



# **iCEcube2 Installation Guide**

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## Platforms Supported

## iCEcube2 Tools

## iCEcube2 - Windows Installation

- Assemble required materials
- Perform the installation
- Verify installation success

## iCEcube2 – Linux Installation

## Uninstall/Modify iCEcube2

## Floating License Setup

**Appendix A: Node Locked License File Troubleshooting.**

**Appendix B: Install iCEcube2 on Vista Home.**

## Node-locked License

- Windows 8/8.1 OS, 32-bit / 64-bit
- Windows 7 OS, 32-bit / 64-bit
- Windows XP Professional

## Floating License Server

- Windows 8/8.1 OS, 32-bit / 64-bit
- Windows 7 OS, 32-bit / 64-bit
- Windows XP Professional
- Red Hat Enterprise Linux WS v4.0

**iCEcube2 Tool Suite consists of Synthesis, Place and Route and Simulation tool sets.**

| Features                               | Windows OS | Linux OS |
|--|------------|----------|
| iCEcube2 Core Tools                    | Yes        | Yes      |
| Lattice Synthesis Engine(LSE)          | Yes        | Yes      |
| Synplify-Pro Synthesis                 | Yes        | Yes      |
| Integrated ALDEC Active-HDL Simulator* | Yes        | No       |
| Lattice Diamond Programmer**           | Yes        | Yes      |

\* Integrated ALDEC Active-HDL simulator is only available in windows platform.

\*\* Lattice Diamond Programmer run in standalone mode is required to program Lattice iCE devices.

# ASSEMBLE REQUIRED MATERIALS

Download the latest iCEcube2 installer from Lattice website.

<http://www.latticesemi.com/products/designsoftware/icecube2/downloads.cfm>

- Registration is required prior to download

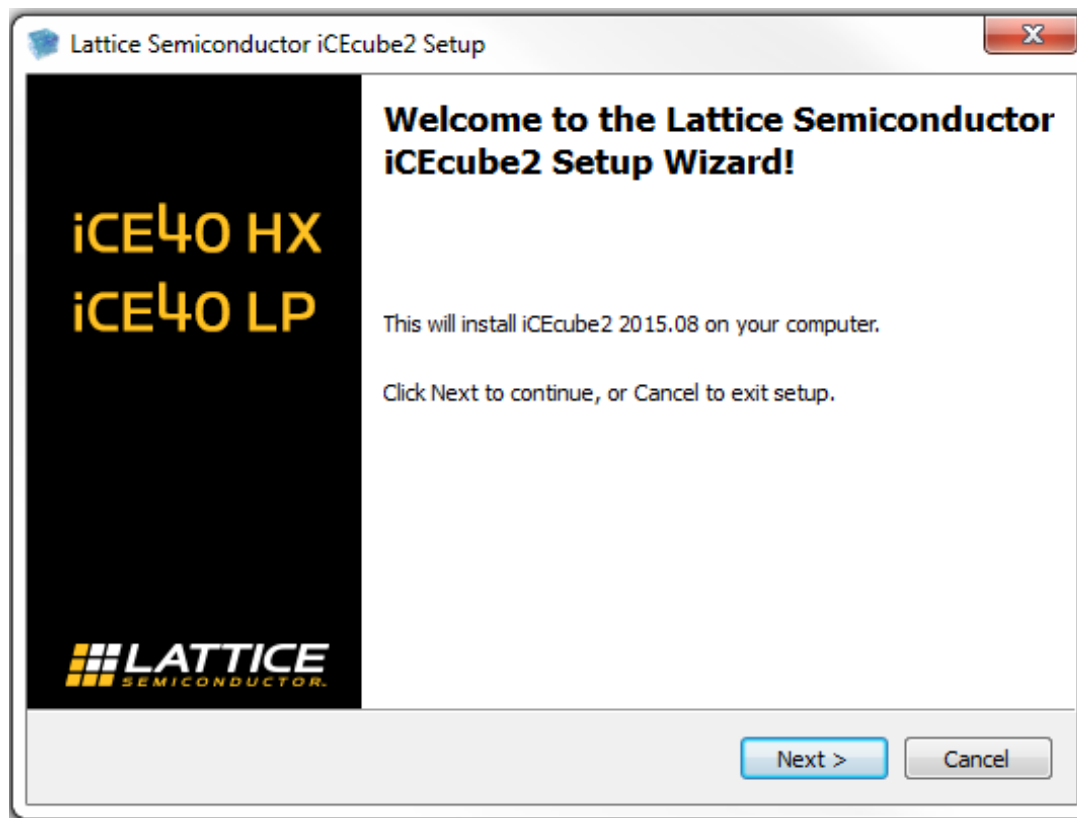
Download and install the latest Lattice Diamond Standalone Programmer from Lattice website.

<http://www.latticesemi.com/Products/DesignSoftwareAndIP/ProgrammingAndConfigurationSw/Programmer.aspx>

Request the license file from lattice admin([lic\\_admn@latticesemi.com](mailto:lic_admn@latticesemi.com)). License file enables the iCEcube2 IDE, Synplifypro synthesis tool and the Aldec Active-HDL simulator.

- Node-Locked License (Windows only)
  - Launch “cmd” console, type “ipconfig –all” to get the MAC ID of the system.
  - Submit your MAC ID to Lattice. If Virtual Machine (e.g. Remote Desktop) is used, the MAC address required by the license is the MAC address of that Virtual Machine, not the machine in which the user is physically using.
- Floating License (Linux & Windows)
  - Submit the MAC ID of your license server to Lattice.
    - Windows
      - Launch “cmd” console, type “ipconfig /all” to get the MAC ID.
    - Linux
      - Type “ifconfig –a”. The Ethernet HWAddr gives the required MAC ID.
  - You will need to modify the license file to include your license server name and port information.

