



PRODUCT OUTLINE

CM2012gf – Low-Power 8-bit SAR ADC

8 bits, 50kSPS, Low Voltage (1.8V), Low Power (20 μ A)

Part Number

- CM2012gf

Features

- 8-bit resolution, 50kSPS speed
- avdd = 1.8V, dvdd = 1.8V
- Low power (20 μ A) in active mode
- INL = ± 0.5 LSB, DNL = ± 0.5 LSB
- Power down operation mode
- Indicative area: 0.065mm²

Applications

- Energy harvesting ICs
- Housekeeping
- Portable devices
- General purpose measurements

Technology

- TowerJazz TS18SL (0.18 μ m CMOS)

Deliverables

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

Status

- Silicon proven

Overview

This macro-cell is a low power, general purpose, 8-bit, 50kSPS, Successive Approximation Register (SAR) Analog-to-Digital Converter (ADC) core designed for TowerJazz 0.18 μ m TS18SL CMOS technology.

The circuit has an internal sample-and-hold circuit and a power-down operation mode to save power in applications where power consumption is critical.

Functional Diagram

