



PRODUCT OUTLINE

CM2011bg – Low-Power 10-bit SAR ADC
10 bits, 240kSPS, 8 multiplexed inputs

Part Number

- CM2011bg

Features

- General purpose SAR ADC
- 10-bit resolution
- 240kSPS speed
- $avdd = 3.3V$, $dvdd = 1.8V$
- $INL = \pm 0.5 \text{ LSB}$, $DNL = \pm 0.5 \text{ LSB}$
- Indicative area: 0.12mm^2

Applications

- Housekeeping
- Monitor applications
- Consumer electronics
- Tuning machines

Technology

- LFoundry $0.15\mu\text{m}$ LF150 CMOS

Deliverables

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

Status

- Silicon Under Tests

Overview

This macro-cell is a general purpose, 10-bit, 240kSPS, 8-multiplexed input Successive Approximation Register (SAR) Analog-to-Digital Converter (ADC) core designed for LFoundry $0.15\mu\text{m}$ LF150 CMOS technology STD (Standard) and LP (Low Power) process.

The circuit occupies a small area and is optimized for low power consumption.

The core is easily retargeted to any other CMOS technology with R-poly devices.

Functional Diagram