## Launch the iCEcube2 windows installer



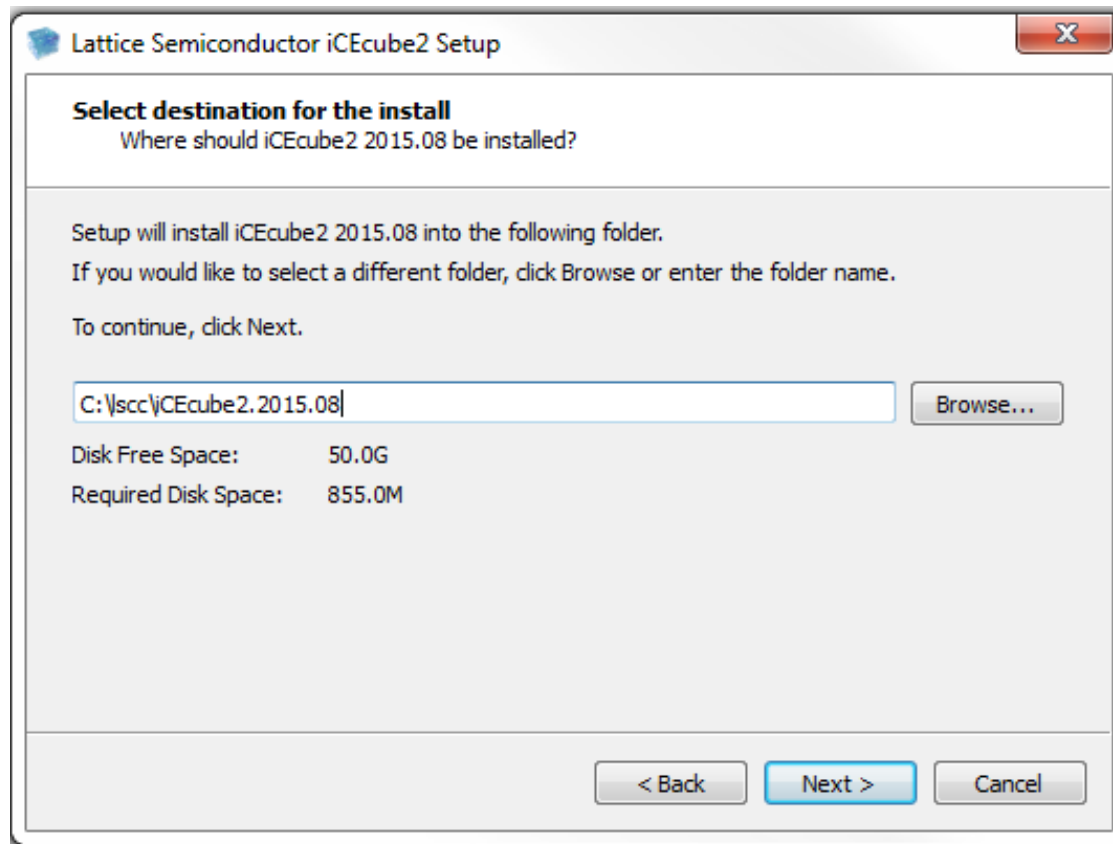
## Accept the license agreement





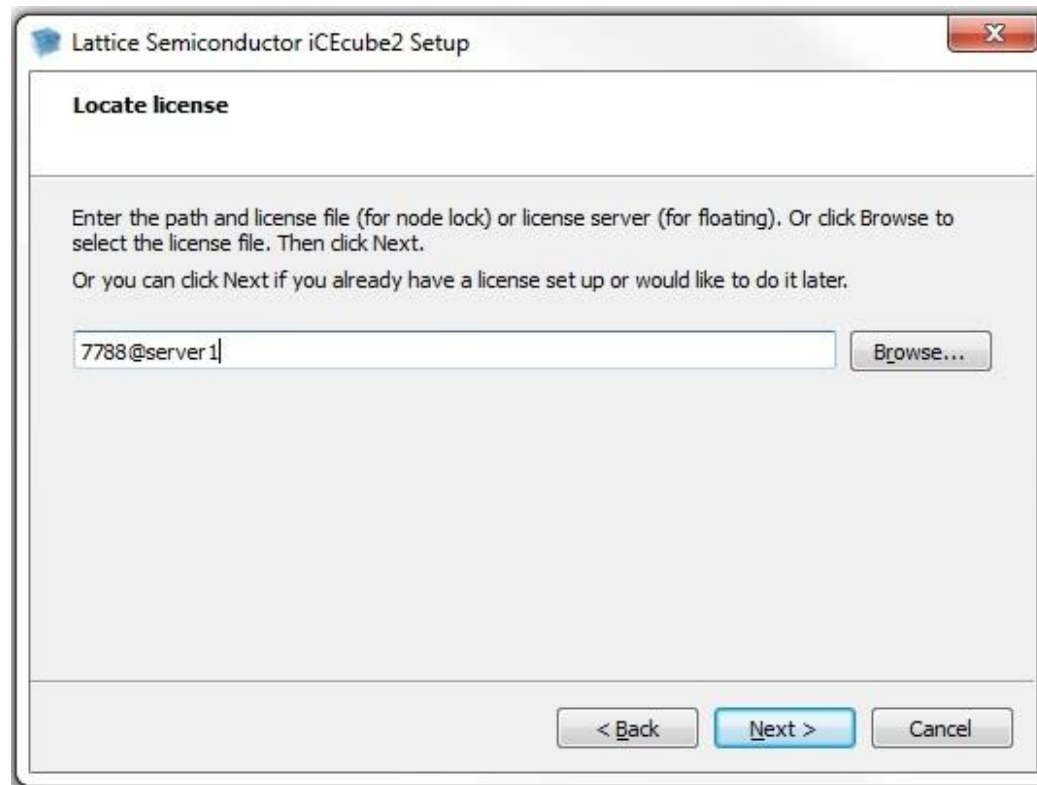
## Select the installation directory

- Default location is recommended
- No spaces are allowed

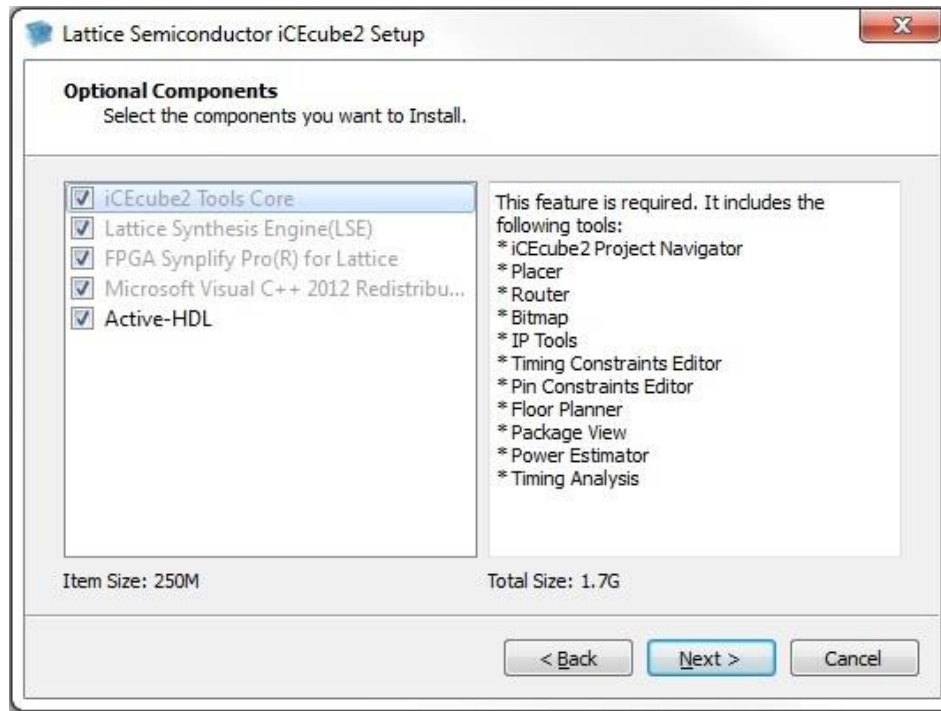


