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## What Is the LabVIEW Communications System Design Suite?

LabVIEW Communications combines LabVIEW NXG with tools that are specifically created to help you rapidly prototype wireless communications systems.

### Explore LabVIEW Communications Features

LabVIEW Communications helps you design, develop, and deploy wireless communications systems to multiple hardware targets such as general-purpose processors, NI Linux Real-Time OSs, and FPGAs all in the same environment. Wireless design and prototype teams can reduce the time to validate wireless algorithms with over-the-air (OTA) signals using a unified graphical programming approach and the ability to directly call code created using The MathWorks, Inc. MATLAB® software and import custom VHDL code. LabVIEW Communications users with an active Standard Service Program (SSP) membership are eligible to upgrade to the latest version.

### Reduce Development Time

Use a single design environment for general-purpose processors, NI Linux Real-Time, and FPGAs.

### Connect to Your Code Created Using MATLAB

Directly call code created using MATLAB without code modifications, and quickly validate your simulation algorithm with OTA signals.

### Use FPGA-based Communications IP

Innovate faster with wireless technology standards such as IEEE 802.11, LTE, and MIMO application frameworks.

## What Can You Do With LabVIEW Communications?

LabVIEW Communications minimizes your time to results with a single unified environment for processors and FPGA-based development. See below to explore how this suite solves common challenges for communications designers.

### Program Processors and FPGAs in One Environment

Design and implement next-generation wireless systems in a single, graphical programming environment using LabVIEW Communications to program general-purpose processors, NI Linux Real-Time OSs, and FPGAs.

### Instantly Connect to Hardware With RF Front End

LabVIEW Communications reduces your setup time with instant connections to NI software defined radio hardware such as USRP (Universal Software Radio Peripheral) products. You can connect your algorithm to FPGAs to develop a real-time wireless communications prototype.

### Quickly Connect Your MATLAB Code to RF Signals

LabVIEW Communications features an interface for MATLAB that you can use to directly call any custom function or script created using the software from the LabVIEW environment so that it connects to OTA signals effortlessly.

### Use High-performance FPGA IP With Application Frameworks

LabVIEW Communications offers ready-to-run reference designs that provide a rich set of high-performance FPGA IP. You can get to results faster with 802.11, LTE, and MIMO FPGA-based PHY and MAC layer reference designs.

## Software Benefits

### Standard Service Program

Every purchase includes a renewable, one-year membership to the Standard Service Program (SSP) for software. SSP membership includes the following:

- Live phone and email technical support from local, degreed engineers

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- Automatic version updates to LabVIEW Communications
  - 24/7 access to selected online training and virtual demonstrations
  - Access to historical versions in case you need to share code with your team

### How to Buy LabVIEW Communications

#### Buy LabVIEW Communications for You

A single-seat license can be associated with an individual or to a specific computer ID.

#### Buy LabVIEW Communications for Your Team

The Volume License Program is designed for teams that need five or more licenses. It reduces the total cost of ownership by providing streamlined asset management to your organization.

#### Buy LabVIEW Communications for Academic

Academic Site Licenses include software for classroom, laboratory, or research. It is the standard way for academics and students to access NI software.

#### Expand the Power of LabVIEW Communications

The active online community for LabVIEW and LabVIEW Communications provides the type of collaboration you want. Browse examples posted by users, upload useful examples you have developed, and engage in conversations with others trying to solve similar problems.

## Related Products

#### LabVIEW Communications 802.11 Application Framework

Offers a modifiable and real-time WiFi PHY and MAC layer IP based on the 802.11a/ac standards.

#### LabVIEW Communications LTE Application Framework

Provides a modifiable real-time LTE PHY and MAC layer IP that supports both TDD and FDD transmission modes.

#### LabVIEW Communications MIMO Application Framework

Features a modifiable and real-time multiple input, multiple output (MIMO) software reference design based on the LTE standard.

## Part Number Table

Description	Part Number
LabVIEW COMM System Design Suite	783835-35
LabVIEW Communications System Design Suite. Includes Standard Service for Software, with Media	783835-35WM