

WA3TFS SSB SDR TRANSMITTER PARTS LIST

DIFFERS FROM PUBLISHED IN YELLOW

PART	VALUE	DESCRIPTION	ORDER NUMBER	ADDITIONAL NOTES
C1	220 uF	ELECTROLYTIC CAPACITOR	EEU-EB1H221	ALL PARTS EXCEPT NOTED AVAILABLE FROM
C2	1 uF	ELECTROLYTIC CAPACITOR	860020672005	DIGIKEY. FEEL FREE TO SUBSTITUTE PARTS
C4	10 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H100D	BUT DO NOT CHANGE VALUES.
C3	10 uF	ELECTROLYTIC CAPACITOR	EEU-EB1H100S	POLARITY SHOW REVERSED ON SCHEMATIC
C5	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C6	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C7	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C8	0.047	CERAMIC CAPACITOR, 50V	K473K10X7RF5UH5	
C9	0.01 uF	CERAMIC CAPACITOR, 50V	K103K10X7RF5UH5	
C10	0.01 uF	CERAMIC CAPACITOR, 50V	K103K10X7RF5UH5	
C11	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C12	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C13	10 uF	ELECTROLYTIC CAPACITOR	EEU-EB1H100S	
C14	0.01 uF	CERAMIC CAPACITOR, 50V	K103K10X7RF5UH5	
C15	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C16	1 uF	ELECTROLYTIC CAPACITOR	860020672005	
C17	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C18	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C19	1500 pF	CERAMIC CAPACITOR, 50V	K152J15C0GF5TL2	
C20	68 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H680J	
C21	220 pF	CERAMIC CAPACITOR, 50V	K221K10X7RF5UH5	
C22	0.01 uF	CERAMIC CAPACITOR, 50V	K103K10X7RF5UH5	
C23	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C24	.001 uF	CERAMIC CAPACITOR, 50V	K102K10X7RF5UH5	
C25	.001 uF	CERAMIC CAPACITOR, 50V	K102K10X7RF5UH5	
C26	33 pF	CERAMIC CAPACITOR, 50V	K330J15C0GF5TH5	
C27	680 pF	CERAMIC CAPACITOR, 50V	K681K10X7RF5UH5	
C28	220 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H221J	
C29	220 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H221J	
C30	220 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H221J	
C31	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C32	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C33	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C34	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C35	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C36	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C37	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C38	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C39	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C41	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C42	0.01 uF	CERAMIC CAPACITOR, 50V	K103K10X7RF5UH5	
C43	68 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H680J	
C44	150 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H151J	
C45	68 pF	CERAMIC CAPACITOR, 50V	FK28C0G1H680J	
C46	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C47	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
C48	0.1 uF	CERAMIC CAPACITOR, 50V	CK05BX104KT/R	
D1	1N4148	SWITCHING DIODE	1N4148	
D2	1N4148	SWITCHING DIODE	1N4148	
D3	1N4148	SWITCHING DIODE	1N4148	
IC1	LM386	AUDIO AMPLIFIER IC	LM386N-4/NOPB	
IC2	7805	POS VOLTAGE REG 5 VOLTS	IFX7805ABTSAKSA1	
L1	38 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L2	38 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L3	26 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L4	26 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L5	20 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L6	20 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L7	10 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L8	10 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L9	10 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L10	10 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L11	9 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
L12	9 TURN	T37 INDUCTOR	AMIDON RED T37 CORE	
LED1	3 MM	LED, RED OR SUB COLOR	C503B-RCN-CW0Z0AA1	SELECT YOUR PREFERRED COLOR
LED2	3 MM	LED, RED OR SUB COLOR	C503B-RCN-CW0Z0AA1	SELECT YOUR PREFERRED COLOR
MOD_A	AD9850	DDS MODULE	NOT SUPPLIED	
MOD_B	AD9850	DDS MODULE	NOT SUPPLIED	
Q1	2N2222	TRANSISTOR, NPN	2N2222CS-ND	
Q2	2N5179	TRANSISTOR, NPN	2N5179CS-ND	
Q3	2N3904	TRANSISTOR, NPN	2N3904BU	
Q4	2N3866	TRANSISTOR, NPN	2N3866CS-ND	MAY SUBSTITUTE 2N5109
Q5	2N3866	TRANSISTOR, NPN	2N3866CS-ND	MAY SUBSTITUTE 2N5109

