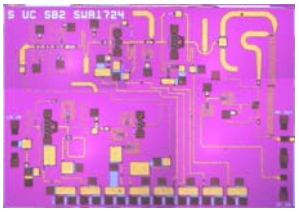
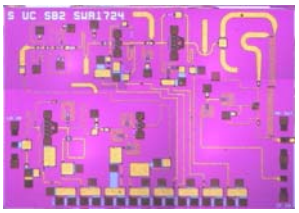
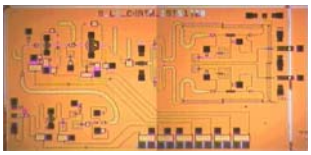
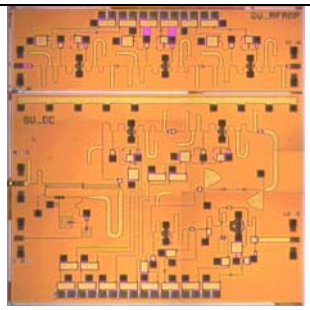
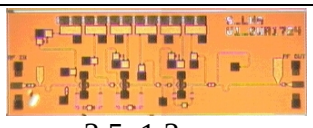
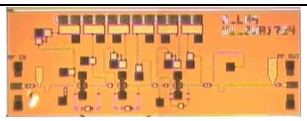
Savant Technologies Ltd.
43 Arava Street, Maccabim 71908, Israel Tel/Fax: +972 8 926 6437

Product List

Date: April 14, 2007

Product List

1. MMIC products and RFIC devices

Part number	Product	Description	Picture / Layout
S-UDC0018Vxx S-UDC0019Vxx	Integrated wide band down converter 17-24.5GHz	Fundamental balanced diode mixer driven by an integrated frequency tripling LO chain. 10dB conversion loss, input LO 5.3-7.5GHz @ +3 – +5dBm, IF=0.9-2.2GHz, RF=17-24.5GHz. (Tested)	 3.7x2.5mm
S-UDC0024Vxx S-UDC0025Vxx	Integrated wide band up converter 17-24.5GHz	Fundamental balanced diode mixer driven by an integrated frequency tripling LO chain. 10dB conversion loss, input LO 5.3-7.5FHz @ +3 - +5dBm, IF=0.9-2.2GHz, RF=17-24.5GHz. (Tested)	 3.7x2.5mm
S-UDC0028Vxx	Application specific integrated down converter 17.7-20.7GHz	An image reject fundamental diode mixer, driven by an integrated frequency doubling LO driver chain. Conversion loss better than 11dB including hybrid coupler, LO input 8.4-9.9GHz @5dBm (Tested)	 4.5x2.6mm
S-UC24-30 S-DC24-30	Integrated wide band Up / Down Converter 24.5-30GHz	A balance fundamental diode mixer driven by a frequency tripling LO chain. IF 0.9-3GHz RF 24.5-30GHz, LO 7.8-9GHz @ 0dBm, conversion loss 10dB. The integrated LNA has typical 4dB noise figure and 30dB gain. (Tested)	 4.5x2.4mm
S-LNA0036Vxx	3 stage LNA 17-24.5GHz	3 stage LNA, 0.25µm devices, gain > 24dB, NF < 4dB, RF frequency 17-24.5GHz, 10dB return loss. (Tested)	 3.5x1.3mm
S-LNA0030Vxx	3 stage LNA 17.7-20.7GHz	3 stage LNA, 0.25µm devices, gain > 24dB, NF < 3.5dB, RF frequency 17.7-20.7GHz, 10dB return loss (Tested)	 3x1.3mm