## Specify iCEcube2 license by either:

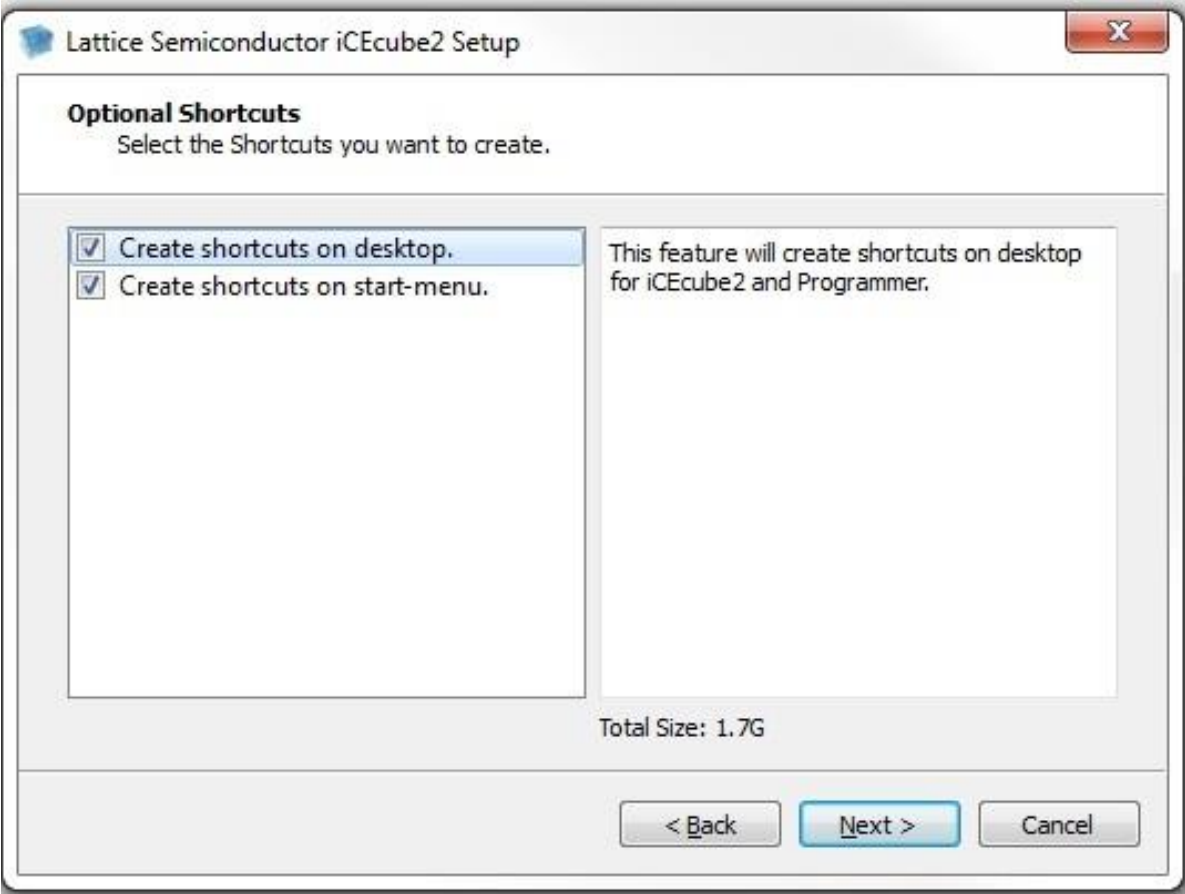
- Browsing to locate a license file on disk
- Typing a floating license server into the text box



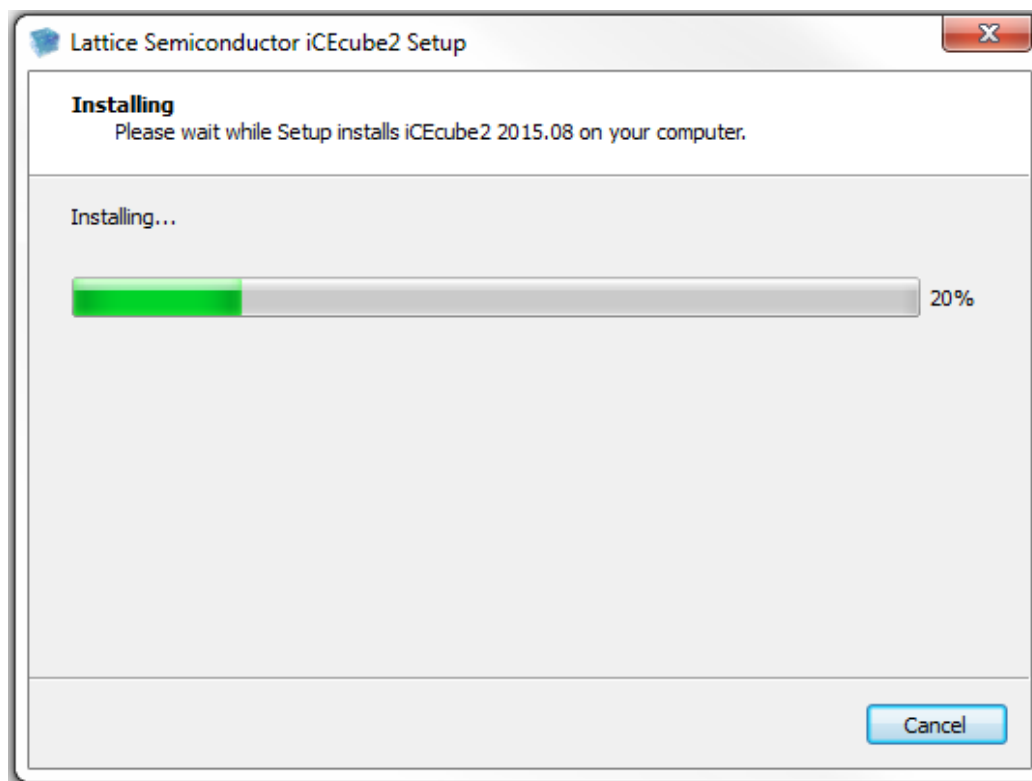
Install the “Active-HDL” Windows based Simulation Software for functional and timing verification.