Q6	2N3866	TRANSISTOR, NPN	2N3866CS-ND	MAY SUBSTITUTE 2N5109
Q7	2N3904	TRANSISTOR, NPN	2N3904BU	
Q8	2N3904	TRANSISTOR, NPN	2N3904BU	
Q9	2N3904	TRANSISTOR, NPN	2N3904BU	
Q10	2N3904	TRANSISTOR, NPN	2N3904BU	
Q11	2N3904	TRANSISTOR, NPN	2N3904BU	
Q12	2N3904	TRANSISTOR, NPN	2N3904BU	
Q13	2N3904	TRANSISTOR, NPN	2N3904BU	
R1	10 OHM	RESISTOR, 1/4W, FILM	CF14JT10R0	
R2	560 OHM	RESISTOR, 1/4W, FILM	CF14JT560R	
R3	500 OHM	RESISTOR, ADJUSTABLE TRIM	3306F-1-501	
R4	10K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10K0	
R5	560 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT560R	
R6	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R7	3.3K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT3K30	
R8	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R9	100 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT100R	
R10	47 OHM	RESISTOR, 1/4W, FILM, 5%	CFR-25JB-52-47R	
R11	3.3K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT3K30	
R12	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R13	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R	
R14	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R15	560 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT560R	
R16	47 OHM	RESISTOR, 1/4W, FILM, 5%	CFR-25JB-52-47R	
R17	560 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT560R	
R18	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R19	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R20	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R21	22 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT22R0	
R22	4.7 OHM	RESISTOR, 1/4W, FILM, 5%	NFR25H0004708JR500	SPEC'ED AS 1/2W BUT FITS PCB HERE
R23	3.3K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT3K30	
R24	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R25	560 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT560R	
R26	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R27	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R28	4.7 OHM	RESISTOR, 1/4W, FILM, 5%	NFR25H0004708JR500	SPEC'ED AS 1/2W BUT FITS PCB HERE
R29	3.3K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT3K30	
R30	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R31	560 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT560R	
R32	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R33	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R34	4.7 OHM	RESISTOR, 1/4W, FILM, 5%	NFR25H0004708JR500	SPEC'ED AS 1/2W BUT FITS PCB HERE
R35	3.3K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT3K30	
R36	10 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10R0	
R37	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R38	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R39	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R40	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R41	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R42	10K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT10K0	
R43	1K OHM	RESISTOR, 1/4W, FILM	CF14JT1K00	
R44	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R45	1K OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT1K00	
R46	100 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT100R	
R47	470 OHM	RESISTOR, 1/4W, FILM, 5%	CF14JT470R	
T1	FT50-43	TRIFILAR TRANSFORMER	14 TURNS ON AMIDON FT-43 CORE	WIND 3 COLOR WIRES AROUND CORE
T2	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
T3	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
T5	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
T6	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
T7	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
T8	FT50-43	TRANSFORMER	PRI 16 TURNS, SEC 8 TURNS #28AWG	WIND PRIMARY THEN SECONDARY ON TOP
Y1 (X1)	9.000 MHZ	CRYSTAL, HC-49/U	HC-49/U-S9000000ABJB	WIND PRIMARY THEN SECONDARY ON TOP
Y2 (X2)	9.000 MHZ	CRYSTAL, HC-49/U	HC-49/U-S9000000ABJB	WIND PRIMARY THEN SECONDARY ON TOP
J1	TO MICRO	10 POSITION SIL SOCKET	MILL-MAX 851-93-010-20-001000	SUPPLIED WITH LAUNCHPAD BOARD
J2	TO MICRO	10 POSITION SIL SOCKET	MILL-MAX 851-93-010-20-001000	SUPPLIED WITH LAUNCHPAD BOARD
J3	TO DDS MOD A	10 POSITION SIL SOCKET	609-3550-ND	CONNECTS DDS MODULE TO MICRO BOARD
J4	TO DDS MOD A	10 POSITION SIL SOCKET	609-3550-ND	CONNECTS DDS MODULE TO MICRO BOARD
J5	TO DDS MOD B	10 POSITION SIL SOCKET	609-3550-ND	CONNECTS DDS MODULE TO MICRO BOARD
J6	TO DDS MOD B	10 POSITION SIL SOCKET	609-3550-ND	CONNECTS DDS MODULE TO MICRO BOARD
Z1	SRA-1	DOUBLE BALANCED DIODE MIX	MINI-CIRCUITS	SBL-1 EXCELLENT ALTERNATE PART
MICRO BOARD	MSP430G2553	MICRO DEVELOPMENT BOARD	TEXAS INSTRUMENTS	SUPPLIED WITH 430/2553 MICROPROCESSOR
PCB	11212016-A-B-C	SET OF 3 CIRCUIT BOARDS	WA3TFS	
SOFTWARE	TFS/1212017-1	CONTROL SOFTWARE	WA3TFS	