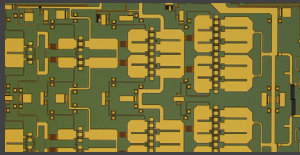
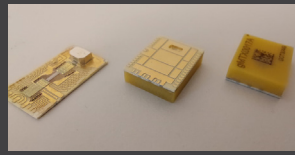


YOUR PARTNER FROM 30 TO 300 GHz

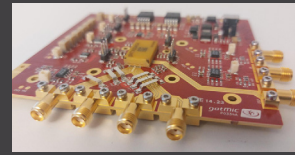
IC Products for Telecom, Defence, SATCOM,
Test & Measurement, and Industrial Systems



MMICs (Bare Die)



SMD / SiP



Evaluation Boards



Waveguide Modules

Product Portfolio

Our comprehensive portfolio covers the V-band (57-66 GHz), E-band (71-86 GHz), W-band (92-114 GHz), & D-band (130-175 GHz). We offer best-in-class transmitters / receivers (Tx/Rx), power amplifiers (PAs), low-noise amplifiers (LNAs), multipliers, mixers, switches, phase shifters, power detectors and more. Available as MMICs (bare die), SMD/SiP packages, waveguide modules, and plug & play evaluation boards.

Customized Solutions

Our skilled engineering team is ready to support custom product development, bringing new projects from the concept stage to volume production. Our services cover the full development cycle for MMIC, SMD/SiP, and waveguide module solutions.



Applications

Our technology and products support challenging requirements across a wide range of applications, including wireless networks & telecom, defence, SATCOM, industrial systems, and test & measurement.



Technology

We constantly evolve our unique MMIC and package solutions to offer best-in-class performance at competitive prices. We rely on advanced proprietary semiconductor models and partnerships with leading IC foundries and OSATs. We test & verify our products at system-level based on customer use scenarios.



About us

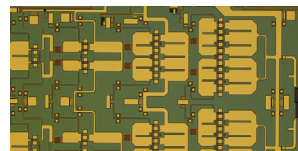
Based in the technology hub of Gothenburg, Sweden, we have since 2008 enabled our customers to reach demanding targets in terms of performance, cost efficiency, and time-to-market.

POWER AMPLIFIERS

MMIC PAs (Bare Die)

Our bare die MMIC PAs are suitable for a variety of mm-wave assemblies built with chip-and-wire technology.

p/n	Frequency	Gain	PSAT (P3dB)	
gAPZ0079B	57-71 GHz	15 dB	28 dBm	
gAPZ0091A	71-76 GHz	19 dB	29 dBm	
gAPZ0120A	71-76 GHz	21 dB	32 dBm	Coming soon
gAPZ0092A	81-86 GHz	16 dB	28.5 dBm	
gAPZ0121A	81-86 GHz	21 dB	32 dBm	Coming soon
gAPZ0095A	92-96 GHz	15 dB	28 dBm	



SMD PAs

Our SMD PAs are fully compatible with industry-standard surface-mount assembly. They feature waveguide input & output ports for low-loss interconnections.

p/n	Frequency	Gain	PSAT (P3dB)
gMPA0035A	71-76 GHz	21 dB	29 dBm
gMPA0036A	81-86 GHz	17 dB	29 dBm
gMPA0021A	92-96 GHz	12 dB	27 dBm



Waveguide PAs

Our waveguide module PAs have standard flanges for simple system integration. The modules are equipped with internal voltage regulators and power detectors.

p/n	Frequency	Gain	PSAT (P3dB)
GBL0014	68-79 GHz	20 dB	30 dBm
GBL0027	57-72 GHz	18 dB	26 dBm
GBL0015	76-90 GHz	15 dB	29 dBm
GBL0016	85-100 GHz	12 dB	27 dBm
GBL0029	100-116 GHz	18 dB	19 dBm



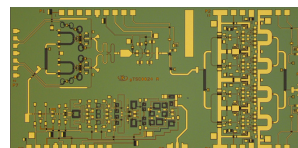
Specifications and descriptions are subject to change without notice

TRANSMITTERS & RECEIVERS

Tx/Rx MMICs (Bare Die)

Our single-chip fully integrated Tx & Rx MMICs support baseband frequencies from DC to 10 GHz and advanced modulation formats.

