



PRODUCT OUTLINE

CM1223ff – ULP Bandgap Voltage Reference
210nA consumption, 40ppm/°C

Part Number

■ CM1223ff

Features

- Ultra low power (210nA)
- 1.23V reference
- Low TC (>40ppm/°C after trimming)
- Supply: 1.8V
- PTAT current reference (10nA)
- Indicative area: 0.05mm²

Applications

- RFID
- Battery powered ICs
- IoT applications

Technology

- Silterra 0.18μm CMOS I18L

Deliverables

- Datasheet / Integration Guide
- HDL Model
- Flat GDS Database / LVS Netlist
- Customer Support

Status

- GDS available

Overview

This macro-cell is an ultra low power bandgap voltage reference (1.23V) with low temperature coefficient (>40ppm/°C) consuming 210nA. A 5-bit digital bus allows TC adjust against process variations. It provides a built-in 10nA PTAT current reference with 4 outputs.

The core can be easily retargeted to any other CMOS technology as it uses typical devices of standard CMOS technologies (MOS and PN junctions).

Functional Diagram

