

TIDA-01400 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I PCB	1		PWR898	Any	Printed Circuit Board	
C1, C2, C11	3	0.1uF	C0603C104K3RACTU	Kemet	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0603	0603
C3	1	4.7uF	GRM32ER71H475KA88L	MuRata	CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1210	1210
C4	1	0.01uF	CC0805KRX7R9BB103	Yageo America	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0805	0805
C5, C6, C10, C18, C19	5	0.1uF	C0603X104K3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603
C7	1	10uF	C3225X7R1C106M	TDK	CAP, CERM, 10uF, 16V, +/-20%, X7R, 1210	1210
C8, C16	2	0.1uF	C0603X104K3RACTU	Kemet	CAP, CERM, 0.1uF, 25V, +10%, X7R, 0603	0603
C9, C31	2	1uF	GRM188R71C105KA12D	MuRata	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603
C12, C17, C36	3	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 0805	0805
C13	1	0.022uF	C1608X7R1H223K	TDK	CAP, CERM, 0.022uF, 50V, +/-10%, X7R, 0603	0603
C14	1	390pF	08055A391JAT2A	AVX	CAP, CERM, 390pF, 50V, +/-5%, COG/NPO, 0805	0805
C15	1	1.8uF	C1210C185K3RACTU	Kemet	CAP, CERM, 1.8uF, 25V, +/-10%, X7R, 1210	1210
C20	1	4.7uF	GRM31CR71H475KA12L	MuRata	CAP, CERM, 4.7uF, 50V, +/-10%, X7R, 1206	1206
C21	1	1uF	GRM31CR72A105KA01L	MuRata	CAP, CERM, 1uF, 100V, +/-10%, X7R, 1206	1206
C22, C23, C24, C25	4	1000pF	CC1206KKX7RCBB102	Yageo America	CAP, CERM, 1000pF, 1000V, +/-10%, X7R, 1206	1206
C26, C30	2	0.1uF	C1608X7R1E104K	TDK	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	0603
C27	1	4.7uF	C3225X7S2A475K200AB	TDK	CAP, CERM, 4.7 uF, 100 V, +/- 10%, X7S, 1210	1210
C28	1	1000pF	C0603C102K5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0603	0603
C29	1	1uF	08055C105KAT2A	AVX	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
C32, C33, C35	3	4.7uF	CGB3B1X5R1A475K055AC	TDK	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0603	0603
C34	1	0.01uF	GRM188R71E103KA01D	MuRata	CAP, CERM, 0.01uF, 25V, +/-10%, X7R, 0603	0603
D1, D2	2	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20V, 0.5A, SOD-123	SOD-123
D3	1	Green	LTST-C170KGKT	Lite-On	LED, Green, SMD	LED_0805
D4, D5	2	White	VAOL-S8WR4	Visual Communications Comp	LED, White, SMD	0805
GND	1		1598-2	Keystone	Terminal, Turret, TH, Triple	Keystone1598-2
J1	1		70551-0038	Molex		70551-0038
J1/J3, J4/J2	2		PPPC102LFBN-RC	Sullins Connector Solutions	Receptacle, 100mil, 10x2, Gold, TH	10x2 Receptacle
J2	1		22-12-4062	Molex		22-12-4062
J3, J4	2		1729018	Phoenix Contact	TERM BLOCK 2POS 5mm, TH	10x10x8.1 mm
J5, J6	2		PBC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Gold, TH	Sullins 100mil, 1x2, 230 mil above insulator
L1	1	10uH	PCD2107TR-ND	Panasonic	Inductor, Shielded, Ferrite, 10uH, 1.3A, 0.17 ohm, SMD	ELL6RH
L2, L3	2	100uH	ACT45B-101-2P-TL003	TDK	Inductor, Ferrite, 100 uH, 0.15 A, 2 ohm, SMD	SMD, 4-Leads, Body 4.7 x 3.7 mm
L4, L5	2	470uH	744242471	Würth Elektronik	Coupled inductor, 470 uH, 0.4 A, 0.35 ohm, SMD	5x3.3mm
LBL1	1		THT-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 inch
Q1	1		ZXTN4004KTC	Diodes/Zetex	TRANS 150V 1A NPN LED DRVR TO252	DPAK
