

Bill of Materials

TI DESIGNS
Charger Booster Pack
TIDA-00587

Designator	Description	Manufacturer	PartNumber	Quantity
!PCB1	Printed Circuit Board	Any	TIDA-00587	1
C1	CAP, CERM, 0.033uF, 50V, +/-10%, X7R, 0603	MuRata	GRM188R71H333KA61D	1
C2, C8, C9, C10, C25	CAP, CERM, 1uF, 25V, +/-10%, X7R, 0805	MuRata	GRM21BR71E105KA99L	5
C3, C4, C5, C6	CAP, CERM, 10uF, 10V, +/-10%, X5R, 0805	MuRata	GRM21BR61A106KE19L	4
C7, C12, C13, C14, C15, C18, C20, C24, C26, C28	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	Kemet	C0603C104K3RACTU	10
C11, C17, C22	CAP, CERM, 100pF, 50V, +/-5%, COG/NP0, 0603	Kemet	C0603C101J5GACTU	3
C16, C19, C27	CAP, CERM, 100pF, 50V, +/-5%, COG/NP0, 0603	MuRata	GRM1885C1H101JA01D	3
C21, C23	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0603	MuRata	GRM188R71E104KA01D	2
D1, D2	Diode, TVS, Uni, 6.8V, 1500W, SMC	Littelfuse	1.5SMC6.8A	2
D3	LED, Red, SMD	Lite-On	LTST-C190CKT	1
F1, F2	Fuse, Resettable, 1.9A, 6V, SMD	TE Connectivity	RF1824-000	2
FID1, FID2, FID3	Fiducial mark. There is nothing to buy or mount.	N/A	N/A	3
H1	Heatsink, TO-268 [D3]SMT	Ohmite	DA-T268-101E	1
J1	Header, 12x1, 100mil, R/A, TH	Sullins Connector Solutions	PBC12SGBN	1
J2	Connector, Receptacle, Mini-USB Type B, R/A, Top Mount SMT	Hirose Electric Co. Ltd.	UX60SA-MB-5ST	1
J3	Header, 3x1 3.5mm, TH	On-Shore Technology	OSTOQ031251	1
J4	Header, 2.54 mm, 2x1, Gold, TH	Würth Elektronik	61300211121	1
J5	Connector, DC Jack 2.1X5.5 mm, TH	CUI Inc.	PJ-102A	1
J7, J8	Connector, Receptacle, 100mil, 10x2, Gold plated, TH	Samtec	SSW-110-24-F-D	2
L1	Inductor, Shielded Drum Core, Ferrite, 1uH, 3A, 0.019 ohm, SMD	Panasonic	ELL-6RH1R0M	1
LBL1	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	Brady	THT-14-423-10	1
Q1	MOSFET, N-CH, 30V, 32A, LFPK	NXP Semiconductor	PSMN013-30YLC,115	1
Q2	MOSFET, N-CH, 60V, 0.17A, SOT-23	Diodes Inc.	2N7002-7-F	1
R1	RES, 133 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603133RFKEA	1
R2, R6, R12, R18, R20, R21, R23, R31, R37, R39, R40	RES, 1.00Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031M00FKEA	11
R3	RES, 0.01 ohm, 0.5%, 0.5W, 1206	Ohmite	LVK12R010DER	1
R4	RES, 1.50k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K50FKEA	1
R5	RES, 365k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603365KFKEA	1
R7, R8, R27	RES, 10.0 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310R0FKEA	3
R9, R10, R25, R26, R33, R35	RES, 1.00k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031K00FKEA	6
R11, R13, R17, R19, R22, R28, R30, R32, R36, R38	RES, 10.0k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW060310K0FKEA	10
R14	RES, 124 ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW0603124RFKEA	1
R15	RES, 4.99k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034K99FKEA	1
R16	RES, 9.76k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06039K76FKEA	1
R24	RES, 1.82Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06031M82FKEA	1
R29	RES, 4.75k ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06034K75FKEA	1
R34	RES, 0.1 ohm, 1%, 1W, 2010	Stackpole Electronics Inc	CSRN2010FKR100	1
R41	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA	1
R42, R43	RES, 2.00Meg ohm, 1%, 0.1W, 0603	Vishay-Dale	CRCW06032M00FKEA	2
RT1	Thermistor NTC, 10.0k ohm, 1%, 0603	Panasonic	ERT-J1VG103FA	1
S1	Switch, Toggle, SPDT 1Pos, TH	NKK Switches	G12AP	1
TP1, TP3	Test Point, Miniature, Red, TH	Keystone	5000	2
TP2, TP5	Test Point, Miniature, Black, TH	Keystone	5001	2
TP4, TP6, TP7, TP8, TP9	Test Point, Miniature, White, TH	Keystone	5002	5
U1	2A Single Input I2C, Standalone Switch-Mode Li-Ion Battery Charger with Power-Path Management, RGE0024H	Texas Instruments	BQ24250RGER	1
U2, U3, U4	0.45 ohm QUAD SPDT ANALOG SWITCH QUAD-CHANNEL 2:1 MULTIPLEXER/DEMULTIPLEXER WITH TWO CONTROLS, PW0016A	Texas Instruments	TS3A44159PWR	3
U5	1.8-V, microPower, CMOS Operational Amplifiers, Zero-Drift Series, DBV0005A	Texas Instruments	OPA333AIDBV	1
U6	16-Bit, Ultra-Low Glitch, Voltage Output Digital-to-Analog Converter with 2.5V, 2ppm/°C Internal Reference, DGK0008A	Texas Instruments	DAC8560IDDGK	1
U7, U9	0.05 uV/C Max, Single-Supply CMOS Operational Amplifier, 2.7 to 5.5 V, -40 to 125 degC, 6-pin SOT23 (DBV0006A), Green (RoHS & no Sb/Br)	Texas Instruments	OPA334AIDBVR	2
U8	2.5 V, 4 ppm / degC, 100 uA Series (Bandgap) Voltage Reference, -40 to 125 degC, 6-pin SOT-23 (DBV), Green (RoHS & no Sb/Br)	Texas Instruments	REF3225AIDBVR	1
ZZZ	This is the mating Plug for Connector J3	On-Shore Technology	OSTTJ0311530	1
ZZ3	Transformer Wall Mnt 5V 2A	Volgen America	KUSB1052	1
ZZ4	CBL USB A-Mini B Con 3' 28/28 AWG	Qualtek	3021003-03	1

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