

SSB Bitx Multiband V1.1

BOM (Bill of materials) / Daftar Komponen

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Item #	*Designator	*Qty	Name / Value	*Package/Footprint	Type	Notes
1	MX1	1	ADE-1	CD636	SMD	MIXER
2	J2	1	DC80c	HDR-M-2.54_1X3	TH	Untuk Bias FT-80C
3	C87,C62,C65,C72,C76	5	1uF/16V	CAP-TH_BD4.0-P1.50-D0.8	TH	Elco
4	C89,C47,C48	3	470uF/16V	CAP-D6.3x2.5	TH	Elco
5	C90	1	104	C0805	SMD	jika pakai TCXO
6	C98,C55,C64,C67,C69,C71	6	10uF/16V	CAP-TH_BD4.0-P1.50-D0.8	TH	Elco
7	D1,D2,D3,D4,D7,D10,D39,D5,D6,D41,D8,D9,D20,D21,D22,D23,D24,D25,D26,D27,D28,D29,D30,D31,D32,D33,D34,D35,D36,D37,D38	31	1N4148	DO35-7_SDR	TH	
8	K1,K2,K3K5,K6,K7,K8,K9	5	HRS2H-S-DC12V-N	RELAY-TH_HRS2H-S-XX SD	TH	Relay 12V 8Pin
9	L3,L15	2	0.22uH	INDUCTOR_SDR	TH	Colour Inductor
10	L4,L13,L17	3	4.7uH	INDUCTOR_SDR	TH	Colour Inductor
11	L5,L9,L16	3	0.47uH	INDUCTOR_SDR	TH	Colour Inductor
12	L6,L11,L18	3	1uH	INDUCTOR_SDR	TH	Colour Inductor
13	L7,L12,L19	3	2.2uH	INDUCTOR_SDR	TH	Colour Inductor
14	L10	1	10uH	INDUCTOR_SDR	TH	Colour Inductor
15	R114,R4,R9,R16,R22,R25,R40,R48	8	10	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
16	X2	1	TCXO 27Mhz	SMD-5032_4P-L5.0-W3.2	SMD	Optional
17	C20,C22	2	100/68	CAP XX	TH	Multilayer Capacitor
18	C21	1	220/82	CAP XX	TH	Multilayer Capacitor
19	R21	1	220/100	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
20	R73	1	4,7	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
21	R49,R77	2	100Ω	RES-ADJ-TH_3P-L9.5-W4.9	TH	Top Adjust Trimpot
22	R87	1	500Ω	RES-ADJ-TH_3P-L9.5-W4.9	TH	Top Adjust Trimpot
23	C63	1	101	CAP XX	TH	Multilayer Capacitor
24	D42	1	1N4007	DO-41_BD2.4-L4.7-P8.70-	TH	
25	J4	1	LPF1	HDR-M-2.54_1X8	TH	Header male
26	C23,C77,C78,C86	4	100uF/16V	CAP-TH_BD6.3-P2.50-D1.0	TH	Elco
27	R84	1	20K	RES-ADJ-TH_3P-L9.5-W4.9	TH	Top Adjust Trimpot
28	R95	1	10K	RES-ADJ-TH_3P-L9.5-W4.9	TH	Top Adjust Trimpot
29	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C24,C25,C26,C27,C28,C29,C30,C31,C32,C34,C35,C37,C38,C46,C51,C61,C66,C68,C70,C73,C74,C75,C79,C80,C81,C82,C83,C84,C85,C88	49	104	CAP XX	TH	Multilayer Capacitor