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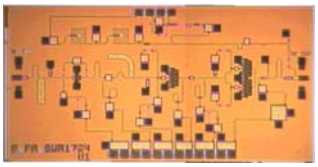
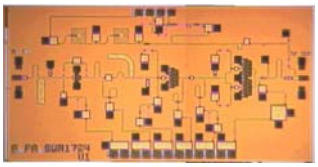
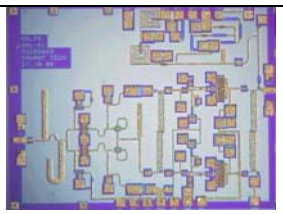
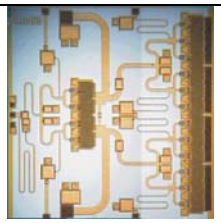
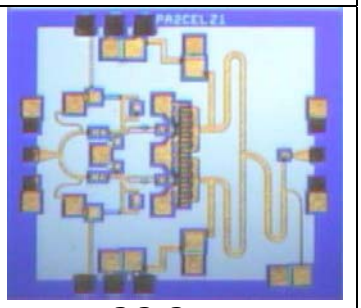
S-PWR0037Vxx	Power amp 22dBm 17-24.5GHz with BIT power detector	3 stage Power amplifier. 2x0.5mm 0.25µm output cells, +22dBm output power @1dBc, RF frequency 17-24.5GHz, 16dB small signal gain typical 10dB return loss. Power detector produces 100mV DC when output power is greater than 10dBm. (Tested)	 (3.3x2.1mm)
S-PWR1001Vxx	Power amplifier 24.5-30GHz 20dBm with BIT detector	3 stage Power amplifier. 2x0.5mm 0.25µm output cells, +20dBm output power @1dBc, RF frequency 24.5-30Hz, 13dB small signal gain typical 10dB return loss. Power detector produces 100mV DC when output power is greater than 10dBm (Tested)	 (3.3x2.1mm)
S-PA24-30	Balanced power amplifier 18dBm 24-30GHz with BIT detector	RF 24-30GHz 18dBm output power 2x0.5mm cells in a balanced configuration 15dB output return loss (Tested)	 3.1x2.4mm
	S band Power Amplifier	S band, 20W output power, 27dB gain (Tested)	 2.5x3.3mm
	X band power amplifier	2Stage, 2x600µm cell, X band, 32dBm output power, 18dB gain (Tested)	 2.2x2mm

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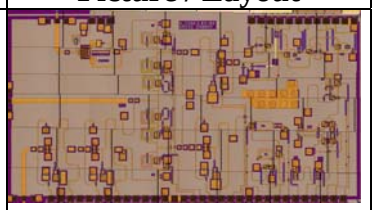
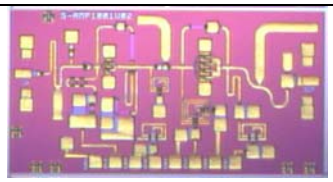
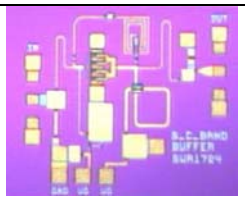
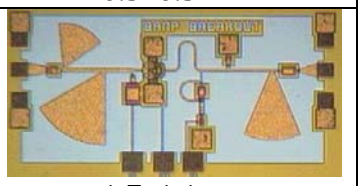
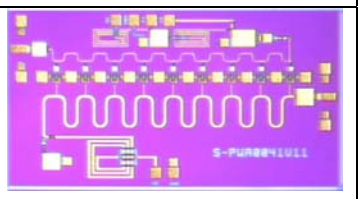
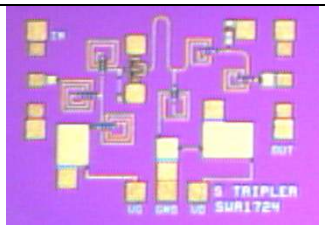
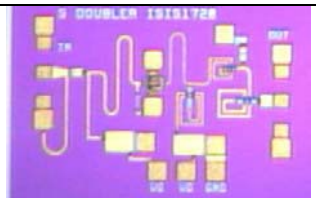
	X band Multi-function chip	T/R switching, buffers, LNA, 6bit attenuator, 6bit phase shifter LNA and Tx driver (Tested)	 5.7x3.4mm
S-AMP1001Vxx	2 stage mid power driver	RF 15-28GHz, 19dBm output power @1dBc, 10dB return loss, 15dB SSG (Tested)	 2.4x1.3mm
S-AMP0026Vxx	C band buffer	RF 5-10GHz, 10dB gain 10dB typical return loss (Tested)	 0.9x0.9mm
	Single stage amplifier	RF 23-30GHz, gain 12dB (Tested)	 1.7x1.1mm
S-PWR0041V11	Traveling wave amplifier	DC-20GHz, gain 10dB, 12dB match (Tested)	 2.5x1.5mm
S-GTA0017Vxx	Frequency Tripler	Input 5-9GHz, conversion loss better than 8dB, 10dB return loss (Tested)	 1.1x0.9mm
S-GTA0027Vxx	Frequency Doubler	Input 8.4-9.9GHz, 5dB conversion loss (Tested)	 1x0.9mm

