

# AT12612

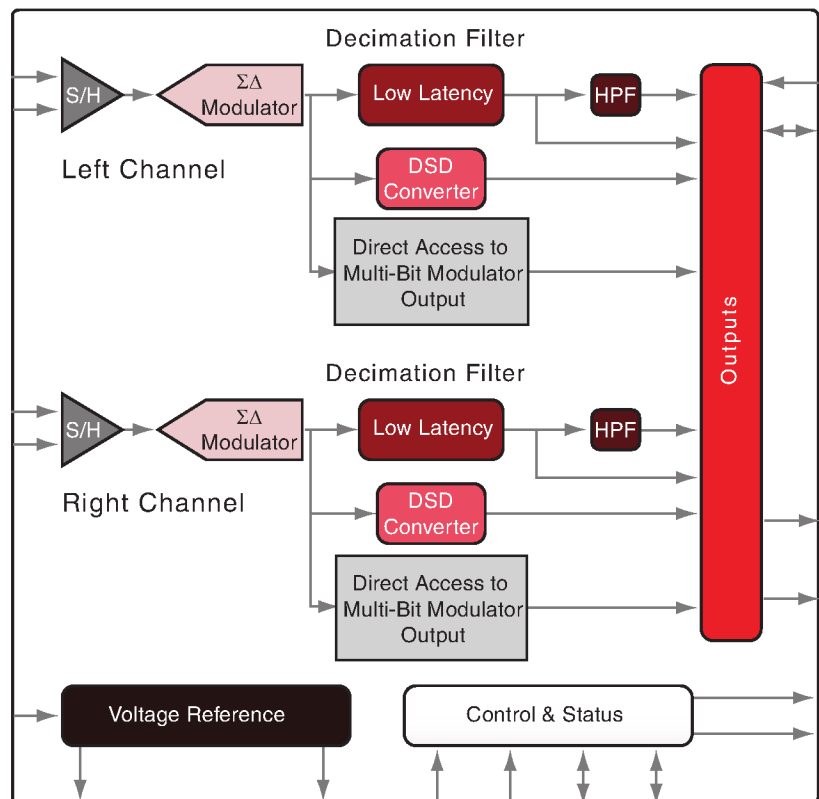
## Audio A/D Converter

### Features

Pin Compatible with AT1201  
 Lower Power: 450mW  
 Dynamic Range: 120dB  
 THD+N: -110dB  
 Sampling Frequency: up to 192kHz  
 PCM, Multi-Bit and DSD outputs  
 Low Latency Antialias Filter  
 Digital High Pass Filter  
 Overflow Indicator  
 QFN-64 Green Package

### Applications

Multi-Channel Audio Systems  
 Digital Audio Mixing Consoles  
 Live Sound Production  
 Broadcast Studio Equipment  
 Data Acquisition



AT12612 Block Diagram



The AT12612 is a 24-bit stereo A/D converter designed for the most uncompromising multi-channel high performance audio systems requiring reduced power dissipation. Based on Arda's flagship AT1201 ADC, the AT12612 provides superior dynamic range, the industry's lowest THD and sampling rate of up to 192kHz.

On-chip digital filters are designed for perceptually transparent response at all three sampling rate modes: 48kHz, 96kHz, and 192kHz. Multi-bit modulator and DSD outputs enable the use of external filters, and all three outputs (PCM, DSD, and multi-bit) can be enabled simultaneously.

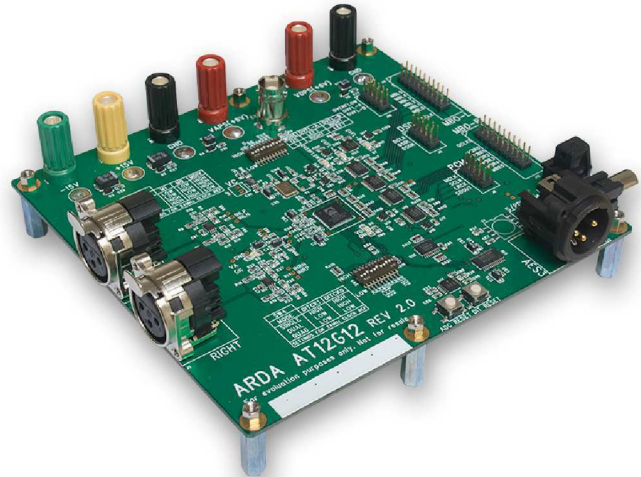
### AT12612EVK Evaluation Kit

The evaluation kit for the AT12612 provides an easy to use platform for evaluating the performance and functionality of the AT12612.

To use the evaluation kit, you will need:

1. AT12612EVK Evaluation Kit
2. Audio Analyzer such as Rohde & Schwarz UPV or Audio Precision SYS-2722
3. Power Supplies for +6V and  $\pm 8V$
4. XLR cables for Audio input
5. XLR cable for AES3 or optical cable for S/PDIF

For an evaluation kit, please contact [sales@ardatech.com](mailto:sales@ardatech.com).



### Arda Audio Products

**AT1401 Digital-to-Analog Converter** - The AT1401 is a differential 24-bit D/A converter designed for ultra high performance audio systems. The converter architecture provides a direct mapping of digital codes to an output current for the most faithful representation of the source material.

- Resistor ladder based architecture
- Power supply  $\pm 5V$
- Differential current output:  $\pm 15.5mA$
- High compliance voltage
- Ground centered output

**AT1525 Cleanup Phase Locked Loop** - The AT1525 is a phase locked loop and FIFO that brings out the highest performance in digital-to-analog converters and in analog-to-digital converters by removing noise from the input clock and generating a pristine output running at the same rate as the input. A FIFO eliminates jitter from up to 2 incoming streams producing clean data output.

Arda's audio products group is dedicated to fulfilling the needs of professional and consumer audio system manufacturers. Arda's Early Adopter Program (EAP) gives our key customers a voice in the product definition early on in the design and development process, thereby ensuring a product that is ideally suited to their needs. For more information on EAP, please contact [sales@ardatech.com](mailto:sales@ardatech.com).

### Arda Technologies

Arda Technologies is an eclectic team of talented designers that are passionate about audio. From pro-audio to consumer, we pour our love of music into each of our integrated circuit products.

With our background in analog-to-digital converters, digital-to-analog converters, phase locked loops, and wireless communications, we are out to set new standards for the entire audio signal path.

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