


Component List / BOM Archive				Company:		Box Synergy							
Project:	Summits 7			Location:	Córdoba, Argentina								
Version:	Beta 1.0			Website:	https://www.box-synergy.com/								
Report Date:	07-16-2020				Design Engineer Con	electronic@box-synergy.com - Gustavo Belbruno							
Generated by:	Gustavo Belbruno - Box Synergy Engineering Area												
#	Designator	Name/Value	Description	Package / Case	Importance*	Quantity	Manufacturer	Supplier 1			Alternative Supplier		
								Name	Part Number	Link Part	Name	Part Number	Link Part
1	Antenna	2450AT42B100E	Ceramic Antenna SMD	T&R		1	Johanson Technology	Mouser	609-2450AT42B100E	<a href="#">Link Mouser</a>	Digikey	712-1008-1-ND	<a href="#">Link Digikey</a>
2	Ca1	10uF	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
3	Ca2	100nF	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
4	Ca3	3.0pF	Capac Ceramic SMD 0402	0402		1	-	-	-	-	-	-	-
5	Ca4	2.4pF	Capac Ceramic SMD 0402	0402		1	-	-	-	-	-	-	-
6, 8, 9	Cb1, Cc1, Cd1	4.7uF	Capac Ceramic SMD 0603	0603		3	-	-	-	-	-	-	-
7, 13, 15	Cbus, Ce1, Ce3	22uF	Capac Ceramic SMD 1210	1210		3	-	-	-	-	-	-	-
10, 11	Cd2, Cd3	100pF	Capac Ceramic SMD 0603	0603		2	-	-	-	-	-	-	-
12	Cd4	2.2uF	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
14	Ce2	1uF	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
16, 17	Cf1, Cf2	22uF	Capac Ceramic SMD 0603	0603		2	-	-	-	-	-	-	-
18, 19	Cy1, Cy2	22pF	Capac Ceramic SMD 0603	0603		2	-	-	-	-	-	-	-
20	D_LED	OVLGC0C6B9	LED Green-Blue 505nm	T-1½		1	Optek / TT Electronics	Mouser	828-OVLGC0C6B9	<a href="#">Link Mouser</a>	Digikey	365-1185-ND	<a href="#">Link Digikey</a>
21	D_Phot	VBPW34S	Photodiode 850nm 25ns 120° 2-SMD, Gull Wing	Non Standard		1	Vishay	Mouser	621-DDZ12ASF-7	<a href="#">Link Mouser</a>	Digikey	751-1500-1-ND	<a href="#">Link Digikey</a>
22	J_Jumper	M50-3530242	1.27mm Pin Header 2x1	1.27mm Header		1	HARWIN	Mouser	855-M50-3530242	<a href="#">Link Mouser</a>	-	-	-
24	J_UART	M50-3530442	1.27mm Pin Header 4x1	1.27mm Header		1	HARWIN	Mouser	855-M50-3530442	<a href="#">Link Mouser</a>	-	-	-
25	J_USB_A	CQ-USB-AFFS90	USB-A Socket	-		1	Shenzhen Chuangqin Technology	Alibaba	-	<a href="#">Link Alibaba</a>	-	-	-
26	La1	4.3nH	Inductor SMD 0603	0603		1	-	-	-	-	-	-	-
27	La2	2.2nH	Inductor SMD 0402	0603		1	-	-	-	-	-	-	-
28	Le	SRN5040-6R8M	Inductor 6.8uH 2.3A	Non Standard		1	Bourns	Mouser	652-SRN5040-6R8M	<a href="#">Link Mouser</a>	Digikey	SRN5040-6R8MCT-ND	<a href="#">Link Digikey</a>
29	Q	ZXT11N20DFTA	Transistor NPN Low Saturation Vce - SOT23-3	SOT-23-3	Important Low Saturation Vce	1	Diodes	Mouser	522-ZXT11N20DFTA	<a href="#">Link Mouser</a>	Digikey	ZXT11N20DFTR-ND	<a href="#">Link Digikey</a>
30	Ra1	12K +- 1%	Resistor SMD	0603		1	-	-	-	-	-	-	-
31	Ra2	200	Resistor SMD	0603		1	-	-	-	-	-	-	-
32	Ra3	499	Resistor SMD	0603		1	-	-	-	-	-	-	-
33, 38, 44	Ra4, Rd1, Rq1	1K	Resistor SMD	0603		3	-	-	-	-	-	-	-
