



Still Switching Analog the Old Fashioned Way?

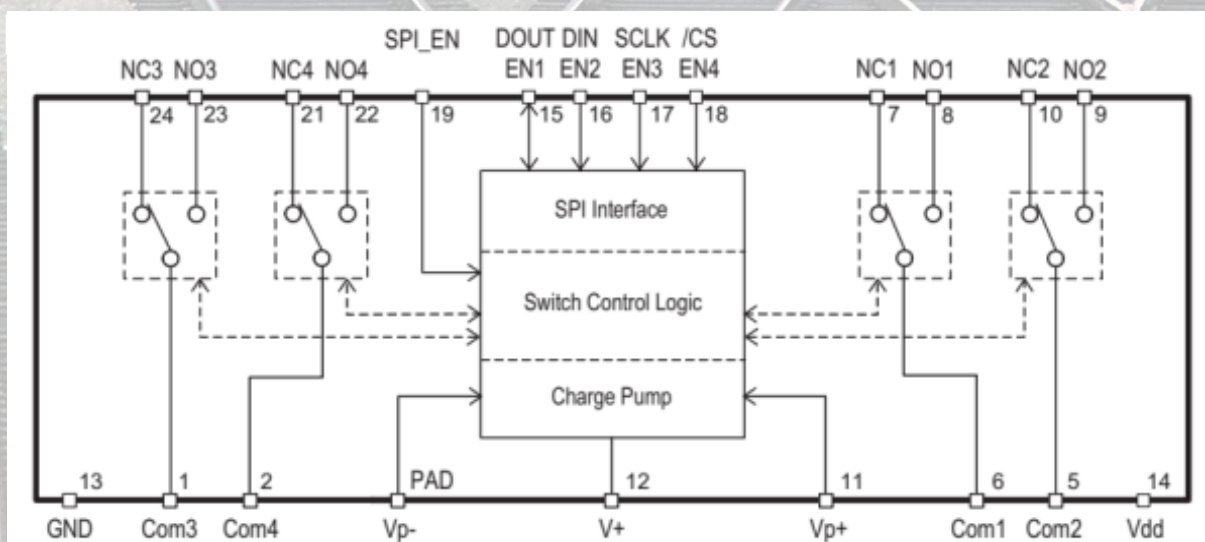


Switch to THAT's *New Solid-State Solutions*



Introducing *THAT* 5xx4-Series Quad SPDT Analog Switch ICs

- +29dBu Differential Signals
- 6 Ω & 10 Ω R_{ON} Options
- ± 15 V or +5 V Supplies
- Very Low THD
- Click-Less Switching
- Tiny 4x4 mm Package



THAT's a *Switch!*

Applications

- Mic/Line Switching
- Pads for Digitally Controlled Input Stages
- Output Signal Switching
- Analog Signal Routing
- Test Equipment
- Communications Systems
- Data Acquisition Systems
- Mixing Consoles
- Digital Audio & Video Recorders
- Industrial Measurement Systems
- Instrumentation Amplifiers
- ATE Systems

Benefits

- Eliminates contact bounce
- Has short, predictable switching time
- Extends maximum signal for digitally controlled mic preamps
 - ♦ THAT626x, 5171/81, 5173, 5263
 - ♦ Up to +29 dBu input swing
- Needs only one +5V Supply (5544 & 5514)
 - Still handles +28dBu signals
- Offers flexible SPI and direct control
- Switchable from Make-Before-Break to Break-Before-Make
- Lowers System Cost

A New Direction for THAT

Based on THAT's extensive experience with digital control of analog gain, the THAT 5xx4-Series of Quad SPDT Switch ICs delivers the industry's lowest THD+N performance in a compact 4x4mm QFN package, optimized for professional audio applications. With a wide +29 dBu signal swing (57x4 series, $\pm 17V$ supplies), choice of 6 Ω and 10 Ω on-resistances, and either high-voltage or single +5V supply operation, the 5xx4-Series is the ideal solid-state replacement for mechanical relays anywhere that analog signal must be routed or controlled.

The series pairs perfectly with THAT's 626x and other mic preamps for a complete, digitally controlled front-end solution, delivering click-less switching that preserves all of the preamp's performance. Yet they are equally at home in outputs, switching XLRs from AES/EBU to analog, or enabling input/output selection on a single connector. And, of course, they can be used for signal routing control, filter enabling/changing, etc., anywhere an analog signal must be controlled.

Key Features and Specifications

Lowest THD+N in Class 0.0005% (–106 dB): best-in-class distortion performance	Wide Signal Swing +29.2 dBu (31.5 Vp) differential AC signals (57x4 with $\pm 17V$ supplies)	Click-Less Switching Controlled 400 ns switch time 25 pC charge injection
Two Low On-Resistance Options 6 Ω (5544/5744) and 10 Ω (5514/5714) variants	Two Low-Power Options Single +5V Supply: 115 mW total, or Dual $\pm 15V$ Supplies: 16.5 mW total	Flexible Control Options SPI control over all features, or... Direct per-switch logic control
Survives Phantom Power Faults Maximum fault current self-limited to 500 mA	Make/Break Configurable Make-before-break, or Break- before-make, plus an Off state	Compact Package 4x4 mm QFN24 — space-efficient board footprint

Product Lineup

Part Number	Supply / Signal Voltage	On-Resistance (Ron)	Supply Current
THAT 5544	Low-Supply (+5 V), High Signal (+28 dBu)	6 Ω	23 mA
THAT 5514	Low-Supply (+5 V), High Signal (+28 dBu)	10 Ω	23 mA
THAT 5744	High-Supply Voltage, High Signal (+28 dBu)	6 Ω	550 μA
THAT 5714	High-Supply Voltage, High Signal (+28 dBu)	10 Ω	550 μA