WM8524-6228-DT16-EV1

Example Configurations

DOC TYPE:	Example Configurations
BOARD REFERENCE:	WM8524-6228-DT16-EV1
BOARD TYPE:	Customer Standalone Board
WOLFSON DEVICE(S):	WM8524
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INTRODUCTION

The WM8524-6228-DT16-EV1 Customer Standalone Board provides a complete hardware platform for evaluation of the WM8524. The WM8524 Customer Standalone Board can also be connected directly to a processor board using flying wires or appropriate headers.

Configurations covered are listed below:

- DAC Playback to Line Out

This document should be used as a starting point for evaluation of WM8524 but it will not cover every possible configuration.

Assumptions:

1. The user is familiar with the WM8524-6228-DT16-EV1 board and that the board is configured correctly for the path of interest (see related documents below).

Related documents:

1. WM8524-6228-DT16-EV1_Schematic_Layout.pdf

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BOARD CONFIGURATION STAND-ALONE

The WM8524 Customer Standalone Board can be used a stand-alone module for direct connection to a processor board via flying leads or dedicated headers. This section will detail important considerations and provide all information required to do this without risking damage to the device.

CONNECTION DIAGRAM

Figure 1 below shows the connections required to power-up and control the WM8524 Customer Standalone Board.

Please refer to Table 1 for further detail on external I/O connections.

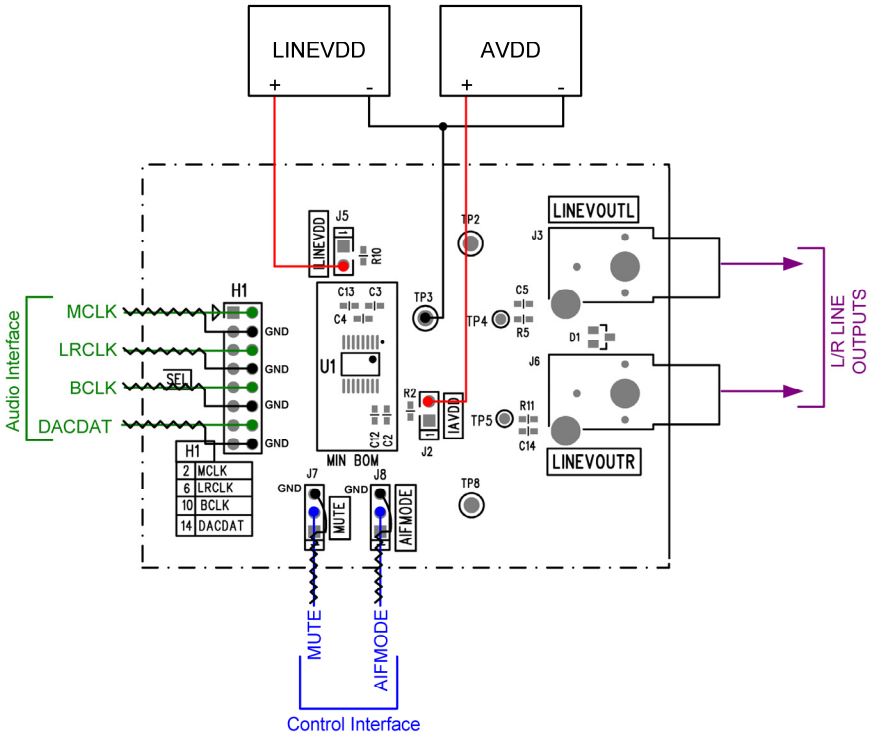

Figure 1 Stand-Alone Board Configuration

I/O TABLE

SIGNAL	BOARD REFERENCE	PART TO REMOVE	IMPORTANT NOTES	
Voltage Supplies				
AVDD	J2.2	R2	LINEVDD and AVDD must always be within 0.3V of each other and at 3.3V ± 10%	
LINEVDD	J5.2	R10		
Ground				
AGND	TP3		Analogue grounds must always be within 0.3V of each other	
LINEGND	TP3			
Master Clock				
MCLK	H1.2	Jumper H1.1	Master clock	Referenced to LINEVDD level
Audio Interface				
LRCLK	H1.6	Jumper H1.5	Digital audio interface left/right clock	
BCLK	H1.10	Jumper H1.9	Digital audio interface bit clock	
DACDAT	H1.14	Jumper H1.13	Digital audio interface data input	
MUTE	J7.2	Jumper J7.1	0 = Mute enabled 1 = Mute disabled	
AIFMODE	J8.2	Jumper J8.1	0 = 24-bit Left Justified 1 = 24-bit I^2S Z = 24-bit Right Justified	
Analogue Outputs				
LINEVOUTL	J3		Left line output	
LINEVOUTR	J6		Right line output	

Table 1 I/O Configuration

Table 1 above shows the points on the board where external stimuli can be connected, and the description of each pins function.

