



## Circaflex™ Embedded Control System

### Ready to Use Rapid Control Platform for Life Sciences

#### ACCELERATE YOUR LIFE SCIENCES PRODUCT DEVELOPMENT

Circaflex™ is a family of powerful off-the-shelf control modules with predefined inputs and outputs that support a wide variety of sensors and output devices for bioprocess, biotechnology, and biomedical product development. Your proof-of-concept and prototype can be up and running in just a few days with greatly reduced risk and a drastically lower cost than traditional custom embedded control systems. Circaflex™ I/O connectors can be customized for your application and deployed to create your finished product.

#### Customizable platform to meet your application needs

##### Out-of-the-box sensor connectivity

- Built in connectivity for industry recognized sensors and devices
- Drivers and signals for endless selection of user-specified devices

##### Pre-built software and HMI

- Easy to use graphical interface
- No programming required
- All I/O points operate out-of-the-box
- Precompiled FPGA code
- Bug-free code reuse library
- Custom FPGA programming without the time and cost of a dedicated programmer

##### Powerful control architecture based on National Instruments Single-Board RIO platform and NI LabVIEW™ software

Powered by VxWorks™, the industry's most stable and widely used Real-Time OS

**Circaflex™ offers out-of-the-box I/O connectivity for life sciences sensors and devices**

- Mass flow controller
- Gas, liquid, DO, pH sensors
- DC, stepper and servo motors
- Peristaltic pump
- Electronic liquid or gas valves
- Fluidics pumps
- Linear motor or linear slide
- Pneumatic or hydraulic devices
- RTDs and thermocouples
- Thermoelectric coolers (TEC) and Peltier devices
- Syringes and dispensers
- Solenoids and actuators
- Piezo and galvanometers

**Circaflex™ is an ideal platform for prototyping and design applications**

- Real-time or diagnostic PCR equipment
- Electromechanical laser and x-ray generation or detection
- Bioreactor or recipe control systems
- Fluid or drug delivery, monitoring, analysis
- Robotic handling, dispensing, surgery
- Spectroscopy or chromatography
- Physiological monitoring and stimulus



Custom enclosures and panels available.

**ABOUT CYTH SYSTEMS**

Cyth Systems is a leading integration and engineering firm with a proven track record of success designing and building automated test and embedded control systems. Our goal is to help you develop quality products with minimized schedule, risk, and cost. Our unique approach allows for systems that are maintainable, flexible, reliable, and achievable within time and budget constraints.

**For more information about the Circaflex™ embedded control system, visit [www.cyth.com/circaflex](http://www.cyth.com/circaflex)**

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