

2-cell charger

Reference	QTY	Identifier	footprint	Value	PN	Cost ea	Cost tot
BT2;BT1	2			LiFePO4			
C1;C2	2	CAP CER 4.7UF 16V X5R 0805	Radial_D5.0mm_P2.50mm	4.7uF	490-3338-1-ND	£0.25	£0.50
C10	1	CAP CER 2.2UF 16V X7R 0805	Radial_D5.0mm_P2.50mm	2.2uF	445-1420-1-ND	£0.15	£0.15
C13;C21	2	CAP CER 10UF 16V X7R 1206	Radial_D5.0mm_P2.50mm	10uF	478-5725-1-ND	£0.23	£0.46
C14;C16;C17;C19	4	CAP CER 12PF 50V C0G/NP0 0603	C_0805	12pF	399-1050-1-ND	£0.08	£0.32
C7;C12;C11;C5;C6;C3;C4;C9;C8;C24;C25;C26;C18;C15;C22;C20;C23	17	CAP CER 0.1UF 16V X7R 0603	C_0805	0.1uF	311-1088-1-ND	£0.08	£1.36
D1	1	LED RED DIFFUSED 0603 SMD	LED_0603	RED_LED	475-2512-1-ND	£0.20	£0.20
D3;D2	2	DIODE ZENER 5.6V 200MW SOD323F	SOT-23	MM3Z5V6C	MM3Z5V6CCT-N	£0.15	£0.30
D4;D5	2	LED RED DIFFUSED 0603 SMD	LED_0603	LED_ALT	475-2512-1-ND	£0.20	£0.40
F1	1	PTC 12V POLYFUSE 1812	R_1812	Polyfuse	F4246CT-ND	£1.51	£1.51
J1	1		CONN PWR JACK 2.5X5.5MM	BARREL_JACK	CP-036BHPJCT-	£1.07	£1.07
J5;J4;J3;J2	4			CONN_01X01			£0.00
J6	1	CONN USB MICRO B RECPT SMT R/A		USB_OTG	609-4613-1-ND	£0.36	£0.36
J7	1		Header_Straight_1x04_Pitc	CONN_01X04	A123234-ND	£0.59	£0.59
J8	1		Header_Straight_2x03_Pitc	CONN_02X03	WM17457-ND	£0.44	£0.44
Q1	1		SOT-23	2N7002K	2N7002K-7DICT-	£0.19	£0.19
Q3;Q2	2		SO-8_PowerPAK	Q_NMOS_DGS	296-24256-1-ND	£0.69	£1.38
R1	1	RES SMD 1K OHM 1% 1/10W 0603	R_0805	1k	311-1.00KHRCT-	£0.01	£0.01
R12	1	RES SMD 0.001 OHM 1% 1W 1206	R_1812	3m	CSNL1206FT1L0	£0.50	£0.50
R13;R14	2	RES SMD 5.1K OHM 1% 1/10W 0603	R_0805	5.1k	311-5.10KHRCT-	£0.01	£0.02
R15;R11;R9;R8;R5;R6;R16	7	RES SMD 100 OHM 1% 1/10W 0603	R_0805	100	311-100HRCT-NI	£0.01	£0.08
R17	1	RES SMD 4.99 OHM 1% 1/10W 0603	R_0805	5	311-4.99HRCT-N	£0.01	£0.01
R18	1	RES SMD 510 OHM 1% 1/10W 0603	R_0805	510	311-510HRCT-NI	£0.01	£0.01
R19;R20	2	RES SMD 100K OHM 1% 1/10W 0603	R_0805	100k	311-100KHRCT-N	£0.01	£0.02
R2	1	RES SMD 1.15K OHM 1% 1/10W 0603	R_0805	1.15k	311-1.15KHRCT-	£0.01	£0.01
R23;R24	2	RES SMD 22 OHM 1% 1/10W 0603	R_0805	22	311-22.0HRCT-N	£0.01	£0.02
R3	1	RES SMD 10 OHM 1% 1/10W 0603	R_0805	10	311-10.0HRCT-N	£0.01	£0.01
R7;R10	2	RES SMD 10M OHM 1% 1/10W 0603	R_0805	10M	311-10MGRCT-N	£0.01	£0.02
SW1	1	SWITCH TACTILE SPST-NO 0.05A 24V		SW_Push	450-2146-1-ND	£0.22	£0.22
TH1	1	NTC THERMISTOR 10K OHM 1% BEAD TH?		NTC10k	490-8601-ND	£0.54	£0.54
R4;R22;R21	3	RES SMD 10K OHM 5% 1/10W 0603	R_0805	10k	311-10KGRCT-N	£0.01	£0.04
U1	1		DFN-10-1EP_3x3mm_Pitch0	MCP73223	MCP73223-C2SI/	£1.43	£1.43
U2	1		DFN-12-1EP_3x3mm_Pitch0	BQ28Z610	296-43394-1-ND	£3.60	£3.60
U3	1	AP2210K-3.3TRG1	SOT-23-5	AP131-33	AP2210K-3.3TRC	£0.32	£0.32
U4	1	STM32F103C8T6	LQFP-48_7x7mm_Pitch0.5m	STM32F103C8Tx	497-6063-ND	£4.68	£4.68
Y1	1			8M0	887-1740-1-ND	£0.51	£0.51
Y2	1			32k768			£0.00
	5	CONN JUMPER SHORTING .100" GOLD		JUMPER	S9337-ND	£0.10	£0.50
	1	Solder Paste			SMD291AX50T3-	£10.02	£10.02

mm	mils	inch
0.16	6.2992	0.0063
0.20	7.8740	0.0079
0.25	9.8425	0.0098
0.30	11.8110	0.0118
0.40	15.7480	0.0157
0.60	23.6221	0.0236
0.85	33.4646	0.0335
1.00	39.3701	0.0394