Texas Instruments - BOOSTXL-CC1120-90-915MHz -SigFox BOM

Rev A

Date October 19, 2015

DNP - Indicates Do Not Populate

Item Number	Description	Manufacturer	MPN	Part Reference	Value	Quantity	Notes/ Alternatives
1	ANTENNA PCB 868/915MHz, SMD	TEXAS INSTRUMENTS	ANTENNA PCB 868/915MHz	A1	Antenna PCB 868/915MHz	0	PCB Antenna
2	CAPACITOR, CERAMIC X7R, 100nF, 10V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R71A104KA01D	C1 C25 C41 C45 C46 C48 C56	100nF	7	
3	CAPACITOR, CERAMIC X7R, 100nF, 10V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R71A104KA01D	C2	DNP	0	
4	CAPACITOR, CERAMIC X5R, 2.2uF, 10V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	MURATA	GRM188R61A225ME34D	C3 C42	2.2uF	2	
5	CAPACITOR, CERAMIC, 47nF, 10%, X7R, 10V, 0402, SMD	MURATA	GRM155R71A473KA01D	C4 C5 C7 C8 C9 C15 C17 C18 C19 C20 C21	47nF	11	
6	CAPACITOR, CERAMIC X5R, 220nF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD	MURATA	GRM155R61A224KE19D	C6	220nF	1	
7	CAPACITOR, CERAMIC C0G/NP0, 33pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H330JA01D	C10 C52 C53	33pF	3	
8	CAPACITOR, CERAMIC X7R, 10nF, 25V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R71E103KA01D	C11 C14	10nF	2	
9	CAPACITOR, CERAMIC C0G/NP0, 100pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H101JA01D	C12	100pF	1	
10	CAPACITOR, CERAMIC C0G/NP0, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H150JA01D	C13 C29	15pF	2	
11	CAPACITOR, CERAMIC C0G/NP0, 15pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H150JA01D	C23	DNP	0	
12	CAPACITOR, CERAMIC U2J, 1.8nF, 10V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1557U1A182JA01D	C16	1.8nF	1	
13	CAPACITOR, CERAMIC C0G/NP0, 22pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H220JA01D	C24	22pF	1	
14	CAPACITOR, CERAMIC C0G/NP0, 0.8pF, 50V, -0.1pF/+0.1pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1HR80BA01D	C26	0.8pF	1	

15	CAPACITOR, CERAMIC C0G/NP0, 220pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H221JA01D	C27 C43 C47	220pF	3	
16	CAPACITOR, CERAMIC X5R, 10uF, 16V, -20%/+20%, -55DEGC/+85DEGC, 0603, SMD	TAIYO YUDEN	EMK107BBJ106MA-T	C28 C57 C58	10uF	3	
17	CAPACITOR, CERAMIC C0G/NP0, 27pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H270JA01D	C30	27pF	1	
18	CAPACITOR, CERAMIC C0G/NP0, 47pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H470JA01D	C31 C35 C49 C50	47pF	4	
19	CAPACITOR, CERAMIC X7R, 1nF, 50V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM155R71H102KA01D	C32 C51	1nF	2	
20	CAPACITOR, CERAMIC X5R, 1uF, 10V, -10%/+10%, -55DEGC/+85DEGC, 0402, SMD	MURATA	GRM155R61A105KE15D	C33 C44	1uF	2	
21	CAPACITOR, CERAMIC C0G/NP0, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H120JA01D	C34 C36	12pF	2	
22	CAPACITOR, CERAMIC C0G/NP0, 3.3pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H3R3CA01D	C37	3.3pF	1	
23	CAPACITOR, CERAMIC C0G/NP0, 7.5pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H7R5CA01D	C38	7.5pF	1	
24	CAPACITOR, CERAMIC C0G/NP0, 7.5pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H7R5CA01D	C39	DNP	0	
25	CAPACITOR, CERAMIC C0G/NP0, 2.7pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H2R7CA01D	C59	DNP	0	
26	CAPACITOR, CERAMIC C0G/NP0, 2.4pF, 50V, -0.25pF/+0.25pF, -55DEGC/+125DEGC, 0402, SMD	MURATA	GRM1555C1H2R4CA01D	C60	DNP	0	
27	OPTO, LED, GREEN COLOR, 574nm, 0.025A, 0.1W, 0402, SMD	LUMEX	SML-LX0402SUGC-TR	CR1	SML-LX0402SUGC	1	Polarized. Care should be taken in the Assy of this part. Refer to Sch for direction
28	DIODE, ZENER, 1.8V@50uA, 0.01A, 0.5W, -55DEGC/+150DEGC, SOD-123, SMD	ON SEMICONDUCTOR	MMSZ4678T1G	CR2	1.8V	1	Band indicates Cathode. Care should be taken in the Assy of this part. Refer to Sch for direction
29	FILTER, OTHER, 50@891.5MHz, -40DEGC/+85DEGC, SMD	MURATA	LFD21868MMF1D386	FL1	LFD21868MMF1D386	1	Alternate: 0900PC15J0013 from Johanson (Need to use R10 = 0 Ohms)
30	FILTER, SAW, 50@915MHz, -45DEGC/+125DEGC, DCC6C, SMD	TDK-EPCOS	B39921B3588U410	FL2	B39921B3588U410	1	

