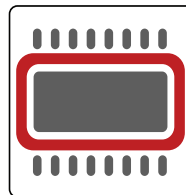
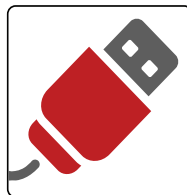
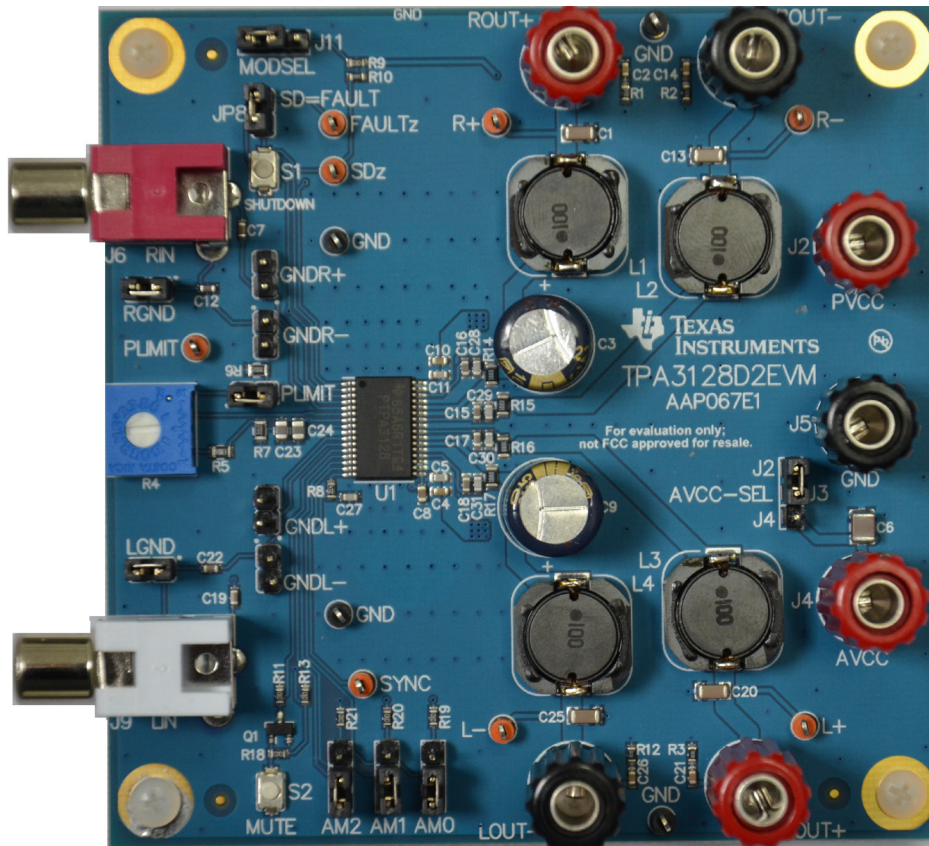


