MR-BusIO-SW™ BusIO Push Button Switch Input BOARD
User Manual

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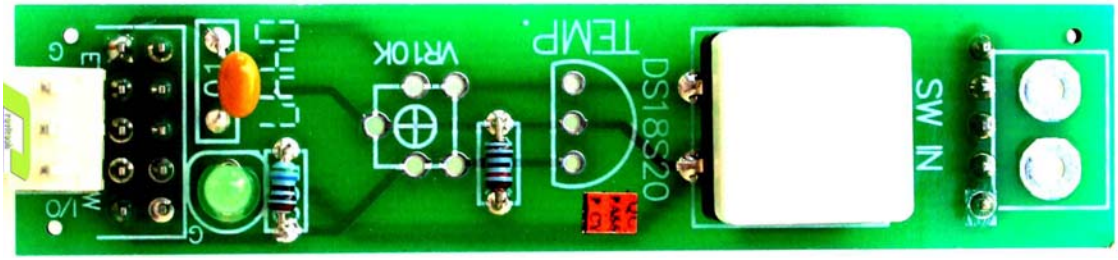

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Description

The MR-BusIO-SW is an experiment board for receiving input from push button switch. When the switch has been pressed, the indicator LED is illuminated and status on I/O pin is LOW. Moreover, user can add DS18S20 IC, 1-Wire Digital Thermometer onto the board. It can send the temperature value via 1-Wire bus system to microcontroller (optional). It is best for sensing switch input and temperature reading.

The board can be use with MR-BusIO-MAIN board or stand-alone. PCB size is 0.63” x 2.80”

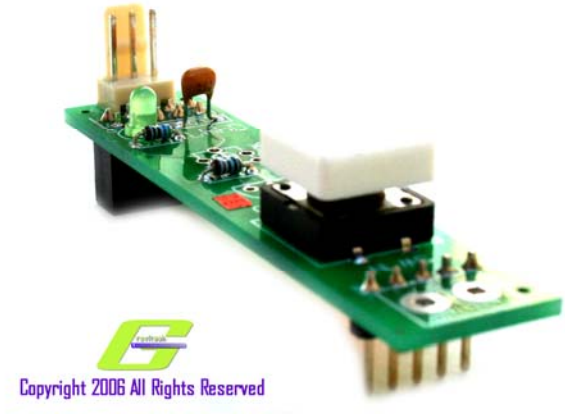
Operation:

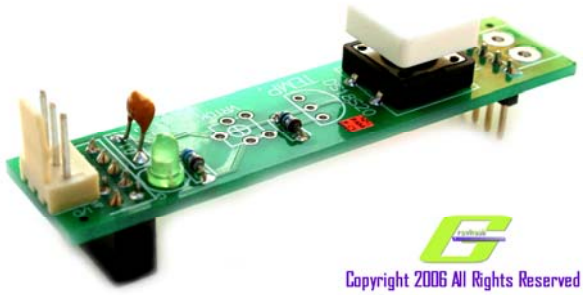
There are three ways to use this board:

As a switch input: When user press the switch, logic LOW is apply at the I/O pin. The indicator LED is also illuminated. I/O pin read logic HIGH when the switch is de-press.

As a VR (Variable Resistor): This is optional. User has to solder 10 POT on to the board. It’s operating as a voltage divider of VCC.

As an 1-Wire Thermometer (DS18S20): This is optional. User has to solder 3-PIN DS18S20 on to the board, pin1 GND, pin2 DQ, and pin3 VCC. The 1-Wire data can be read from an I/O pin. **Do not connect VR when using this option.**





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Accessories

All of the accessories are available for purchase via our website. If you don't see the item you need, please contract our sales department at sales@gravitech.us

- **DS18S20 IC**
  The DS18S20 Digital Thermometer provides 9-bit centigrade temperature measurements and has an alarm function with nonvolatile user-programmable upper and lower trigger points. The DS18S20 communicates over a 1-Wire bus that by definition requires only one data line (and ground) for communication with a central microprocessor.

- **MR-BusIO-MAIN**
  Experiment board which receives output signals from any microcontrollers. The signals then distribute to daughter boards for each experiment. It designed to connect directly with 10PIN MRconnect©. It is a quick and easy way to control up to 8 daughter boards.

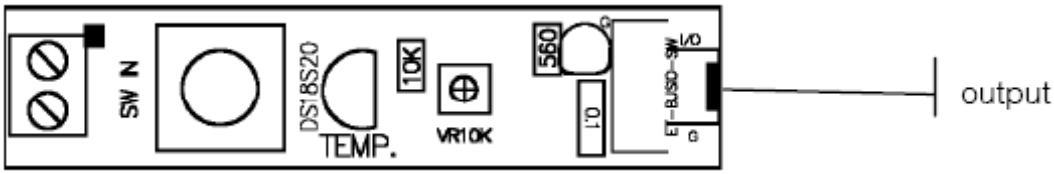

FIG 1: MR-BusIO-SW Board Layout

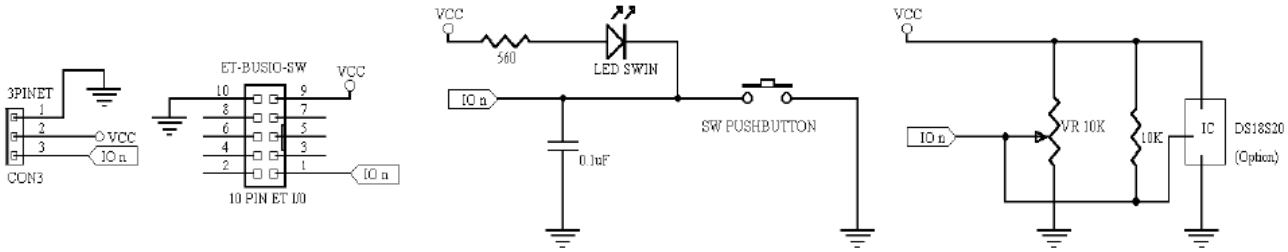

FIG 2: MR-BusIO-SW Schematic

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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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