WM71xx-1701

Example Configurations

DOC TYPE:	EXAMPLE CONFIGURATIONS
BOARD REFERENCE:	WM7120-1701-MS4-M-REV2 WM7121-1701-MS4-M-REV1 WM7130-1701-MS6-M-REV2 WM7131-1701-MS3-M-REV1 WM7132-1701-MS6-M-REV1
BOARD TYPE:	Customer Mini Board
WOLFSON DEVICE(S):	Analogue Silicon Microphone (WM71xx): WM7120A, WM7121,WM7130A,WM7131,WM7132
DATE:	January 2013
DOC REVISION:	Rev 1.1

INTRODUCTION

The WM71xx-1701 Customer Mini Board is compatible with the 1700-EV1-REV1 customer evaluation board and together provide a complete hardware platform for evaluation of the WOLFSON analogue silicon microphones WM71xx. The WM71xx Customer Mini Board is also compatible with other Wolfson CODEC evaluation boards which have microphone slots. Finally, it is possible to connect the mini board to a custom circuit via flying leads or to test equipment directly.

Related Documents:

1. 1700-EV1-REV1-User-Manual
2. 1700-EV1-REV1 Schematic & Layout
3. WISCE Quick Start Guide.pdf
4. Any relevant Wolfson CODEC evaluation board documentation.
5. Audio Precision 2700 Series User's Manual
6. APx500 User's Manual.

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BOARD CONFIGURATION STAND-ALONE

The WM71xx-1701 Customer Mini Board can be used in stand-alone module for direct connection to a preamp board with flying leads or test equipment for test and evaluation. The schematic of WM71xx-1701 EVB is illustrated in Figure 1.

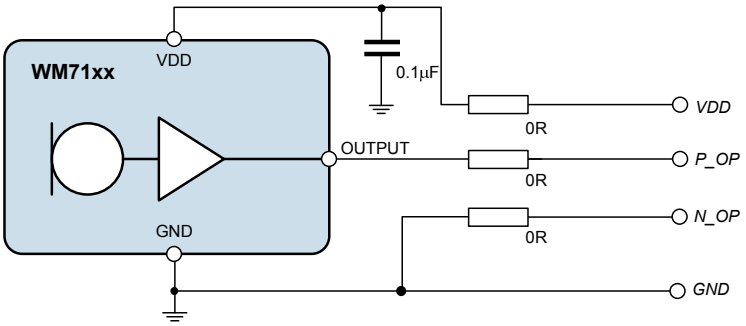

Figure 1 WM71xx-1701 Customer Mini Board Schematic

CONNECTION DIAGRAM

Figure 2 below shows the WM7120 board layout as a typical example for the WM71xx-1701 Customer Mini Board and suggested points for flying lead connections. The MIC OUTPUT (P_OP) supports single ended connection to a CODEC and BNC-Unbalanced input port of test equipment. N_OP provides an additional ground connection to the CODEC for pseudo differential configuration. This can be ignored if not required.