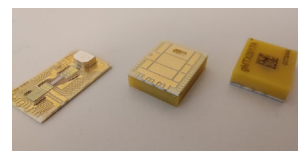
p/n	Frequency	Gain	PSAT (P3dB)	NF
gTSC0020B (Tx)	57-66 GHz	22 dB	23 dBm	
gRSC0016B (Rx)	57-66 GHz	15 dB		4 dB
gTSC0024A (Tx)	71-76 GHz	17dB	26 dBm	
gRSC0017A (Rx)	71-76 GHz	22 dB		5 dB
gTSC0025A (Tx)	81-86 GHz	17 dB	26 dBm	
gRSC0018A (Rx)	81-86 GHz	22 dB		5 dB



Tx/Rx System-in-Package (SiP)

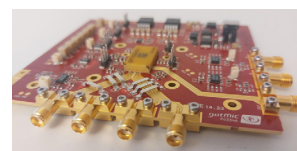
Our fully integrated surface-mount Tx & Rx SiPs support baseband frequencies from DC to 10 GHz and advanced modulation formats. The SiPs feature waveguide input / output ports for low-loss interconnections.

p/n	Frequency	Gain	PSAT (P3dB)	NF
gMTX0060A (Tx)	57-66 GHz	35 dB	27 dBm	
gMRX0060A (Rx)	57-66 GHz	14 dB		4.5 dB
gMTX0051A (Tx)	71-76 GHz	33 dB	29 dBm	
gMRX0014A (Rx)	71-76 GHz	22 dB		5 dB
gMTX0052A (Tx)	81-86 GHz	33 dB	28 dBm	
gMRX0015A (Rx)	81-86 GHz	22 dB		5 dB
gMTX0045A (Tx)	92-100 GHz	30 dB	27 dBm	
gMRX0033A (Rx)	92-100 GHz	14 dB		7 dB



Evaluation Boards

Evaluation boards are available for our range of Tx/Rx SiP products. Contact us today to get started.



Specifications and descriptions are subject to change without notice

MMICs

Low Noise Amplifiers (LNAs)

p/n	Frequency	Gain	NF
gANZ0031C	57-66 GHz	21 dB	3.5 dB
gANZ0032C	71-76 GHz	15 dB	4 dB
gANZ0033C	81-86 GHz	14 dB	5 dB
gANZ0017A	75-110 GHz	17 dB	5 dB

Driver Amplifiers

p/n	Frequency	Gain	PSAT (P3dB)
gAPZ0038A	57-66 GHz	18 dB	23 dBm
gANZ0012A	71-86 GHz	12 dB	13 dBm
gAPZ0018A	71-86 GHz	14 dB	13 dBm
gAPZ0033A	71-86 GHz	25 dB	19 dBm

Multipliers

p/n	RF Frequency	Factor	PSAT (P3dB)
gXSB0024B	57-66 GHz	X6	16 dBm
gXSB0015B	71-86 GHz	X6	7 dBm
gXSB0025A	71-86 GHz	X6	14 dBm
gXQB0012B	77-100 GHz	X4	0 dBm
gXOB0017A	86-106 GHz	X8	12 dBm

Switches

p/n	Frequency	Type	IL
gSSD0011A	32-110 GHz	SPDT	5 dB
gSSS0013B	40-110 GHz	SPST	2.5 dB

Power Detectors

p/n	Frequency
gDPZ0011A	50-170 GHz

Phase Shifters

p/n	Frequency	Range	Resolution
gPSH0012A	92-96 GHz	360 deg.	5 bit

Mixers

p/n	Frequency	Type	CL
gMDR0027B	57-66 GHz	I/Q, Balanced	9 dB
gMDR0037A	57-66 GHz	I/Q, Balanced	9 dB
gMBR0011A	70-100 GHz	Balanced	12 dB
gMDR0015A	71-86 GHz	I/Q, Balanced	10 dB
gMDR0039A	71-86 GHz	I/Q, Balanced	9 dB
gMDR0013A	71-100 GHz	I/Q, Balanced	10 dB
gMQR0011A	70-95 GHz	I/Q	10 dB
gMDR0040A	92-114 GHz	I/Q, Balanced	10 dB
gMDR0035A	140-170 GHz	I/Q, Balanced	12 dB