31	CONNECTOR, USB, MICROUSB-B, RIGHT ANGLE, 5 PINS, PITCH 0.65mm, SMD	TE CONNECTIVITY	1981568-1	J4	1981568-1	1	
32	CONNECTOR, COAX, RF, STRAIGHT, PICO SWITCHING COAX CONNECTOR, UP TO 11GHz, SMD	TE CONNECTIVITY	1551372-1	J3	1551372-1	1	
33	FILTER, EMI, 1000@100MHz, -55DEGC/+125DEGC, 0402, SMD	MURATA	BLM15HG102SN1D	L1 L12	BLM15HG102SN1	2	
34	INDUCTOR, CHIP, 8.2nH, -2%/+2%, 0.54A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN8N2G00D	L2	8.2nH	1	
35	INDUCTOR, CHIP, 10nH, -5%/+5%, 0.5A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN10NJ00D	L3 L4	10nH	2	
36	INDUCTOR, CHIP, 1.5nH, -0.3nH/ +0.3nH, 0.3A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQG15HS1N5S02D	L5	1.5nH	1	
37	INDUCTOR, CHIP, 15nH, -5%/+5%, 0.46A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN15NJ00D	L6	15nH	1	
38	INDUCTOR, CHIP, 22nH, -5%/+5%, -55DEGC/+125DEGC, 0603, SMD	MURATA	LQW18AN22NJ10D	L7	22nH	1	
39	INDUCTOR, CHIP, 7.5nH, -2%/+2%, 0.57A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN7N5G00D	L8	7.5nH	1	
40	INDUCTOR, CHIP, 2.9nH, -0.2nH/+0.2nH, 0.75A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN2N9C00D	L9	2.9nH	1	
41	INDUCTOR, CHIP, 9.1nH, -2%/+2%, 0.54A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN9N1G00D	L10	9.1nH	1	
42	INDUCTOR, CHIP, 12nH, -5%/+5%, 0.5A, -55DEGC/+125DEGC, 0402, SMD	MURATA	LQW15AN12NJ00D	L11	12nH	1	
43	INDUCTIVE, CHIP COIL, 2.7nH, -0.3nH/+0.3nH, 0.3A, 6000MHz, 0402, SMD	MURATA	LQG15HS2N7S02D	L13	DNP	0	
44	CONNECTOR, HEADER, MALE, STRAIGHT, 2 ROWS, 10 PINS, PITCH 1.27mm, SMD	SAMTEC	FTSH-105-01-L-DV-K	P1	FTSH-105-01-L-DV-K	1	
45	CONNECTOR, Socket Strip, STRAIGHT, 2 ROWS, 20 PINS, PITCH 2.54mm, PTH	SAMTEC	SSW-110-23-F-D	P2 P3	SSW-110-23-F-D	2	Bottom Mount, PINS should protrude to the top side
46	CONNECTOR, HEADER, MALE, STRAIGHT, 2 ROW, 12 PINS, PITCH 2.54mm, SMD	SAMTEC	TSM-106-01-L-DV-P	P6	TSM-106-01-L-DV-P	1	
47	CONNECTOR, HEADER, MALE, STRAIGHT, 1 ROW, 3 PINS, PITCH 2.54mm, SMD	SAMTEC	TSM-103-01-L-SV-P-TR	P7	TSM-103-01-L-SV-P	1	
48	RESISTOR, THICK FILM, 56k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF5602X	R1 R18	56k	2	Alternatives can be used
49	RESISTOR, THICK FILM, 10, -1%/+1%, 0.063W, 50V, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF10R0X	R3	10	1	Alternatives can be used