## Create shortcuts on desktop and start-menu.

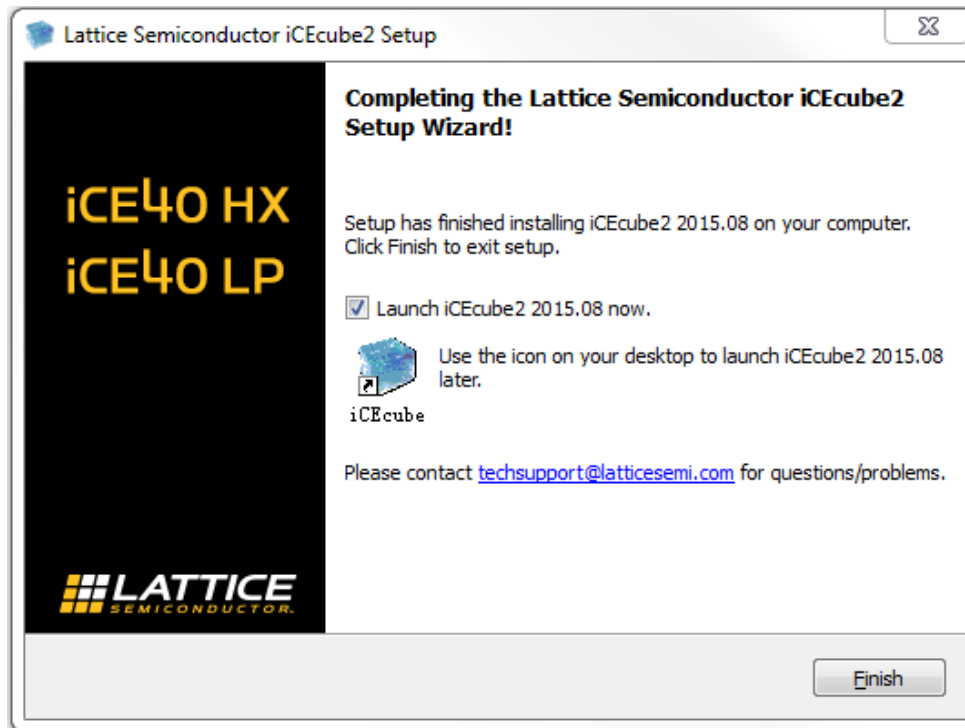


## Installer starts to install iCEcube2 on your computer



When the Setup Wizard is finished, click “Finish” to exit and launch iCEcube2.

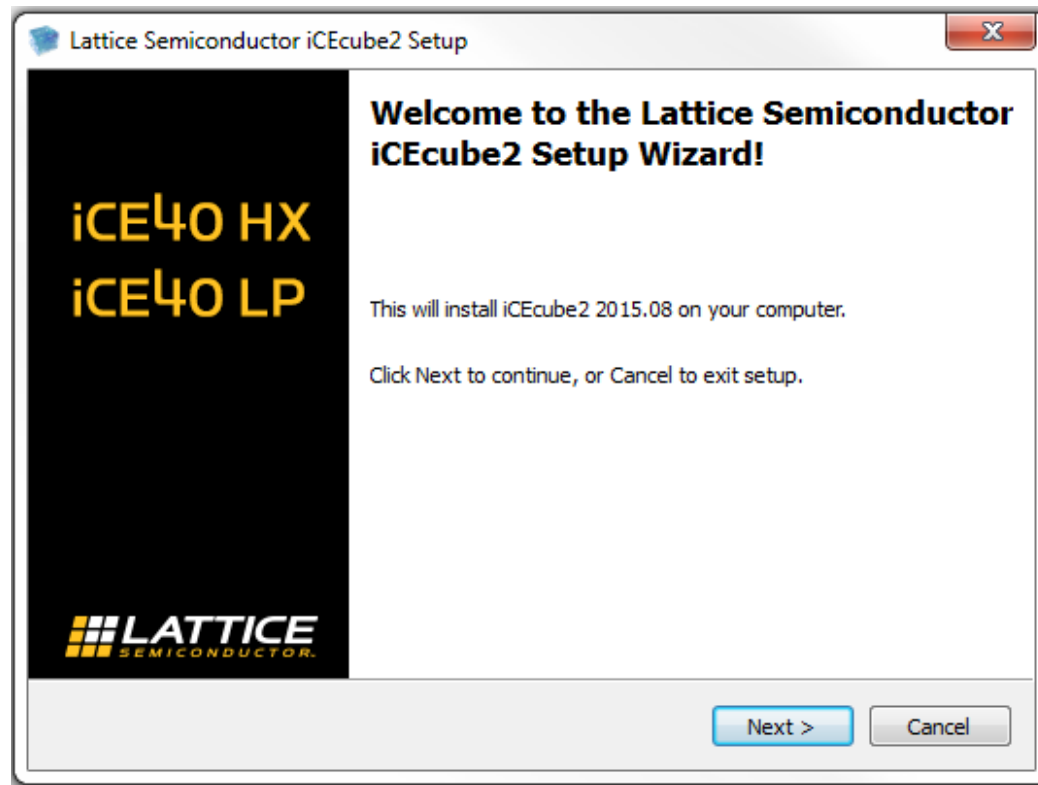
**Congratulations!! You have successfully installed iCEcube2.**



