

SGC24212\_01\_GF\_22FDSOI

## HIGH RESOLUTION JTM / ADC

### Features

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

### General Description

*SGC24212\_01\_GF\_22FDSOI* is an accurate compact 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  $\Delta\Sigma$  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  $T_j = -40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ , 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
$F_{CLK}$	$\Delta\Sigma$ Freq.	0.50	1.00	1.50	MHz