PRODUCT OUTLINE

CM1014ff – 17nA Current Bias with Trimming
Ultra Low Voltage (0.9V), Ultra Low Power (70nW)

Part Number

- CM1014ff

Status

- Silicon proven

Features

- Ultra low power current bias
- I_{bias}=17nA $\pm$10% (without trimming)
- Current consumption below 72nA in active mode
- Flexible voltage operation: 1.0V–2.0V
- Enable control
- Indicative area: 0.008mm^2

Overview

This macro-cell is an ultra low power general purpose current bias generator core designed for SilTerra 0.18μm CL180G CMOS technology.

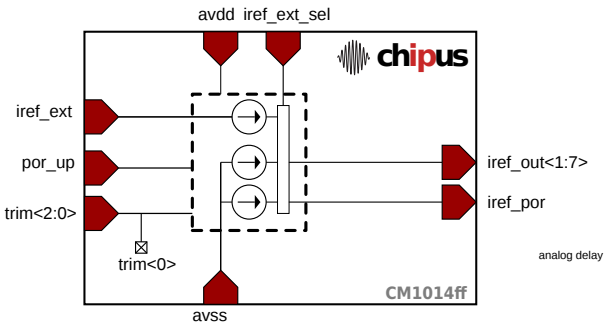
The circuit generates 7 $\times$ NMOS 17nA current branches and 1 $\times$ NMOS 8.5nA branch. The current bias is temperature compensated.

The core is easily retargeted to any other CMOS technology due to high portability architecture.

Applications

- Passive/active RFID tag ICs
- Battery powered equipment
- Energy Harvesting ICs
- Hearing Aids

Functional Diagram



Technology

- SilTerra 0.18μm CL180G CMOS

Deliverables

- Datasheet/Integration Guide
- HDL Model
- Flat GDSII database/LVS netlist
- Customer Support

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