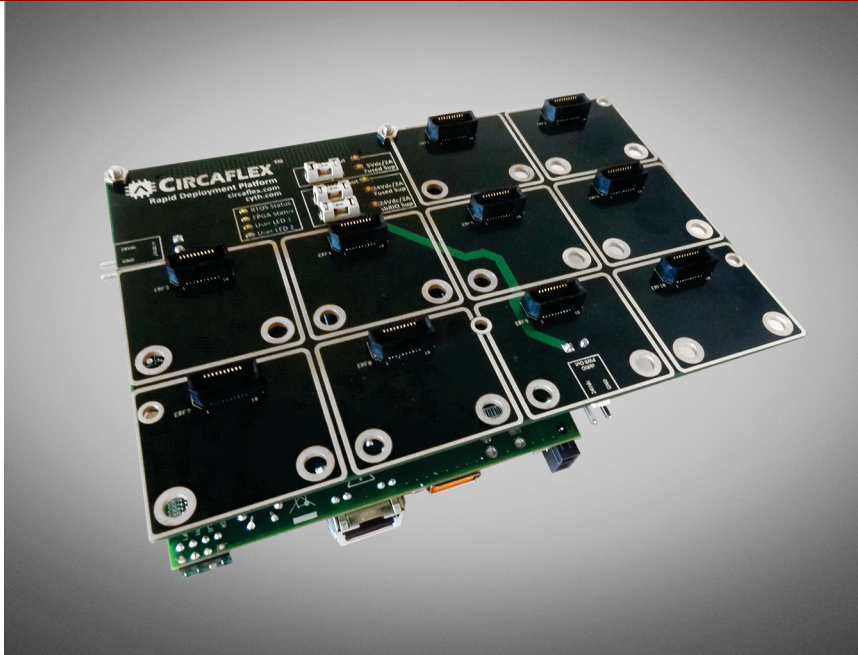


Circaflex™ 540

Modular Prototyping & Deployment Control System



PROTOTYPING WITH A MAXIMUM NUMBER OF MODULES FOR MAXIMUM FLEXIBILITY

Circaflex is a family of off-the-shelf control systems, prototyping boards, and signal conditioning modules which combine to make customized embedded control systems based on the National Instruments RIO platform. Each Circaflex product is designed to support a variety of sensors and devices commonly used in industrial, medical, and biotech device development. Using Circaflex engineers and scientists can develop feature-packed control systems for prototyping or deployment, which can be developed or modified in just days without the risk and cost of custom designed control systems.

Circaflex 540 is a prototyping daughterboard for use with the second generation NI Single-Board RIO controllers with 240-pin RIO Mezzanine connectors. The CFX-540 contains no I/O onboard, but instead provides 10 sockets for your choice of our growing family of Circaflex I/O modules. Users can add application-specific modules like reed relays, pH probes, RTDs, stepper drivers, and many others. After prototyping and choosing the modules for your project, use Circaflex software for LabVIEW to create your application.

OEM PRICING

Aggressive discounts are available for higher-volume customers.

For pricing information please call 888-508-7355 (US) or email us at sales@cyth.com.

PROJECTS & CUSTOMIZATIONS

Cyth is the best resource worldwide for embedded control integration projects using NI RIO products like Compact-RIO and Single-Board RIO.

Contact Cyth for advice, product recommendations, customizations, and cost estimates for your product development goals.

STANDARD FEATURES

- For use with any sbRIO with 240-pin RMC Connector:
sbRIO-9605, 9606, 9607
9623, 9626, 9627
(Not Supported : sbRIO-9633, 9636, 9637)
- 24V Power Input
- RTOS, FPGA, and User LED's
- Green/Red Power LED's
- Fuses

UNIQUE FEATURES

- 10 Circaflex Module Sockets

HELPFUL FEATURES

- 9-30V Power options
- Reverse power protection
- Strictly regulated power onboard
- Fuses protect Circaflex, modules, and RIO SOM during prototyping
- LED's for power, blown fuses, and most I/O signals help with troubleshooting
- On-board power terminals make prototyping and changes easy
- Circaflex modules make expansion easy and efficient
- Attractive and powerful user interfaces via embedded computers, remote computers, and Android and iOS devices.
- Can be redesigned and customized to match application requirements

PACKING LIST (920-00540)

CFX-540 OEM Modular Control System
24V, 4 Amp Power Supply
Quick Start Guide
Circaflex Screwdriver
Circaflex Thumb-drive with software
Spare Fuses, Standoffs

FEATURES, CHANNELS, PERIPHERALS

Circaflex provides the necessities to quick-start embedded control projects using the NI sbRIO, as well as most common basic I/O, plus expansion ports for customization.

10	Circaflex I/O Module adaptors
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SPECIFICATIONS & DETAILS

Input Power

- Voltage 24 V +/- 0.5V
- Current (idle) 1.2 A
- Current (common) 1.2-2.6 A
- Current (max, fused) 4 A
- Connector for Deployment 2-pos MTA-156
- Power Usage 3-5 W Typical

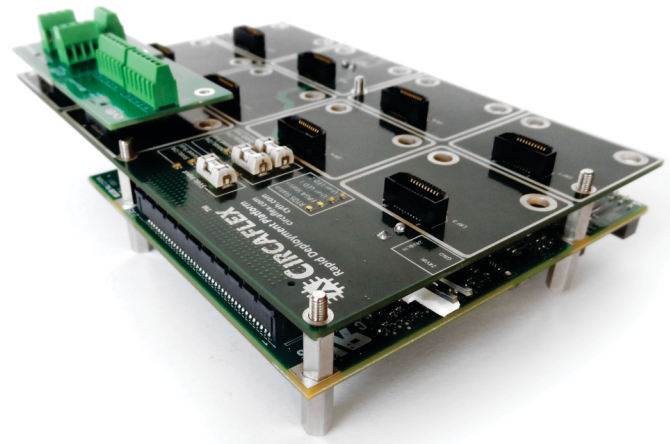
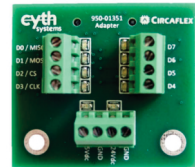
Status & Performance LED's

- Code Status RTOS, FPGA
- RIO SOM Status FPGA Config, SOM Status
- RIO SOM Other Temp Alert
- Communication Ethernet Activity
- User LED's User 1, User 2

CIRCAFLEX I/O EXPANSION MODULES

The customizations never end with Circaflex I/O Expansion modules. Choose from a variety of most common I/O types made by Cyth, or request something new and Cyth will share the cost.

8 ch 3.3V TTL	4 ch Solid State Relay
8 ch 5V TTL	4 ch REED Relay
8 ch Analog Input	4 ch 12V Power Supply
4 ch Analog Output	4 ch Power Breakout (5V, 24V)
8 ch Industrial Digital Input	GPS Module
8 ch Industrial Digital Output	IMU Module
2 ch CAN Bus	
1 ch RS-485	
4 ch Thermocouple	
1 ch RTD 1k Ohm	
1 ch Stepper Driver	
2 ch Stepper/Encoder Controller	



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.