



Features

- Up-conversion Mixer IC from 2.4 GHz to 5.8 GHz
- Input Frequency Range 2.4 GHz to 3.5 GHz
- P_{OUT} Typically 12 dBm at 5.8 GHz
- P_{IN} Typically 0 dBm
- V_{CC} 3.0 V to 3.9 V
- CW Mode Operation
- Package: QFN16

Benefits

- Ramping Control Extends Battery Lifetime
- AC Input Coupling Saves External Capacitors
- Extremely Low BOM for Application

Electrostatic sensitive device.
Observe precautions for handling.

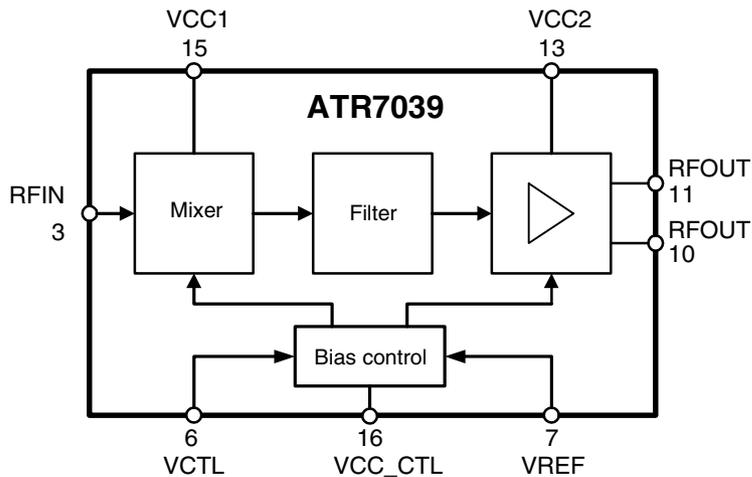


Description

The 5-GHz Up-conversion Mixer IC is designed with Atmel's Silicon-Germanium (SiGe) process and provides a high conversion gain.

The Up-conversion Mixer consists of a first mixer stage, a filter and a driver amplifier with an output power of 12 dBm. The output stage was realized using an open-collector structure. Power-up/down and output levels are controlled via the bias control pin 6 and pin 7 (V_{CTL} , V_{REF}).

Figure 1. Block Diagram



Up-conversion Mixer IC from 2.4 GHz to 5.8 GHz

ATR7039

Summary

Preliminary

Rev. 4786CS-DECT-11/04



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

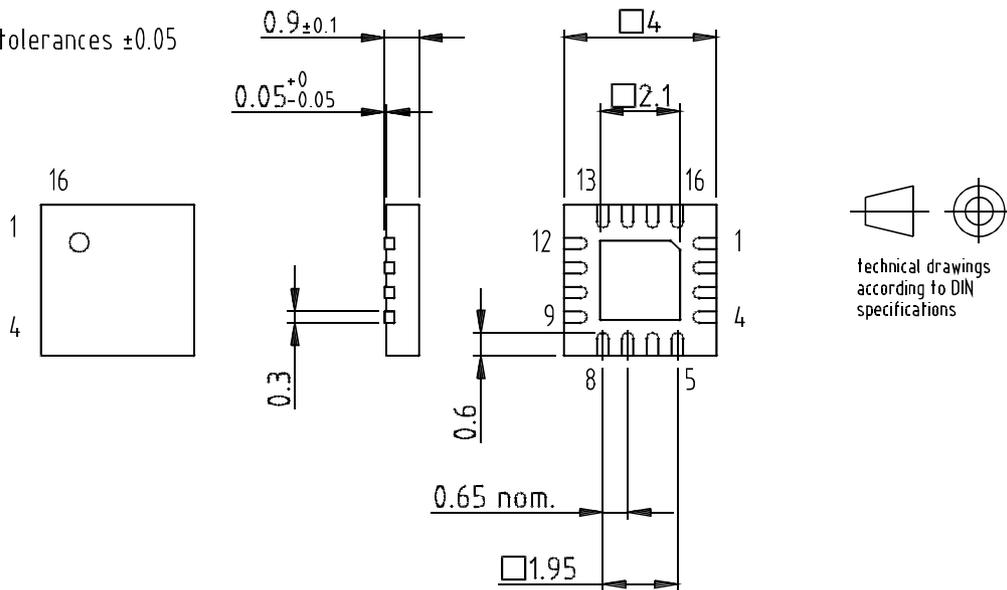
Ordering Information

Extended Type Number	Package	Remarks
ATR7039-PES	QFN16 - 4x4	Tube, MOQ 750
ATR7039-PEQ	QFN16 - 4x4	Taped and reeled, MOQ 6000

Package Information

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

Not indicated tolerances ± 0.05



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