

CAT5269

Digital Potentiometer (POT), Dual 256-Tap, with 2-wire Interface

Product Overview

For complete documentation, see the data sheet.

The CAT5269 is two digital POTs integrated with control logic and 18 bytes of NVRAM memory. Each digital POT consists of a series of resistive elements connected between two externally accessible end points. The tap points between each resistive element are connected to the wiper outputs with CMOS switches. A separate 8-bit control register (WCR) independently controls the wiper tap switches for each digital POT. Associated with each wiper control register are four 8-bit non-volatile memory data registers (DR) used for storing up to four wiper settings. Writing to the wiper control register or any of the non-volatile data registers is via a 2-wire serial bus. On power-up, the contents of the first data register (DR0) for each of the four potentiometers is automatically loaded into its respective wiper control registers.

The CAT5269 can be used as a potentiometer or as a two terminal, variable resistor. It is intended for circuit level or system level adjustments in a wide variety of applications. It is available in the -40°C to 85°C industrial operating temperature range.

Features

- Two linear taper digital potentiometers
- 256 resistor taps per potentiometer
- End to end resistance 50 k Ω or 100 k Ω
- Potentiometer control and memory access via 2-wire interface (I²C like)
- Low wiper resistance, typically 100 Ω
- Nonvolatile memory storage for up to four wiper settings for each potentiometer
- Automatic recall of saved wiper settings at power up
- 2.5 to 6.0 volt operation
- Standby current less than 1 μ A
- 1,000,000 nonvolatile WRITE cycles

For more features, see the data sheet

Applications

- Audio Equipment
- Industrial Controls

End Products

- Automobiles
- Industrial Equipment