Active Device List

Note: Passive Components per

All Components are 0805 SMT D

Receiver Module

Reference ID	Part Number	Discription
M1	LRFMS-2-17	RF Mixer
TR1	N/A	
TR2	BFG-591	IF Amplifier
TR3	2SC3583	IF Amplifier
TR4	BC-847	GP Transistor
TR5	BC-847	DC Filter to VCO
TR6	BC-847	TCXO Buffer
X1	89.545 MHz	Crystal
X2	TCXO	1 ppm TCXO
IC1	NE615	IF Amplifier
IC2	78L08	8 volt regulator
IC3	LP2951	Adjustable regulator
IC4	MSA-0886	LO Buffer
IC5	MC3302	Audio/RSSI Buffer
IC6	X24C04	ROM
IC7	78L05	5 volt Regulator
IC8	78L05	5 volt Regulator
IC9	79M08	-8 volt Regulator
IC10	SA7025DK	PLL IC
IC11	OP28FS	Low Noise Operational Amplifier
IC12	SGA-6489	RF High Dynamic Range Amp

Power Amplifier Module

Reference ID	Part Number	Discription
TR1	DO34	50 Watt RF Output Device
TR2	FZT751	PNP PTT Control
TR3	2SJ177	FET, Voltage Regulator
IC1	PD55008	RF Power Hybrid
IC2	78L05	5 Volt Regulator
IC3	78L05	5 Volt Regulator
IC4	X24C04	ROM
IC5	LT1123C2	Voltage Regulator
D1, D2	HSMS-2800	Forward/Reverse Detector

Tx VCO Module

Reference ID	Part Number	Discription
TR1	SST-310	FET, Oscillator
IC1	MAR-6SM	RF Amplifier/Buffer
IC2	MAR-6SM	RF Amplifier/Buffer

Rx VCO Module

Reference ID	Part Number	Discription
TR1	SST-310	FET, Oscillator
IC1	MAR-6SM	RF Amplifier/Buffer
IC2	MAR-6SM	RF Amplifier/Buffer

Exciter Module

Reference ID	Part Number	Discription
TR1	N/A	
TR2	BC847	GP Transistor, Power Control
TR3	BC857	Bias for TR4
TR4	BFG-591	RF Buffer Amplifier
TR5	BC847	GP Transistor, PTT
TR6	BC857	GP Transistor, PTT
TR7	BC847	TCXO Buffer
TR8	FTZ751	GP Transistor, Power Control
X1	TCXO	1 ppm
IC1	MAR-06	RF Buffer
IC2	MAV-11	RF Buffer
IC3	78L08	8 Volt Regulator
IC4	74HC393	Frequency Divider
IC5	78L05	5 Volt Regulator
IC6	X24C16	ROM
IC7	78L05	5 Volt Regulator
IC8	78L08	8 Volt Regulator
IC9	OP284FS	Low Noise Op Amp
IC10	SA7025DK	PLL Device

Schematic

Devices