CompactRIO Integrated Systems with Real-Time Controller and Reconfigurable Chassis

NI cRIO-907x *NEW!*

- Integrated CompactRIO systems with a reconfigurable FPGA chassis and embedded real-time controller
- Lower cost systems for high-volume OEM applications
- Up to 2M gate reconfigurable FPGA
- 8 slots for C Series I/O modules
- Up to 400 MHz real-time processor
- Up to 128 MB DRAM memory, 256 MB of nonvolatile storage
- Up to two 10/100BaseTX Ethernet ports with built-in FTP/HTTP servers and LabVIEW remote panel Web server
- RS232 serial port for peripheral devices
- Low power consumption with single 19 to 30 VDC power supply inputs
- -20 to 55 °C operating temperature range

>> For complete specifications, see the *CompactRIO cRIO-9072/9074 Operating Instructions* manual at **ni.com/manuals**.

LabVIEW Development Software
- LabVIEW Real-Time (VxWorks)
- LabVIEW FPGA

Driver Software
- NI-RIO for reconfigurable embedded systems

Product	Processor Speed (MHz)	FPGA Size (Gates)	Module Slots	DRAM Memory (MB)	Internal Nonvolatile Storage (MB)	10/100BaseTX Ethernet Port	RS232 Serial Port	Power Supply Input Range	Remote Panel Web and FTP Servers
cRIO-9072	266	1 M	8	64	128	✓	✓	19 to 30 VDC	✓
cRIO-9074	400	2 M	8	128	256	✓ (Dual)	✓	19 to 30 VDC	✓

Table 1. cRIO-907x Selection Guide

Overview and Applications

National Instruments cRIO-907x integrated systems combine an industrial real-time controller and reconfigurable FPGA chassis for high-volume and industrial machine control and monitoring applications. The new NI cRIO-9072 integrated system features an industrial 266 MHz real-time processor and an 8-slot chassis with an embedded, reconfigurable 1M gate FPGA chip. The new NI cRIO-9074 integrated system contains a 400 MHz real-time processor and an 8-slot chassis with an embedded, reconfigurable 2M gate FPGA chip. Both systems feature built-in nonvolatile memory and a fault-tolerant file system that deliver increased reliability for data-logging applications.

Both systems also accept up to eight NI C Series I/O modules. A variety of I/O modules are available including voltage, current, thermocouple, RTD, accelerometer, and strain gage inputs; up to ±60 V simultaneous sampling analog I/O; 12, 24, and 48 V industrial digital I/O; 5 V/TTL digital I/O; counter/timers; pulse generation; and high voltage/current relays.

The 10/100 Mb/s Ethernet port allows for programmatic communication over the network and built-in Web (HTTP) and file (FTP) servers. The cRIO-9074 features dual Ethernet ports, which allows for the use of one port for network communication to a host PC or enterprise system and the other port for expansion I/O (easily connect another CompactRIO system or another Ethernet-based device for additional I/O).

Embedded Software

You can quickly program the reconfigurable FPGA within the cRIO-907x systems using the NI LabVIEW FPGA Module for custom and high-speed control, I/O timing, and signal processing. The LabVIEW Real-Time Module includes built-in function blocks for floating-point control, processing, analysis, data logging, and communication for programming the embedded real-time processor. LabVIEW Real-Time also has function blocks to program data transfer between the real-time processor and the FPGA.

Ordering Information

NI cRIO-9072	779998-01
NI cRIO-9074	779999-01

OEM Pricing Available!
Aggressive discounts are available for high-volume customers.

BUY NOW!

For complete product specifications, pricing, and accessory information, call 800 813 3693 (U.S.) or go to **ni.com/compactrio**.

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NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with **ni.com/pxiadvisor**.

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