


Component List / BOM Archive

Project:	Frost 5000
Version:	RTM 1.0
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#	Designator	Name/Value	Description	Package / Case	Importance*	Quantity	Manufacturer	Supplier 1			Alternative Supplier		
								Name	Part Number	Link Part	Name	Part Number	Link Part
1, 3	Ca1, Cd1	0.1uF	Capac Ceramic SMD 0603	0603		2	-	-	-	-	-	-	-
2	Ca2	10uF	Capac Ceramic SMD 1206	1206		1	-	-	-	-	-	-	-
4, 8, 11	Ce_bat, Ce_out2, Cf_bat1	22uF 10V	Capac Ceramic SMD 1206	1206		3	-	-	-	-	-	-	-
5, 13, 14	Ce_in1, Cu1, Cu2	10uF 10V	Capac Ceramic SMD 1206	1206		3	-	-	-	-	-	-	-
6, 12	Ce_in2, Cf_bat2	100nF 10V	Capac Ceramic SMD 0603	0603		2	-	-	-	-	-	-	-
7	Ce_out1	22uF 10V	Capac Ceramic SMD 1210	1210		1	-	-	-	-	-	-	-
9	Cf1	22uF 10V	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
10	Cf2	22uF	Capac Ceramic SMD 0603	0603		1	-	-	-	-	-	-	-
37	Rd1	4.7K	Resistor SMD	0603		1	-	-	-	-	-	-	-
33, 34, 35, 38, 44	Ra1, Ra2, Ra3, Re1, Rpb1	5.6K	Resistor SMD	0603		5	-	-	-	-	-	-	-
45, 47, 49, 51, 53	Rq1b, Rq2b, Rq3b, Rq4b, Rq5b	1K	Resistor SMD	0603		5	-	-	-	-	-	-	-
39, 55	Rf_in1, Ru	0 Ohms	Resistor SMD	0603		2	-	-	-	-	-	-	-
40	Ro1	332K +-1%	Resistor SMD	0603		1	-	-	-	-	-	-	-
41	Ro2	90.9K +- 1%	Resistor SMD	0603		1	-	-	-	-	-	-	-
42, 43	Rp1, Rp2	10K	Resistor SMD	0603		2	-	-	-	-	-	-	-
46, 48, 50, 52, 54	Rq1c, Rq2c, Rq3c, Rq4c, Rq5c	2.74K	Resistor SMD	0603		5	-	-	-	-	-	-	-
36	RcS	ERJ-6BWFR010V	Shunt 0.01 Ohm 0.5W 1% SMD Resistor	0805	Important Good Quality, at least 0.5W	1	Panasonic	Mouser	667-ERJ-6BWFR010V	Link Mouser	Digikey	P.01AQTR-ND	Link Digikey
26	L_Ind	SRN5040TA-1R0M	Inductor 1uH 5A	Non Standard	Important Good Quality, 1uH Value, at least 5A	1	Bourns	Mouser	652-SRN5040TA-1R0M	Link Mouser	Digikey	SRN5040TA-1R0MCT-ND	Link Digikey
22	J_Jumper	M50-3530242	1.27mm Pin Header 2x1	1.27mm Header		1	HARWIN	Mouser	855-M50-3530242	Link Mouser	-	-	-
24	J_UART	M50-3530442	1.27mm Pin Header 4x1	1.27mm Header		1	HARWIN	Mouser	855-M50-3530442	Link Mouser	-	-	-
23	J_MICROUSB	CQ-MUB-FS8772	MicroUSB B-type Socket	-		1	Shenzhen Chuangqin Technology	Alibaba	-	Link Alibaba	-	-	-
25	J_USB_A	CQ-USB-AFFS90	USB-A Socket	-		1	Shenzhen Chuangqin Technology	Alibaba	-	Link Alibaba	-	-	-
15, 16, 17, 18, 19	D_LED1, D_LED2, D_LED3, D_LED4, D_LED5	LCB TTSD-T2V1-2J8L-Z	Blue LED PLCC-2	PLCC-2		5	OSRAM	Mouser	720-LCBTTSDT2VA1160	Link Mouser	-	-	-
20	De1	DDZ6V8BSF-7	Zener 6.5V / 0.5W	SOD323F		3	Diodes	Mouser	621-DDZ6V8BSF-7	Link Mouser	Digikey	DDZ6V8BSF-7	Link Digikey
28, 29, 30	Q1, Q2, Q3	BC817	Transistor NPN	SOT-23-3		3	Diodes	Mouser	621-BC817-40W-7	Link Mouser	Digikey	BC817-40W-7	Link Digikey
31, 32	Q4, Q5	BC807	Transistor PNP	SOT-23-3		2	Diodes	Mouser	621-BC807-40-7-F	Link Mouser	Digikey	BC807-40-7-F	Link Digikey
56	U1	ESP-07	ESP07 Module with Antenna Ai-Thinker	-		1	AI-Thinker	Alibaba	-	Link Alibaba	It can be easily found with others Alibaba sellers		

57	U2	24CW1280T-I/OT	EEPROM 128K I2C	SOT-23-5		1	Microchip	Mouser	579-24CW1280T-I/OT	Link Mouser	Digikey	24CW1280T-I/OTCT-ND	Link Digikey
58	U3	INA219BIDCNR	Current Monitor Regulator High-Side 10mA SOT-23-8	SOT-23-8		1	Texas Instruments	Mouser	595-INA219BIDCNR	Link Mouser	Digikey	296-46420-1-ND	Link Digikey
59	U4	MC3419	Accelerometer	VFLGA-12		1	MEMSIC	Mouser	498-MC3419	Link Mouser	-	-	-
60	U5	FM5324G	Power Battery Management IC	eSOP8L		1	FM Shenzhen	Yoycart	FM5324G	Link Yoycart	-	-	-
61	U6	LM1117LD-3.3/NOPB	LDO Regulator Pos 3.3V 0.8A Texas - WSON8	WSON8		1	Texas Instruments	Mouser	926-LM1117LD33NOPB	Link Mouser	Digikey	LM1117LD-3.3 /NOPBCT-ND	Link Digikey
27	PB1	800SP9B7M6RE	Push Button 800C	M6		1	E-Switch	Mouser	612-800-S762	Link Mouser	onlinecomponents.com	800SP9B7M6RE	Link OC
21	J_Battery	Connx2_Battery	No component										

*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.