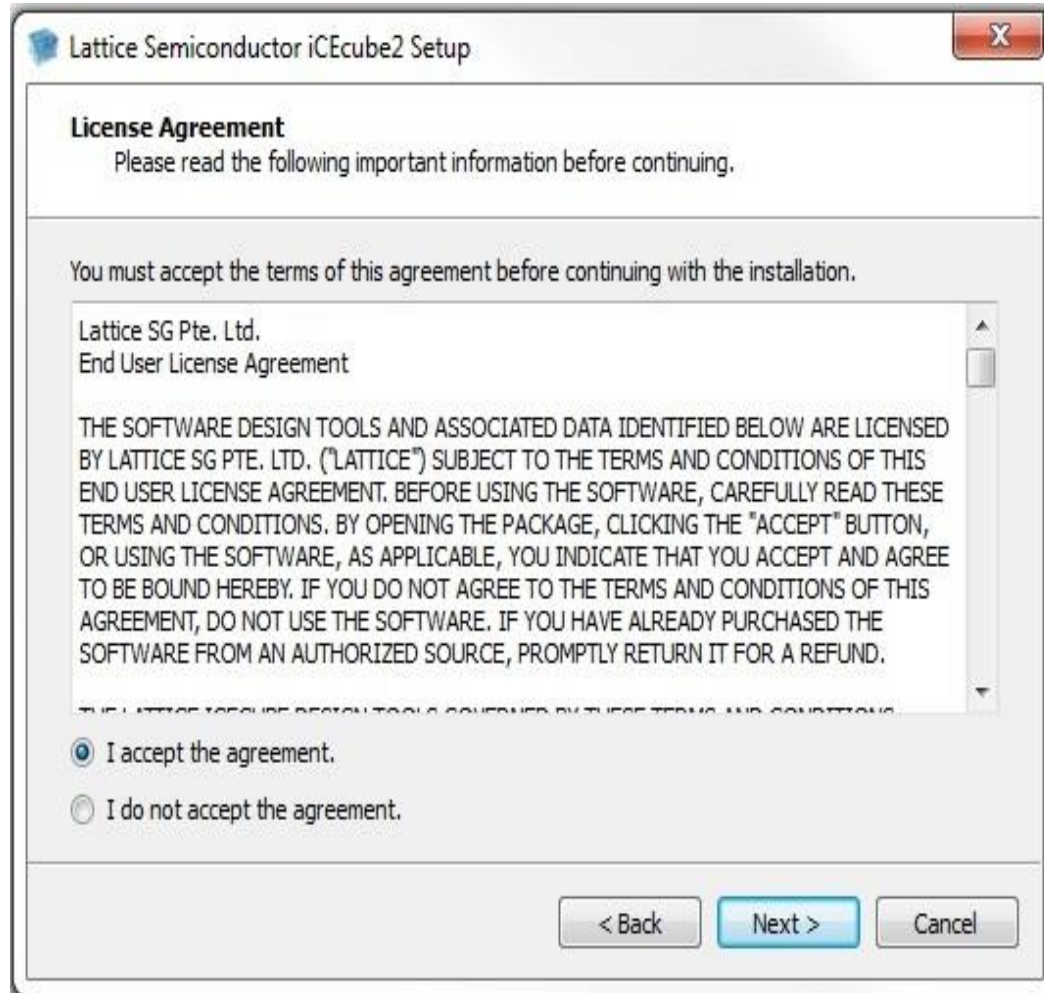
Download the latest iCEcube2 installer for linux from Lattice website.

