

INSTALL NOTES FOR SystemC Release 2.2.0

Installation Notes for Windows

Visual C++ 7.1

The download directory contains two subdirectories:
'msvc71' and
'examples'.

The 'msvc71' directory contains the project and workspace files to compile the 'systemc.lib' library. Double-click on the 'SystemC.vcproj' file to launch Visual C++ 7.1 with the workspace file. The workspace file will have the proper switches set to compile for Visual C++ 7.1. Select 'Build SystemC' under the Build menu or press F7 to build 'systemc.lib'.

The 'examples' directory contains the project and workspace files to compile the SystemC examples. Go to one of the examples subdirectories and double-click on the .vcproj file to launch Visual C++ with the workspace file. The workspace file will have the proper switches set to compile for Visual C++ 7.1. Select 'Build <example>.exe' under the Build menu or press F7 to build the example executable.

Creating SystemC Applications

1. Start Visual Studio. From the Start Page select New Project and Win32 Console Project. Type the project name and select a suitable location then click OK.
2. Select the Application Settings page of the Win32 Application Wizard and make sure the 'Empty project' box is ticked. Click 'Finish' to complete the wizard.
3. Add new/existing C++ files to the project and edit code.
4. Display the project Property Pages by selecting 'Properties...' from the Project menu.
5. From the C/C++ tab, select the General properties and set 'Detect 64-bit Portability Issues' to No

6. From the C/C++ tab, select the Language properties and set 'Enable Run-Time Type Info' to Yes
7. From the C/C++ tab, select the Command Line properties and add /vmg to the 'Additional Options:' box.
8. From the Linker tab, select the Input properties and type 'systemc.lib' in the 'Additional Dependencies' box.
9. Click OK

Also make sure that the compiler and linker can find the SystemC header and library files respectively. There are two ways to do this, both can refer to an environment variable pointing to the SystemC install path:

To update the include file and library directory search paths for all projects:

1. Select Tools -> Options . . . and the Projects -> VC++ Directories tab
2. Select show directories for: Library files
3. Select the 'New' icon and enter:
\$(SYSTEMC)\SystemC\Debug
4. Select show directories for: Include files
5. Select the 'New' icon and enter: \$(SYSTEMC)\..\src

To add the include file and library directory search paths for the current project only:

1. Display the project Property Pages by selecting 'Properties...' from the Project menu.
2. From the C/C++ tab, select the General properties and type the path to the SystemC 'src' directory in the text entry field labeled 'Additional include directories' (e.g. the examples use '\$(SYSTEMC)\..\src').
3. From the Linker tab, select the General properties and type the path to the SystemC library in the text entry field labeled 'Additional Library Directories

(e.g. the examples use '\$(SYSTEMC)\SystemC\Debug').

4. From the Linker tab, select the Input properties and enter 'systemc.lib' in the 'Additional Dependencies' text entry field.

5. Click OK

To set the SYSTEMC environment variable, right-click on the 'My Computer' icon and select the properties menu. Select the 'Advanced' tab from the 'System Properties' page and click the 'Environment Variables' button. Create a new environment variable named 'SYSTEMC' with a variable value that contains the path to the SystemC install (e.g. 'C:\apps\systemc-2.2\msvc71').

Click OK to save the environment variable (note the environment variable must be set before starting Visual C++).