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PRODUCTOUTLINE

SGC24212_01_GF_22FDSOI

COMPACT HIGH RESOLUTION JTM / ADC

Features

- High resolution temperature and voltage measurement
- High noise immunity (ΔΣ ADC)
- 0.18 ºC resolution
- Wide sensor range (ΔVbe and absolute voltage measurement modes)

General Description

SGC24212_01_GF_22FDSOI is an accurate high-resolution ADC for temperature or voltage monitoring. Due to its high accuracy, it has a wide range of applications ranging from predictive protection systems to temperature compensation of crystal oscillators. Making use of an advanced fully differential *ΔΣ ADC*, the *SGC24212_01_GF_22FDSOI* offers excellent repeatability and high *PSRR*. Additionally, due to its range of input gains, it is the suitable solution for any type of temperature or voltage measurement applications. Specified from Tj = −40ºC to +125ºC, it is designed to achieve 2.0% overall temperature accuracy.

Applications

- In chip temperature monitoring
- Battery monitoring
- General purpose ADC
- Crystal oscillator temperature curve compensation

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{AVDD}	Analog Sup.	1.50	—	1.98	V
V_{DVDD}	Digital Sup.	0.60	—	0.90	V
F_{CLK}	ΔΣ Freq.	0.50	1.00	1.50	MHz

Applications Diagram

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