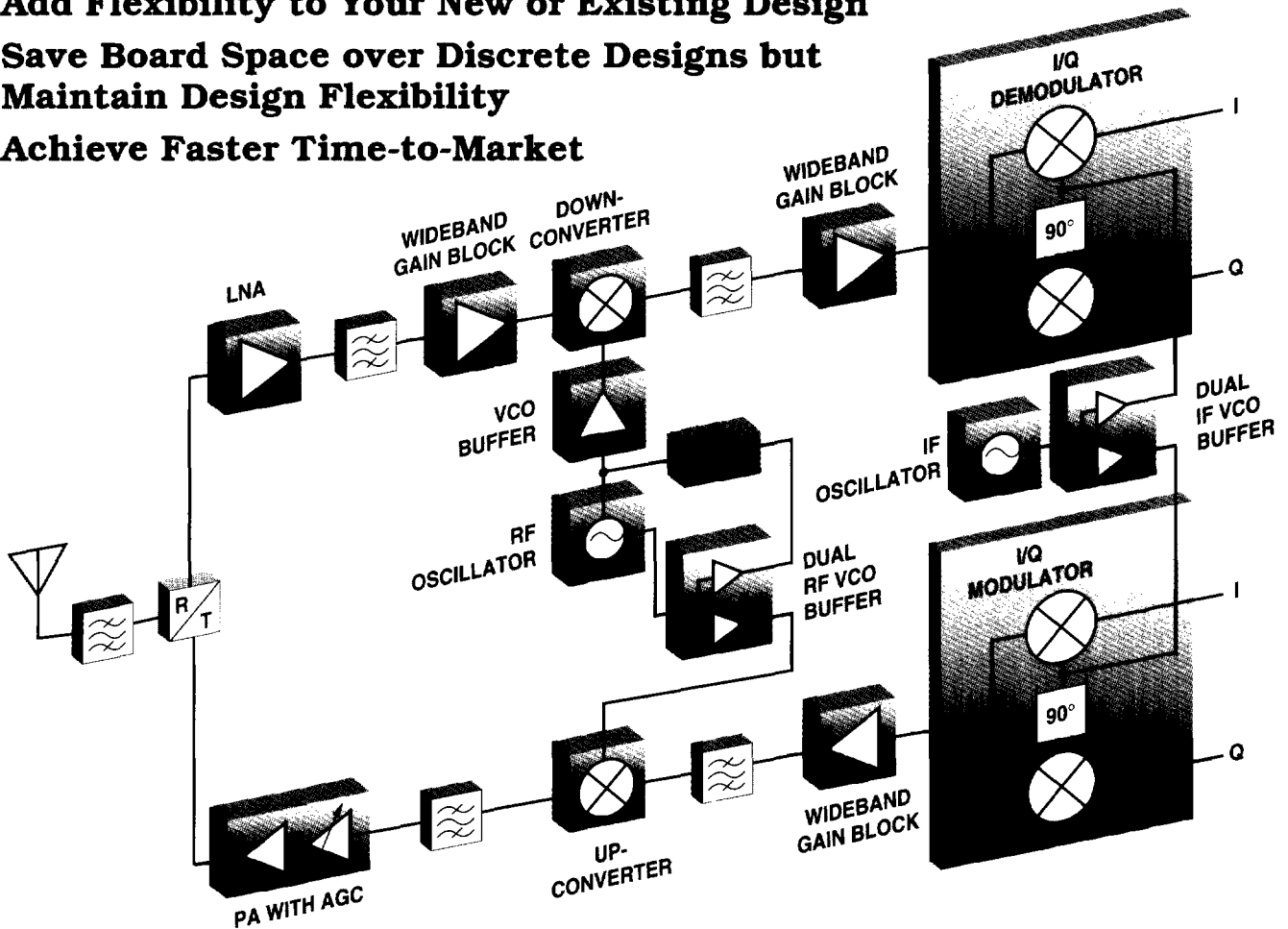


Build Your Radio with Maxim's Wide

- Add Flexibility to Your New or Existing Design
- Save Board Space over Discrete Designs but Maintain Design Flexibility
- Achieve Faster Time-to-Market



Low-Noise Amplifiers

Part	Supply Voltage (V)	Current (mA)	Frequency Range (MHz)	Gain (dB)	Noise Figure (dB)	Input IP3 (dBm)	Package	Features
NEW MAX2640	2.7 to 5.5	3.5	400 to 1500	15.1 (at 900MHz)	0.9	-10	6-Pin SOT23	Ultra-low noise, SiGe
NEW MAX2641	2.7 to 5.5	3.5	1400 to 2500	14.4 (at 1900MHz)	1.3	-4	6-Pin SOT23	Ultra-low noise, SiGe
FUTURE MAX2651‡	2.7 to 3.3	5.7/5.9	925 to 960/ 1805 to 1880	18	1.2/1.7	-5	10-Pin µMAX	Dual LNA, GSM/DCS/PCS, 20dB gain step
FUTURE MAX2652‡	2.7 to 3.3	5.7/5.9	925 to 960/ 1805 to 1880	18	1.5/2.0	-5	10-Pin µMAX	Dual LNA, GSM/DCS/PCS, 20dB gain step, shutdown
FUTURE MAX2653‡	2.7 to 3.3	5.9	1805 to 1880	18	1.7	-5	8-Pin µMAX	DCS/PCS LNA, 20dB gain step, shutdown

VCO Buffers

Part	Supply Current (mA)	Frequency Range (MHz)	Gain (dB)	Reverse Isolation (dB)	Package	Features
NEW MAX2470	3.0 to 5.1 (adj.)	10 to 500	14.9	64 (at 200MHz)	6-Pin SOT23	Dual diff. outputs, single-ended input, adj. bias
NEW MAX2471	5.1	10 to 500	16.9	69 (at 200MHz)	6-Pin SOT23	Dual diff. outputs, diff. inputs
NEW MAX2472	5.1	500 to 2500	10.2	49 (at 900MHz)	6-Pin SOT23	Dual open-collector outputs, single-ended input
NEW MAX2473	2.5 to 4.3 (adj.)	500 to 2500	11.8	48 (at 900MHz)	6-Pin SOT23	Single open-collector output, adj. bias/output power

Note: Bolded parts are featured in this design guide.