R1, R5	2	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R2, R7	2	49.9k	RC0603FR-0749K9L	Yageo America	RES, 49.9k ohm, 1%, 0.1W, 0603	0603
R3	1	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100k ohm, 5%, 0.1W, 0603	0603
R4	1	200k	CRCW0603200KJNEA	Vishay-Dale	RES, 200k ohm, 5%, 0.1W, 0603	0603
R6	1	232k	CRCW0603232KFKEA	Vishay-Dale	RES, 232k ohm, 1%, 0.1W, 0603	0603
R8, R10, R11	3	100k	RC0603FR-07100KL	Yageo America	RES, 100k ohm, 1%, 0.1W, 0603	0603
R9	1	49.9	RC0603FR-0749R9L	Yageo America	RES, 49.9, 1%, 0.1 W, 0603	0603

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R12, R13, R14, R15	4	10.0	CRCW120610R0FKEA	Vishay-Dale	RES, 10.0 ohm, 1%, 0.25W, 1206	1206
R16	1	2.0k	RC0603JR-072KL	Yageo America	RES, 2.0 k, 5%, 0.1 W, 0603	0603
R17	1	1.00	RC0603FR-071RL	Yageo America	RES, 1.00 ohm, 1%, 0.1W, 0603	0603
R18	1	0.39	ERJ-3RQFR39V	Panasonic	RES, 0.39 ohm, 1%, 0.1W, 0603	0603
R19, R20	2	100	CRCW2512100RJNEG	Vishay-Dale	RES, 100, 5%, 1 W, AEC-Q200 Grade 0, 2512	2512
R21, R22, R23, R24	4	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
R25, R26, R27, R28, R29	5	10.0k	CRCW120610K0FKEAHP	Vishay-Dale	RES, 10.0 k, 1%, 0.5 W, 1206	1206
R30	1	499	CRCW1206499RFKEA	Vishay-Dale	RES, 499, 1%, 0.25 W, 1206	1206
R31	1	0.1	CSRN2010FKR100	Stackpole Electronics Inc	RES, 0.1, 1%, 1 W, 2010	2010
R32, R33	2	0	CRCW12060000Z0EA	Vishay-Dale	RES, 0, 5%, 0.25 W, 1206	1206
R34, R35	2	2.2k	CRCW06032K20JNEA	Vishay-Dale	RES, 2.2 k, 5%, 0.1 W, 0603	0603
SC1, SC2	2		PMSSS 440 0025 PH	B&F Fastener Supply	MACHINE SCREW PAN PHILLIPS 4-40	Machine Screw, 4-40, 1/4"
SH-1, SH-2	2		881545-2	TE Connectivity	Shunt, 100mil, Gold plated, Black	Shunt 2 pos. 100 mil
ST1, ST2	2		1902B	Keystone	Standoff, Hex, 0.375"L #4-40 Nylon	Standoff
T1	1	340uH	750313638	Würth Elektronik	Transformer, 340 uH, SMT	8x9.14mm
TP1, TP2	2		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
U1	1		BQ76PL455ATPFCRQ1	Texas Instruments	16 Cell Battery Monitor with Passive Cell Balancing, PFC0080A (TQFP-80)	PFC0080A
U2	1		TPS7A1650DGNR	Texas Instruments	Single Output LDO, 100 mA, Fixed 5 V Output, 3 to 60 V Input, with Enable and Power Good, 8-pin MSOP (DGN), -40 to 125 degC, Green (RoHS & no Sb/Br)	DGN0008C
U3	1		TPS76350DBVR	Texas Instruments	LOW-POWER 150-mA LOW-DROPOUT LINEAR REGULATOR, DBV0005A	DBV0005A
U4	1		SN6501DBVR	Texas Instruments	Transformer Driver for Isolated Power Supplies, DBV0005A	DBV0005A
U5	1		NC7SZ04M5XTR	Rohm Semiconductor	IC INVERTER WITH SCHMITT TRIGGER SINGLE	soT23-5
U6	1		TPS61093QDSKRQ1	Texas Instruments	Low Input Boost Converter With Integrated Power Diode and Input/Output Isolation, DSK0010A (WSON-10)	DSK0010A
U7, U8	2		AMC1200BDUBR	Texas Instruments	Fully-Differential Isolation Amplifier, DUB0008A	DUB0008A
U9	1		TPD4E05U06QDQARQ1	Texas Instruments	1, 4, 6 CHANNEL PROTECTION SOLUTION FOR SUPER-SPEED (UP TO 6 GBPS) INTERFACE, DQA0010A	DQA0010A
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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