



## Features

- Versatile GHz Frequency Range Down Converter
- Low Power Building Block
- Triple Balanced Mixer with High LO Rejection

## Benefits

- Low Current Consumption
- Single Supply
- Wide Supply Voltage Range of 2.7 V to 4.6 V
- Easy to Use and Handle
- Fully Integrated 5.8 GHz RF Port Matching
- Integrated Coupling Capacitors at RF- and LO-ports
- Open Collector IF Output Port
- Wide Useful Frequency Ranges
- RF: 2 GHz to 7 GHz
- LO: 1 GHz to 4 GHz
- IF: 0 GHz to 3 GHz

Electrostatic sensitive device.  
Observe precautions for handling.

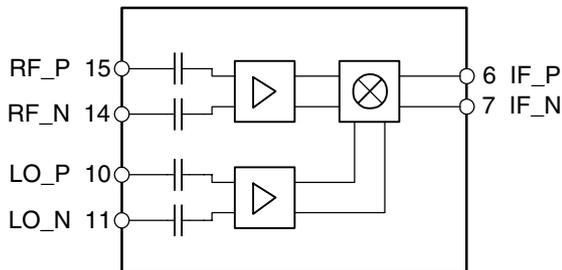


## Description

The down converter IC ATR2809 is fabricated in Atmel's powerful SiGe bipolar process.

The single ended RF input signal is differentially converted and down (or up) converted by a triple balanced Gilbert-cell mixer.

**Figure 1.** Block Diagram



## 5.8-GHz Down Converter IC

### ATR2809

### Summary

### Preliminary

Rev. 4692CS-DECT-06/04



Note: This is a summary document. A complete document is available under NDA. For more information, please contact your local Atmel sales office.

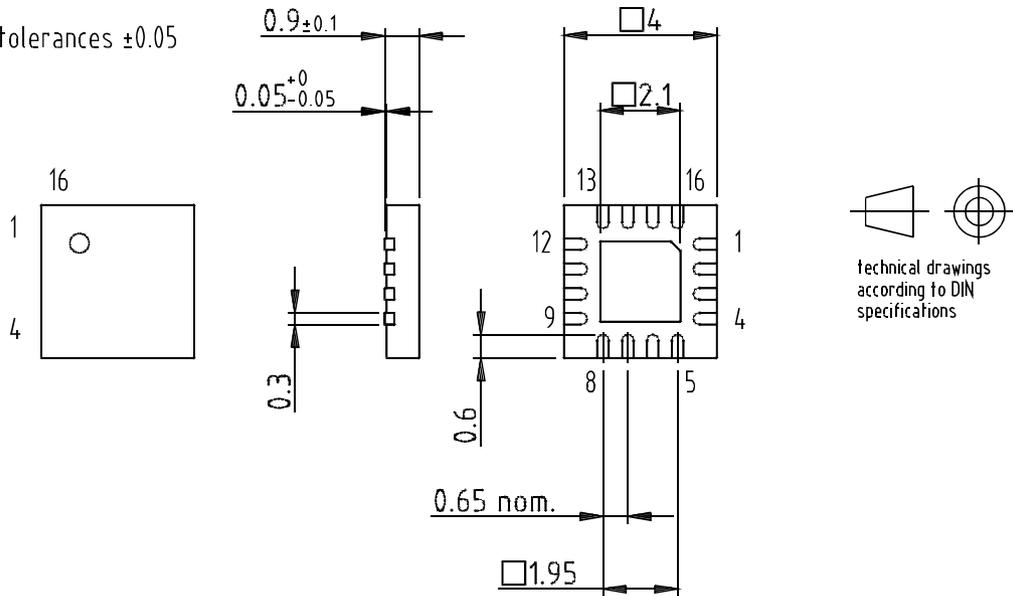
## Ordering Information

Extended Type Number	Package	Remarks
ATR2809	QFN16	4 x 4 mm, exposed pad, taped and reeled

## Package Information

Package: QFN 16 - 4x4  
 Exposed pad 2.1x2.1  
 (acc. JEDEC OUTLINE No. MO-220)  
 Dimensions in mm

Not indicated tolerances  $\pm 0.05$



Drawing-No.: 6.543-5090.01-4

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[www.atmel.com/literature](http://www.atmel.com/literature)

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