

# New ADC Delivers Flagship Audio Performance

## Provides 120 dB Dynamic Range, -110 THD+N at Very Competitive Price

### CS5381 Features

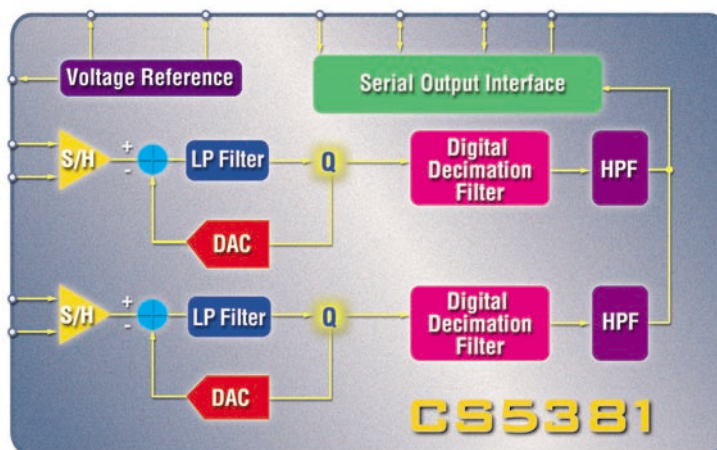
- Advanced multi-bit  $\Delta\Sigma$  architecture
- 24-bit conversion
- System sampling rates up to 192 kHz
  - DVD Audio compatible
- 120 dB dynamic range
- -110 dB THD+N
- 5 V analog power supply
- 3-5 V digital power supply
- Supports logic levels between 5 and 2.5 V
- 315 mW power consumption
- High pass filter or DC offset calibration
- Differential analog architecture
- Linear phase digital anti-alias filtering
- Supports Master or Slave mode operation
- Pin-compatible with the CS5361 and CS5351
- Available in 24-pin TSSOP/SOIC
- CS5381 price: \$14.95 (1K)

### Applications

- Digital mixing consoles
- Multi-track recording systems
- Effects processors
- Outboard converters
- A/V receivers
- DVD recorders



Actual Size



The CS5381 analog-to-digital converter is ideal for designers who need to deliver premium audio performance at a competitive price. Starting at an unrivaled offering of \$14.95 in quantities as low as 1,000 units, this ADC is ideal for demanding applications such as digital mixing consoles, multi-track recording systems, A/V receivers, and DVD recorders, which all require wide dynamic range, negligible distortion, and the best sound quality available.

The CS5381 uses a 5th-order, multi-bit  $\Delta\Sigma$  modulator along with digital filtering and decimation to eliminate the need for an external anti-alias filter. The CS5381 features a differential architecture that provides excellent noise rejection and performs sampling, analog-to-digital conversion and anti-alias filtering, generating 24-bit values for both left and right inputs in serial form at sample rates up to 200 kHz per channel.

Power consumption of a mere 315 mW is less than half of competing solutions and can simplify the design for systems that use multiple devices. Also, this ADC is pin-compatible with the CS5361 and CS5351, so current Cirrus customers can upgrade product performance with no need to modify their existing board design.

The CS5381 sets a new standard for price/performance, so flagship sound quality and analog performance no longer cost a fortune!