

TPA203xD1 – Mono Class-D Speaker Amplifiers

One Page Overview

Product Description:

The TPA203xD1 devices are fixed-gain mono 2.75-W High-Efficiency, Filter-Free Class-D audio power amplifiers that require only one external component for operation. Each device has a different gain setting: TPA2032D1 (2V/V), TPA2033D1 (3V/V) and TPA2034D1 (4V/V). They are available in a tiny wafer chip scale package (WCSP). Features like 88% efficiency make the TPA203xD1 devices perfect for any battery operated device that uses a speaker.

Key Parameters:

- Supply Voltage Range: 2.5 V – 5.5 V
- Output Power: 680 mW (at 3.6 V into 8 Ω)
- Power Supply Rejection Ratio (PSRR @ 217 Hz): 73 dB
- Noise Floor: 27 μ V_{RMS} (A-weighted)

Nano-Evaluation Module Description:

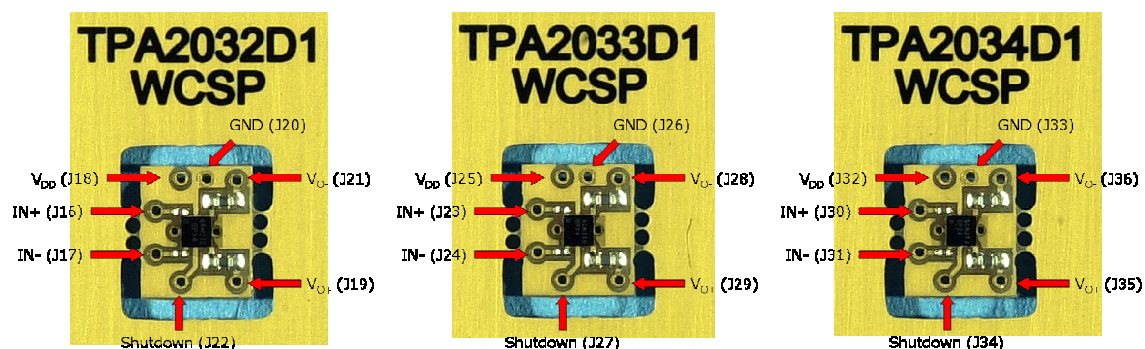
The TPA203xD1 NanoEVMS included within this kit can easily be pushed out of the main NanoEVM PCB and have been made as small as possible to be soldered directly onto a customer's board for immediate evaluation of the device in the system. They contain all the external components needed for correct operation. For full evaluation, please request a standard site EVM (TPS203xD1EVM).

Nano-Evaluation Module Board Use:

Before you connect the NanoEVM to a power supply or please check the picture below to ensure the correct connections.

Please note following important device limitations:

- Maximum Supply Voltage: 5.5 V
- Recommended Supply Voltage Range: 2.5 V to 5.5 V
- Minimum Speaker Impedance: 4 ohms



TPA203xD1 NanoEVMS

The Nano EVM is not designed to test the full functionality of the device. For further product information including the board schematics, BOM and the link to the product folder, please visit the following web site: www.ti.com/analogportable

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