

SEMICONDUCTOR DESIGNATIONS AND FUNCTIONS

Model PR250 and PR590

FCC ID: BBOPR250

Designator	Description	Function
U130	Narrowband FM IF	RX IF amplification and mixing, audio amplification and filtering
U301	Dual PLL	Frequency synthesizing
U30	3.3V Regulator	3.3V Regulator Circuit
U150	Audio Amplifier	Final stage audio amplifier for 200mW output & low pass (3Khz) audio filter
U170	Quad Op Amp	RX filter, CTCSS filter
U400	4 Bit Microcontroller	Transmit/Receive control, key decode, power control
U230	Quad Op Amp	TX Filter
D100	PIN Diode	Transmit/Receive antenna switch
D200	PIN Diode	Transmit/Receive band switch
D50	Varactor Diode	VCO tuning
D51	PIN Diode	Transmit offset switch
D50	Varactor Diode	WX VCO tuning
Q50/Q51	RF Transistor	VCO – fundamental transmit and LO
Q52	Bias Transistor	Receive/Transmit band switch for VCO
Q101	RF Transistor	Low Noise Amplifier (LNA)
Q102	RF Transistor	Mixer
Q103	RF Transistor	IF Amplifier
Q200	RF Power Transistor	PA final stage amplifier – class C
Q201	RF Power Transistor	Transmitter driver amplifier – class A
Q202	RF Power Transistor	Transmitter pre-driver amplifier – class A
Q350	RF Transistor	Low Noise Amplifier (LNA)
Q70	RF Transistor	WX VCO – LO
Q301	Bias Transistor	Weather VCO and RX switch
Q302	Bias Transistor	VCO power switch