# TPA3128D2EVM

## Quick-Start Guide

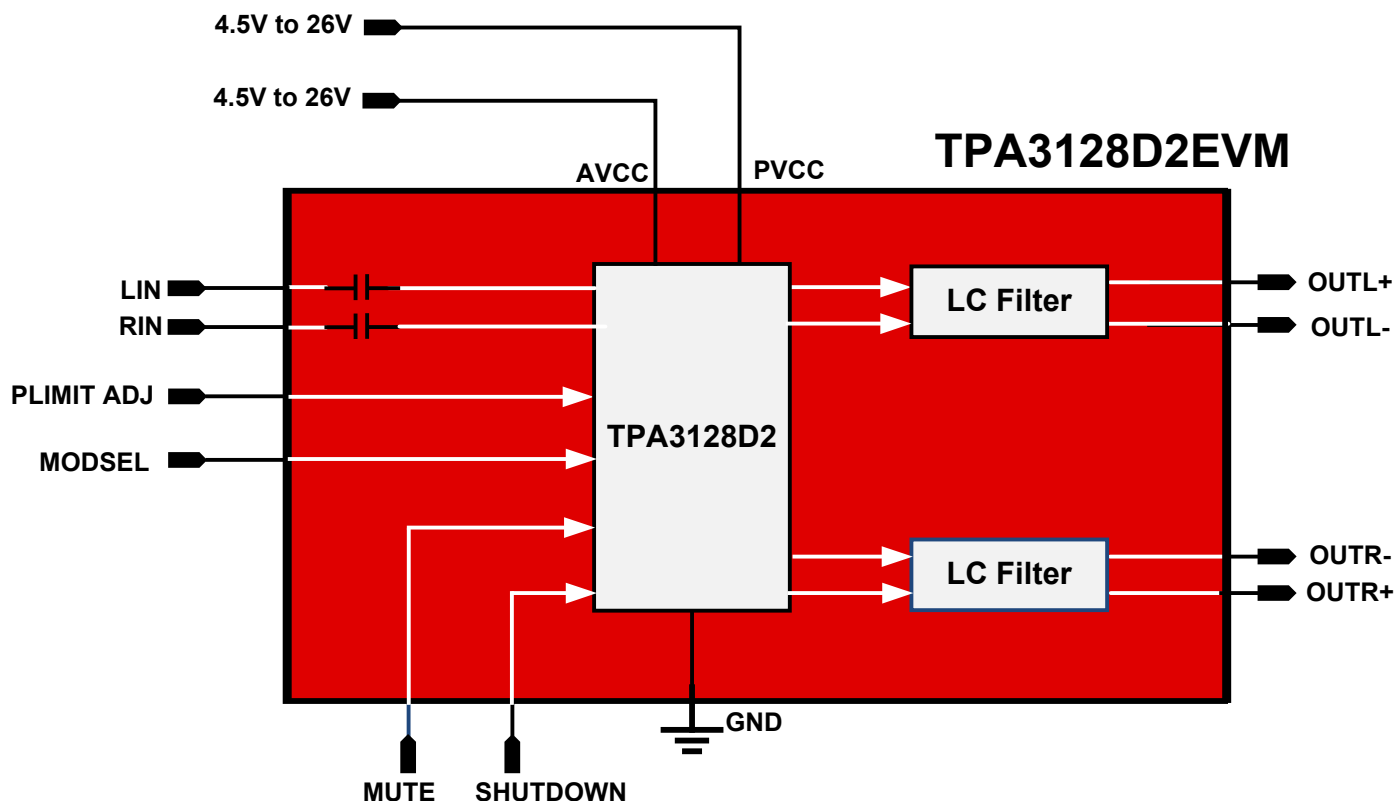
 **Start Here**



[ti.com/tool/tpa3128D2EVM](https://ti.com/tool/tpa3128D2EVM)

