

## **PmodCON1™ Reference Manual**

Revised May 24, 2016
This manual applies to the PmodCON1 rev. B

#### **Overview**

The PmodCON1 is a module that allows your system board to interface to other components via screw terminals.



The PmodCON1.

#### Features include:

- Six screw terminals
- Four screw terminals for data signals
- Two screw terminals for external power
- Small PCB size for flexible designs 1.1" × 0.8" (2.8 cm × 2.0 cm)
- 6-pin Pmod connector with GPIO interface
- Follows <u>Digilent Pmod Interface Specification</u> Type
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## 1 Functional Description

Screw terminals provide two features that are not easily offered by pin headers. With their large surface area, it is easy to pass larger amounts of power through them without running the risk of having them overheat. Additionally, with the ability to screw down onto wires, it is possible to attach this Pmod to objects that otherwise could not be attached to a breadboard or conveniently soldered.

#### 2 Interfacing with the Pmod

Through its GPIO interface, you can easily send out a high or low voltage signal from a pin on the system board and have it get sent straight to the appropriate screw terminal.



Pin Number	Descriptions
1	Screw Terminal P1
2	Screw Terminal P2
3	Screw Terminal P3
4	Screw Terminal P4
5	<b>Ground Screw Terminal</b>
6	VCC Screw Terminal

Table 1. Pin descriptions.

Note that the two screw terminals that are designated for a positive and ground power supply act in only one direction. This means that the ground screw terminal is directly attached to the ground pin, pin 5, on the 6-pin Pmod header and the positive power supply screw terminal is directly attached to the positive power supply pin, pin 6, on the 6-pin Pmod header. This is different than other modules where there is a jumper block to either provide power from the system board or from an external power source, such as the PmodCON3.

Consequently, users have to be aware of what kind of demand they put on these pins as the pins on the a chipKIT<sup>™</sup> board are only able to accept a voltage up to 5V as well as only being able to source or sink a limited amount of current. Please see the reference manual of your respective system board for its specific limitations.

# 3 Physical Dimensions

This Pmod has a 1×6 pin header with each of the pins spaced 100 mil (0.1 inches) apart. The PCB is 1.1 inches long on the side parallel to the pins on the pin header and 0.8 inches long on the side perpendicular to the pin header.