

# TIDA-00462 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	!PCB1	1		TIDA-00462	Any	Printed Circuit Board	
2	C1	1	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 $\mu$ F, 16 V, +/- 10%, X7R, 0603	0603
3	C2	1	0.1uF	C0603C104M4RACTU	Kemet	CAP, CERM, 0.1 $\mu$ F, 16 V, +/- 20%, X7R, 0603	0603
4	C3, C5	2	1uF	GRM188R71E105KA12D	MuRata	CAP, CERM, 1 $\mu$ F, 25 V, +/- 10%, X7R, 0603	0603
5	C4, C8, C18, C23	4	0.1uF	C1005X7R1H104K050BB	TDK	CAP, CERM, 0.1 $\mu$ F, 50 V, +/- 10%, X7R, 0402	0402
6	C6	1	10uF	GMK316AB7106KL	Taiyo Yuden	CAP, CERM, 10 $\mu$ F, 35 V, +/- 10%, X7R, 1206	1206
7	C7	1	0.01uF	C1005X7R1C103K	TDK	CAP, CERM, 0.01 $\mu$ F, 16 V, +/- 10%, X7R, 0402	0402
8	C9, C10	2	0.22uF	C1608X7R1H224K080AB	TDK	CAP, CERM, 0.22 $\mu$ F, 50 V, +/- 10%, X7R, 0603	0603
9	C11	1	0.47uF	GRM188R70J474KA01D	MuRata	CAP, CERM, 0.47uF, 6.3V, +/-10%, X7R, 0603	0603
10	C12, C14, C16	3	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1uF, 6.3V, +/-10%, X7R, 0402	0402
11	C13, C15, C17, C24	4	10uF	CL05A106MQ5NUNC	Samsung	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0402	0402
12	C19	1	7pF	CC0805DRNP09BN7R0	Yageo America	CAP, CERM, 7 pF, 50 V, +/- 7%, C0G/NP0, 0805	0805
13	C20, C21	2	22pF	C1005C0G1H220J050BA	TDK	CAP, CERM, 22 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
14	C22	1	10uF	885012207026	Würth Elektronik	CAP, CERM, 10 $\mu$ F, 10 V, +/- 10%, X7R, 0805	0805
15	C25	1	0.01uF	GRM188R71C103KA01D	MuRata	CAP, CERM, 0.01 $\mu$ F, 16 V, +/- 10%, X7R, 0603	0603
16	D1, D2	2	40V	MBR0540T1G	ON Semiconductor	Diode, Schottky, 40V, 0.5A, SOD-123	SOD-123
17	D3, D4	2	Green	150060VVS75000	Würth Elektronik eiSos	LED, Green, SMD	LED_0603
18	D5	1	Super Red	150060SS75000	Würth Elektronik eiSos	LED, Super Red, SMD	LED_0603
19	J1, J2, J5, J6, J19	5		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin plated, TH	Header, 3 PIN, 100mil, Tin
20	J3, J7, J15, J16, J17, J18, J22, J23, J24, J25	10		923345-01-C	3M	Jumper Wire, 100mil spacing, pkg of 200, TH	Wire Jumper
21	J4	1		ED120/2DS	On-Shore Technology	TERMINAL BLOCK 5.08MM VERT 2POS, TH	TERM_BLK, 2pos, 5.08mm
22	J8, J9	2		SSW-110-23-F-D	Samtec	Connector, Receptacle, 100mil, 10x2, Gold plated, TH	10x2 Receptacle
23	J20	1		SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions	Header (shrouded), 100 mil, 7x2, Gold plated, TH	7x2 Shrouded Header
24	J21	1		142-0701-201	Emerson Network Power	Connector, TH, SMA	SMA
25	L1	1	10uH	LPSS030-103MLB	Coilcraft	Inductor, Shielded Drum Core, Ferrite, 10 $\mu$ H, 1.4 A, 0.13 ohm, SMD	LPSS030
26	L2	1	10uH	VLS201610ET-100M	TDK	Inductor, Shielded, Ferrite, 10uH, 0.4A, 1.38 ohm, SMD	2.0x0.95x1.6mm
27	Q1	1	40 V	MMBT3904LT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
28	R1	1	1.6	ERJ-6GEYJ1R6V	Panasonic	RES, 1.6, 5%, 0.125 W, 0805	0805
29	R2	1	560k	RC0603FR-07560KL	Yageo America	RES, 560 k, 1%, 0.1 W, 0603	0603
30	R3	1	2.4k	CRCW06032K40JNEA	Vishay-Dale	RES, 2.4 k, 5%, 0.1 W, 0603	0603
31	R4	1	54.2k	RT0603DRE0754K2L	Yageo America	RES, 54.2 k, 0.5%, 0.1 W, 0603	0603
32	R5	1	1.0k	CRCW04021K00JNED	Vishay-Dale	RES, 1.0k ohm, 5%, 0.063W, 0402	0402
33	R6, R7, R8	3	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
34	R9	1	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
35	R10, R11, R12, R17	4	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.1W, 0603	0603
36	R13	1	1.50k	ERJ-3EKF1501V	Panasonic	RES, 1.50 k, 1%, 0.1 W, 0603	0603
37	R14	1	3.9k	CRCW06033K90JNEA	Vishay-Dale	RES, 3.9 k, 5%, 0.1 W, 0603	0603
38	R15	1	499k	CRCW0603499KFKEA	Vishay-Dale	RES, 499 k, 1%, 0.1 W, 0603	0603
39	R16	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47k ohm, 5%, 0.063W, 0402	0402
40	R18, R19	2	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00 M, 1%, 0.1 W, 0603	0603
41	R20	1	560	CRCW0603560RJNEA	Vishay-Dale	RES, 560, 5%, 0.1 W, 0603	0603
42	S1	1		SKRKAEE010	Alps	Switch, Push Button, SMD	2.9x2x3.9mm SMD
43	SH-J1, SH-J2, SH-J5, SH-J6, SH-J19	5	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
44	TP1	1	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
45	TP2, TP7	2	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
46	TP3, TP4, TP5, TP6	4	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
47	U1	1		TPS610461YFF	Texas Instruments	28-V Output Voltage Boost Converter, YFF0006AAAA	YFF0006AAAA
48	U2	1		TPS71733DCKR	Texas Instruments	Single Output High PSRR LDO, 150 mA, Fixed 3.3 V Output, 2.5 to 6.5 V Input, with Low IQ, 5-pin SC70 (DCK), -40 to 85 degC, Green (RoHS & no Sb/Br)	DCK0005A
49	U3	1		CD4049UBDR	Texas Instruments	CMOS Hex Buffer/Converters, D0016A	D0016A
50	U4	1		MSP430F5172IRSB	Texas Instruments	Mixed Signal Microcontroller, RSB0040B	RSB0040B
51	U5	1		LMP7715MF	Texas Instruments	1.8V Precision, Single Low Noise CMOS Input Op Amp, DBV0005A	DBV0005A
52	Y1	1		CM250C40000AZFT	Citizen Finetech Miyota	Crystal, 40kHz, 12.5pF, SMD	7.9x3.7mm
53	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
54	J10, J11, J12, J13	0		TSW-101-17-T-S	Samtec	Header, 100mil, 1x1, Tin, TH	2.54mm Header
55	J14	0		923345-01-C	3M	Jumper Wire, 100mil spacing, pkg of 200, TH	Wire Jumper