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PRODUCTOUTLINE

SGC24212_01_TSMC_CLN05

12 BIT HIGH RESOLUTION JTM / ADC

Features

- High resolution temperature and voltage measurement
- Wide sensor range (ΔVbe and absolute voltage measurement modes)
- High noise immunity (ΔΣ ADC)
- 0.2°C resolution

General Description

SGC24212_01_TSMC_CLN05 is an accurate high-resolution ADC for voltage or temperature measurements. Due to its high accuracy, it presents a wide range of applications from predictive protection systems to temperature compensation of crystal oscillators. Making use of a 12-bit advanced fully differential ΔΣ ADC, the *SGC24212_01_TSMC_CLN05* offers excellent repeatability and high PSRR. Designed to achieve 2% overall temperature accuracy, it is specified from Tj = –40°C to 125°C.

Applications

- Battery monitoring
- General-purpose ADC
- Temperature monitoring
- Predictive temperature protection
- Crystal temperature curve compensation

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{AVDD}	Analog Sup.	1.10	1.20	1.32	V
V_{DVDD}	Digital Sup.	0.65	0.75	0.825	V
F_{CLK}	ΔΣ Freq.	250	500	750	kHz

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