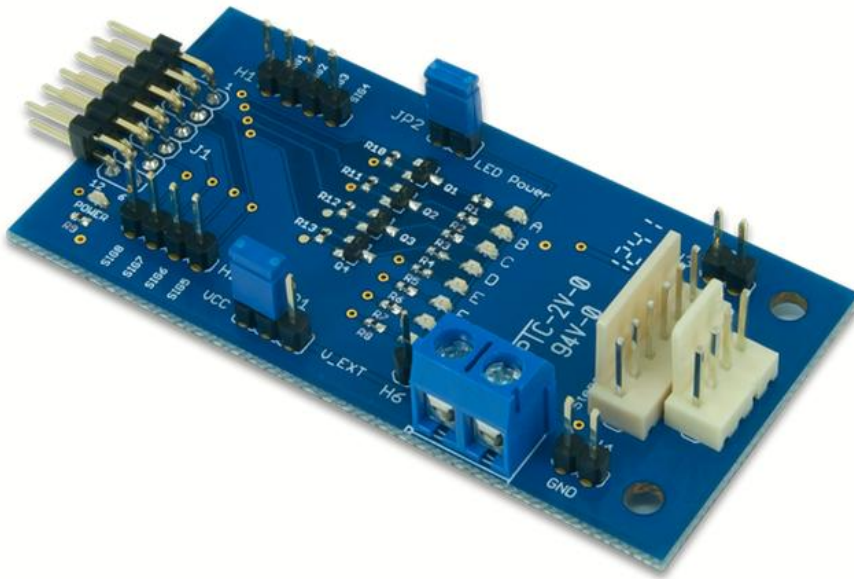# PmodSTEP - Stepper Motor Driver

Part No. 410-264P

Overview

The Digilent PmodStep™ is designed to provide an easy means to drive a stepper motor using any host board with a 12-pin Pmod connector.

The PmodStep contains a push-pull four channel driver, capable of driving up to 600 mA of current per channel. The PmodStep has eight digital I/O signals on header J1, all of which are connected to indication LEDs to show the current states of the signals. Four of the signals are used to control the stepper motor driver. The PmodStep can be powered either from Vcc on the microcontroller board, or alternatively, from the external power screw terminal block.

