TI Side Gig Audio Modules

Build your own audio system. Device evaluation made easy.

TEXAS INSTRUMENTS

We want to make it easy for you to create your own audio system with TI's audio devices. *Side Gigs* offer a modular way to connect high-power Class-D amplifiers with the complete audio signal chain. And this is just the beginning! Our TI *Side Gig* selection will continue to expand and give you even more flexibility to create applications and individualizations.

Features

- Create your own audio signal chain in hardware fast and easy
- Select from a variety of components such as Class-D amplifiers, DACs, operational amplifiers, and more
- Use your imagination to build your own application





1.1 Active Crossover Side Gig

This *Side Gig* features the high performance PCM5252 DAC. Utilizing the 1.1 Active Crossover processing flow allows for digital tuning and compensation of the frequency response for both the woofer and tweeter. This enables a reduction in weight and cost of a 1.1 speaker by removing the passive crossover components while allowing the crossover frequency to be adjusted in software.



OpAmp Side Gig

The OPA1632 **Side Gig** offers a high performance front end for TI audio amplifiers featuring an analog AIB connector. In the case of the TPA32xx family the OPA1632 replaces the pseudo differential NE5532 op-amp stage with a true differential device. With extremely low distortion and voltage noise the OPA1632 is a premium upgrade for high-end analog systems maximizing the audio performance.



Guitar Side Gig

Turn analog input Class-D amplifiers into a guitar or instrument amplifier with the Guitar **Side Gig** module. The board features selectable "Clean" and "Drive" channels for traditional and overdriven guitar sounds. The clean channel offers volume, treble, middle, bass and mid-boost controls to tune the sound of the instrument.

Create Your Own Side Gig

Have a component in mind that you would like to connect to the Class-D amp but no matching board is available today? In addition to the mentioned modules, TI enables you to create your own *Side Gig* module in hardware by providing schematics and PCB layout files that make your *Side Gig* development really easy.

Easy Set Up

Plug in the Side Gig module to your Class-D evaluation module and your system is ready to go.



Easy Integration

Side Gig modules are compatible with TI's TPA32xx family of high-power, high-performance Ultra-HD Class-D amplifiers.

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Device	TPA3244	TPA3245	TPA3250	TPA3251	TPA3255
Max Power to BTL/Ch (W)	110	145	130	220	315
Max Power to PBTL (W)	160	230	190	355	605
Min Supported BTL Load (Ω)	4	3	4	3	4
Power Stage Supply Max (V)	31/5	31.5	38	38	53.5
Thermal Pad Location	Bottom	Тор	Bottom	Тор	Тор
Package	44HTSSOP ²	44HTSSOP ¹	44HTSSOP ²	44HTSSOP ¹	44HTSSOP ¹
Dimensions			6.1 x 14mm		

TPA32xx Product Family

Tools & Resources

Technical collateral and design tools are available to support your next development.

- Setup Guide and Configuration Tool for each device
- LC Filter Design Tool (http://www.ti.com/tool/lcfilter-calc-tool)
- LC Filter Design Application Note (http://www.ti.com/lit/slaa701)
- Post Filter Feedback Application Note (http://www.ti.com/lit/slaa702)
- Analog Input Grounding Application Note (http://www.ti.com/lit/slaa719)

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