

# 2 GHz integer – N PLL synthesizer

## Part number

- ◆ RS3000

## Overview

The RS3000 is a digital integer-N PLL synthesizer operating in the 2 GHz frequency band. The RS3000 allows the selection of multiple reference frequencies and easily adjust of the output frequency and loop dynamics. The output frequency can be easily tuned to other frequency bands.

## Features

- ◆ Low phase noise VCO
- ◆ Multi-band VCO
- ◆ Programmable KPD gain
- ◆ Dead-zone mitigation
- ◆ 1.8V supply voltage

## Deliverable

- ◆ Close source database (flat GDSII)
- ◆ Support

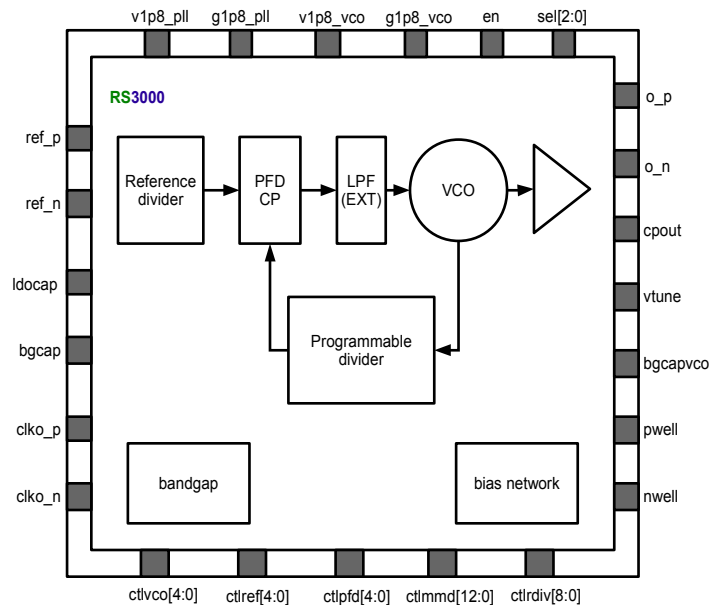
## Applications

- ◆ Wireless receivers
- ◆ Wireless transmitters
- ◆ Radar systems
- ◆ Frequency sources

## Technology node

- ◆ TowerJazz SBC18

## Block diagram



## Main specifications

Parameters	Value
Frequency range	2.0 GHz – 2.8 GHz
Charge pump current	~ 0.3mA to 1.6 mA
Area	0.65 mm x 0.87 mm
DC current	35mA
Supply voltage	1.8V

## Contact

RIO SYSTEMS LTD  
 7 Gush Etzion St.,  
 Givat Shmuel, 54030, Israel  
 E-mail: [info@rio-system.com](mailto:info@rio-system.com)  
 Tel: +972 3 5349109