*Typical performance at 500MHz.

‡Future product—contact factory for availability.

Array of Low-Cost RF Building Blocks

Wideband Gain Blocks

Part	Supply Voltage (V)	Current (mA)	Frequency Range (MHz)	Gain* (dB)	P1dB* (dBm)	Noise Figure* (dB)	Package	Features
MAX2611	4.5 to 5.5	16	DC to 1100	18.3	2.6	3.5	4-Pin SOT143	High output power
MAX2630	2.7 to 5.5	7	DC to 1200	14	-9	3.5	4-Pin SOT143	Internal bias
MAX2631	2.7 to 5.5	7	DC to 1200	14	-9	3.5	5-Pin SOT23	Shutdown control
MAX2632	2.7 to 5.5	7	DC to 1200	14	-9	3.5	5-Pin SOT23	Bias control
MAX2633	2.7 to 5.5	7	DC to 1200	14	-9	3.5	6-Pin SOT23	Shutdown and bias control
MAX2650	4.5 to 5.5	18	DC to 1100	18	1.5	3.2	4-Pin SOT143	High output power

RF Downconverters

Part	Supply Voltage (V)	Current (mA)	RF Frequency (MHz)	IF Frequency (MHz)	Conversion Gain (dB)	Noise Figure (dB)	Input IP3 (dBm)	Package	Features
NEW MAX2680	2.7 to 5.5	5	400 to 2500	10 to 500	11.6	6.3	-13	6-Pin SOT23	Low noise, SiGe
NEW MAX2681	2.7 to 5.5	8.7	400 to 2500	10 to 500	14.2	7	-6	6-Pin SOT23	Low noise, SiGe
NEW MAX2682	2.7 to 5.5	15	400 to 2500	10 to 500	14.7	6.5	-2	6-Pin SOT23	Low noise, SiGe
MAX2690	2.7 to 5.5	16	40 to 2500	10 to 500	7.9	10	7.6	10-Pin μ MAX	High IIP3, shutdown

RF Upconverters

Part	Supply Voltage (V)	Current (mA)	RF Frequency (MHz)	IF Frequency (MHz)	Conversion Gain (dB)	Noise Figure (dB)	Output IP3 (dBm)	Package	Features
MAX2660	2.7 to 5.5	5	40 to 2500	10 to 500	8	8	10	6-Pin SOT23	Low current
MAX2661	2.7 to 5.5	9	40 to 2500	10 to 500	11	8	11	6-Pin SOT23	High OIP3
MAX2663	2.7 to 5.5	3	40 to 2500	10 to 500	4	8	3	6-Pin SOT23	Low current
MAX2671	2.7 to 5.5	14	40 to 2500	10 to 500	11	8	11	6-Pin SOT23	High OIP3, LO buffer
MAX2673	2.7 to 5.5	20	40 to 2500	10 to 500	12	8	12	8-Pin μ MAX	Differential output, LO buffer

Power Amplifiers

Part	Supply Voltage (V)	Current (mA)	Frequency Range (MHz)	Output Power (dBm)	Class	Package	Features
NEW MAX2232	2.7 to 5.5	160	800 to 1000	24	C	16-Pin PQSOP	Analog gain control, auto power ramp, shutdown
MAX2233	2.7 to 5.5	160	800 to 1000	24	C	16-Pin PQSOP	Digital gain control, shutdown
NEW MAX2235	2.7 to 5.5	610	800 to 1000	30.3	C	20-Pin TSSOP-EP	Analog gain control, auto power ramp, shutdown
NEW MAX2430	3 to 5.5	52	800 to 1000	21	AB	16-Pin SO/QSOP	Power control, shutdown
MAX2601	2.7 to 5.5	450	DC to 1000	30	AB/C	8-Pin PSOPII	Power transistor
MAX2602	2.7 to 5.5	450	DC to 1000	30	AB/C	8-Pin PSOPII	Power transistor with on-chip bias diode power ramp, shutdown

Oscillator

Part	Supply Voltage (V)	Current (mA)	Frequency Range (MHz)	Phase Noise** (dBc/Hz)	Output Power (dBm)	Package	Features
MAX2620	2.7 to 5.25	9	10 to 1050	-110	-3	8-Pin μ MAX	Dual buffered outputs, shutdown control

I/Q Modulators and Demodulators

Part	Supply Voltage (V)	Current (mA)	IF Frequency (MHz)	Baseband Bandwidth (MHz)	I/Q Amplitude Balance (dB)	I/Q Phase Balance (degrees)	Package	Features
MAX2450	2.7 to 3.3	5.9	70	9	0.45	± 3	20-Pin SO/QSOP	Modulator/demodulator in one chip
MAX2451	2.7 to 3.3	5.5	70	9	0.45	± 3	16-Pin SO	Modulator with on-chip VCO and phase shifter
MAX2452	2.7 to 3.3	4.1	70	15	0.45	± 3	16-Pin SO	Demodulator with on-chip VCO and phase shifter

Note: Bolded parts are featured in this design guide.

**At 25kHz offset from 915MHz carrier.

