



## PRODUCT OUTLINE

**CM4036ff – True-ULP 32768Hz RTC Oscillator**  
Current Consumption < 120nA

### Part Number

■ CM4036ff

### Features

- true-ULP (<120nA)
- 32768Hz  $\pm 30\%$  PVT after trimming
- Supply: from 2.7V to 3.6V
- Temperature: from  $-40^{\circ}\text{C}$  up to  $125^{\circ}\text{C}$
- Indicative area:  $0.032\mu\text{m}^2$
- Load capacitance: <20fF

### Applications

- Environmental monitoring
- RFID
- Battery powered ICs
- PMIC
- IoT applications

### Technology

- Silterra  $0.18\mu\text{m}$  CMOS I18L

### Deliverables

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

### Status

- GDS Available

### Overview

This macro-cell is a true ultra low power, general purpose 32.768kHz internal oscillator core consuming 120nA when fully functional. A 4-bit digital bus allows frequency adjust against process variations. It features built-in bias references.

The core is easily retargeted to any other CMOS technology because it uses typical devices of standard CMOS technologies.

### Functional Diagram