50	RESISTOR, THICK FILM, 0, Jumper, 0.1W, 50V, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2GE0R00X	R4 R10 R28	DNP	0	Alternatives can be used
51	RESISTOR, THICK FILM, 1.5k, -1%/+1%, 0.1W,-55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF1501X	R5	1.5k	1	Alternatives can be used
52	RESISTOR, THICK FILM, 0, Jumper, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2GE0R00X	C22 C40	0	2	Alternatives can be used
53	RESISTOR, THICK FILM, 91, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF91R0X	R7	91	1	Alternatives can be used
54	RESISTOR, THICK FILM, 82, -1%/+1%, 0.1W,-55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF82R0X	R8 R9	82	2	Alternatives can be used
55	RESISTOR, THICK FILM, 3.3k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF3301X	R11	3.3k	1	Alternatives can be used
56	RESISTOR, THICK FILM, 47, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF47R0X	R12	47	1	Alternatives can be used
57	RESISTOR, THICK FILM, 33, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF33R0X	R14 R15	33	2	Alternatives can be used
58	RESISTOR, THICK FILM, 1.5k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF1501X	R16	1.5k	1	Alternatives can be used
59	RESISTOR, THICK FILM, 2.7k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF2701X	R17	2.7k	1	Alternatives can be used
60	RESISTOR, THICK FILM, 1k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF1001X	R19 R20	1k	2	Alternatives can be used
61	RESISTOR, THICK FILM, 10k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF1002X	R21 R23 R24 R25	10k	4	Alternatives can be used
62	RESISTOR, THICK FILM, 18k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF1802X	R22	18k	1	Alternatives can be used
63	RESISTOR, THICK FILM, 4.7k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF4701X	R26	4.7k	1	Alternatives can be used
64	RESISTOR, THICK FILM, 4.7k, -1%/+1%, 0.1W, -55DEGC/+155DEGC, 0402, SMD	PANASONIC	ERJ-2RKF4701X	R27	DNP	0	Alternatives can be used
65	MECHANICAL, SHIELD Frame, SMD	LAIRD	BMI-S-202-F	SC1	BMI-S-202-F	1	
66	MECHANICAL, SHIELD Cover, SMD	LAIRD	BMI-S-202-C	SC1	BMI-S-202-C	1	
67	IC, RF TRANSCEIVER, CC1120RHB, QFN32, SMD	TEXAS INSTRUMENTS	CC1120RHBR	U1	CC1120RHBR	1	
68	IC, 850-950 MHz RF FRONT END, CC1190, VQFN16, SMD	TEXAS INSTRUMENTS	CC1190RGVR	U2	CC1190RGVR	1	
69	IC, SoC WITH MCU, USB CONTROLER, CC2511F, VQFN36, SMD	TEXAS INSTRUMENTS	CC2511F32RSPR	U4	CC2511F32RSPR	1	
70	IC, LDO, 3V3, 1A, TLV1117LV, SOT223-4, SMD	TEXAS INSTRUMENTS	TLV1117LV33DCYR	U5	TLV1117LV33DCYR	1	
71	CRYSTAL, OSCILATOR, 32MHz, 2.5PPM,1.7V TO 3.3V, -30DEGC/+85DEGC, SMD	NDK	NT2016SA-32M-TEE3017A	U3	32MHz	1	Alternate: X1G004211002500 from Epson Crystals

72	CRYSTAL, 32MHz, 10pF, -10PPM/+10PPM, -40DEGC/+85DEGC, SMD	EPSON	FA-128 32MHz 10pF 10ppm	Y1	DNP	0	
73	CRYSTAL, 48MHz, 10pF, -20PPM/+20PPM, -40DEGC/+85DEGC, SMD	NDK	NX2016SA 48M EXS00A-CS08718	Y2	48MHz	1	Alternatives can be used
74	Conn, Shunt 2.54mm,	3M	969102-0000-DA	P7(2-3), P6(1-2), P6(5-6), P6(9-10)	Shunt	4	Alternatives can be used
75	SWITCH, TACT,SPST-NO, 0.05A@12V, SMD	OMRON	B3U-1000P	SW1	B3U-1000P	1	
76	FIDUCIAL MARK, ROUND 1MM			FIDU1 FIDU2 FIDU3	FIDU_1MM	0	PCB Drafting item
77	PCB,4-Layer, FR4, 4.5"*1.25", 1.24mm thickness, 1Oz Copper					1	

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