<http://www.latticesemi.com/products/designsoftware/icecube2/downloads.cfm>

Launch the iCEcube2 linux installer



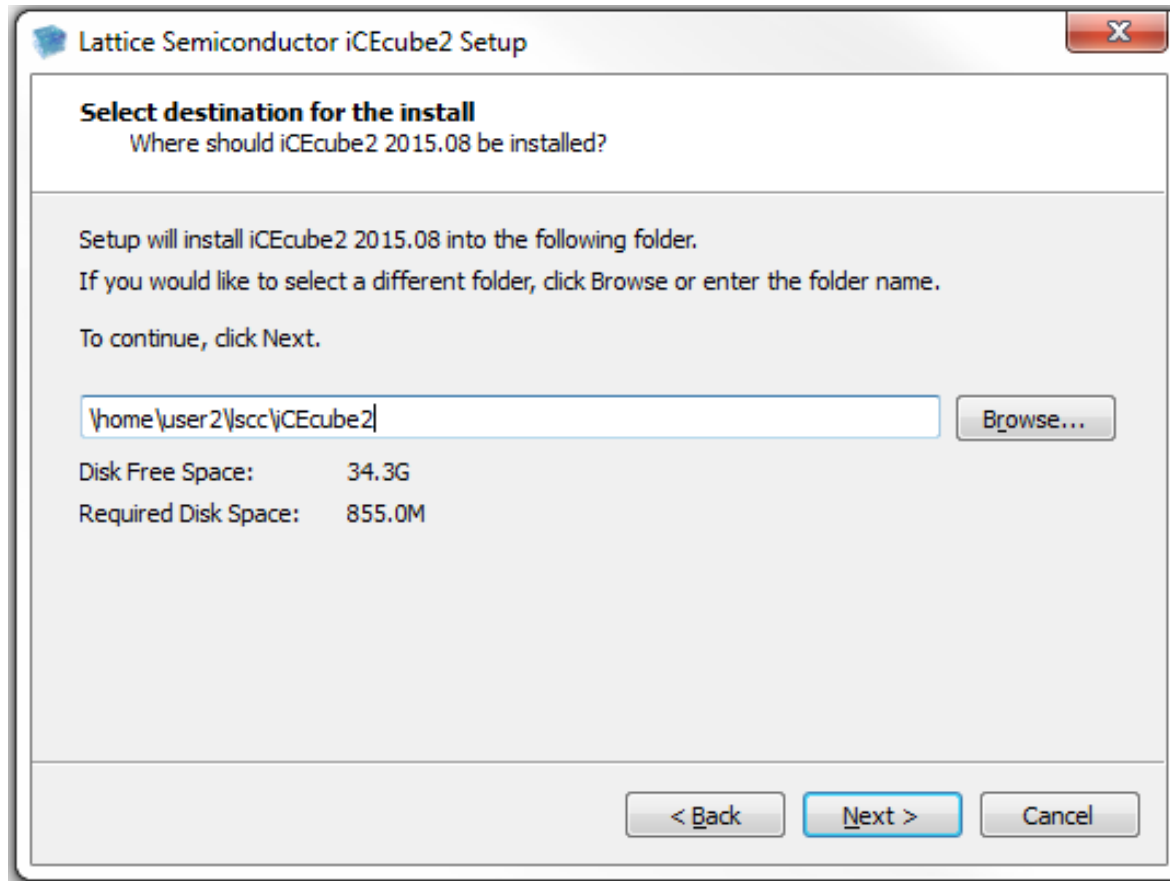
## Accept the license agreement





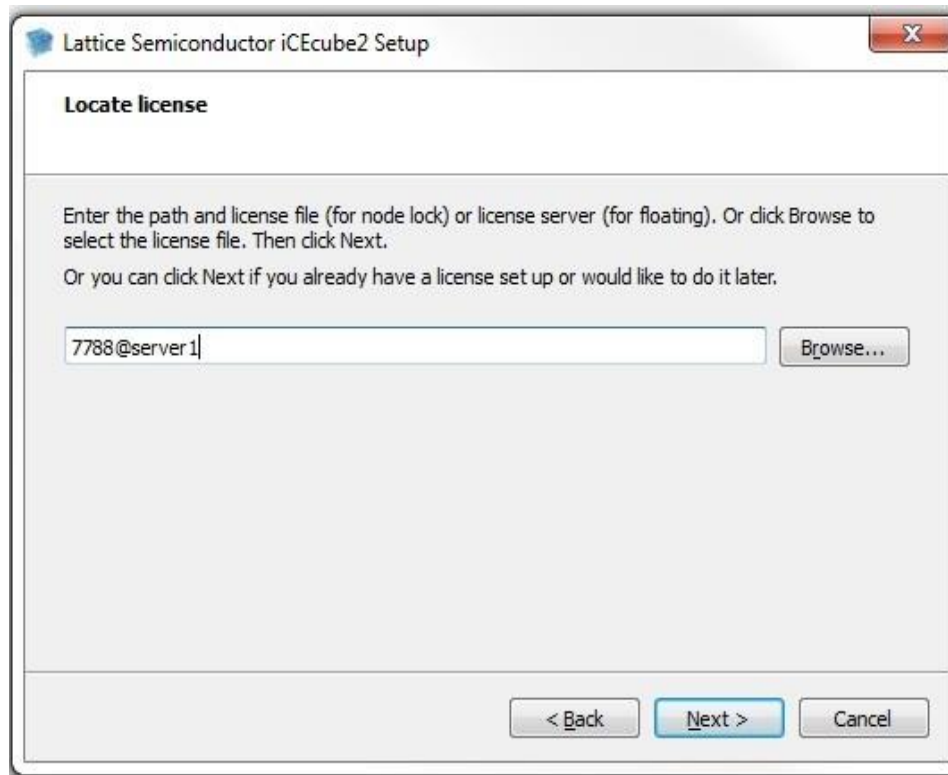
## Select the installation directory

- Default location is recommended
- No spaces are allowed

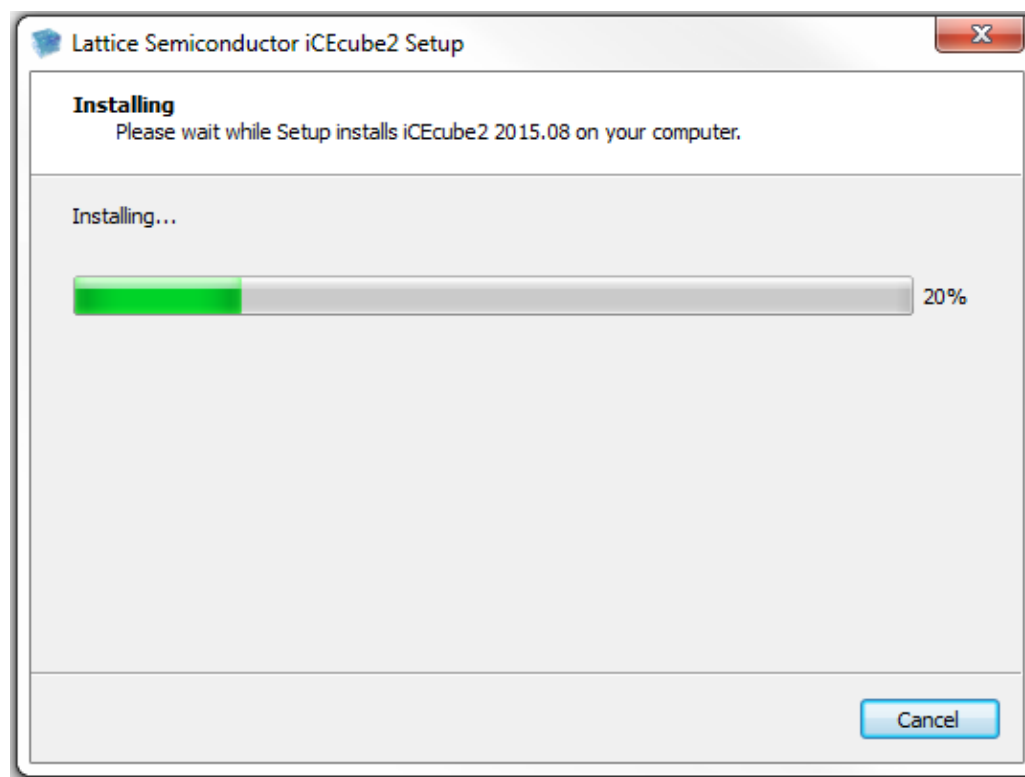


## Specify iCEcube2 license by either:

- Browsing to locate a license file on disk
- Typing a floating license server into the text box

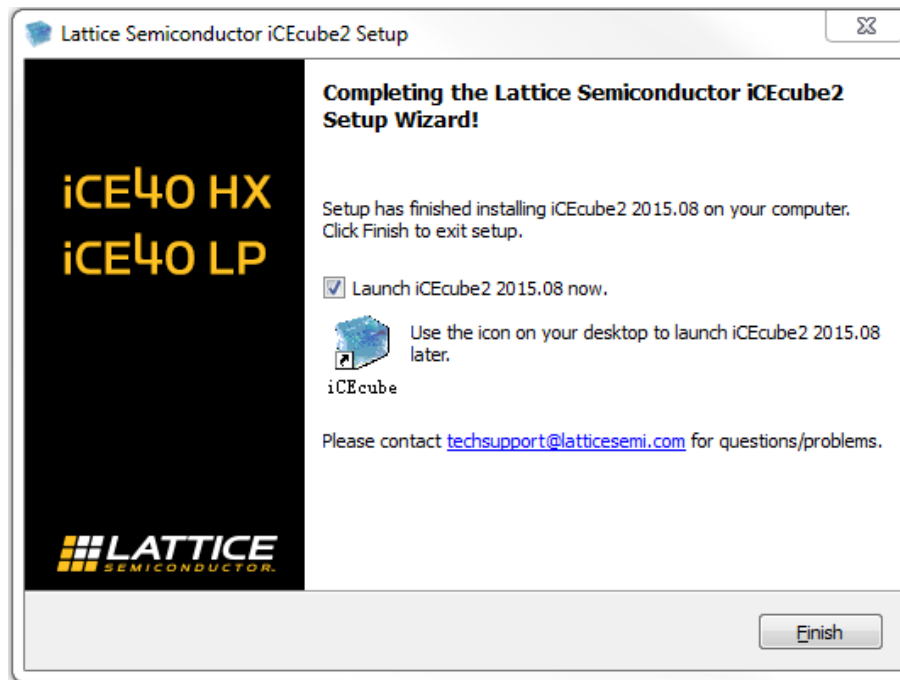


## Installer starts to install iCEcube2 on your computer



When the Setup Wizard is finished, click “Finish” to exit and Launch iCEcube2.