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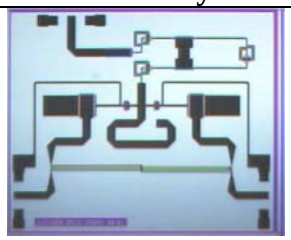
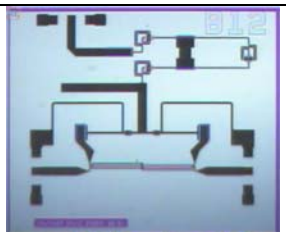
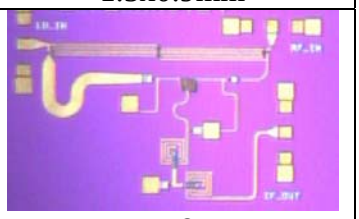
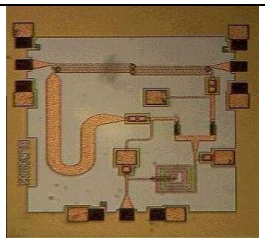
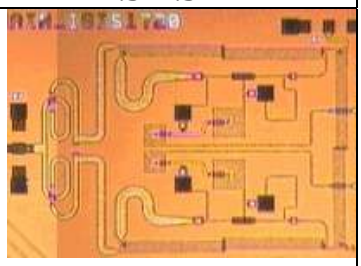
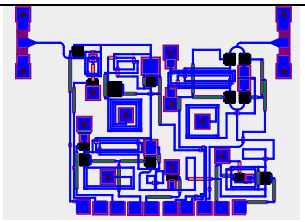
	X band mixer	Conversion loss <10dB RF 8-12GHz, IF LPF @ 5GHz (Tested)	 1.7x0.9mm
	Ku band mixer	Conversion loss <10dB RF 14-18GHz, IF LPF @5GHz (Tested)	 1.5x0.9mm
S-UDC0034Vxx S-UDC0035Vxx	K band mixer	Balanced diode mixer, 10dB conversion loss, Up / Down converter, RF 17-24.5GHz IF 0.9-2.2GHz Integrated IF LPF (Tested)	 1.2x1.9mm
	Ka band mixer	Balanced diode mixer, 10dB conversion loss, Up / Down converter, RF 24.5-30GHz IF 0.9-2.2GHz Integrated IF LPF (Tested)	 1.5x1.5mm
	IRM 17.7-20.7GHz	Conversion loss < 11dB with hybrid coupler, RF 17.7-20.7GHz, IF 0.9-3GHz (Tested)	 2.2x1.5mm
	6 bit phase shifter	6 bit, S band (Preliminary)	 1.8x1.9mm

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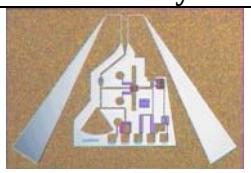
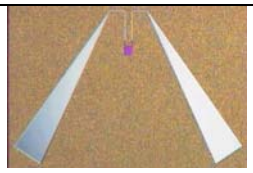
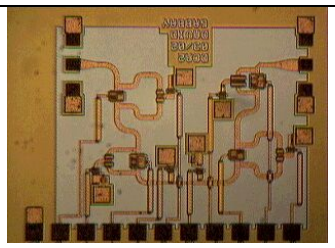
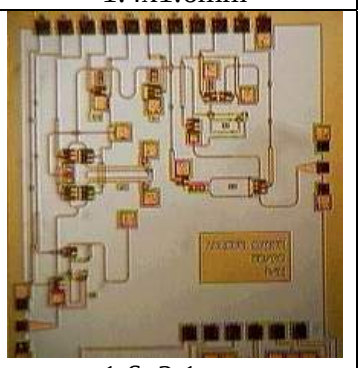
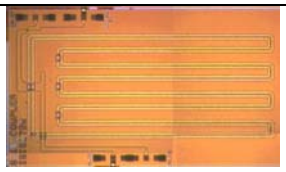
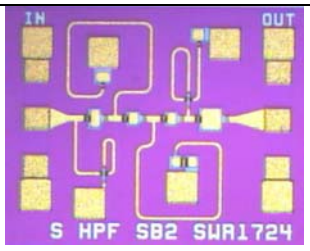
	Ka Doppler sensor transmitter with integrated antenna	30 – 32 GHz 10dBm, AM, FM modulation (Tested)	 2.2x1.6mm
	Ka antenna	On chip, ~50deg EL, 60deg Az, 25GHz, 7% BW (Tested)	 2.2x1.6mm
	5.5 bit Digital Attenuator	6 bit, DC – 16GHz, IL 2.7dB, 0.5, 1, 2, 4, 8, 8 dB bits (Tested)	 1.4x1.6mm
	6 bit Digital Phase Shifter	6 bit, X-band digital phase shifter, 5.6deg LSB, monotonic (Tested)	 1.6x2.1mm
S-IFcoupler	Monolithic IF quad coupler 0.9-1.5GHz	Insertion loss ~4dB, phase match better than 2deg, 15dB typical return loss (Tested)	 4.5x2.4mm
	HPF	HPF cutoff at 15GHz, pass band insertion loss < 2dB, stop band insertion loss > 20dB return loss 10dB (Tested)	 0.9x0.9mm

