

# **Installing PrimeYield LCC**

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# Installing PrimeYield LCC

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This document contains the following sections:

**Note:**

The installation instructions in this document are the most up-to-date available at the time of production. However, changes might have occurred. For the latest installation information, see the product release notes or documentation.

- [Media Availability and Supported Platforms](#)
- [Disk Space Requirements](#)
- [Installing the Software](#)
- [Setting Up the User Environment](#)
- [Setting Up PrimeYield LCC to Use Hercules and IC WorkBench](#)
- [Verifying the PrimeYield LCC Installation](#)

To run the PrimeYield LCC tool, the Hercules and IC Workbench tools must be installed and running. See *Installing Synopsys Tools*, available at <http://www.synopsys.com/install>.

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## Media Availability and Supported Platforms

The PrimeYield LCC tool is available by EST or on CD. Obtain the appropriate binary executable files based on the operating system you need. Table 1 shows the supported platforms for this release.

*Table 1 Platforms and Keywords*

Platform	Operating system	Synopsys platform keyword	Path keyword
AMDOpteron	Red Hat Enterprise Linux v3 (Taroon update 5)	amd64 (64-bit mode)	AMD.64

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### Disk Space Requirements

Table 1 Platforms and Keywords (Continued)

Platform	Operating system	Synopsys platform keyword	Path keyword
IA-32 (X86)	Red Hat Enterprise Linux v3 <sup>1</sup> (Taroon update 5)	linux (32-bit mode)	IA.32
Itanium 2	Red Hat Enterprise Linux 2.1 (Derry)	linuxipf (64-bit mode)	IA.64
Sun SPARC	Solaris 9, 10 <sup>1</sup>	sparc64 (64-bit mode)	SUN.64

1. Binary-compatible operating system. Note, however, that binary compatibility is not guaranteed.

#### Note:

The PrimeYield LCC software is configured so that multiple platforms of this version can be installed in a single installation directory (*install\_dir*).

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## Disk Space Requirements

The disk space requirement varies depending on the platform and the tool selected for installation. Table 2 shows the maximum space required for installing each product on a particular platform. (The total for all platforms is 498 megabytes, including 8 megabytes for the common file.)

Table 2 Disk Space Requirements for PrimeYield LCC (in Megabytes)

Platform	Megabytes
amd64	64
linux (32-bit mode)	81
linuxipf (64-bit mode)	83
sparc64	92

Table 3 shows the maximum space required for installing Hercules on a particular platform.

*Table 3 Disk Space Requirements for Hercules (in Megabytes)*

Platform	Megabytes
amd64	91
linux (32-bit mode)	84
linuxipf (64-bit mode)	162
sparc64	92

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## Installing the Software

PrimeYield LCC uses the Synopsys Installer tool, which allows you to use a graphical user interface (GUI) or a text script. For information about downloading Synopsys Installer and PrimeYield LCC, see [Installing Synopsys Tools](#).

To install PrimeYield LCC by EST or from the CD, follow the procedures described in [Installing Synopsys Tools](#).

[Installing Synopsys Tools](#) shows an example Synopsys media installation script for the synthesis tools. PrimeYield LCC is installed in a similar manner.

PrimeYield LCC is a stand-alone product and cannot be installed over an existing Synopsys product, including a prior version of PrimeYield LCC. You must create a new directory for PrimeYield LCC.

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## Setting Up the User Environment

To set up the user environment, you must specify the location of the executable file and set the license environment variable.

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### Specifying the Executable File Location

Add the PrimeYield LCC directory containing the executable file to the `PATH` environment variable.

If you are using the C shell, add the following line to the `.cshrc` file:

```
set path=(LCC_HOME/bin $path)
```

If you are using the Bourne, Korn, or Bash shell, add the following line to the `.profile`, `.kshrc`, or `.bashrc` file:

```
PATH=$LCC_HOME/bin:$PATH
export PATH
```

where `LCC_HOME` is the name of the PrimeYield LCC installation directory.

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### Setting the `LM_LICENSE_FILE` or `SNPSLMD_LICENSE_FILE` Environment Variable

You must install the SCL software and define the `SNPSLMD_LICENSE_FILE`, `LM_LICENSE_FILE`, or another tool-specific variable before you can verify the PrimeYield LCC installation.

For information about downloading and installing SCL and setting the license variable, see [Installing Synopsys Tools](#).

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## Setting Up PrimeYield LCC to Use Hercules and IC WorkBench

PrimeYield LCC requires the Hercules and IC WorkBench tools. For the Y-2006.12 version of PrimeYield LCC, you must install Hercules version Y-2006.12 and IC WorkBench version X-2005.09.

#### Note:

Hercules, IC WorkBench, and PrimeYield LCC can be installed on different hosts or different platforms. The host names must be specified when the tools call for them.

For download and installation instructions, see the installation instructions available at [http://www.synopsys.com/support/installation/install\\_guide.html](http://www.synopsys.com/support/installation/install_guide.html).

**Note:**

The standard installation instructions in the Hercules document also apply to service pack releases. For the latest information about supported platforms, see the product release notes.

To enable PrimeYield LCC to use Hercules, source the following file:

```
% source install_dir/setup/hercules_setup.csh
```

where *install\_dir* is the Hercules installation directory.

The *hercules\_setup.csh* script sets `HERCULES_HOME_DIR` and other variables and checks whether the appropriate platforms are available. In the *hercules\_setup.csh* script, set the value of `HERCULES_HOME_DIR` to the actual Hercules installation directory.

To enable PrimeYield LCC to use IC WorkBench, set the path to the following:

```
set path=(ICWB_HOME/bin $path)
```

where *ICWB\_HOME* is the IC Workbench installation directory.

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## Verifying the PrimeYield LCC Installation

You can verify whether LCC has been correctly set up by running the validation script *vdlcc.pl* from any working directory. The validation script is placed at `<LCC_HOME>/contrib/samples/vdlcc.pl`. To run *vdlcc.pl*, make sure that `<LCC_HOME>` refers to the initial PrimeYield LCC installation directory from the tar file and Hercules has been installed and added to your `PATH`.

Run the validation script with following command:

```
% <LCC_HOME>/contrib/samples/vdlcc.pl [-n <technology_node>]  
<pylcc_build_dir>
```

If no `<technology_node>` is specified, *vdlcc.pl* will run through all the available technology nodes. Detailed usage can be found with following command:

```
% <LCC_HOME>/contrib/samples/vdlcc.pl -h
```

After the run, *vdlcc.pl* will print out the matching ratio summary for each test pattern and also will indicate whether your LCC has been set up correctly.

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Verifying the PrimeYield LCC Installation