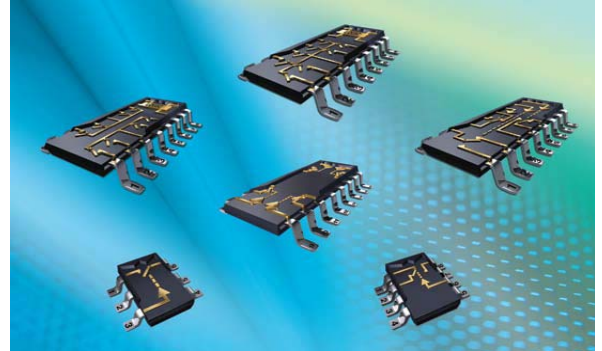




Vishay releases New Precision 8-Channel/Dual 4-Channel CMOS Analog Multiplexers DG508B and DG509B

The DG508B is an 8-channel single-ended Analog multiplexer designed to connect one of eight inputs to a common output as determined by a 3-bit binary address (A0, A1, A2). The DG509B is a dual 4-channel differential analog multiplexer designed to connect one of four differential inputs to a common dual output as determined by its 2-bit binary address (A0, A1). Break-before-make switching action protects against momentary crosstalk between adjacent channels. An on channel conducts current equally well in both directions. In the off state each channel blocks voltages up to the power supply rails. An enable (EN) function allows the user to reset the multiplexer/demultiplexer to all switches off for stacking several devices. All control inputs, addresses (Ax) and enable (EN) are TTL compatible over the full specified operating temperature range. The DG508B and DG509B are fabricated on an enhanced SG-II CMOS process that achieves improved performance on: reduced charge injection, lower device leakage, and minimized parasitic capacitance.



FEATURES

- Operate with single or dual power supply
- V+ to V- analog signal swing range
- 44 V power supply maximum rating
- Extended operate temperature range:
- 40 °C to + 125 °C
- Low leakage typically < 3 pA
- Low charge injection - QINJ = 2 pC
- Low power - ISUPPLY: 10 μA
- TTL compatible logic
- > 250 mA latch up current per JESD78
- Available in SOIC16 and TSSOP16 packages
- Superior alternative to:
 - ADG508A, DG508A, HI-508
 - ADG509A, DG509A, HI-509
- Compliant to RoHS directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition

BENEFITS

- Reduced switching errors
- Reduced glitching
- Improved data throughput
- Reduced power consumption
- Increased ruggedness
- Wide supply ranges
(± 5 V to ± 20 V)

APPLICATIONS

- Data acquisition systems
- Audio and video signal routing
- ATE systems
- Medical instrumentation