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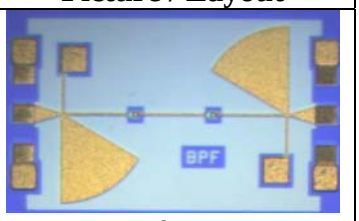
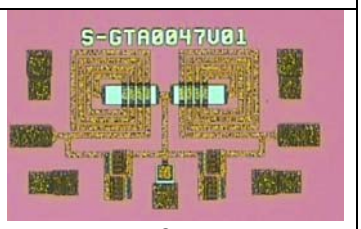
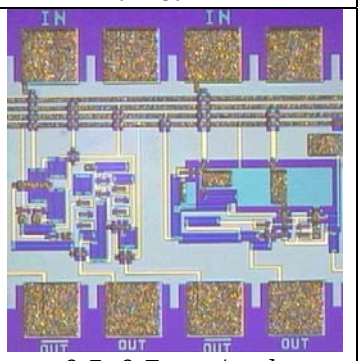
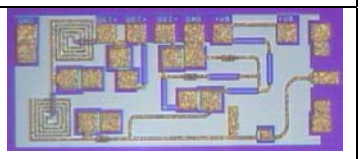
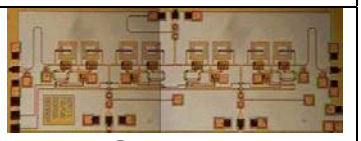
	BPF	Pass band 20 –30GHz Pass band insertion loss 2dB Stop band insertion loss >10dB Return loss >10dB (Tested)	 1.2x0.7mm
S#GTA46V11	LPF	5 versions of Bessel like LPF Cut off frequencies : 2.55GHz, 2.7GHz 2.85GHz, 3GHz and 3.15GHz, better than 15dB match, Group delay < 3pSec up to 4GHz (Tested)	 1.1x0.7mm
S#GTA47V01	Signal Shaper	This custom made device incorporates diodes into an LPF in order to specially shape a signal prior to the Electro-Optic modulator driver	 1.1x0.7mm
	Digital level translator / inverter	Translates TTL input logic levels to switch FET control levels: 0V / -2Vp (tested)	 0.5x0.7mm /each
	Wideband Detector	X-Ka broadband detector Balanced, temperature compensated with optional bias (tested)	 1x0.5mm
	X-band Transfer switch DPDTx2	X-band high isolation. 1GHz BW transfer switch (tested)	 3.5x1mm

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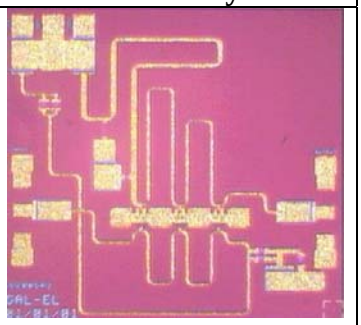
	Distributed Amplifier	BW 100MHz to 18GHz, 12dB gain, 14dBm p1dBc, RL in/out < -12dB, 1dB flatness, low current version (78mA @ 3.5V) (tested)	 1.9x1.7mm