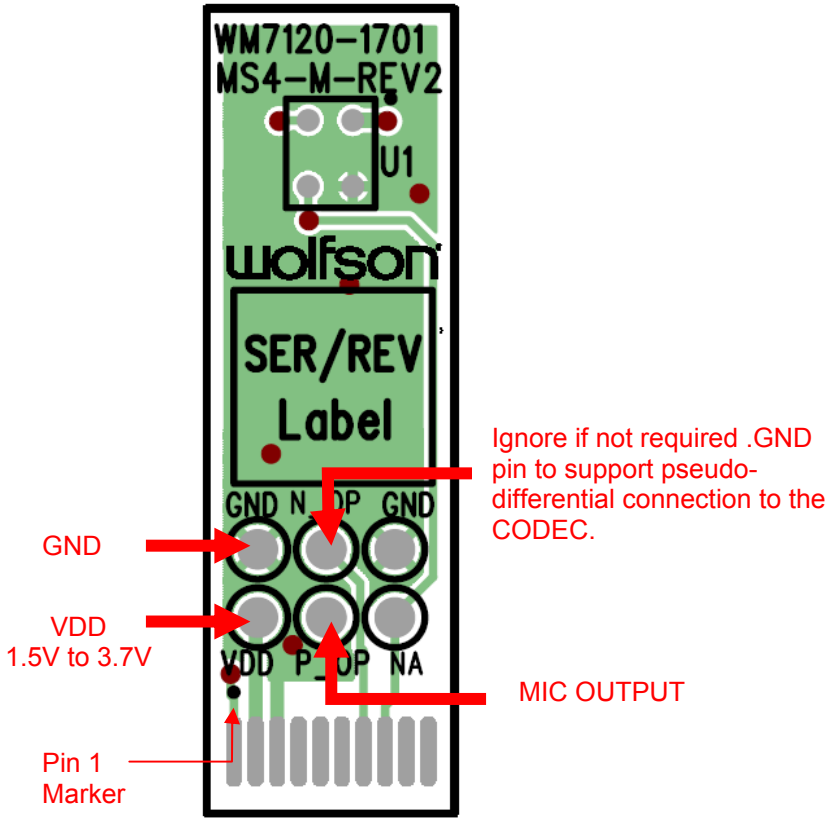

Figure 2 Stand-Alone Board Configuration

I/O TABLE

SIGNAL	IMPORTANT NOTES
A_OP	Microphone output
N_OP	Analogue ground to support a pseudo-differential connection to CODEC. This can be ignored for single ended connection to CODEC or test equipment. (Reserved for negative terminal of differential microphone)
VDD	Microphone supply from CODEC MICBIAS pin or external power supply
GND	Analogue ground
NA	Not applicable

Table 1 I/O Configuration

BOARD CONFIGURATION WITH 1700-EV1-REV1 MAIN BOARD

This section focuses on evaluation of the WM71xx-1701 Customer Mini Board in combination with the 1700-EV1-REV1 main board. The mini board is inserted according to the pin 1 marker on WM71xx-1701 Customer Mini Boards and the pin 1 marker of microphone slot on 1700-EV1-REV1 main board.

Two different WM71xx-1701 Customer Mini Boards can be inserted into both slots available on 1700-EV1-REV1 for stereo recording. The WM71xx-1701 supports other Wolfson CODEC boards with microphone slots as part of system test and integration.

CONNECTION TO THE 1700-EV1-REV1

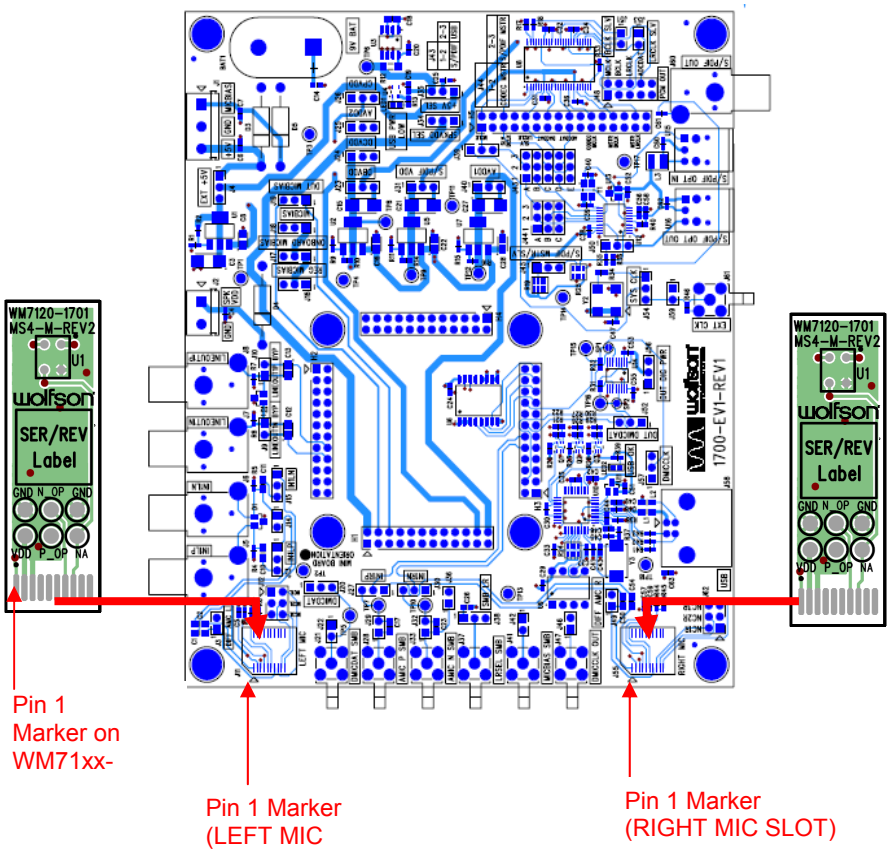

Figure 3 Connection to 1700-EV1-REV1 Board According to Pin 1 Marker

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