Features

- Locking, keyed headers for interfacing with both 4 and 6-pin stepper motors
- Signal headers for easy viewing of digital I/O signals from the host board
- Can be powered externally or by the host board
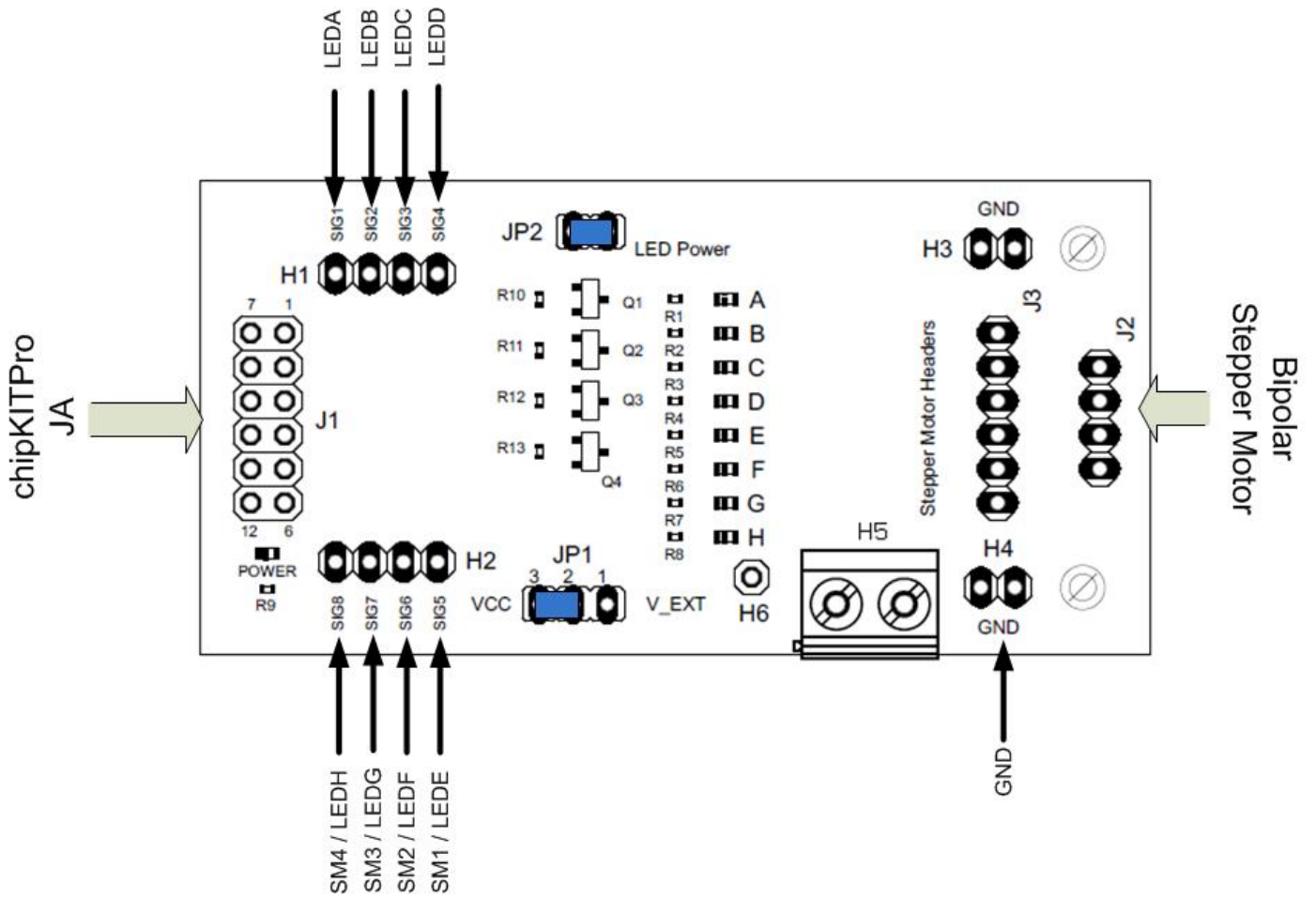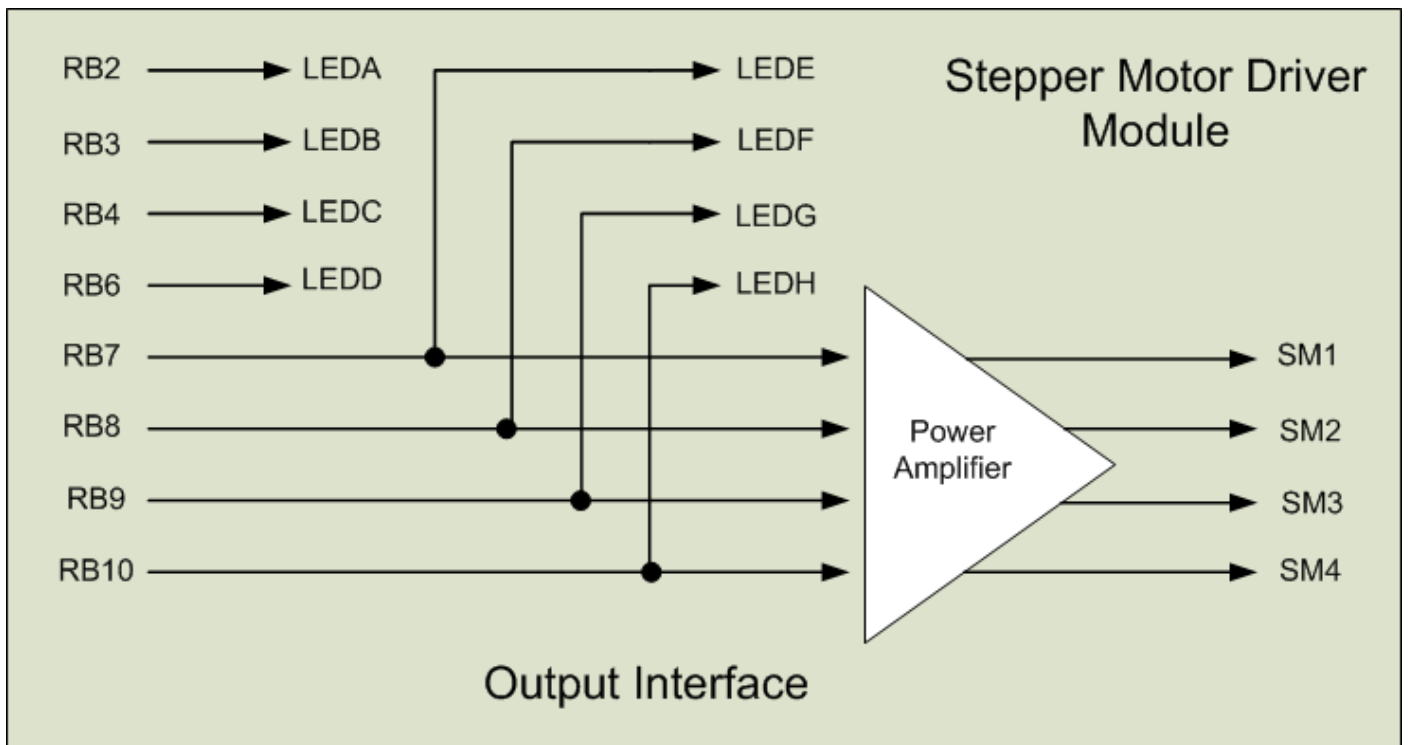- Signal status & power LEDs