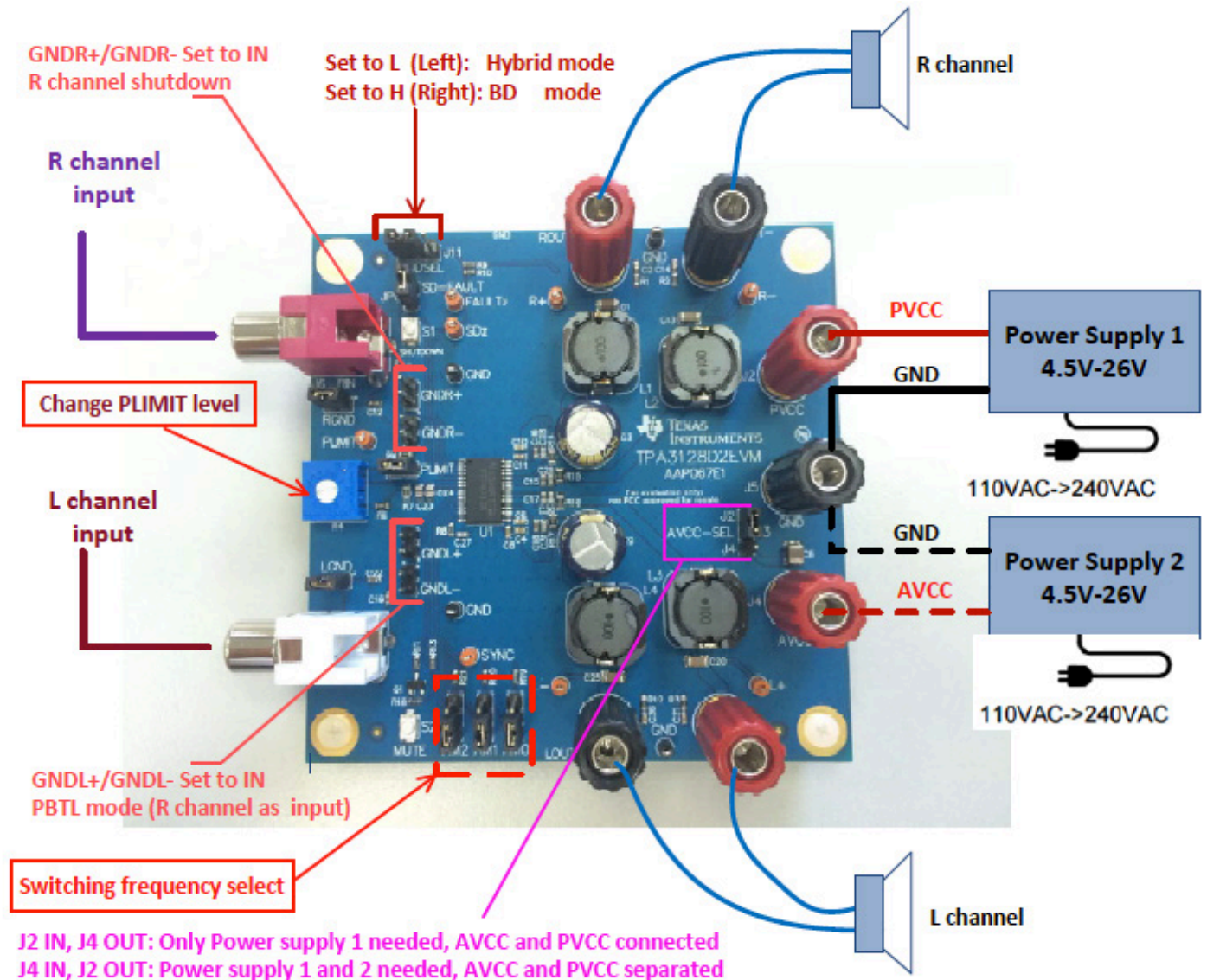
## Evaluation Kit Features

- Very low idle current with LC filter =10uH+0.68uF  
<23mA@PVCC=24V  
<15mA@PVCC=12V
- Adaptive modulation schemes based on output power
- Supports separate AVCC and PVCC to save more power
- Supports stereo output, mono output, and PBTL configuration
- Wide supply voltage capabilities, from 4.5V to 26V
- Multiple switching frequencies, 300KHz to 1.2MHz
- 2× 30W/ch into 8Ω load <10%THD+N@PVCC=21VGNDLC



## Getting Started

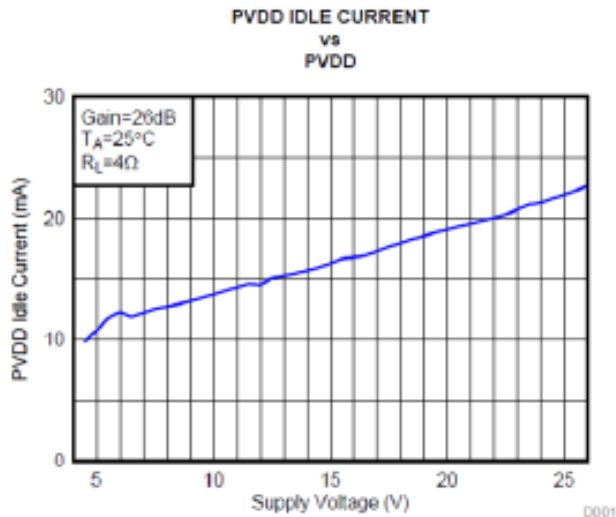
1. Order the TPA3128D2EVM from [ti.com/tool/TPA3128D2EVM](https://ti.com/tool/TPA3128D2EVM).
2. Connect the audio source, power supply, and speaker to the EVM as indicated.



