

The Philips Family Of High Performance Front End Systems

Description		V _{CC}	I _{CC}	Pins	Pkg	Input Frequency	Gain (power)	Noise Figure	Input IP3	1dB Comp.	Input Imped.	Output Imped.	Feature Highlights	
Image Reject Front-end Systems						f_{RF}=2 GHz								
UAA2067G	LNA+IRM+Mod+VCO	3-5.5V	24mA (rx) 45MA (T _x)	32	BE	1.8-2.2 GHz	32 dB	6 dB	-25 dBm	-32dBm	50Ω	50Ω	—Image reject Mixing —DECT, DCS1800, GSM and US PCS	
UAA2077AM	LNA+IRM	3/15-5/3V	27mA @4V	20	DK	1.8-2.2 GHz	20 dB	4.3 dB	-17 dBm	-22dBm	35Ω	1kΩ		
UAA2077BM		3.6-5.3V	27mA @4V	20	DK	1.8-2 GHz	20 dB	4.3 dB	-17 dBm	-23dBm	35Ω	1kΩ		
Image Reject Front-End Systems						f_{RF}=900 MHz								
UAA2072M	LNA+IRM+Mixer	4.5-5.3V	31.5A@5V	20	DK	LNA+IRM 960 MHz	26 DB	4 DB	-15 DBM	-245DBM	200Ω	High	—Image reject mixer (30N min) —T _x down-convert mixer	
UAA2073M	Integrated Front-end	3.6-5.3V	26mA@3.75V	20	DK	960 MHz	23 dB	3.25 dB	-15 dBm	-23 dBm	150Ω	1KΩ	—30 dB min image rejection	
Integrated Front-End Systems						f_{RF}=900 MHz								
NE/SA600	LNA+IRM+Mixer	4.5-5.5V	13mA/4.2mA* @5V	14	D	LNA 1/2 GHz	16/-7.5 dB*	2.2 dB	-10/+26dBm	-20 dBm	50Ω	50Ω	—LLNA Overload Mode —Excellent Noise Figure	
						Mixer 1.2 GHz	-2.6 dB	14 dB	+6 dBm	-14 dB	50Ω	High		
NE/SA601	LNA+IRM+Mixer	4.2-5.5V	7.4mA@3V	20	DK	LNA 1/2 GHz	11.5 dB	1.6 dB	-2 dBm	-16 dBm	50Ω	50Ω	—Low voltage —Excellent Noise Figure	
						Mixer 1.2 GHz	+6 dB	10 dB	-2 dBm	-13 dBm	50Ω	High		
SA620	LNA+Mixer+VCO	2.7-5.5V	10.4mA/7.2mA* @3V	20	DK	LNA 1/2 GHz	11.5/-7.5 dB*	1.6 dB	-3/+25 dBm*	-16 dBm	50Ω	50Ω	—Low voltage —Excellent Noise Figure —LNA Overload Mode —Internal VCO	
						Mixer 1.2 GHz	+3dB	9 dB	-6 dBm	-13 dBm	50Ω	High		
SA611	LNA+Mixer	2.7-5.5V	8mA@3V	20	DK	LNA 1 GHz	15 dB	1.9 dB	-7 dB	-16 dBm	50Ω	50Ω	—Low voltage	
						Mixer 1 GHz	9 dB	0.5 dB	4 dB	-9 dBm	50Ω	High	—Excellent system perf	
SA621	LNA+Mixer+VCO	2.7-5.5V	13.3mA/10mA* @3V	20	DK	LNA 1 GHz	15dB	1.9 dB	-7 dB	-16 dB	50Ω	50Ω	—Low voltage	
						Mixer 1 GHz	9 dB	10.5 dB	4 dB	-9 dB	50Ω	High	—Excellent system perf	
Integrated Front-End Transceiver						f_{RF}=900 MHz								
SA1620	Rx: 2 LNAs w/atten.+mixer T _x : P _{OUT} =+8.5 dBm@2.7V+mixer	2.7-5.5V	R _x :28 mA T _x : 59 mA	48	BE	<1800 MHz	LNA 20 dB 8.5 dB	1.9 dB 10 dB	-5 dB 2 dB	-15 dBm -7.3 dBm	50Ω 50Ω	50Ω High	—LNA gain control range=59dB —Excellent noise Figure —T _x power adjustable	
SA2420	Rx: LNA w/atten.+mixer T _x : Predriver+mixer	2.7-5.5V	R _x :21 mA T _x : 34 mA	24	DH	2.4-2.5 GHz	LNA 14 dB Mixer 8 dB	2.5 dB 11 dB	-6dBm 1 dBm	-17dBm -10dBm	50Ω 50Ω	50Ω High	—low voltage —LNA gain atten. range=22dB —T _x P _{OUT} =0dBm	
Mixer Systems						f_{RF}=45 MHz								
NE/SA602A	Mixer+Oscillator	4.5-8.0V	2.4mA@6V	8	N,D	500 MHz	17dB	5.0 dB	-13cBm	-25dBm	1.5kΩ	1.5kΩ	—Excellent Noise Figure —High Gain	
NE/SA602A	Mixer+Oscillator	4.5-8.0V	2.4mA@6V	8	N,D	500 MHz	17dB	5.0 dB	-13cBm	-25dBm	1.5kΩ	1.5kΩ	—Excellent Noise Figure —High Gain	
Temperature Range NE: 0 to 70°C SA: -40 to +85°C						D: Small Outline-14 Small Outline-16 Small Outline-20		Package Descriptions DK: Shrink Small Outline Package (SSOP)-20 BE: Low Gaud Flat Package (LQFP)				N: Dual In-Line Plastic		

*Amplifier: Enabled/Disabled