Invoke iCEcube2 from bash shell by “<installation\_dir>/iCEcube2 &’

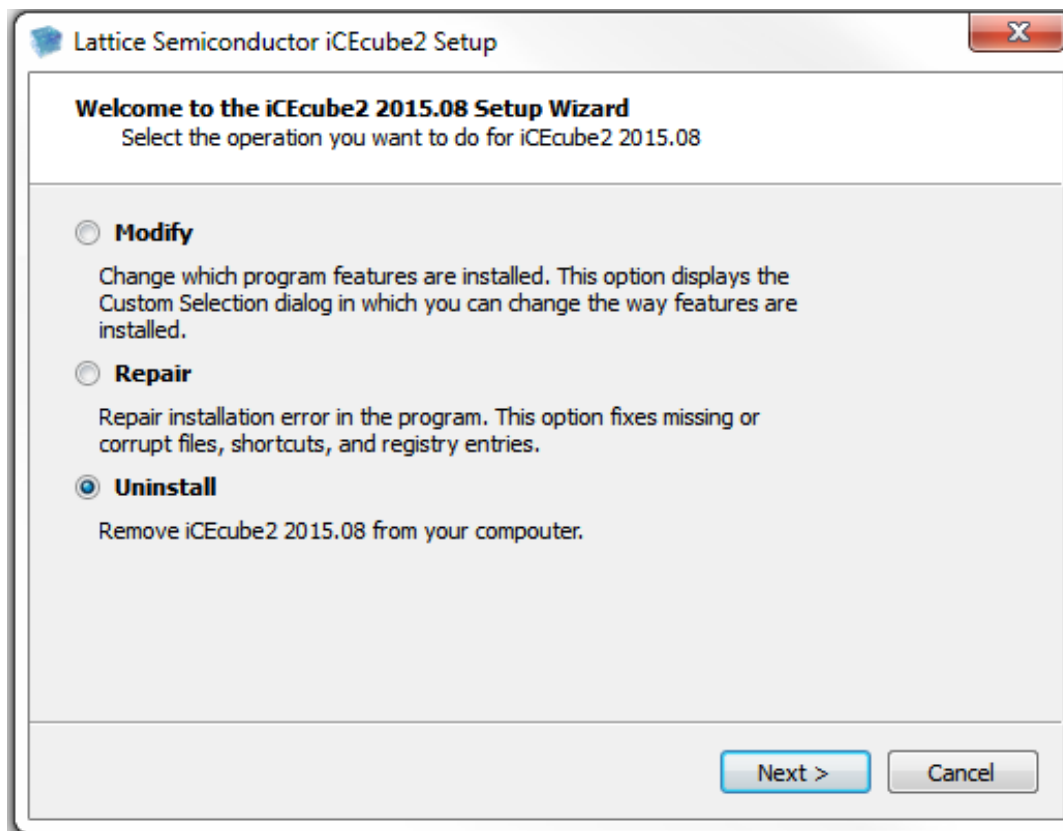


*Note : The Integrated Aldec Active HDL simulation software is available only in windows platform.*

Invoke `<installation_dir>/Setup.exe`

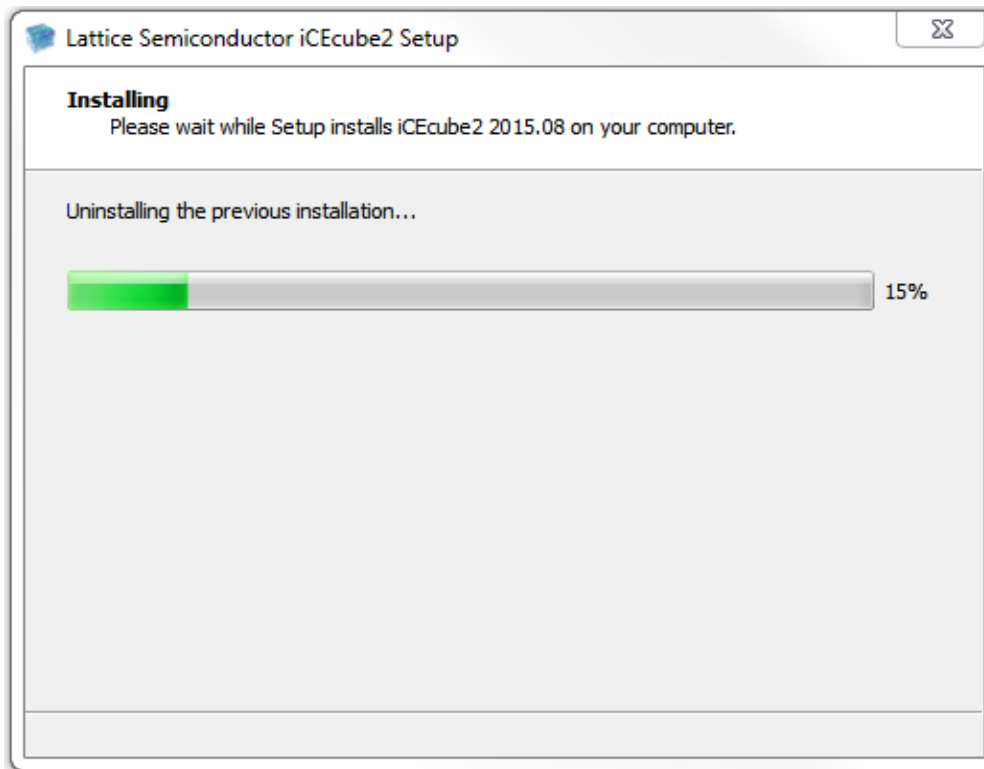
Use Modify option to install the required programming tools for windows.

