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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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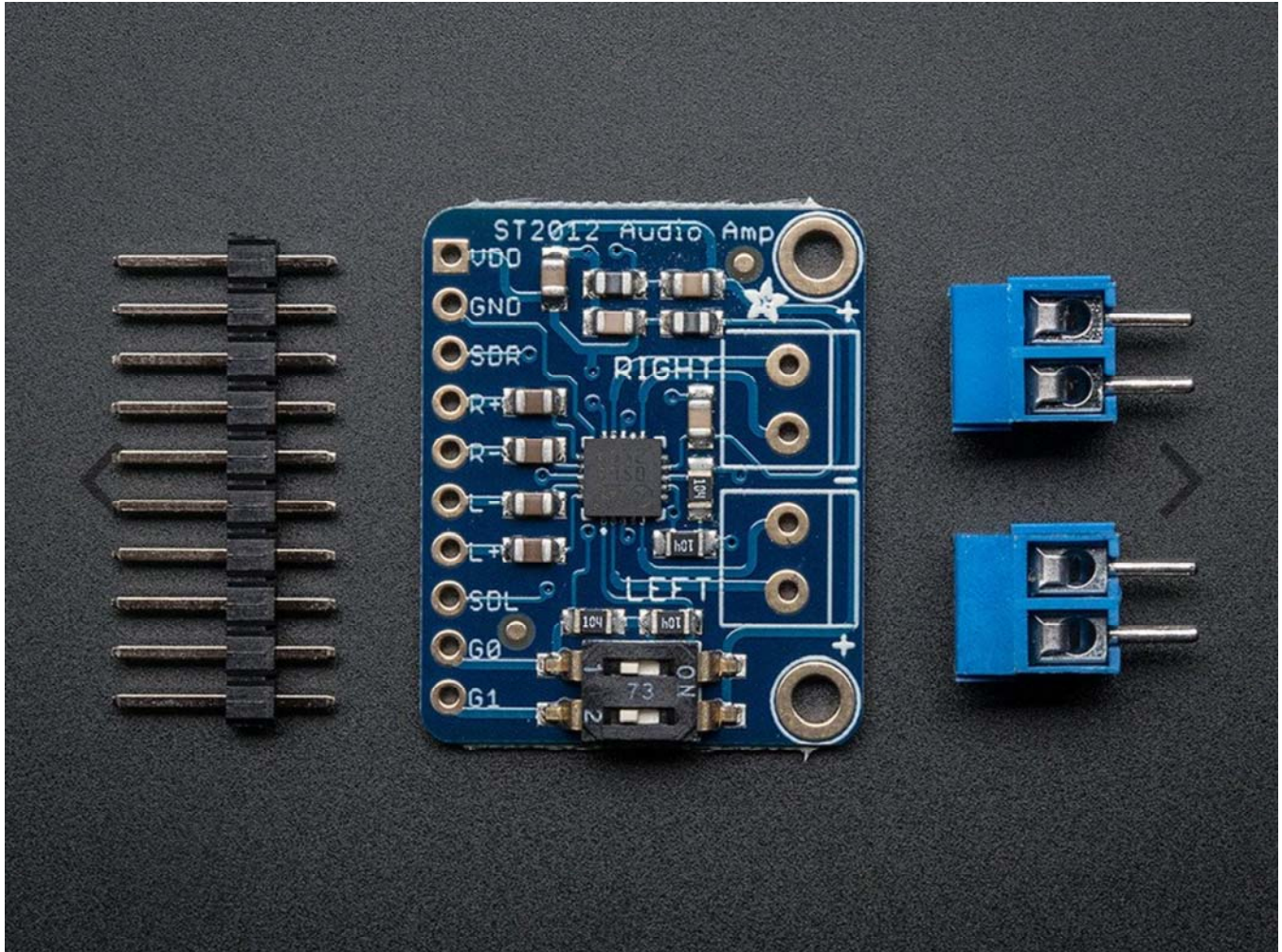
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BOARDS / BREAKOUT BOARDS

Stereo 2.8W Class D Audio Amplifier – TS2012

PRODUCT ID: 1552



DESCRIPTION

This incredibly small stereo amplifier is surprisingly powerful – able to deliver 2 x 2.8W channels into 4 ohm impedance speakers (@ 10% THD). Inside the miniature chip is a class D controller, able to run from 2.7V–5.5VDC. Since the amp is a class D, it's incredibly efficient (89% efficient when driving an 8Ω speaker at 1.5 Watt) – making it perfect for portable and battery-powered projects. It has built in thermal and over-current protection but we could barely tell it got hot. This board is a welcome upgrade to basic "LM386" amps!

The inputs of the amplifier go through 1.0uF capacitors, so they are fully 'differential' – if you don't have differential outputs, simply tie the R- and L- to ground. The outputs are "Bridge Tied" – that means they connect directly to the outputs, no connection to ground. The output is a ~300KHz square wave PWM that is then 'averaged out' by the speaker coil – the high frequencies are not heard. All the above means that you can't connect the output into another amplifier, it should drive the speakers directly.

Comes with a fully assembled and tested breakout board with 1.0uF input capacitors. We also include a dual mini DIP switch for setting the amplifier gain on the fly, 3.5mm screw-terminal blocks so you can easily attach/detach your speakers, and some header in case you want to plug it into a breadboard. You will be ready to rock in 15 minutes! Speakers are not included, use any 4 ohm or 8 ohm impedance speakers.

- Output Power: 2.8W at 4Ω, 10% THD, 1.7W at 8Ω, 10% THD, with 5V Supply
- PSRR: 70 dB typ @ 217 Hz with 6 dB gain
- Designed for use without an output filter, when wires are kept at under 2"-4" long
- Four pin-selectable gains: 6dB, 12dB, 18dB and 24dB. Select with the onboard switches or by setting the G0 and G1 breakout pins (see schematic for breakout board showing gain pin settings for details)
- Excellent click-and-pop suppression

- Thermal shutdown protection
 - Independent channel shutdown
 - Low current draw: 5mA quiescent and 2uA in shutdown mode
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