3. To register your installation, click **Register**. This opens the Analog Devices registration Web page in your default browser. Follow the on-screen prompts to complete the license installation. Your installation now is registered and validated for the trial period.

4. A validation code will be e-mailed to you within 24 hours of registering. (In the meantime, VisualDSP++ is operational.) Launch VisualDSP++ as in Step 1, and then choose **Help –> About VisualDSP++**. Click the **Licenses** tab and click **Validate**. Enter the validation code exactly as provided and click **OK** to complete the validation.

Step 5: Learning About Your VisualDSP++ Installation

Congratulations, you are ready to begin using VisualDSP++ 4.5!

If you are new to VisualDSP++, it is highly recommended that you begin with the *VisualDSP++ 4.5 Getting Started Guide*. This publication is available from VisualDSP++ Help. Simply choose **Help –>Contents**. In the Help window's **Contents** pane, click **Getting Started Guide**.

In addition to the *VisualDSP++ 4.5 Getting Started Guide*, EZ-KIT users should explore the installed code examples. These programs reside in a group of `Examples` directories located at the VisualDSP++ installation path, for example:
`<install_path>\Blackfin\Examples\ADSP-BF537 EZ-KIT Lite`

If you are an experienced VisualDSP++ user, begin with the *VisualDSP++ 4.5 Product Release Bulletin*. This document highlights new features and changes from previous versions of VisualDSP++.

The Analog Devices Web site, www.analog.com, is continually updated with new Engineer-to-Engineer notes, data sheets, FAQ topics, and application code examples, making it an invaluable resource for VisualDSP++ users. Make a habit of visiting our site; incorporate it into your daily routine for all of the latest information concerning Analog Devices, processors, and development tools.

VISUAL DSP++ 4.5

Installation Quick Reference Card

System Requirements

Verify that your computer has these minimum requirements:

- Windows XP® or 2000
- Intel Pentium® processor (or compatible), 500 MHz or faster
- 512 MB RAM
- 1 GB available hard disk space (approximately 500 MB of additional space is temporarily required when installing from the Web download), more for your own project data
- 1 open USB port for EZ-KIT Lite and USB-ICE connections
- 1 open PCI slot for HP-PCI ICE connections

NOTE Windows NT®, 98, and ME are not supported.

PCs with faster processors and/or more RAM can expect faster project builds and simulation speeds. Performance under emulation generally is bounded by the aggregate bandwidth of the communication channel to the target.

Overview

VisualDSP++, EZ-KIT Lite, and ICE installations are combined of:

- Step 1: Software Installation
- Step 2: Software Update
- Step 3: EZ-KIT Lite or ICE Hardware Installation
- Step 4: License Installation
- Step 5: Learning About Your Installation
  This optional step points to a variety of resources which can help you to master the purchased product as quickly as possible.

CROSSCORE®

ANALOG DEVICES

Step 1: Install the Software

Install the VisualDSP++ software before connecting any hardware, such as an EZ-KIT Lite or emulator, to your computer. Likewise, use the hardware only when the VisualDSP++ software is installed on your computer.

To install the VisualDSP++ software:

- For a Web download, double-click on the download `.EXE` file and follow the on-screen prompts to complete the installation.
- For a CD/DVD media installation, insert the media into your CD/DVD drive. The installer program runs automatically. If the installer does not run automatically, click the **Start** button and select **Run....** Type "`D:\Setup.exe`" in the **Open** field, where "D" is the letter of your CD/DVD drive. Follow the on-screen prompts to complete the installation.

Step 2: Update the Software

After installing the VisualDSP++ software, check whether an update is available for your installation. Installing an update ensures that your VisualDSP++ software contains the latest processor support, example code, and bug fixes.

To update the VisualDSP++ software:

1. From the **Start** menu, select **All Programs –> Analog Devices–> VisualDSP++ 4.5 –>Maintain this Installation**.
2. Select **Check the ADI web site for updates** to launch your Web browser. Follow the on-screen prompts to identify and download your update.
3. Select **Install Downloaded Update** and follow the on-screen prompts to complete the update.

Step 3: Install the EZ-KIT Lite or Emulator

If you are using VisualDSP++ without any additional hardware, skip this step.

Remove the board from the package. Be careful when handling the board to avoid the discharge of static electricity, which may damage some components.

To install the EZ-KIT Lite or USB-based ICE:

An EZ-KIT Lite or USB-based ICE board is designed to run as a stand-alone unit. You do not have to open your computer case.

1. Plug the board's power supply into a surge-protected outlet (recommended). Connect the board's USB assembly to your computer's USB port using the provided USB cable. On the board, the power LED illuminates, and there may be other visible activity (blinking LEDs, etc.). The connection activates the Windows **New Hardware wizard**.
2. From the **Welcome** screen of the wizard, click **Next** two times. The installation takes a few seconds to complete; a Windows message about the new device being ready for use completes the hardware installation.
3. Verify that the yellow USB monitor LED is lit. (The LED is in close proximity to the USB connector.) This signifies that the board is communicating properly with the host PC and is ready to run.
4. For a USB-based ICE, attach the JTAG cable to the emulation target. Refer to the emulator documentation for details.

To install the HP-PCI ICE:

1. Shut down and disconnect your computer from its power supply and all other peripherals. Remove the computer's case cover (refer to your computer's owner's manual for instructions).
2. Locate an open PCI slot and firmly seat the emulator PCI board into the slot. Secure the card in place, replace the computer's case cover, and re-attach all peripherals.
3. Reboot the computer. After rebooting and logging in, the Windows **New Hardware wizard** launches.
4. From the **Welcome** screen of the wizard, click **Next** two times. The installation takes a few seconds to complete; a Windows message about the new device being ready for use completes the hardware installation.

NOTE Use the supplied cable to power and connect the hardware to your computer. Do not use a power supply other than the one provided, as it represents a possible fire hazard. Use of low-grade USB cables or USB extenders may result in intermittent data loss.

Step 4: Install, Register, and Validate a License

VisualDSP++ and EZ-KIT Lites are licensed products—they do not run unless a license is installed. Thre are two types of licenses: **KIT** (evaluation) and **ADI** (permanent). Each offers a full evaluation period during which, without registering a copy of the software, you are allowed to use a simulator or an emulator target with no limits to the size of user programs.

- A KIT license grants you 10 (ten) days to register and validate the installation. Once validated, the KIT licence grants you 90 (ninety) days of a full evaluation in total.

  At the end of the evaluation period, unless you have upgraded the KIT license to "permanent", simulator and emulator connections become prohibited and the size of the user program limited to 25% of the processor's program memory.

- The ADI license grants you 30 (thirty) days to register and validate the installation for permanent use.

  If you fail to register and validate your installation during the 30-day evaluation period, your copy of VisualDSP++ 4.5 becomes inoperable.

NOTE The following procedure is for installing a single-user license. If you are connecting to a floating license server, your license administrator will guide you through the steps necessary to connect to your license server.

To install a single-user license:

1. From the **Start** menu, select **All Programs –>Analog Devices –> VisualDSP++ 4.5 –>VisualDSP++ Environment**. An information message indicates that no license can be found; select **Yes** when prompted to install a license.
2. In the **Licenses** tab of the **About VisualDSP++** dialog box, click **New**. Select the **Single user license** type and type in your serial number exactly as provided. Your serial number can be found:
   - On the back of the envelope in which the VisualDSP++ installation CD/DVD is mailed
   - On the registration card accompanying the VisualDSP++ installation CD/DVD