34	Ra5	5K	Resistor SMD	0603		1	-	-	-	-	-	-	-
35, 36	Rc1, Rc2	10K	Resistor SMD	0603		2	-	-	-	-	-	-	-
39	Rd2	6.8K	Resistor SMD	0603		1	-	-	-	-	-	-	-
41	Re1	40.2K	Resistor SMD	0603		1	-	-	-	-	-	-	-
42	Re2	7.68K	Resistor SMD	0603		1	-	-	-	-	-	-	-
43	Re3	59K	Resistor SMD	0603		1	-	-	-	-	-	-	-
45	Rq2	33	Resistor SMD	0603		1	-	-	-	-	-	-	-
40	RdT	R_Trimmer_20K	Trimmer Resistor SMD 20kΩ	J-Hook	Trimmer 20K	1	Bourns	Mouser	81-PVG3A203C01R00	<a href="#">Link Mouser</a>	Digikey	490-2650-1-ND	<a href="#">Link Digikey</a>

46	RqT	R_Trimmer_1K	Trimmer Resistor SMD 1kΩ	J-Hook	Trimmer 1K	1	Bourns	Mouser	81-PVG3A102C01R00	<a href="#">Link Mouser</a>	Digikey	490-2643-1-ND	<a href="#">Link Digikey</a>
37	RcS	ERJ-6BWFR010V	Shunt 0.01 Ohm 0.5W 1% SMD Resistor	0805		1	Panasonic	Mouser	667-ERJ-6BWFR010V	<a href="#">Link Mouser</a>	Digikey	P.01AQTR-ND	<a href="#">Link Digikey</a>
47	U1	ESP8266EX	Microcontroller ESP8266EX	32VFQFN		1	Espressif Systems	Mouser	356-ESP8266EX	<a href="#">Link Mouser</a>	Digikey	1904-1001-1-ND	<a href="#">Link Digikey</a>
48	U2	W25Q32JVSSIQ	FLASH - NOR Memory IC 32Mb _4M x 8 - SOIC	SOIC-8		1	Winbond	Mouser	454-W25Q32JVSSIQ	<a href="#">Link Mouser</a>	Digikey	W25Q32JVSSIQ-ND	<a href="#">Link Digikey</a>
49	U3	INA219BIDCNR	Current Monitor I2C	SOT-23-8		1	Texas Instruments	Mouser	595-INA219BIDCNR	<a href="#">Link Mouser</a>	Digikey	296-46420-1-ND	<a href="#">Link Digikey</a>
50	U4	MCP6001T-E/LT	OP AMP - 1.8V 1MHz Single Supply	SC-70-5		1	Microchip	Mouser	MCP6001T-E/LTCT-ND	<a href="#">Link Mouser</a>	Digikey	MCP6001T-E/LTCT-ND	<a href="#">Link Digikey</a>
51	U5	AP65111AWU-7	Buck Switching Regulator IC Positive Adjustable 0.8V 1 Output 1.5A SOT-23-6 Thin, TSOT-23-6	TSOT26		1	Diodes	Mouser	621-AP65111AWU-7	<a href="#">Link Mouser</a>	Digikey	AP65111AWU-7DICT-ND	<a href="#">Link Digikey</a>
52	U6	LM1117MPX-3.3/NOPB	LDO Regulator Pos 3.3V 0.8A SOT-223	SOT-223		1	Texas Instruments	Mouser	926-LM1117MPX3.3NOPB	<a href="#">Link Mouser</a>	Digikey	LM1117MPX-3.3/NOPBCT-ND	<a href="#">Link Digikey</a>
53	Y	ABM8-26MHz	26MHz Â±10ppm Crystal 10pF 50 Ohms 4-SMD, No Lead	ABM8		1	Abracon	Mouser	815-ABM8-26-T	<a href="#">Link Mouser</a>	-	-	-
23	J_Solar	Connx2_Battery											
*Importance: Refers to the importance of using the designated component and not a default replacement			This is a critical device and was specially calculated, it should not be exchanged for any device. In case of not obtaining this device, please contact the design engineer.										
			If possible, use the supplied device. In case there is difficulty in obtaining it, you can use another one with similar characteristics, but as long as the device has a complete datasheet where its parameters can be consulted.										
			This is a regular device and you can choose the device that suits you.										