It also details the components that must be removed before external stimuli are connected to avoid bus contention.

SYSTEM BOARD CONFIGURATION

This section focuses on evaluation of the WM8524-6228-DT16-EV1 Customer Standalone Board. This system is the reference platform for measurement data contained in this document. Please note that only a limited number of usage modes will be covered.

DAC PLAYBACK TO LINE OUT

The following section details board configuration for DAC playback to line out.

BLOCK DIAGRAM

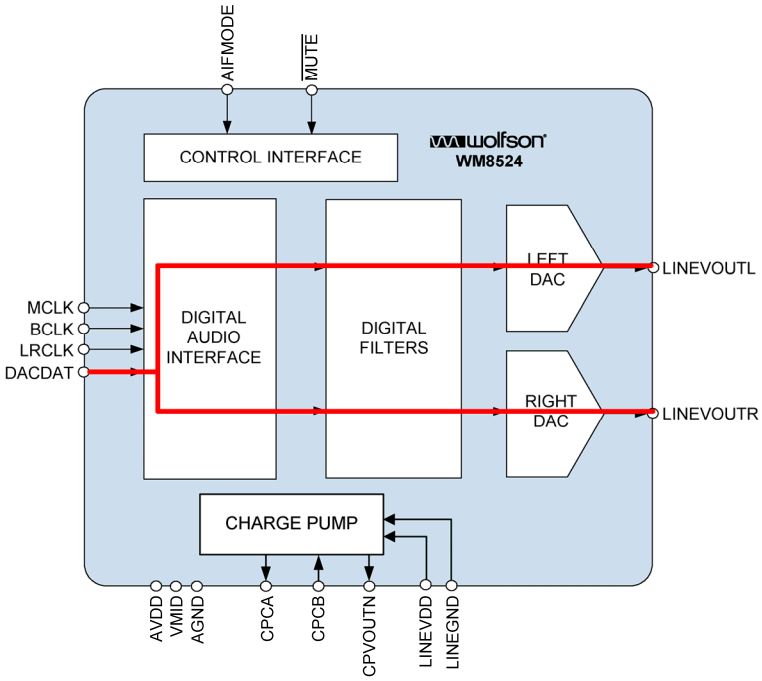

Figure 2 DAC Playback to Line Out

BOARD CONFIGURATION

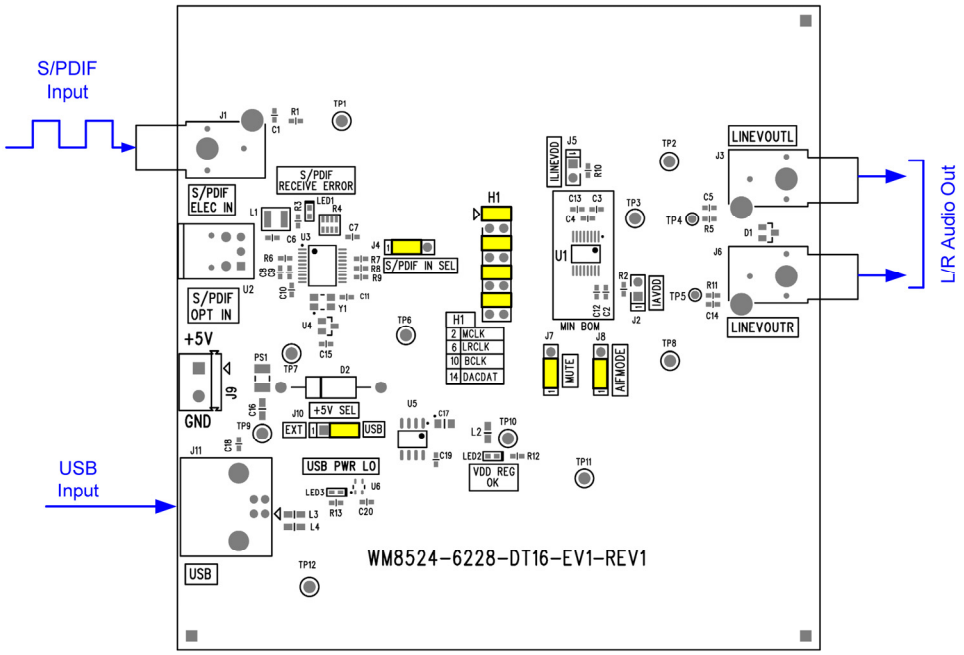

Figure 3 Board Configuration

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If you require more information or require technical support, please contact the Wolfson Microelectronics Applications group through the following channels:

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