

## 4 Bill of Materials, Board Layout and Schematics

### 4.1 Bill of Materials

'24150-001	'24151-002	bq24152-003	'24150A-004	'24151A-005	RefDes	Value	Description	Size	Part Number	MFR
1	1	1	1	1	C1	1uF	Capacitor, Ceramic, X5R, 16V, +-10%	603	GRM188R61C105K	muRata
1	1	1	1	1	C2	4.7uF	Capacitor, Ceramic, X7R, 16V, +-10%	805	GRM21BR71C475K	muRata
2	2	2	2	2	C3, C9	10uF	Capacitor, Ceramic, X5R, 6.3V, +-20%	603	GRM188R60J106M	muRata
2	2	2	2	2	C4, C5	1uF	Capacitor, Ceramic, X5R, 10V, +-10%	402	GRM155R61A105K	muRata
1	1	1	1	1	C6	10nF	Capacitor, Ceramic, X5R, 16V, +-10%	402	GRM155R61C103K	muRata
2	2	2	2	2	C7, C8	0.1uF	Capacitor, Ceramic, X7R, 16V, +-10%	402	GRM155R71C104K	muRata
1	1	1	1	1	D1	Green	Diode, LED, Green, 2.1-V, 20-mA, 6-mcd	603	LTST-C190GKT	Liteon
1	1	1	1	1	D2	BAT54C	Diode, Dual Schottky, 200-mA, 30-V	SOT23	BAT54C	Vishay-Liteon
1	1	1	1	1	J1	ED1514/2DS	Terminal Block, 2-pin, 6-A, 3.5mm	0.27 x 0.25 inch	ED1514/2DS	OST
3	3	3	3	3	J2, J3, J4	ED1515/3DS	Terminal Block, 3-pin, 6-A, 3.5mm	0.41 x 0.25 inch	ED1515/3DS	OST
1	1	1	1	1	J5	2510-6002UB	Connector, Male Straight 2x5 pin, 100mil spacing, 4 Wall	0.338 x 0.788 inch	2510-6002UB	3M
3	3	3	3	3	JMP1, JMP2, JMP4	PTC03SAAN	Header, 3-pin, 100mil spacing, (36-pin strip)	0.100 inch x 3	PTC03SAAN	Sullins
2	2	2	2	2	JMP3, JMP5	PTC02SAAN	Header, 2-pin, 100mil spacing, (36-pin strip)	0.100 inch x 2	PTC02SAAN	Sullins
4	4	4	4	4		929950-00	Shorting jumpers, 2-pin, 100mil spacing,		929950-00	3M/ESD
1	1	1	1	1	L1	1.0uH	2.5mmx2mm, 1.0uH, +/-30%, 1.5A	0.11x0.09 inch	"LQM2HPN1R0MJ0 or MIPS2520D1R0 or MDT2520-CN1R0M or CP1008"	muRata or FDK or TOKO or Inter-Technical
1	1	1	1	1	R1	0.068	Resistor, Chip, 68mohm, 125mW, 5%	402	ERJ-2BWJR068X	Panasonic
1	1	1	1	1	R2	5.1k	Resistor, Chip, 5.1k-Ohms, 1/16-W, 5%	603	Std	Std

'24150-001	'24151-002	bq24152-003	'24150A-004	'24151A-005	RefDes	Value	Description	Size	Part Number	MFR
1	1	1	1	1	R3	10k	Resistor, Chip, 10k-Ohms, 1/16-W, 5%	603	Std	Std
1	1	1	1	1	R4	200	Resistor, Chip, 200-Ohms, 1/16-W, 5%	603	Std	Std
1	1	1	1	1	R5	200	Resistor, Chip, 200-Ohms, 1/16-W, 5%	603	Std	Std
1	0	0	0	0	U1	BQ24150YFF	IC, Battery Charger for Single-Cell Li-Ion and Li-Polymer Battery	WCSP	BQ24150YFF	TI
0	1	0	0	0	U1	BQ24151YFF	IC, Battery Charger for Single-Cell Li-Ion and Li-Polymer Battery	WCSP	BQ24151YFF	TI
0	0	1	0	0	U1	BQ24152YFF	IC, Battery Charger for Single-Cell Li-Ion and Li-Polymer Battery	WCSP	BQ24152YFF	TI
0	0	0	1	0	U1	BQ24150AYFF	IC, Battery Charger for Single-Cell Li-Ion and Li-Polymer Battery	WCSP	BQ24150AYFF	TI
0	0	0	0	1	U1	BQ24151AYFF	IC, Battery Charger for Single-Cell Li-Ion and Li-Polymer Battery	WCSP	BQ24151AYFF	TI
1	1	1	1	1	--	HPA256	PCB, 2.0 In x 2.0 In x 0.031 In		PCB	Any

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