

TIDA-00982 REV A Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC B1	1		TIDA-00982	Any	Printed Circuit Board	
2	C1, C2, C3, C7, C8, C9, C14, C16, C18, C19, C20, C22, C23, C24, C25, C29, C30, C31	18	0.1uF	C1005X7R1E104M050BB	TDK	CAP, CERM, 0.1 uF, 25 V, +/- 20%, X7R, 0402	0402
3	C4, C5	2	10uF	UMK325AB7106KM-T	Taiyo Yuden	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
4	C6	1	2.2uF	C2012X7R1H225K125AC	TDK	CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, 0805	0805
5	C10, C15	2	1uF	C0603C105K3RACTU	Kemet	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, 0603	0603
6	C11, C12, C13, C27, C28	5	10uF	C3216X7R1C106K160AC	TDK	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, 1206_190	1206_190
7	C17	1	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	0603
8	C21, C26	2	2.2uF	GRM155R61E225KE11D	MuRata	CAP, CERM, 2.2 uF, 25 V, +/- 10%, X5R, 0402	0402
9	C32	1	100pF	CC0402JRNPO9BN101	Yageo America	CAP, CERM, 100 pF, 50 V, +/- 5%, COG/NPO, 0402	0402
10	D1	1	8.2V	BZT52C8V2T-7	Diodes Inc.	Diode, Zener, 8.2 V, 300 mW, SOD-523	SOD-523
11	D2, D5	2	30V	BAT54HT1G	ON Semiconductor	Diode, Schottky, 30 V, 0.2 A, SOD-323	SOD-323
12	D3, D4	2	Green	150060GS75000	Würth Elektronik	LED, Green, SMD	LED_0603
13	D6	1	5V	SM05T1G	ON Semiconductor	Diode, TVS, Uni, 5 V, 300 W, SOT-23	SOT-23
14	D7, D8, D9, D10, D11	5	Blue	150060BS75000	Würth Elektronik	LED, Blue, SMD	LED_0603
15	H1, H2, H3, H4	4		SJ61A1	3M	Bump on, Cylindrical, 0.312 X 0.200, Black	Black Bump on
16	J1, J2	2		B2B-XH-A(LF)(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 2x1, Tin, TH	Header (Shrouded), 2.5mm, 2x1, TH
17	J3	1		PJ-102AH	CUI Inc.	DC POWER JACK, R/A, TH	DC POWER JACK, R/A, TH
18	J4	1		B3B-XH-A(LF)(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 3x1, Tin, TH	Header (Shrouded), 2.5mm, 3x1, TH
19	J5	1		XT60-M	heXTronik	XT60 Connector, Male, Gold, TH	XT60 Connector, Male
20	J6	1		B4B-XH-A(LF)(SN)	JST Manufacturing	Header (Shrouded), 2.5mm, 4x1, Tin, TH	Header (Shrouded), 2.5mm, 4x1, TH
21	J7	1		XT60-F	heXTronik	XT60 Connector, Female, Gold, TH	XT60 Connector, Female
22	L1	1	3.3uH	74437349033	Würth Elektronik	Inductor, Shielded Drum Core, Powdered Iron, 3.3 uH, 6 A, 0.019 ohm, SMD	7.30x4.80x6.60mm
23	L2	1	10uH	74404042100	Würth Elektronik	Inductor, Wirewound, Ferrite, 10 uH, 1.2 A, 0.15 ohm, SMD	4x4mm
24	Q1	1	-30V	SSM6J507NU,LF	Toshiba	MOSFET, P-CH, -30 V, -10 A, UDFN6B	UDFN6B
25	Q2, Q3, Q4, Q6	4	30V	PSMN013-30YLC,115	NXP Semiconductor	MOSFET, N-CH, 30 V, 32 A, LFPACK	LFPACK
