



LC4684

REV1.0-Revised DEC 2007

Ultra-Low Resistance, Dual SPDT Analog Switch

DESCRIPTION

Low voltage, dual single-pole/double-throw (SPDT) analog switches operate from a single +1.8V to +5.5V supply. The Ron for the Normally-Closed (NC) switches are 0.5Ω(max) and 0.8Ω (max) for the Normally-Open (NO) at a +2.7V supply. The digital logic inputs are 1.8V logic-compatible with a supply ranges from +2.7V to +3.3V.

The LC4684 is packaged in CSP-10, significantly minimizing the required PC board area. The chip occupies only a 2.0mm × 1.50mm area. The 4 × 3 array of solder bumps are spaced with a 0.5mm bump pitch.

FEATURES

- NC Switch R_{ON} 0.5Ω max (+2.7V Supply)
- NO Switch R_{ON} 0.8Ω max (+2.7V Supply)
- R_{ON} Match Between Channels 0.06Ω (max)
- R_{ON} Flatness Over Signal Range 0.15Ω (max)
- +1.8V to +5.5V Single-Supply Operation
- 1.8V Logic Compatibility
- 50nA (max) Supply Current
- Low Leakage Current: 10nA (max)
- Low Crosstalk: -60dB (100kHz)
- High Off-Isolation: -90dB (100kHz)

APPLICATIONS

- Portable Device
- Speaker Headset Switching
- Power Routing
- Relay Replacement
- Audio and Video Signal Routing
- Communications Circuits

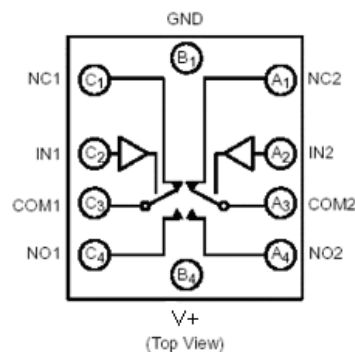
ORDERING INFORMATION

Product NO	Ordering Number	Pin Package	Devices per reel	Temperature range & Rohs
LC4684	LC4684CGATR	CSP-10	3K/reel	-40~85°C & Pb free

PIN DESCRIPTION

Name	Pin	Function
NC_	A1, C1	Analog Switch-Normally Closed Terminal
IN_	A2, C2	Digital Control Input
COM_	A3, C3	Analog Switch--Common Terminal
NO_	A4, C4	Analog Switch-Normally Open Terminal
V+	B4	Positive Supply Voltage Input
GND	B1	Ground

FUNCTIONAL DIAGRAM/TRUE TABLE



IN_	NO_	NC_
0	OFF	ON
1	ON	OFF

MARKING INFORMATION

