

## Features

- Frequency Range 5 GHz to 6 GHz
- $P_{OUT}$  Maximum 28 dBm
- Gain Typically 19 dB
- $V_{CC}$  3.0V to 3.9V
- Package: QFN16
- Current Consumption in Power Down Mode Typically  $\leq 15 \mu A$

## Benefits

- Biasing Control Extends Battery Life Time
- Simple Input and Output Matching
- One Single Supply Voltage Required

Electrostatic sensitive device.  
Observe precautions for handling.



## 5.8 GHz WDCT Power Amplifier

### ATR7035

### Summary

### Preliminary

## 1. Description

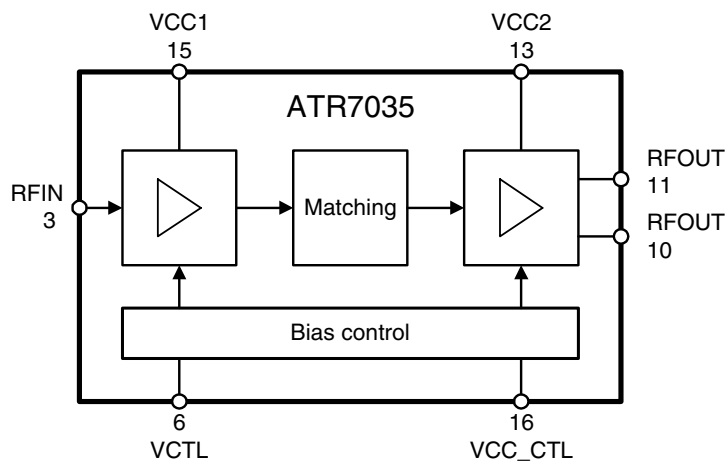
### 1.1 Process

The 5-GHz power amplifier is designed using Atmel's Silicon-Germanium (SiGe) process and provides excellent noise performance as well as good power-added efficiency.

### 1.2 Circuitry

The PA consists of a 2-stage amplifier with a maximum output power of 28 dBm. The output stages were realized using an open-collector structure. The IC features 50- $\Omega$  input matching. Power-up/down and output level are controlled at bias control pin 6 ( $V_{CTL}$ ).

Figure 1-1. Block Diagram



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

## 2. Ordering Information

Extended Type Number	Package	Remarks
ATR7035-PESG	QFN16	Tube, MOQ 750, Pb-free
ATR7035-PEQG	QFN16	Taped and reeled, MOQ 6000, Pb-free

## 3. Package Information

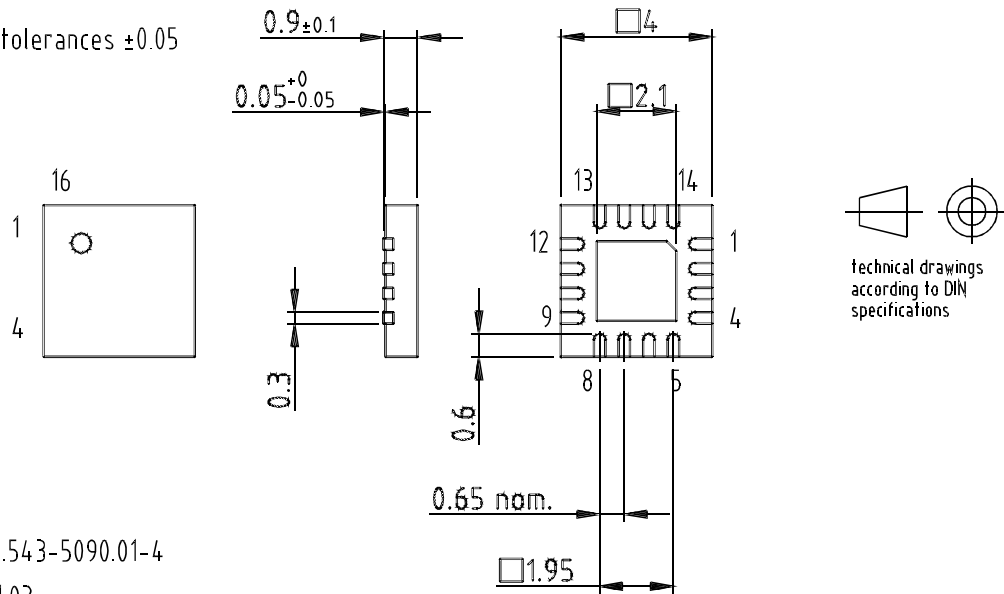
Package: QFN 16 - 4x4

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

Issue: 2; 24.01.03



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## Literature Requests

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

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4577ES-DECT-10/05