

# CONTEMPORARY CONTROLS®

## BASpi Raspberry Pi I/O board

The BASpi I/O board is a 12-point BAS expansion board for Raspberry Pi. The I/O board, plus the firmware files provided by Contemporary Controls turn your Raspberry Pi into a BACnet-networked, Sedona-programmable controller with 6 Universal Inputs and 6 Relay Outputs. All 12 physical I/O points, in addition to 24 Virtual Points are served up over BACnet/IP using Ethernet or Wi-Fi. BASpi is web page configurable over Ethernet or Wi-Fi connections. The BAScontrol Toolset is offered as a free download. This toolset is used to create control applications by linking graphical components on a wiresheet, create backups of your entire project to a single file, and emulate BASpi operation on PC. The BASpi I/O board is available stand-alone, as well as a complete system – the BASpi-SYS, which is packaged with RaspberryPi 3 board + BASpi I/O board for immediate control right out of the box.

### Versatile Control Device

- BACnet/IP Server - 12 physical points and 24 virtual points
- BACnet/IP over Ethernet or Wi-Fi
- Resident Sedona Virtual Machine (SVM)
- Free BAScontrol Toolset with graphical programming tool, project backup and restore utility, and PC emulator
- Programmable with Sedona Application Editor or Workbench AX™
- Web page configurable with a common web browser over Ethernet or Wi-Fi
- NTP server or manually-settable clock

BASpi I/O board is compatible with Raspberry Pi 3 and requires a Raspbian installation, as well as firmware files provided by Contemporary Controls. There are two installation options for the BASpi I/O board firmware:

The entire Raspbian image (Raspbian + BASpi firmware files) provided by Contemporary Controls as a download. All you would need to do is download it from [www.baspi.io](http://www.baspi.io), write it to an 8GB or larger SD card, and power it up.



### Flexible Input/Output — 12-points of physical I/O

- Six configurable Universal Inputs:  
Analog Input, Binary Input, Resistance, Thermistor (10KT2, 10KT3, 20K), Pulse Input (40Hz)
- Six Relay Outputs
- 24 Virtual Points used to read or write data to/from wiresheet by a BACnet client/supervisor station
- 48 Web Components allow live monitoring and control of wiresheet points from the BASpi's web page

The firmware files alone can be copied and installed onto your existing Raspbian system.

BASpi System is also available from Contemporary Controls to those who want to take control right out of the box!

The BASpi-SYS includes all elements required to use the controller:

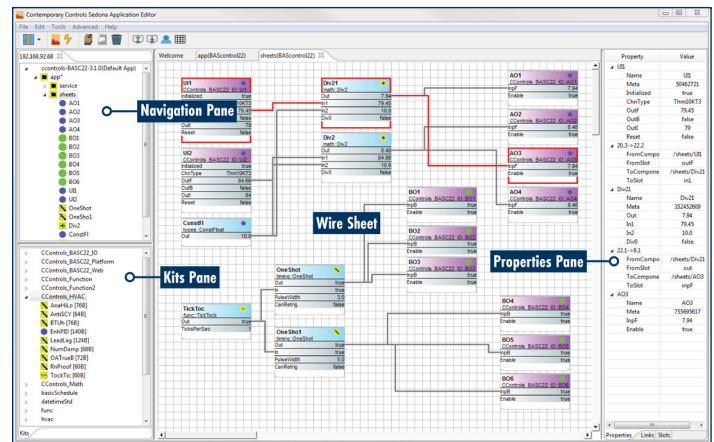
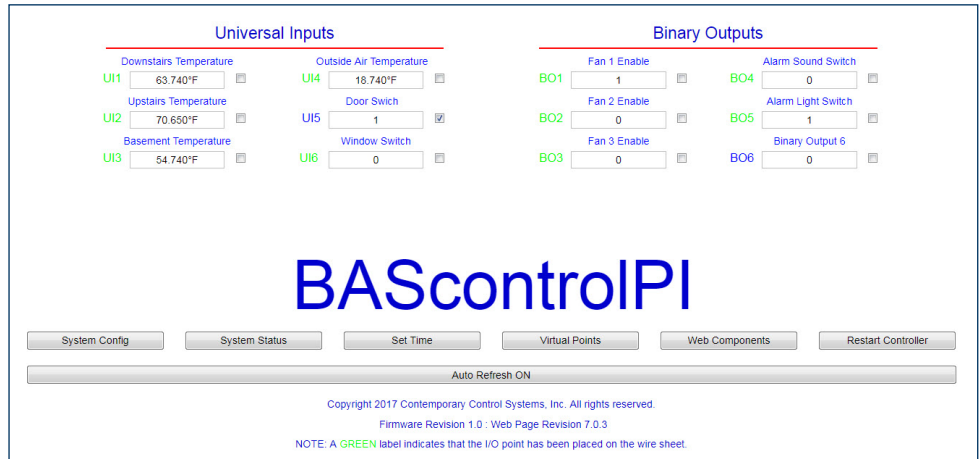
- Raspberry Pi 3 board
- BASpi I/O board
- 8GB pSLC industrial grade µSD card with pre-written image
- Enclosure case
- 100-240V AC input, 5VDC output wall power supply
- Free BAScontrol Toolset with graphical programming tool, project backup and restore utility, and PC emulator
- Quick Start Guide for beginners

The BASpi is web page configurable over wired Ethernet IP connection, or wirelessly over Wi-Fi. The web page allows for easy configuration, live monitoring, and control of physical points, virtual points, and web components.

Sedona Application Editor is a software tool used to easily create control applications by linking components together on a wiresheet. SAE delivers live programming and execution of the control sequence.

There is no need to compile or upload the program, you can simply watch it work.

SAE allows wiresheet applications to be saved to your PC for safekeeping, and then restored from the saved file. SAE tool is available for free download on the Contemporary Controls website.



## Ordering Information

### Model

BASPI-IO6U6R  
BASPI-SYS6U6R

### RoHS



### Description

Raspberry Pi Daughterboard 6UI/6 Relay  
Raspberry Pi 3 with BASpi 6UI/6 Relay



<http://www.baspi.io>

## Worldwide Locations

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