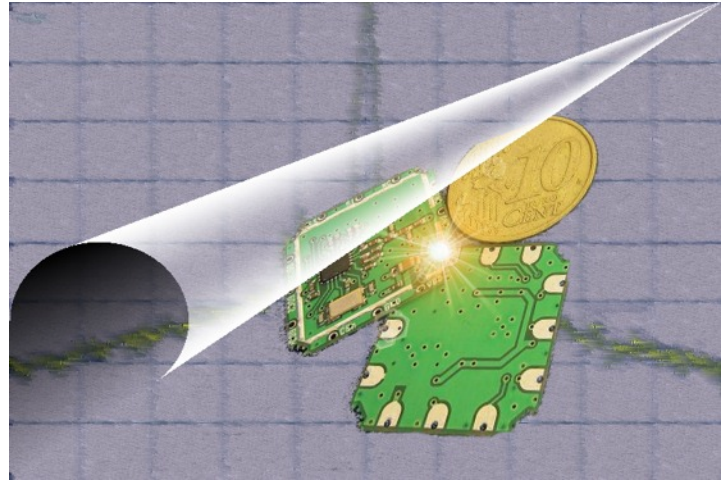




Your best partner
for embedded
RF design



BIT169PA30

RF Power Amplifier
1Watt @169MHz

Very low cost power amplifier module designed for band 169 MHz applications in a very small package (14,4x14,4 mm)

Highly Integrated RF Solutions

The BIT169PA30 modules is a very small complete and compact RF Power amplifier.

The product is available for RF applications in the 169 to 170 MHz unlicensed ISM(Industrial, Scientific and Medical) and SRD (Short Range Device) frequency bands.

BIT169PA30 is ideal solution for Wireless Metering and wireless metering infrastructure

Module can be SMT assembled.

Lead-free "green package.

With only 14,4 x 14,4 mm footprint the modules provide a real cost-effective wireless solution.

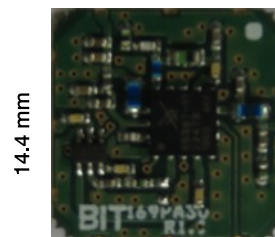
Matching Impedance is 50 ohm both in input, as in output

No additional components are needed.

BIT169PA30 is the ideal companion of BIT169RMH BIT's modules.

Order code are:

BIT169PA30 : up to 30dBm Power Amplifier 169 MHz



14.4 mm

14.4 mm

Should you need any other information or customization don't hesitate to call us..

BIT169PA30 RF Power Amplifier Module

Features

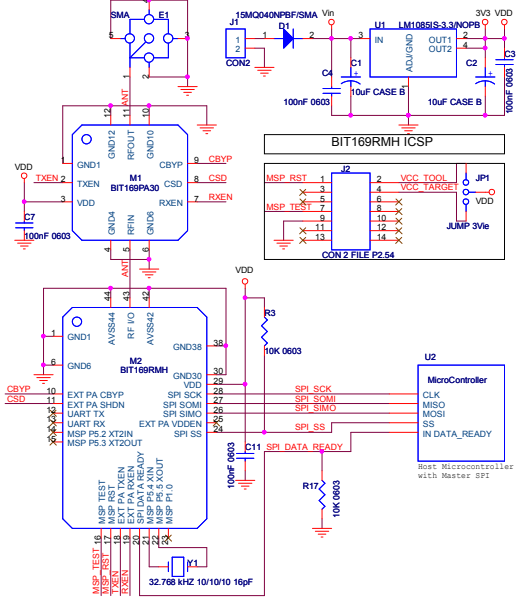
- Seamless Interface to BIT169RMH Module from BIT
- Up to 30 dBm (1 Watt) Output Power
- Receive loss < 0.4dB
- Transmit bypass mode with 0.9 dB insertion loss
- Sleep mode current < 1mA
- High Transmit Power Efficiency – PAE = 63% at 30 dBm Output Power
- Integrated control logic
- RoHS Compliant
- Small size (14.4 x 14.4 mm)
- 2 V to 3.6 V Operation

Applications

- Automated meter reading
- Advanced metering infrastructure
- ISM systems

BIT169PA30

Typical Application



Control Logic

Mode	CSD	TXEN	RXEN	CBYP
Sleep	0	X	X	X
Transmit bypass	1	1	0	0
Receive	1	0	1	X
Transmit	1	1	0	1

Note: "1" = 1.6 to VDD,
 "0" = 0 to 0.7V,
 "X" = don't care.

Operating Conditions and Specification

Parameter	Min.	Typ	Max	Units	Remarks
RF Frequency Range		169		MHz	BIT169PA30
Operating Temperature	-40		+85	°C	
Supply Voltage VDD	2		3,6	V	
Current Consumption		-	1	µA	Sleep
		680		µA	TX Bypass
		665		mA	TX
		680		µA	Rx
Input RF level		10		dBm	
Maximum Output Power		30		dBm	VDD = 3.6 V
Input Impedance		50		ohm	
Output Impedance		50		ohm	



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