

TIDA-050027 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPCB1	1		TIDA-050027	Any	Printed Circuit Board	
2	C1, C2, C3, C5, C7, C9, C10, C11, C13, C14, C16, C27, C29, C31, C34	15	1uF	885012105012	Würth Elektronik	CAP, CERM, 1 uF, 10 V, +/- 20%, XSR, 0402	0402
3	C4, C6, C8, C12, C15, C28, C30, C32, C33	9	0.1uF	GRM033R61C104KE84D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, XSR, 0201	0201
4	C17	1	1000pF	GRM033R71E102KA01D	MuRata	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, 0201	0201
5	C18, C23	2	22uF	CL10A226MP8NUNE	Samsung Electro-Mechanics	CAP, CERM, 22 uF, 10 V, +/- 20%, XSR, 0603	0603
6	C19, C20, C21, C25, C26	5	10uF	GRM155R60J106ME15D	MuRata	CAP, CERM, 10 uF, 6.3 V, +/- 20%, XSR, 0402	0402
7	C22, C24	2	6.8pF	GRM155C1E6R8CA01D	MuRata	CAP, CERM, 6.8 pF, 25 V, +/- 5%, C0G/NPO, 0402	0402
8	C35	1	0.1uF	GRM155R61E104KA87D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, XSR, 0402	0402
9	C36	1	1uF	C1005JB1V105K050BC	TDK	CAP, CERM, 1 uF, 35 V, +/- 10%, JB, 0402	0402
10	C37, C39	2	1000pF	GRM033R71C102KA01D	MuRata	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0201	0201
11	C38	1	0.01uF	GRM033R61C103KA12D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, XSR, 0201	0201
12	C40, C44	2	22uF	C2012JB1V226M125AC	TDK	CAP, CERM, 22 uF, 35 V, +/- 20%, JB, 0805	0805
13	C41, C42, C45, C46	4	22uF	GRM188R60J226MEA0D	MuRata	CAP, CERM, 22 uF, 6.3 V, +/- 20%, XSR, 0603	0603
14	C43, C47, C48, C49	4	0.1uF	160R07X104KV4T	Johanson Technology	CAP, CERM, 0.1 uF, 16 V, +/- 10%, XSR, 0402	0402
15	J1	1		292303-4	TE Connectivity	Connector, Receptacle, USB Type A, R/A, Top Mount TH	USB Type A right angle
16	J2	1		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
17	JP1, JP2, JP5, JP6, JP7	5		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
18	JP3, JP4, JP8, JP9, JP10, JP11	6		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
19	L1	1	1uH	XAL4020-102MEB	Coilcraft	Inductor, Shielded, Composite, 1 uH, 8.75 A, 0.01 ohm, AEC-Q200 Grade 1, SMD	4x2.1x4mm
20	L2	1	2.2uH	XAL4020-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 uH, 5.5 A, 0.04 ohm, AEC-Q200 Grade 1, SMD	4x2.1x4mm
21	L3	1	1.5uH	SRP5030T-1R5M	Bourns	Inductor, Shielded, Ferrite, 1.5 uH, 6 A, 0.025 ohm, SMD	Inductor, 5.7x2.8x5.2mm
22	L4	1	3.3uH	SRN6045TA-3R3Y	Bourns	Inductor, Shielded, Ferrite, 3.3 uH, 5 A, 0.0252 ohm, AEC-Q200 Grade 1, SMD	6.0x6.0x4.5mm
23	Q1, Q3, Q5	3	-30V	A03401A	AOS	MOSFET, P-CH, -30 V, -4 A, SOT-23	SOT-23
24	Q2, Q4, Q6	3	30 V	BC849CLT1G	ON Semiconductor	Transistor, NPN, 30 V, 0.1 A, SOT-23	SOT-23
25	R1, R4, R13	3	100k	RG1005P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.063 W, 0402	0402
26	R2, R5, R14, R21, R22	5	1.00k	ERA-2AEB102X	Panasonic	RES, 1.00 k, 0.1%, 0.063 W, 0402	0402
27	R3, R6, R15, R24	4	10.0k	MCR01MRTF1002	Rohm	RES, 10.0 k, 0.1%, 0.063 W, 0402	0402
28	R7	1	150k	CRCW0402150KFKED	Vishay-Dale	RES, 150 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
29	R8, R10	2	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
30	R9	1	464k	CRCW0402464KFKED	Vishay-Dale	RES, 464 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