26	Q5	1	-30V	FDN358P	Fairchild Semiconductor	MOSFET, P-CH, -30 V, -1.5 A, SSOT-3	SSOT-3
27	Q7	1	60V	2N7002KW	Fairchild Semiconductor	MOSFET, N-CH, 60 V, 0.31 A, SOT-323	SOT-323
28	R1	1	9.31k	CRCW04029K31FKED	Vishay-Dale	RES, 9.31 k, 1%, 0.063 W, 0402	0402
29	R2, R5, R16, R18, R31, R32, R33, R38, R41	9	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, 0402	0402
30	R3	1	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
31	R4	1	430k	CRCW0402430KJNED	Vishay-Dale	RES, 430 k, 5%, 0.063 W, 0402	0402
32	R6	1	2.0	CRCW20102R00JNEF	Vishay-Dale	RES, 2.0, 5%, 0.75 W, 2010	2010
33	R7, R8, R17, R20, R27, R28, R30	7	100	CRCW0402100R0JNED	Vishay-Dale	RES, 100, 5%, 0.063 W, 0402	0402
34	R9, R15, R40	3	100k	CRCW0402100KFKED	Vishay-Dale	RES, 100 k, 1%, 0.063 W, 0402	0402
35	R10	1	0.01	LVK12R010FER	Ohmite	RES, 0.01, 1%, 0.5 W, 1206 sense	1206 sense
36	R11	1	287k	CRCW0402287KFKED	Vishay-Dale	RES, 287 k, 1%, 0.063 W, 0402	0402
37	R12	1	300k	CRCW0402300KFKED	Vishay-Dale	RES, 300 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
38	R13	1	10	CRCW060310R0JNEA	Vishay-Dale	RES, 10, 5%, 0.1 W, 0603	0603
39	R14	1	24.9k	CRCW0402249KFKED	Vishay-Dale	RES, 24.9 k, 1%, 0.063 W, 0402	0402
40	R19	1	0.001	PMR25HZPFV1L00	Rohm	RES, 0.001, 1%, 1 W, 1210	1210
41	R21, R26, R34	3	10Meg	CRCW040210M0JNED	Vishay-Dale	RES, 10 M, 5%, 0.063 W, 0402	0402
42	R22	1	300	CRCW0603300R0JNEA	Vishay-Dale	RES, 300, 5%, 0.1 W, 0603	0603
43	R23	1	100	CRCW0603100R0JNEA	Vishay-Dale	RES, 100, 5%, 0.1 W, 0603	0603
44	R24, R25, R29	3	5.1k	CRCW04025K10JNED	Vishay-Dale	RES, 5.1 k, 5%, 0.063 W, 0402	0402
45	R36, R37	2	200	CRCW0402200R0JNED	Vishay-Dale	RES, 200, 5%, 0.063 W, 0402	0402
46	R39	1	1.21Meg	CRCW04021M21FKED	Vishay-Dale	RES, 1.21 M, 1%, 0.063 W, 0402	0402
47	R42	1	383k	CRCW0402383KFKED	Vishay-Dale	RES, 383 k, 1%, 0.063 W, 0402	0402
48	R43	1	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402
49	RT1	1	10.0k ohm	ERT-J0EG103FA	Panasonic	Thermistor NTC, 10.0k ohm, 1%, 0402	0402
50	S1, S2	2		7914G-1-000E	Bourns	Switch, Tactile, SPST-NO, 0.1A, 16V, SMT	4.93x4.19x6.2 mm
51	U1	1		BQ24600RVAR	Texas Instruments	Standalone Synchronous Switch-Mode Charge Controller, 5 V, -40 to 85 degC, 16-pin VQFN (RVA), Green (RoHS & no Sb/Br)	RVA0016A
52	U2	1		BQ4050RSMR	Texas Instruments	1-Series, 2-Series, 3-Series, and 4-Series Li-Ion Battery Pack Manager, RSM0032A	RSM0032A
53	U3	1		TPS62175DQCR	Texas Instruments	28V, 0.5A Step-Down Converter with Sleep Mode, DQC0010A	DQC0010A
54	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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