Texas Instruments

Bill of Materials

TI DESIGNS
50mA Wireless Charger Booster Pack
TIDA-00881

Designator	Description	Manufacturer	PartNumber	Quantity
PCB1	Printed Circuit Board Main PCB	Any	TIDA-00668	1
PCB2	Printed Circuit Board PCB Coil	Any	TIDA-00668_C02	1
BT1	Battery Holder, CR2032, Retainer clip, TH	Memory Protection Devices	BS-7	1
C1, C13, C15	CAP, CERM, 4700 pF, 50 V, +/- 10%, X8R, 0402	TDK	C1005X8R1H472K	3
C2, C19	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X7R, 0603	MuRata	GRM188R71E474KA12D	2
C3, C14, C16, C21, C23, C26, C27, C29	CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0402	MuRata	GRM155R71A104KA01D	8
C4, C5	CAP, CERM, 4.7 µF, 10 V, +/- 10%, X5R, 0402	TDK	C1005X5R1A475K050BC	2
C6, C9, C10, C20, C28	CAP, CERM, 0.01 µF, 50 V, +/- 5%, X7R, 0402	Kemet	C0402C103J5RACTU	5
C7	CAP, CERM, 0.022 µF, 16 V, +/- 10%, X7R, 0402	TDK	C1005X7R1C223K	1
C8	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X5R, 0603	MuRata	GRM188R61C475KAAJ	1
C11, C12	CAP, CERM, 220 pF, 50 V, +/- 5%, C0G/NP0, 0402	MuRata	GRM1555C1H221JA01D	2
C17, C18, C22, C24, C25	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603	Kemet	C0603C106M9PACTU	5
D1	LED, Green, SMD	Lite-On	LTST-C190GKT	1
Ferrite 1	Ferrite shield WE-FSFS	Wurth	354005	1
FID1, FID2, FID3	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	3
H1, H2, H3, H4, H5, H6, H7, H8	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	B&F Fastener Supply	NY PMS 440 0025 PH	8
HS5, HS6, HS7, HS8	Standoff, Hex, 0.375"L #4-40 Nylon	Keystone	1902B	4
J1, J2, J3, J4, J5, J6, J7	Header, 100mil, 2x1, Gold, TH	Sullins Connector Solutions	PBC02SAAN	7
J8	Header (shrouded), 2mm, 2x1, R/A, SMT	JST Manufacturing	S2B-PH-SM4-TB(LF)(SN)	1
JP1, JP2	Header, 100mil, 10x2, Tin, SMT	Samtec	TSM-110-01-T-DV-P	2
L1	Inductor, Shielded, Ferrite, 4.7 µH, 1.2 A, 0.14 ohm, SMD	Coilcraft	EPL3015-472MLB	1
L2	Inductor, Wirewound, Ferrite, 10 µH, 0.47 A, 0.435 ohm, SMD	Wurth Elektronik eiSos	74404024100	1
L3	Inductor, Wirewound, Ferrite, Wireless receiver coil 19mm Round	Wurth Elektronik	760308101214	1
Q1	MOSFET, N-CH, 20 V, 6.7 A, SMD, 2.0x2.0, Height 0.8mm	Texas Instruments	CSD85301Q2	1
R1, R6	RES, 10.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0FKED	2
R2	RES, 5.36 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04025K36FKED	1
R3	RES, 4.87 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04024K87FKED	1
R4	RES, 1.30 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04021K30FKED	1
R5	RES, 20.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040220K0FKED	1
R7	RES, 1.50 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04021K50FKED	1
R8, R10, R17, R23, R24	RES, 1.00 M, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04021M00FKED	5
R9	RES, 196, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402196RFKED	1
R11	RES, 110 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402110KFKED	1
R12	RES, 8.06 M, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04028M06FKED	1
R13, R21	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04020000Z0ED	2

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R14	RES, 140 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402140KFKED	1
R16	RES, 4.53 M, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04024M53FKED	1
R18	RES, 221, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402221RFKED	1
R19	RES, 2.21 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW04022K21FKED	1
R20	RES, 0.82, 1%, 0.125 W, 0402	Panasonic	ERJ-2BQFR82X	1
R22	RES, 2.7 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04022K70JNED	1
SH-J1, SH-J4, SH-J5, SH-J6, SH-J7	Shunt, 100mil, Gold plated, Black	3M	969102-0000-DA	5
U1	Highly Integrated Wireless Receiver Qi (WPC v1.1) Compliant Power Supply, YFP0028APAL	Texas Instruments	BQ51003YFPR	1
U2	400 mA Single-Input, Single Cell Li-Ion Battery Chargers, YFP0006AFAV	Texas Instruments	BQ25100YFP	1
U3	LOW INPUT VOLTAGE STEP-UP CONVERTER IN 6 PIN SC-70 PACKAGE, DCK0006A	Texas Instruments	TPS61220DCK	1
U4	Programmable Output Voltage Ultra-Low Power Buck Converter With Up to 50 mA Output Current, RGY0014A	Texas Instruments	TPS62736RGYR	1
U5	Cost-Effective Voltage and Current Protection Integrated Circuit for Single-Cell Li-Ion/Li-Polymer Batteries, DSE0006A	Texas Instruments	BQ29707DSER	1

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