30	C33	1	10pF	CAP XX	TH	Multilayer Capacitor
31	C36	1	102	CAP XX	TH	Multilayer Capacitor
32	H1	1	HDR-F-2.54_1x15	HDR-F-2.54_1X15	TH	Header Female
33	Q29,Q30,Q31,Q28,Q1,Q14,Q18,Q19,Q20,Q21,Q2,Q3,Q11,Q12,Q13,Q16,Q17,Q15,Q4,Q5,Q6,Q7,Q8,Q9,Q10	25	2N3904	TO-92-3_L4.8-W3.7-P2.54	TH	NPN - Bisa diganti transistor lain yang compatible
34	R38,R29,R35,R46	4	100	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
35	R39,R99	2	10K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
36	R41,R112,R113,R100,R101,R102,R103,R104,R105,R2,R11,R14,R20,R27,R36,R37,R44,R57,R58,R59,R60,R61,R62,R63,R75	25	1K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
37	R43	1	150	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
38	R56,R90	2	68	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
39	R13,R31	2	4K7	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
40	R45,R54	2	101	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
41	L1	1	47uH	INDUCTOR_SDR	TH	Colour Inductor
42	R106,R34,R42,R51	4	470	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
43	R107,R94	2	560	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
44	R108,R3,R5,R6,R7,R8,R10,R15,R17,R18,R23,R24,R26,R30,R47,R71,R72,R74,R79,R80,R83	21	220	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
45	R109	1	390	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
46	R110	1	6R8	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
47	R111	1	33	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
48	JP6	1	SPK	CONN-TH_2P-P2.50-XH2.5	TH	Speaker
49	L22	1	100uH	INDUCTOR_SDR	TH	Colour Inductor
50	J5	1	Jumper	HDR-M-2.54_1X3	TH	Jumper PTT dds
51	JP2	1	PTT	CONN-TH_2P-P2.50-XH2.5	TH	PTT
52	Q22,Q23,Q24,Q25,Q26,Q27	6	2N3906	TO-92-3_L4.8-W3.7-P2.54	TH	PNP
53	R97	1	33K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
54	R98	1	3K3	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
55	U9	1	7809	TO220H	TH	REG
56	R1,R12,R19,R28,R76	5	2K2	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
57	R32,R52,R53,R91	4	10K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
58	R33	1	47K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
59	R50,R55	2	2.2	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
60	R78	1	22	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
61	R81	1	120K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
62	R82,R96	2	4k7	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor

63	R85,R86	2	100k	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
64	R88	1	5k6	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
65	R89	1	2k2	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
66	R92	1	220K	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
67	R93	1	5K6	R_AXIAL-0.3 SDR	TH	0.25Watt Resistor
68	JP5	1	MIC	CONN-TH_2P-P2.50-XH2.5	TH	MIC Condenser
69	J7	1	Volume	HDR-M-2.54_1X3	TH	Trimpot 10-50K
70	J12	1	S-METER	HDR-M-2.54_1X2	TH	
71	U1	1	TDA2003	TO-220B-5_L10.6-W8.7-P	TH	dengan Pendingin
72	DC1	1	DC 12V	CONN-TH_DG350-3.5-02P	TH	DC 12-13.8V
73	T1,T2,T3	3	Toroid-Trifillar Bitx	FT37-6 PIN	TH	kawat email0.4mm Trifillar 5-8T / Toroid diameter 10mm
74	U3	1	CD4028BM96	SOIC-16_L9.9-W3.9-P1.27	SMD	
75	TC	1	30pF	CAPACITOR VARIABLE TRI	TH	Trimmer Capacitor
76	Y1,Y2,Y3,Y4	4	8Mhz	CRYSTAL_HC49-U_VERTICAL	TH	SSB Filter
77	OC1	1	817	DIP-4_L4.6-W6.5-P2.54-LS	TH	Optocoupler
78	JP3	1	TX OUT	CONN-TH_2P-P2.50-XH2.5	TH	
79	JP4	1	RX IN	CONN-TH_2P-P2.50-XH2.5	TH	
80	X1	1	27.000MHZ	HC-49S_L11.0-W4.4-P4.88	TH	
81	U7	1	AMS1117-5.0	SOT-223_L6.5-W3.5-P2.30	SMD	
82	U10	1	AMS1117-3.3	SOT-223_L6.5-W3.5-P2.30	SMD	
83	U8	1	SI5351A-B-GT	MSOP-10_L3.0-W3.0-P0.5	SMD	
84	C41,C57	2	272	C025-025X050	TH	Ceramic Capacitor
85	C53	1	122	C025-025X050	TH	Ceramic Capacitor
86	C43,C59	2	821	C025-025X050	TH	Ceramic Capacitor
87	C44,C60	2	152	C025-025X050	TH	Ceramic Capacitor
88	C50	1	681	C025-025X050	TH	Ceramic Capacitor
89	LED2	1	PWR	LED3MM-WS	TH	Green
90	LED1	1	TX	LED3MM-WS	TH	RED
91	C54,C42,C58	3	391	C025-025X050	TH	Ceramic Capacitor
92	C49	1	181	C025-025X050	TH	Ceramic Capacitor
93	C40,C56	2	271	C025-025X050	TH	Ceramic Capacitor
94	C52	1	121	C025-025X050	TH	Ceramic Capacitor
95	JP9	1	TX+	1X02	TH	Header male
96	JP10	1	RX+	1X02	TH	Header male