

MX-1110/1111 Critical Parts

Ref. No.	Parts	Description	Function.
D202	DIODE VARACTOR	BB149	Rx 2nd Lo tuning diode
D203	DIODE VARACTOR	BB149	Rx 2nd Lo tuning diode
D301	DIODE VARACTOR	BB149	Tx 1st Lo tuning diode
D302	DIODE VARACTOR	BB149	Tx 1st Lo tuning diode
D300	DIODE DUAL CHIP	BAT74	Power detector diode
D416	DIODE DUAL COMMON ANODE	KDS120	1st/2nd Lo PLL lock detector signal summing
D415	Shortkey Diode	M1FS4	DC-DC converter diode.
D414	Shortkey Diode	SS24	DC-DC converter input protection diode.
D413	Diode Single	KDS160	Vibrator surge protection diode.
D417	Diode Single	KDS160	U404 flash memory high speed write enable diode.
D425	Diode Single	KDS160	Buzzer surge protection diode.
D419	TVS	SMF05	Surge protector to system connector.
D420	TVS	SMF05	Surge protector to system connector.
D421	TVS	SMF05	Surge protector to system connector.
D422	TVS	SMF05	Surge protector to system connector.
D423	DIODE DUAL SERIAL	KDS122	Surge protection diode for serial I/O lines.
D424	DIODE DUAL SERIAL	KDS122	Surge protection diode for serial I/O lines.
Q402	BRT PNP	KRA305	External ear-microphone switch detection transistor.
Q401	BRT PNP	KRA308	Power ON Key sense transistor.
Q300	TRANSISTOR	KRC405	PA module bias control transistor for FM mode.
Q301	TRANSISTOR	KRC405	PA driver bias control transistor for CDMA low power.
Q403	TRANSISTOR	KRC408	External hands free detection transistor
Q404	TRANSISTOR	KRC408	External boot signal detection transistor.
Q405	TRANSISTOR	KRC408	Message lamp driver transistor.
Q302	FET	TP0202T	PA module bias control FET for FM mode.
D200	DIODE CHIP	HSMP3890	Receiver variable attenuator
D201	DIODE CHIP	HSMP3890	Receiver variable attenuator
Q304	SILICON RF TR	AT32032	Tx 2nd Lo. Buffer transistor.
U105	DUAL OP AMP	LMC7111	Receiver variable attenuator driver.
U100	VCTCXO	VCTCXO RTVY-174DF23J-5-19.680	Main timing reference.
U301	IC REGULATOR 3.0V	TK71630SCLH	PA module bias circuit.
U102	IC PLL	LMX2332L	Main PLL circuit control IC.
U200	IC RX ASIC	RF25A	Receiver IC.
U300	IC TX ASIC	RF25B	Transmitter IC
PA301	IC PWR AMP	RM912	Power Module.
U104	IC TEMP SENSOR	LM20BIM7	RF board temperature sensor.
U101	VCO	UCVA3X132A	Main VCO for Rx 1st Lo/Tx 2nd Lo signals.
U401	CDMA ASIC	MSM3000_UBGA176	Central Processing Unit.
U402	BBASIC + CODEC	RF262-UBGA100	Interface between RF circuits and Digital circuits.
U404	Flash + Sram MCP	28F1604C3B110 -> 28F1604C3B90	Hold software program and calibration datas.
U406	MOSFET	SI6963DQ	DCDC converter switching FET.
U403	Power Management IC	PM1000	Controls DCDC converter and 3Volts LDO.
U408	AND Gate Dual	TC7W08FU	Interface between CPU and memory.
U407	AND Gate Single	TC7S08FU	Interface between CPU and memory.
FL300	FILTER SAW	RF_TX_SAW (SFD836LH001)	Tx RF SAW filter for 800Mhz
FL301	FILTER SAW	RF_TX_SAW (SFD836LH001)	Tx RF SAW filter for 800Mhz
FL200	FILTER SAW	RF_RX_SAW (SFD881LH001)	Rx RF SAW filter for 800Mhz
FL202	FILTER SAW	RX_IF_CDMA (85SD15)	CDMA Rx IF filter for 85.380Mhz
FL201	FILTER SAW	RX_IF_AMPS (85SKY3)	FM Rx IF filter for 85.380Mhz
X401	Ceramic Resonator	CSTCW2700MX03	Main clock for CPU.
X402	RTC 32.768KHz	XTAL_MC146	Sub clock for CPU for power save.

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Ref. No.	Parts	Description	Function.
IS300	ISOLATOR	CU452A1F-836.5-1T	ISOLATOR
DUP300	DUPLEXER	DFA0836G0881AR	DUPLEXER
BUZZER	Buzzer	SMT9503RP	Buzzer