Figure 1. PmodSTEP™ parts layout
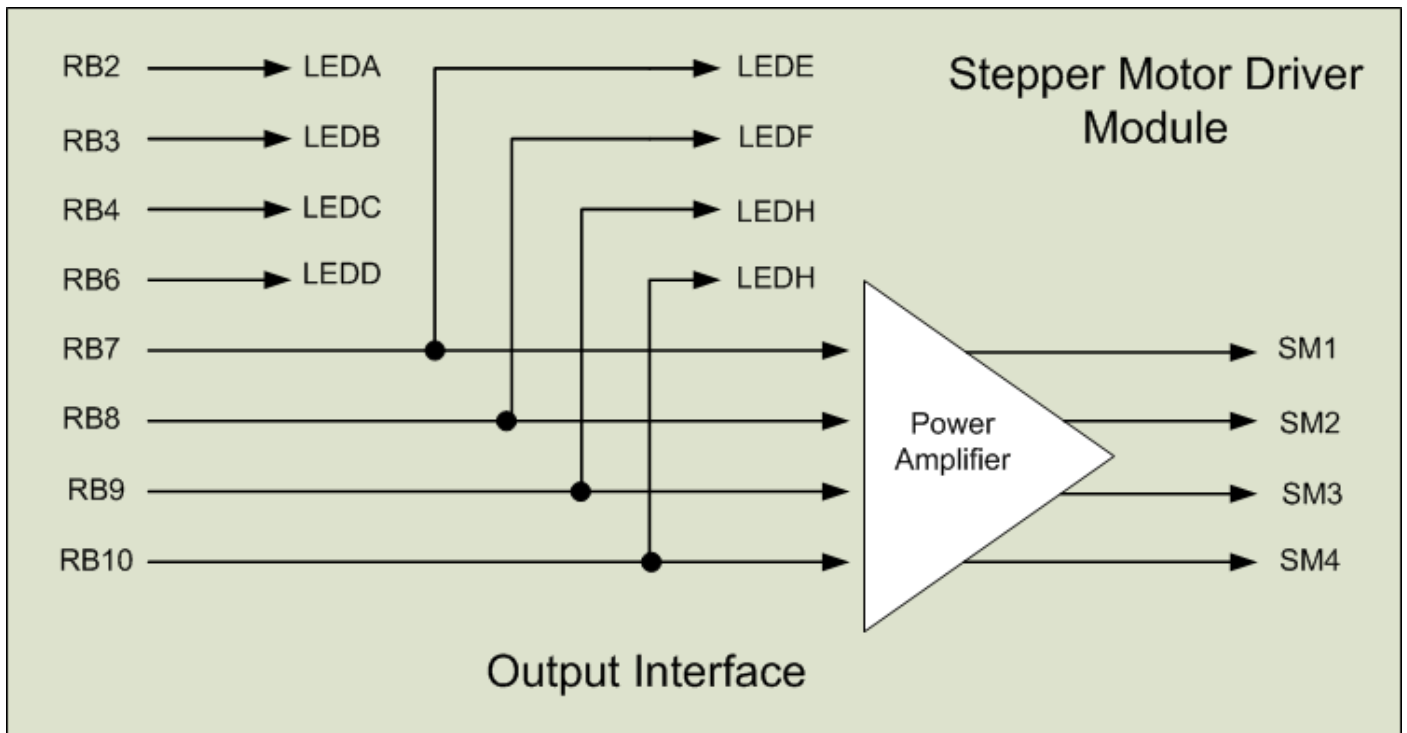

Figure 2. PmodSTEP parts layout

Figure 3. PmodSTEP wiring diagram.

Table 1. LED—Pmod Port JA Pin and PIC™32MX7 I/O Port B assignments.

LED	JA Pin #	PIC32MX7 Port B Pin #
LED A	1	RB2
LED B	2	RB3
LED C	3	RB4
LED D	4	RB6
LED E/SM1	7	RB7
LED F/SM2	8	RB8
LED G/SM3	9	RB9
LED H/SM4	10	RB10