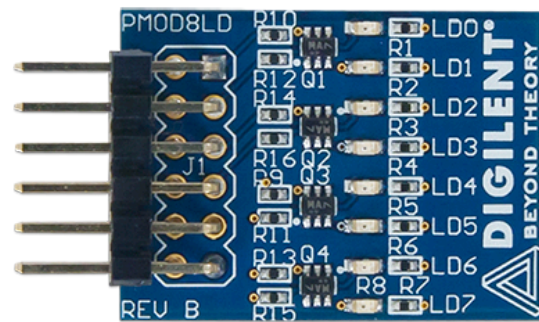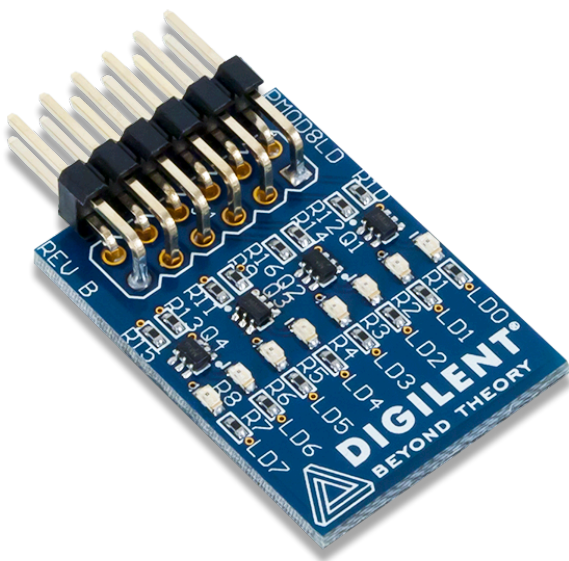# Pmod 8LD Reference Manual

The Digilent Pmod 8LD (Revision B) has eight high-brightness LEDs that are driven by logic-level transistors so that each LED can be individually illuminated from a logic high signal.

Features

- Eight high-brightness green LEDs
- Uses BJTs for low-power logic level control
- Small PCB size for flexible designs 1.1 in × 0.8 in (2.8 cm × 2.0 cm) 2×6-pin Pmod connector with GPIO interface
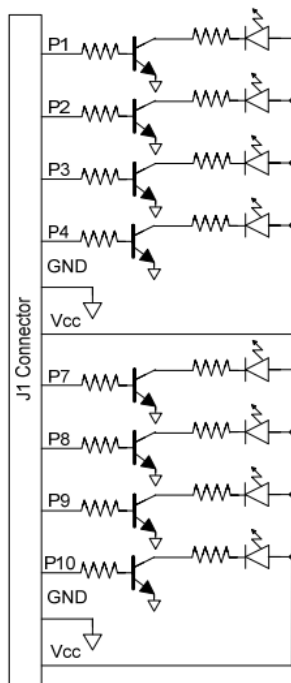- Library and example code available in resource center

Functional Description

The Pmod 8LD utilizes individual transistors so that each LED can be turned on or off independently. In order to activate an LED, the associated pin on the pin header must receive about 1mA of current.

Interfacing with the Pmod

The Pmod 8LD communicates with the host board via GPIO pins. Correspondingly, to turn a particular LED on, the pin must be driven to a logic high state and driven to a logic low state to turn a LED off. With the parallel arrangement of these LEDs it is possible to turn on (or off) multiple LEDs simultaneously.

A pin description and diagram are provided below.

Pmod8LD Module Circuit Diagram

Pinout Description Table

Header J1		
Pin	**Signal**	**Description**
1	LD0	LED 0
2	LD1	LED 1
3	LD2	LED 2
4	LD3	LED 3
5	GND	Power Supply Ground
6	VCC	Power Supply (3.3V)
7	LD4	LED 4

8	LD5	LED 5
9	LD6	LED 6
10	LD7	LED 7
11	GND	Power Supply Ground
12	VCC	Power Supply (3.3V)

Physical Dimensions

The pins on the pin header are spaced 100 mil apart. The PCB is 1.1 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.

Additional Information

Example code demonstrating how to get information from the Pmod 8LD can be found here (https://digilent.com/reference/pmod/pmod8ld/start#example_projects).

If you have any questions or comments about the Pmod 8LD, feel free to post them under the appropriate section ("Add-on Boards") of the ⊕ Digilent Forum

Digilent co NI
attn: PBU Operations
11500 N Mopac Expy,
Austin, TX 78759
United States of America