	220pF	GRM2165C1H221JA01D	MuRata	CAP, CERAM, 220 pF, 50 V, +/- 5%, COG/NP0, 0805	0805
76	C33, C34	0	1000pF	GRM216R71E102KA01D	MuRata	CAP, CERAM, 1000 pF, 25 V, +/- 10%, X7R, 0805	0805
77	R8, R9, R39, R40	0	0	CRCW06030000Z0EA	Vishay-Dale	RES, 0, 5%, 0.1 W, 0603	0603
78	R12, R13	0	51k	CRCW080551K0JNEA	Vishay-Dale	RES, 51 k, 5%, 0.125 W, 0805	0805
79	R14, R23	0	100k	CRCW0805100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.125 W, 0805	0805
80	R18, R21	0	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
81	R24, R28	0	20.0k	CRCW080520K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.125 W, 0805	0805
82	R26	0	180k	CRCW0805180KJNEA	Vishay-Dale	RES, 180 k, 5%, 0.125 W, 0805	0805
83	R31	0	120k	CRCW0805120KJNEA	Vishay-Dale	RES, 120 k, 5%, 0.125 W, 0805	0805

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