

## 3. PIN CONFIGURATIONS AND FUNCTION DESCRIPTIONS

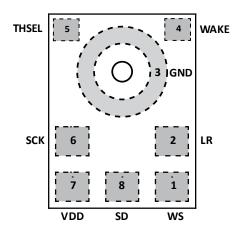


Figure 3. Pin Configuration (Top View, Terminal Side Down)

## **3.1. PIN FUNCTION DESCRIPTIONS**

PIN	NAME	FUNCTION
1	WS	Serial Data Word Select for I <sup>2</sup> S Interface
2	LR	Left Channel or Right Channel Select: Left: LR tied to GND Right: LR tied to VDD. In this setting, LR should be tied to the same voltage source as the VDD pin.
3	GND	Ground
4	WAKE	Wake Output Pin. Interrupt pin for Acoustic Activity Detect (AAD) Modes. Outputs HIGH state to indicate the acoustic stimulus exceeds AAD conditions, returns LOW when the stimulus no longer exceeds them.  For operation without AAD modes, this pin can be tied to Gnd or left as No Connect.
5	THSEL	Threshold Select Input Pin. Used to both enable and configure AAD Modes.  No connection for operation without AAD modes.
6	SCK	Clock Input to Microphone
7	VDD	Power Supply. For best performance and to avoid potential parasitic artifacts, place a $0.1\mu\text{F}$ (100 nF) ceramic type X7R capacitor between Pin 7 (VDD) and ground. Place the capacitor as close to Pin 7 as possible.
8	SD	Serial Data Output for $I^2S$ Interface. This pin tristates when not actively driving the appropriate output channel. The SD trace should have a $100~k\Omega$ pull-down resistor to discharge the line during the time that all the microphones on the bus have tristated their outputs.

**Table 10. Pin Function Descriptions**