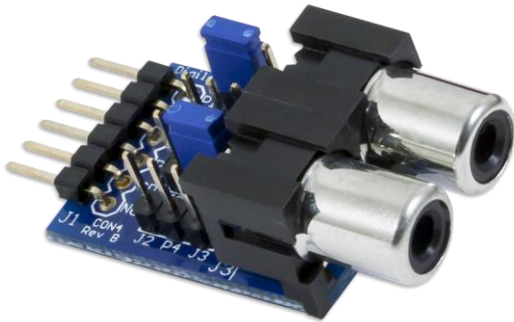# PmodCON4™ Reference Manual

Revised May 26, 2016
This manual applies to the PmodCON4 rev. B

Overview

The Digilent PmodCON4 allows users to act as a transceiver with two RCA audio jacks.

The PmodCON4.

Features include:

- 2 RCA audio jacks
- Receive and transmit audio signals
- Jumper blocks to easily adjust signal routing
- Small PCB size for flexible designs 1.1" × 0.8" (2.8 cm × 2.0 cm)
- 6-pin Pmod connector with GPIO interface
- Follows Digilent Pmod Interface Specification Type 1

1   Functional Description

The PmodCON4 is able to route any GPIO based audio signal from one of its four input pins (pins 1 through 4 on the 1×6 pin header) to either one of the RCA audio jacks via the jumper block present on each of the inputs.

2   Interfacing with the Pmod

The PmodCON4 is able to both receive and transmit audio (or other) signals to one of the two RCA jacks. However, only one input/output pin can be attached to an RCA audio jack at a time. If two or more are tied to the same jack, there is a chance that one output will be at a high voltage and the other output at a low voltage, effectively shorting those two pins and potentially damaging the system board.

Header J1	
Pin Number	Description
1	Input P1
2	Input P2
3	Input P3
4	Input P4
5	Ground
6	Not Connected

Jumper Headers	
Jumper Settings	Description
J2	The J2 RCA jack will receive this input
J3	The J3 RCA jack will receive this input

Table 1. Pin Descriptions as labeled on the Pmod.
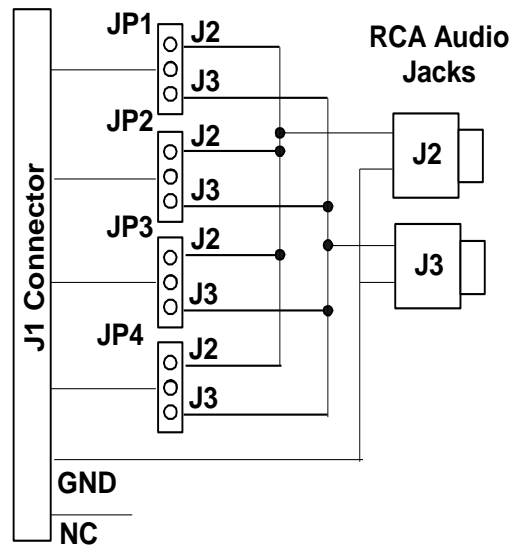

Figure 1. PmodCON4 circuit diagram.

Since RCA jacks typically send or receive analog voltage signals, users can easily connect thePmodCON4 to either an ADC or DAC module such as the PmodAD5 or the PmodDA4.

3   Physical Dimensions

The pins on the pin header are spaced 100 mil apart. The PCB is 1.10 inches long on the sides parallel to the pins on the pin header and 0.8 inches long on the sides perpendicular to the pin header.