



PRODUCT OUTLINE

CM1413ff – Power-On Reset

Flexible Threshold (1–1.3V), Ultra Low Current (100nA)

Part Number

- CM1413ff

Features

- Supply voltage: 1.0–2.0V
- Configurable assertion threshold (1.0V – 1.3V)
- Adjustable hysteresis (70mV – 200mV)
- Ultra low current consumption (100nA)
- Indicative area: 0.0064mm²

Applications

- Passive/active RFID tag ICs
- Battery powered equipment
- Hearing aids

Technology

- SiITerra 0.18µm CL180G CMOS

Deliverables

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

Status

- Silicon Proven

Overview

This macro-cell is an ultra low consumption Power-On Reset (POR) core designed for SiITerra 0.18µm CL180G CMOS technology.

The threshold sensing voltage can be configured from 1V to 1.3V (default is 1.15V). A hysteresis of 120mV is added to avoid false reset glitches in noisy supplies. This value can be digitally configured from 70mV to 200mV. The POR features an internal process compensated voltage reference. It requires an external 7.75nA current bias (sink), which can be implemented using **chipus CM1014ff** IP.

The core is easily retargeted to any other CMOS technology.

Functional Diagram

