2-channel / 4-channel Sigma-Delta ADCs for audio and sensor signal capture

Product Positioning

ADC products are suitable for converting analog microphone, audio or sensor signals into digital data. Key evaluation points include channel count, sampling rate, dynamic range, latency and interface compatibility.

Core Value

- The product page shows 2-channel and 4-channel Sigma-Delta ADC directions.
- Up to 192 kSPS sampling can support audio and real-time signal acquisition.
- High SNR helps improve voice, audio and sensor measurement quality.
- Suitable for microphone arrays, voice interaction, industrial data acquisition and medical front ends.

Representative Models / Directions

Model	Function / Spec Summary	Suitable Scenario
ACM1201	3 V-5.5 V, approx. 90 dB SNR, 0.01% THD+N	Analog microphone...
2-Channel ADC	Sigma-Delta architecture	Stereo audio or...
4-Channel ADC	High-sampling-rate multi-channel acquisition	Microphone array and...
High-SNR Direction	Public materials mention up to 110 dB SNR	High-quality audio and...

Typical Applications

Analog Microphones | Microphone Arrays | Voice Interaction | Industrial DAQ | Medical Devices | Communication Equipment

ACME | Analog-to-Digital Converters

Analog-to-Digital Converter

Customer Visit Talking Points

- If customers need to connect analog microphones to a digital host, ask for channel count and interface requirements.
- If voice-recognition quality is important, focus on SNR, noise floor, latency and sample rate.
- For industrial or medical acquisition, confirm accuracy, dynamic range and operating temperature range.

Selection Checklist

- Confirm channel count: 2-channel / 4-channel
- Confirm sampling rate, SNR, THD+N and latency
- Confirm input source: microphone / line / sensor
- Confirm digital interface, supply voltage and package

Recommended Sales Scenarios

- The customer project matches the typical applications in this category.
- The existing design has heat, noise, EMI, battery-life or BOM-complexity issues.
- The customer wants local alternatives, shorter debugging cycles or technical support.
- Use "model + application + pain point" to quickly narrow down a product direction.

Customer Requirement -> Recommended Direction

Customer Pain Point	Key Questions	Recommended Approach
Insufficient output power / SPL	Speaker impedance, target THD+N, supply voltage	Select from Analog-to-Digital Converters by power class
Heat or battery-life issue	Battery cell count, playback time, heat-dissipation area	Consider Class-H / high efficiency / boost collaboration
Design-in risk	Package, lead time, software/debug support	Recommend mature models + demo + reference design first

Reference: ACME official product page and public product selection materials. Final specifications should be verified with the latest datasheets.