31	R11	1	100k	ERJ-2RKF1003X	Panasonic	RES, 100 k, 1%, 0.1 W, 0402	0402
32	R12	1	20.0k	PCF0402-12-20K0BT1	TT Electronics/IRC	RES, 20.0 k, 0.1%, 0.063 W, 0402	0402
33	R16	1	1.00Meg	MCT06030C1004FP500	Vishay/Beyschlag	RES, 1.00 M, 1%, 0.125 W, 0603	0603
34	R17	1	487	CRCW0402487RKFED	Vishay-Dale	RES, 487, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
35	R18	1	1.00Meg	ERJ-2RKF1004X	Panasonic	RES, 1.00 M, 1%, 0.1 W, 0402	0402
36	R19	1	1.37k	CRCW04021K37FKED	Vishay-Dale	RES, 1.37 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
37	R20	1	1.65k	CRCW04021K65FKED	Vishay-Dale	RES, 1.65 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	R23	1	56.2k	CRCW040256K2FKED	Vishay-Dale	RES, 56.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
39	R25	1	20.0k	RC0201FR-0720KL	Yageo America	RES, 20.0 k, 1%, 0.05 W, 0201	0201
40	R26	1	100k	RC0201FR-7D100KL	Yageo America	RES, 100 k, 1%, 0.05 W, 0201	0201
41	SH-J1, SH-J2, SH-J3, SH-J4, SH-J5, SH-J6, SH-J7	7	1x2	SPC02SYAN	Sullins Connector Solutions	Shunt, 100mil, Flash Gold, Black	Closed Top 100mil Shunt
42	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP25	23		5010	Keystone	Test Point, Multipurpose, Red, TH	Red Multipurpose Testpoint
43	TP23, TP24	2		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
44	U1	1		TLV75901PDRVT	Texas Instruments	1 A LDO, DRV0006A (WSON-6)	DRV0006A
45	U2, U3, U4, U9, U10	5		TPS22919DCKR	Texas Instruments	5.5-V, 1.5-A, 100-mohm Load Switch with Output Discharge, DCK0006A (SOT-SC70-6)	DCK0006A
46	U5	1		TLV75518PDQNT	Texas Instruments	500-mA, Low IQ, Small Size, Low Dropout Regulator, DON0004A (XSON-4)	DON0004A
47	U6	1		TPS22975DSGR	Texas Instruments	5.7V, 6A, 16mΩ Load Switch with Adjustable Rise Time & Optional QOD for Cost-Conscious Applications, DSG0008A (WSON-8)	DSG0008A
48	U7	1		TLV62569ADRLR	Texas Instruments	2-A High Efficiency Synchronous Buck Converter with Forced PWM Feature, DRL0006A (SOT-OTHER-6)	DRL0006A
49	U8	1		TLV62568PDRL	Texas Instruments	1-A High Efficiency Step-Down Converter in SOT Package, DRL0006A (SOT-6)	DRL0006A
50	U11	1		TPS25221DBVR	Texas Instruments	Precision Adjustable Current-Limited Power-Distribution Switch, DBV0006A (SOT-23-6)	DBV0006A
51	U12	1		TPS259541DSGR	Texas Instruments	12V eFuse with Over Voltage Protection, DSG0008A (WSON-8)	DSG0008A
52	U13, U14	2		TPS22810DBVR	Texas Instruments	16V, 3A, 79mohm Load Switch with Adjustable Rise Time, Adj. Quick Output Discharge, & Thermal Shutdown, DBV0006A (SOT-23-6)	DBV0006A
53	U15	1		TPS566250DDAR	Texas Instruments	4.5V to 17V Input, 6A Synchronous Step-Down Converter With VID Control, DDA0008E (SOIC-8)	DDA0008E
54	U16	1		TPS564201DDCR	Texas Instruments	4.5V to 17V Input, 4A Output, Synchronous Step-Down Converter, DDC0006A (SOT-23-T-6)	DDC0006A
55	U17	1		TLV809EA46DBZR	Texas Instruments	3-Pin Voltage Supervisors with Active-Low, Open-Drain Reset, DBZ0003A (SOT-23-3)	DBZ0003A
56	U18	1		TLV809EA29DBZR	Texas Instruments	3-Pin Voltage Supervisors with Active-Low, Open-Drain Reset, DBZ0003A (SOT-23-3)	DBZ0003A
57	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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