

# Press Release

## PA5331 Low Power Stereo Audio CODEC with Headphone and Mic Amplifier



Chandler, Ariz., January, 2010

ProTek Analog a division of ProTek Devices introduces the PA5331 a Low Power Stereo Audio CODEC with Headphone and Microphone Amplifiers

The PA5331 is a high performance, low power and low cost audio CODEC. It consists of 2-ch ADC, 2-ch DAC, microphone amplifier, headphone amplifier, digital sound effects, and analog mixing and gain functions.

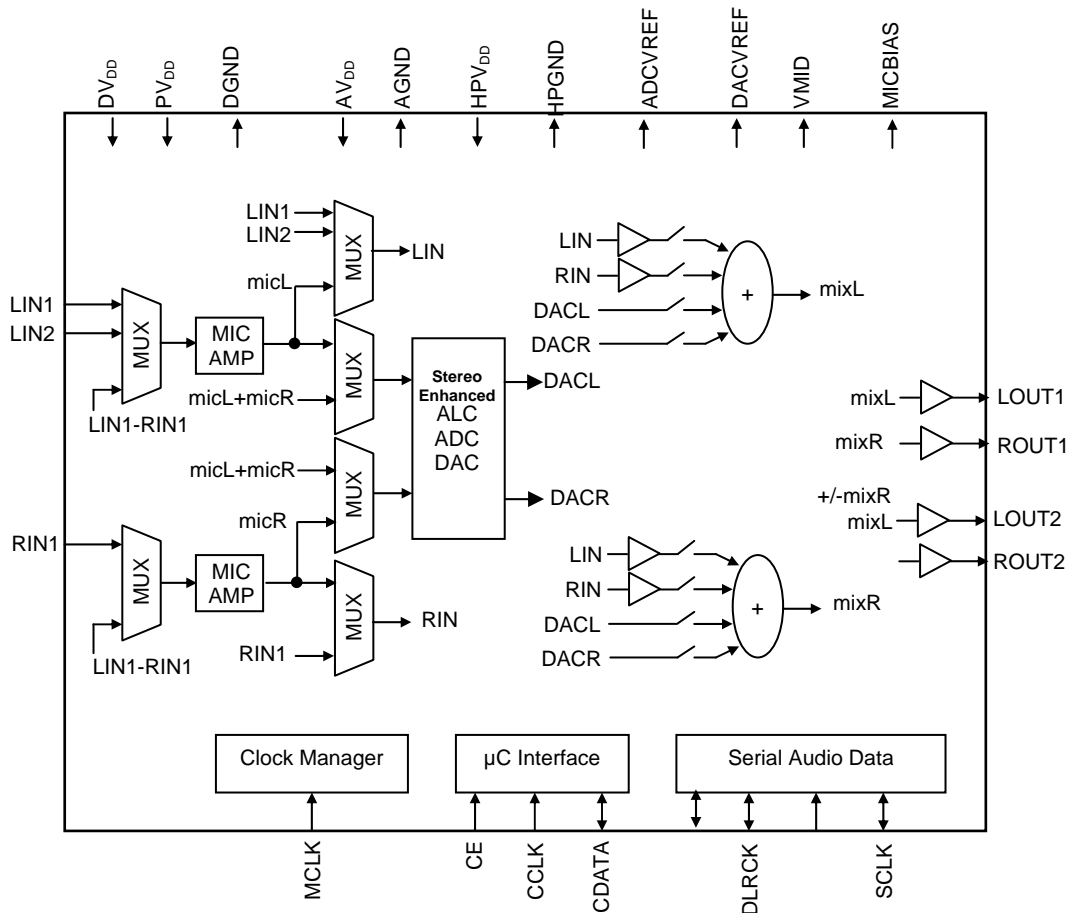
The PA5331 uses advanced multi-bit delta-sigma modulation technique to convert data between digital and analog.

The multi-bit delta-sigma modulators make the device with low sensitivity to clock jitter and low out of band noise.

The PA5155 is available in a QFN-28 package and is specified for operation over the -40°C to +85°C temperature range.

Sample quantities are available upon request. SPICE model and parameters are available for circuit simulation on request.

