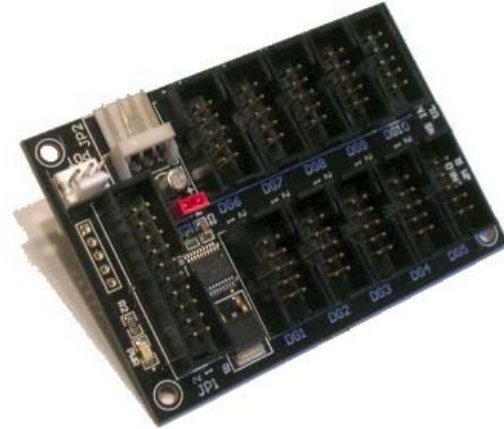The SPI-PWM card is designed to control up to 10 SPI based output devices such as gauges as well as dual backlight brightness through a POT connected to the card. LED brightness is achieved by pulse width modulating the output from 0 to 100% duty cycle for complete brightness control.
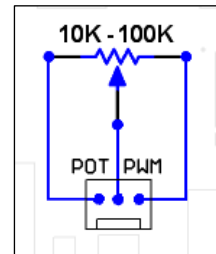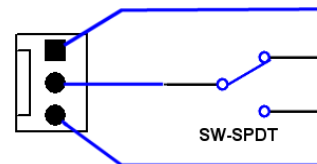
Features:

- 10 SPI channels.

- PWM dimming for backlight brightness control.

- Dual backlight selector input.

Connecting the SPI-PWM card:

1. Set the ElectronFlux output port to SPI mode in the Device Manager.

2. Connect the SPI-PWM card to the ElectronFlux port using a keyed 20 pin IDC ribbon cable.

3. Plug in the power supply to connector *JP2*.

4. Connect 10K-100K pot to the connector labeled *BRIGHTNESS*.

5. Connect a toggle switch or jumper to the *BACKLIGHT SELECT* connector.

6. Connect devices to the SPI ports using 10 pin IDC cables using the following pinout.

GND: Ground
BL1-2: Backlight brightness output. This pin is a PWM connection to GND. If your gauge is not equipped with a backlight, BL pins can be left unconnected.
12V: +12VDC
VCC: +5VDC
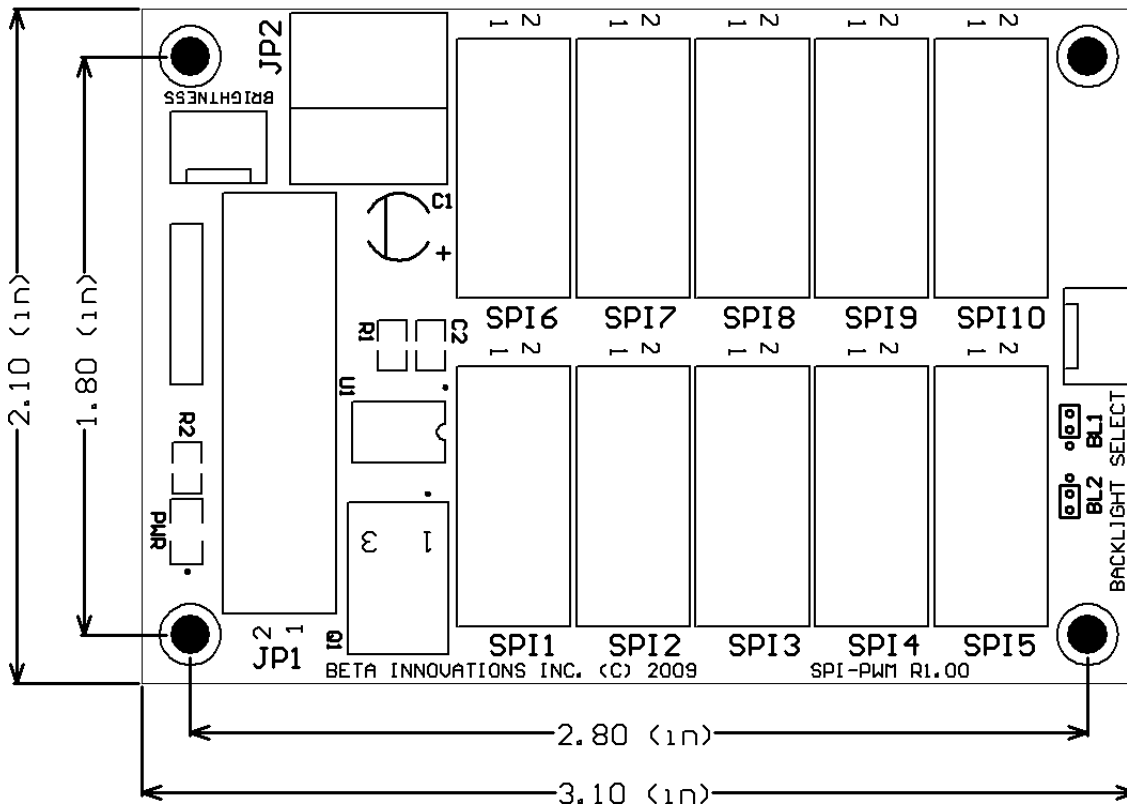**CS**: Chip Select line. Set CS Line to HIGH in device manager.
SCLK: SPI clock line.
SDO: SPI Output Data line.
NC: No contact. Leave this pin unconnected.

Mechanical Specifications:

Visit www.betainnovations.ca for the availability of expansion modules and accessories.