



Audio LINE-IN input application

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Version history

Date	Version	Description of change	Author
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1 Introduction

This document describes how to set up the audio channel as LINE-IN input. The MIC2 input is only for the modules that have two analog audio input channels. For more details, please refer to related hardware design document.

2 Scope of the document

This document is intended for the following versions of the SIMCom modules

- SIM900/ SIM900A
- SIM900B/SIM900D

3 Recommended application circuit

3.1 Audio input 1 single-ended LINE-IN input configuration

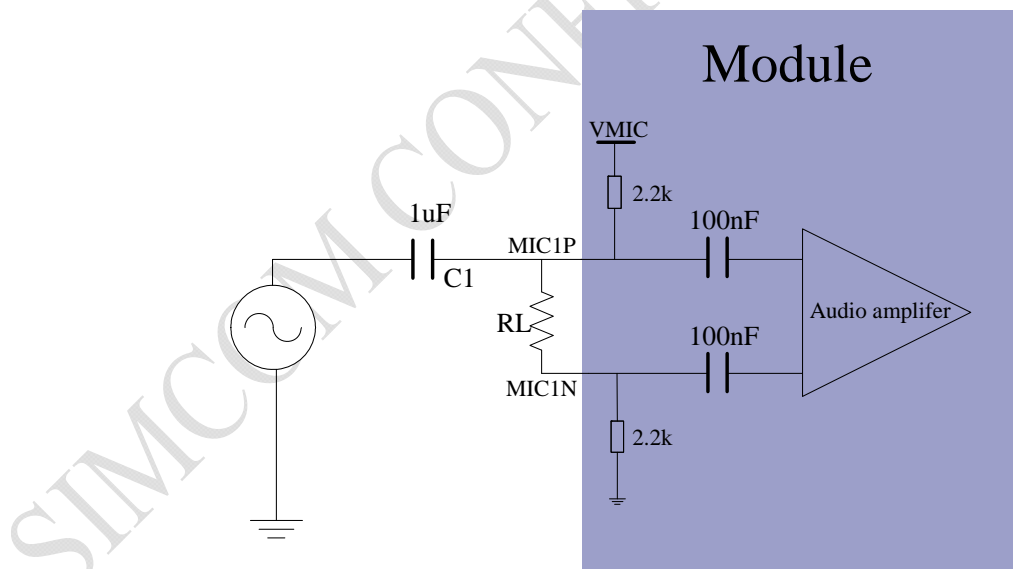


Figure 1: MIC1 LINE-IN input single-ended connection

3.2 Audio input 1 difference LINE-IN input configuration

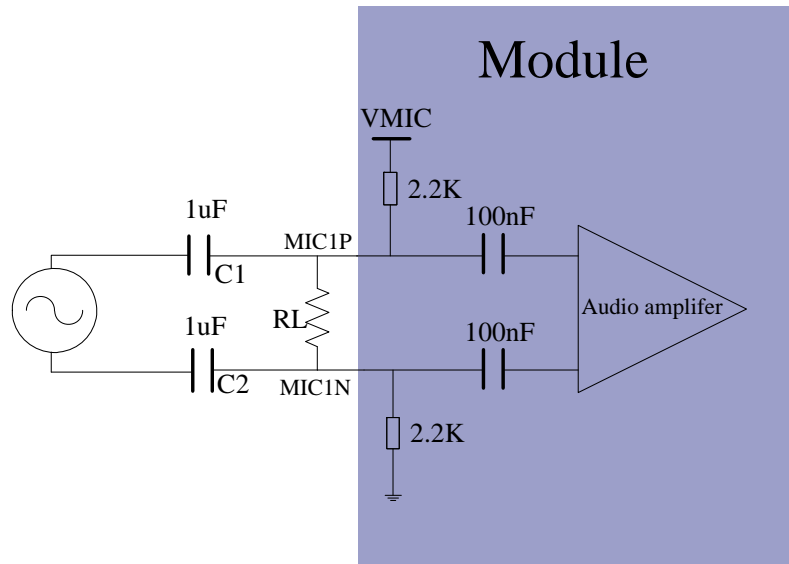


Figure 2: MIC1 LINE-IN input difference connection

3.3 Audio input 2 single-ended line input configuration

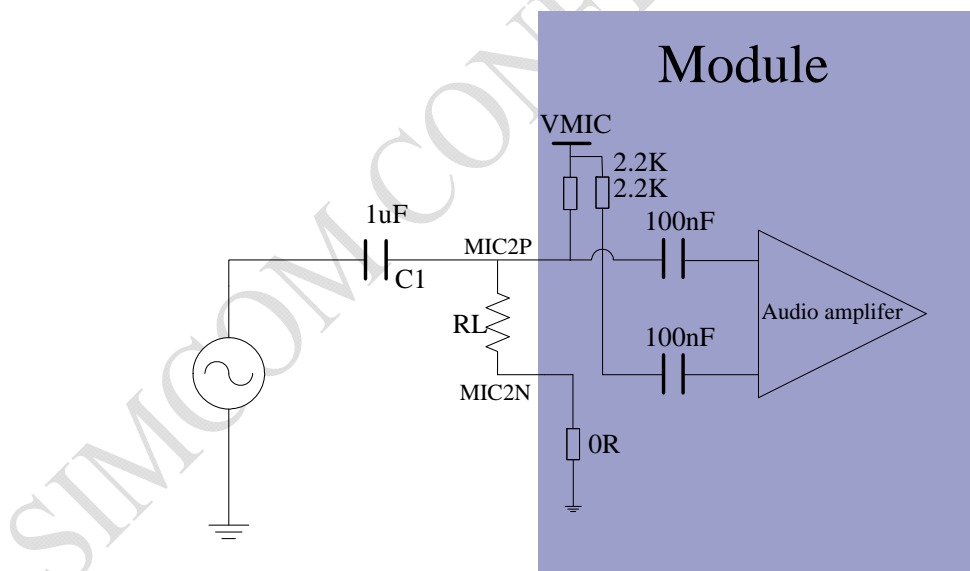


Figure 3: MIC2 LINE-IN input single-ended connection

RL is used to adjust the bias voltage level. C1 and C2 are used for AC coupling capacitor. It is recommended to use MIC1 for line input application. If MIC2 is selected for LINE-IN input, the detection of audio accessories function will be disabled.

3.4 Recommended external components

The following table shows some examples for external components selection.

Table 1: Recommended external components

Configuration	Bias voltage	RL	C	LINE-IN input range(pk-pk)
MIC1 LINE-IN input single-end configuration	1.5V	1K	1uF	<500mV
MIC1 LINE-IN input difference configuration	1.5V	1K	1uF	<100mV
MIC2 LINE-IN input single-end configuration	1.2V	2.2K	1uF	<100mV

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