## Features and Benefits

### Ultra-low idle current

Use Hybrid mode to lower the idle power loss, and help to extend the battery life of Bluetooth/wireless speakers and other battery powered audio systems.

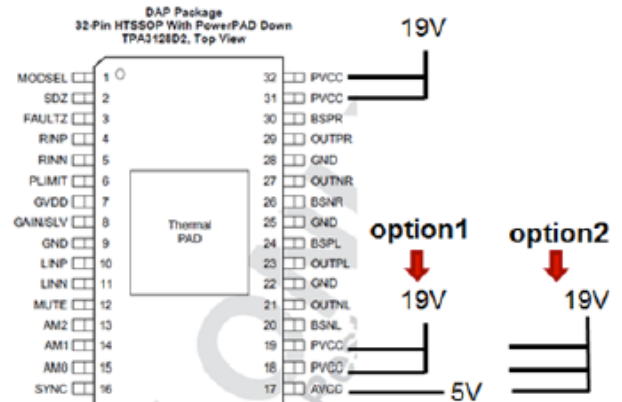


### Adaptive modulation schemes

The adaptive modulation schemes minimize the average PVCC current, based on output power.

### Save more power

Separate AVCC and PVCC will lower system power consumption.



Compare with Option2, Option 1 save power= (19-5)×4=56mW !

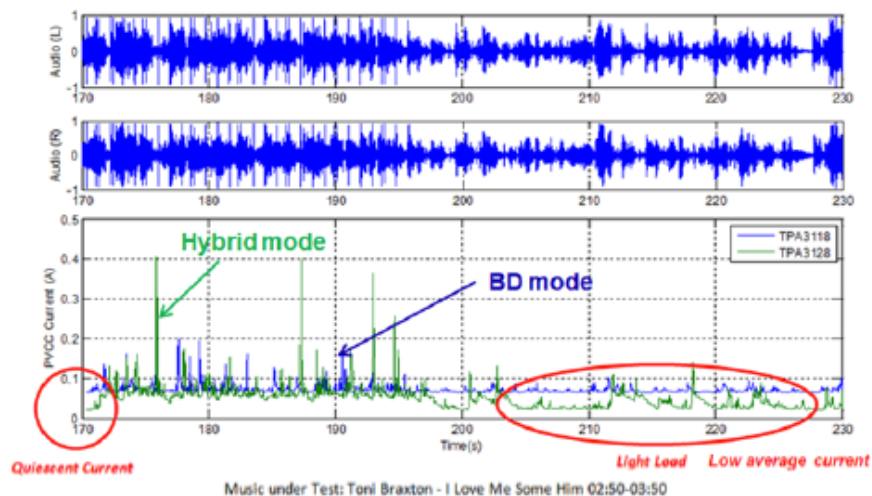
Save Power= (PVCC value – AVCC value) × 4mA

### P2P compatible

Supports P2P with the **TPA3118D2**

### Robust protection

Speaker protection includes power limiter and DC protection, thermal protection, plus pin-to-pin, pin-to-ground, and pin-to-power short circuit protection.



## Design Resources and References



**Engage in the  
Audio Amplifiers Support Forum**  
**Search for solutions, get help and share  
knowledge with fellow engineers**

**Available on: [ti.com/product/tpa3128d2](https://ti.com/product/tpa3128d2)**

- TPA3128D2 datasheet
- Complete TPA3128D2EVM User's Guide
- TPA3128D2EVM gerber with schematic and BOM

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