

SGC24212_IP007705_GF_22FDX

COMPACT HIGH RESOLUTION JTM / ADC

Features

- High resolution temperature and voltage measurement
- ΔV_{be} and absolute voltage measurement modes
- High noise immunity ($\Delta \Sigma$ ADC)
- 0.18°C resolution

General Description

SGC24212_IP007705_GF_22FDX is an accurate high-resolution ADC for temperature or voltage monitoring. Due to its high accuracy, it has a wide range of applications from predictive protection systems to temperature compensation of crystal oscillators. Using an advanced fully differential $\Delta \Sigma$ ADC, the SGC24212_IP007705_GF_22FDX 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 $T_j = -40^\circ\text{C}$ to $+125^\circ\text{C}$, it is designed to achieve 2% overall temperature accuracy.

Applications

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

Quick Reference

SYMBOL	DESCRIPTION	MIN	TYP	MAX	UNIT
V_{AVDD}	Analog Voltage	1.60	-	1.98	V
V_{DVDD}	Digital Voltage	0.70	-	0.90	V
F_{CLK}	Clock Range	0.50	1.00	1.50	Mhz