



PRODUCT OUTLINE

CM4033ff – ULP 32.768kHz oscillator
398nA current consumption, low TC

Part Number

■ CM4033ff

Features

- 32.768kHz $\pm 5.1\%$
- ULP ($P_{tot} < 1.3\mu W$)
- Low TC
- 6-bit trimming
- Self-biased, built-in references
- Area: $0.032 \mu m^2$ ($153 \mu m \times 210 \mu m$)

Applications

- RTC (real-time clock)
- Time reference for watchdog timer
- IoT (internet of things)

Technology

- Silterra $0.18\mu m$ 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, general purpose 32.768kHz internal oscillator core aimed for RTC (real-time clock) applications. A 6-bit digital bus allows frequency adjustment against process variations. It has self-biased, built-in references and doesn't require external ones. The core is easily retargeted to any other CMOS technology due to its MOSFET-only oscillator architecture.

Functional Diagram

