

SGC24212\_IP007705\_GF\_22FDX

## COMPACT HIGH RESOLUTION JTM / ADC

### Features

- High resolution temperature and voltage measurement
- $\Delta V_{be}$  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