Overview
Module Design and Features
The NI 9467 C Series GPS synchronization module provides accurate time synchronization to NICompactRIO systems. System designers can use this module for the following:
- Accurate data timestamping
- System clock setting
- Gating DAQ based on the arrival of the PPS
- Synchronization of global waveform acquisition data using the NI FPGA Timekeeper for CompactRIO

Applications
Test engineers can use this module for large-scale distributed applications such as the following:
- Bridge and large building structural health monitoring systems
- Electrical grid phasor measurement units (PMUs)
- Wind farm monitoring systems
- Power quality analysis systems

Recommended Accessories
- GPS antenna, magnetic mount, 5m cable with SMA

Box Contents
- 1 NI 9467 C Series module
- 1 NI 9467 Operating Instructions and Specifications manual

About the NI FPGA Timekeeper
The NI FPGA Timekeeper is LabVIEW FPGA IP designed to integrate the CompactRIO onboard FPGA clock with external timing sources such as SNTP, IRIG-B, and GPS. When used with the NI 9467, the NI FPGA Timekeeper timestamps each tick of the 40/80 MHz clock with real-world time accurate to within ±100 ns. To learn more about the NI FPGA Timekeeper and download the code, visit ni.com/info and enter fpgatimekeeper or see the Resources tab.

Application and Technology
NI C Series Overview
NI C Series modules are designed to provide high-accuracy measurements to meet the demands of advanced DAQ and control applications. Each module contains measurement-specific signal conditioning to connect to an array of sensors and signals, bank and channel-to-channel isolation options, and support for wide temperature ranges to meet a variety of application and environmental needs all in a single rugged package. You can choose from more than 100 C Series modules for measurement, control, and communication to connect your applications to any sensor on any bus.

Most C Series I/O modules work with both the NI CompactDAQ and NI CompactRIO platforms. The modules are identical, and you can move them from one platform to the other with no modification.

NI CompactRIO Platform

Powered by the NI LabVIEW reconfigurable I/O (RIO) architecture, NI CompactRIO combines an open embedded architecture with small size, extreme ruggedness, and hot-swapable industrial I/O modules. Each system contains an FPGA for custom timing, triggering, and processing with a wide array of modular I/O to meet any embedded application requirement.

Configure Your Complete NI CompactRIO System

Support and Services

System Assurance Programs

NI system assurance programs are designed to make it even easier for you to own an NI system. These programs include configuration and deployment services for your NI PXI, CompactRIO, or Compact FieldPoint system. The NI Basic System Assurance Program provides a simple integration test and ensures that your system is delivered completely assembled in one box. When you configure your system with the NI Standard System Assurance Program, you can select from available NI system driver sets and application development environments to create customized, reorderable software configurations. Your system arrives fully assembled and tested in one box with your software preinstalled. When you order your system with the standard program, you also receive system-specific documentation including a bill of materials, an integration test report, a recommended maintenance plan, and frequently asked question documents. Finally, the standard program reduces the total cost of owning an NI system by providing three years of warranty coverage and calibration service. Use the online product advisors at ni.com/advisor to find a system assurance program to meet your needs.

Technical Support

Get answers to your technical questions using the following National Instruments resources.

- Support - Visit ni.com/support to access the NI KnowledgeBase, example programs, and tutorials or to contact our applications engineers who are located in NI sales offices around the world and speak the local language.
- Discussion Forums - Visit forums.ni.com for a diverse set of discussion boards on topics you care about.
- Online Community - Visit community.ni.com to find, contribute, or collaborate on customer-contributed technical content with users like you.

Repair

While you may never need your hardware repaired, NI understands that unexpected events may lead to necessary repairs. NI offers repair services performed by highly trained technicians who quickly return your device with the guarantee that it will perform to factory specifications. For more information, visit ni.com/repair.

Training and Certifications
The NI training and certification program delivers the fastest, most certain route to increased proficiency and productivity using NI software and hardware. Training builds the skills to more efficiently develop robust, maintainable applications, while certification validates your knowledge and ability.

- **Classroom training in cities worldwide** - the most comprehensive hands-on training taught by engineers.
- **On-site training at your facility** - an excellent option to train multiple employees at the same time.
- **Online instructor-led training** - lower-cost, remote training if classroom or on-site courses are not possible.
- **Course kits** - lowest-cost, self-paced training that you can use as reference guides.
- **Training memberships** and training credits - to buy now and schedule training later.

Visit ni.com/training for more information.

**Extended Warranty**

NI offers options for extending the standard product warranty to meet the life-cycle requirements of your project. In addition, because NI understands that your requirements may change, the extended warranty is flexible in length and easily renewed. For more information, visit ni.com/warranty.

**OEM**

NI offers design-in consulting and product integration assistance if you need NI products for OEM applications. For information about special pricing and services for OEM customers, visit ni.com/oem.

**Alliance**

Our Professional Services Team is comprised of NI applications engineers, NI Consulting Services, and a worldwide National Instruments Alliance Partner program of more than 700 independent consultants and integrators. Services range from start-up assistance to turnkey system integration. Visit ni.com/alliance.