### BLOCK DIAGRAM:



### APPLICATION USES

- GPS
- Bluetooth
- MP3, MP4, PMP
- Cell phone
- Digital camera, camcorder
- Portable audio devices

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## FEATURES

### ADC

- 24-bit, 8 kHz to 96 kHz sampling frequency
- 95 dB dynamic range, 95 dB signal to noise ratio, -85 dB THD+N
- Stereo or mono microphone interface with microphone amplifier
- Auto level control and noise gate
- 3-to-1 analog input selection
- Various analog input mixing and gains

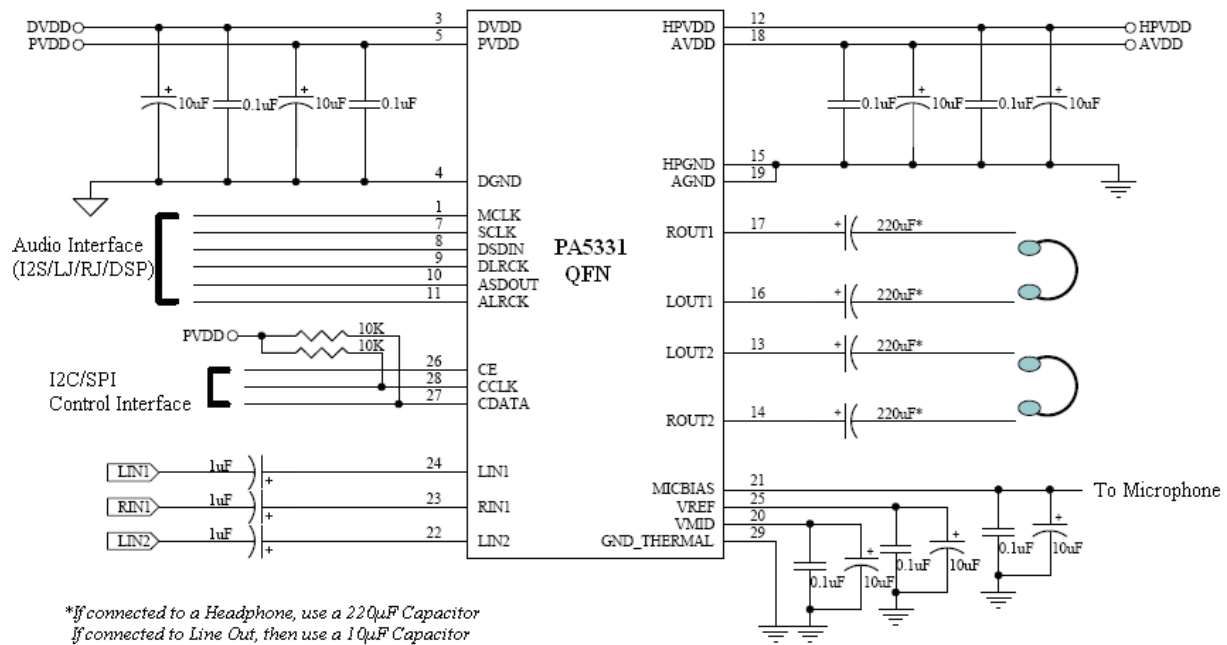
### DAC

- 24-bit, 8 kHz to 96 kHz sampling frequency
- 96 dB dynamic range, 96 dB signal to noise ratio, -83 dB THD+N
- 40 mW headphone amplifier, pop noise free
- Stereo enhancement
- Bass and Treble
- Various analog output mixing and gains
- Low Power
- 1.8V to 3.3V operation
- 7 mW playback; 16 mW playback and record

### System

- I<sup>2</sup>C or SPI  $\mu$ C interface
- 256Fs, 384Fs, USB 12 MHz or 24 MHz
- Master or slave serial port
- I<sup>2</sup>S, Left Justified, DSP/PCM Mode

## TYPICAL APPLICATION



# Press Release

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## About ProTek Devices

ProTek Devices, based in Chandler, Ariz., provides advanced Analog, Mixed signal and Transient Voltage Suppressor devices for Voice, Video and Data (V2D). With more than 25 years of engineering and manufacturing experience, ProTek provides Analog and TVS solutions which function effectively with the latest high-speed communication and networking products.

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