

Midland Radio 71-3200A/B VHF Base Tech II

5.0 LIST OF SEMICONDUCTORS DESIGNATIONS AND FUNCTIONS

5.1 Tx VCO UNIT

Q301	2SK508	Oscillator
Q302	2SC4325	Amplifier
Q303	2SC3583	VCO output amplifier
Q304	DTA124EUA	Switch
Q305	2SC2351	B + filter
Q306	DTYA114EUA	B + switch
IC301	uPC1688	Amplifier

5.2 Tx UNIT

Q201	2SK3018	PTT buffer
Q202	UMG1N	Switch
Q204	UMC2	Switch
Q207	2SD2351	B + filter
Q205	2SK3018	Charge pump
Q208	RTU002P02	Charge pump
Q209	2SK3018	Charge pump
Q210	UMC2N	Switch
Q212	UMG1N	Switch
Q213	DTC124EUA	Switch
Q206	DTA124EUA	Switch
Q211	2SC3357	RF amplifier
Q214	2SC4250	Switch
Q215	2SC4325	Switch
Q217	2SK3018	Switch
IC201	BAJ0BCOFP	10v regulator
IC202	XC6202P702P	7v regulator
IC204	TC75W51F	Mod LF amplifier
IC205	TA75S01F	Mod. Amplifier
IC208	MB1511	PLL

IC210	NJU7662M	DC/DC converter
IC209	TC4566F	LPF, switch
IC211	BA00CC0WFP	Tx power adjust
IC212-B	NJM2904	Power control
IC212-A	NJM2904	Error amplifier
IC203	XC6202P502M	5v regulator
IC213	TA75S01F	Mod. LF amplifier
IC206	TC7TW125FU	Level converter
IC207	TC7TW125FU	Level converter

5.3 PA UNIT

Q501	2SK3018	Switch
Q502	DTB143EK	B + switch
IC501-B	BAM4558F	Reverse power control
IC501-A	BAM4558F	Error amplifier
IC502	TA75S01F	Power control
IC504	AN78L05M	5v regulator
IC503	TA75S01F	Power signal amplifier
PM510	RA08H1317M	Driver amplifier
Q504	RD70HVF1	Power amplifier
Q505	RD70HVF1	Power amplifier

5.4 RX VCO UNIT

Q301	2SK508	Oscillator
Q302	2SC4325	Amplifier
Q303	2SC3583	VCO output amplifier
Q304	DTA124EUK	Switch
Q305	2SC2351	B + filter
Q306	DTYA114EUA	B + switch
IC301	uPC1688	Amplifier

5.5 RX UNIT

Q861	3SK177	RF amplifier
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Q810	2SK508	1 st High IF amplifier
Q809	2SD2351	B + filter
Q806	RTU002P02	Charge pump
Q805	2SK3018	Charge pump
Q807	2SK3018	Charge pump
Q808	UMC2N	Switch
Q804	UMC2N	Switch
Q811	DTA144EUA	Switch
Q803	33061MCH	Rx switch
Q802	2SD2351	Rx switch
Q801	2SK3018	Rx switch
Q812	2SC4250	Switch
Q813	2SC4325	Switch
Q814	2SC4325	Switch
IC806	MB1511	PLL
IC807	NJU7662M	DC/DC inverter
IC808	TC4566F	LPF switch
IC805	XC6202P502M	5v regulator
IC809	TA75S01F	VCO error amplifier
IC811	SPM5001	1 st mixer
IC802	XC221A200	AF LPF
IC801	BA70BCOFP	7v regulator
IC803	TCWT125FU	Level converter
IC804	TCWT125FU	Level converter
IC810	XC221A1200	DC amplifier
IC812	XC6201P502M	5v regulator

5.6 IF UNIT

Q001	2SC4250	1st IF amplifier
Q002	2SK880	Wide/Narrow switch
Q003	DTC323TU	Wide/Narrow switch
Q004	2SK880	Wide/Narrow switch
Q005	2SK3018	Wide/Narrow switch
Q006	2SD2351	Noise amplifier
Q007	XP01501	Squelch switch

IC001 TA31136FNG

2nd IF/oscillator/detector

IC002 TC75W51FU

AF amplifier

Logic Unit and Front Panel Unit semiconductor parts are the same as the MMA710100B radio.