Now, Select Uninstall option to uninstall the iCEcube2 software

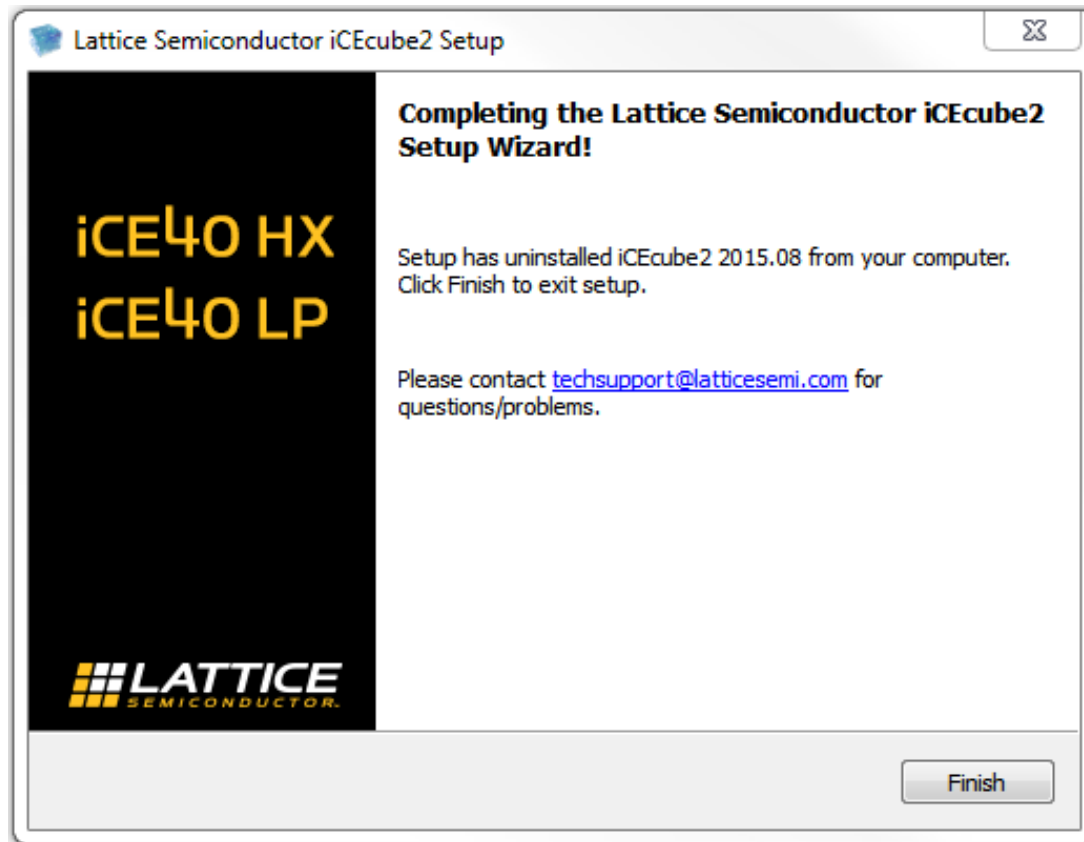


**Confirm to uninstall iCEcube2.**

**Setup wizard starts to uninstall the software from your computer.**



Uninstall process completed. Click on “Finish” to exit the setup wizard.



iCEcube2 license management utilities are located at  
<instllation\_dir>\sbt\_backend\bin\win32\opt

- **Imgrd.exe** : License server program.
- **Imutil.exe** : FLEXlm utility to diagnose ,control license
- **Imtools.exe** : Utility to setup and control floating server
- **ispdsdmn.exe** : The Lattice Semiconductor licensing daemon for windows



**Edit the floating license file to specify the server name , port and the paths to the Lattice daemon.**

```
SERVER <servername> 0018d1ye3037 <portnumber>  
DAEMON lattice <instllation_dir>\sbt_backend\bin\win32\opt\ispdsgdmn.exe
```

```
FEATURE LSC_ICECUBE2_A lattice 10.0 11-mar-2014 10 7B847C77C779 \  
VENDOR_STRING="LSC_ICECUBE2_A "
```

```
FEATURE LSC_ADVANCED lattice 8.0 11-mar-2014 10 FF474427C07C \  
VENDOR_STRING="ispLEVER Advanced "
```

.....

**Start license server using the Imgrd/Imtools program.**

**Each client PC must have the LM\_LICENSE\_FILE variable set to point to the license server.**

iCEcube2 license management utilities are located at  
<instllation\_dir>/sbt\_backend/bin/linux/opt

- **Imgrd.exe** : License server program.
- **Imutil.exe** : FLEXlm utility to diagnose ,control license.
- **lattice** : The Lattice Semiconductor licensing daemon for linux

**Edit the floating license file to specify the server name , port and the paths to the Lattice daemon.**

```
SERVER <servername> 0018d1ye3037 <portnumber>
DAEMON lattice <instllation_dir>/sbt_backend/bin/linux/opt/lattice

FEATURE LSC_ICECUBE2_A lattice 10.0 11-mar-2014 10 7B847C77C779 \
  VENDOR_STRING="LSC_ICECUBE2_A "

FEATURE LSC_ADVANCED lattice 8.0 11-mar-2014 10 FF474427C07C \
  VENDOR_STRING="ispLEVER Advanced "
```

.....  
**Start license server using the Imgrd utility.**

**Each client PC must have the LM\_LICENSE\_FILE variable set to point to the license server.**

## Verify that the required network adapter is present

- Inspect the license file, and make note of the HOSTID string (e.g. HOSTID=000C2965945E)
- Windows
  - Launch “cmd” console, type “ipconfig –all”
- Linux
  - Type “ifconfig –a”
- Verify that one of the network adapters listed has a physical address that matches HOSTID.
- If Virtual Machine (e.g. Remote Desktop) is used, the HOSTID should match with the MAC address of that Virtual Machine.

Make sure LM\_LICENSE\_FILE environment variable points to the license.dat file.

## Re-run the iCEcube2 license setup wizard

- Navigate to the iCEcube2 installation directory
- Launch “LicenseSetup.exe” and re-enter the license path and file name

**There is a bug in the current installer that occurs only in Windows Vista Home.**

- **Skip the workaround for other OS versions**

**Implement workaround before installation by turning off user account control (UAC)**

**Change this option using the control panel**

- **Method 1: Control Panel Standard View**
- **Method 2: Control Panel Classic View**

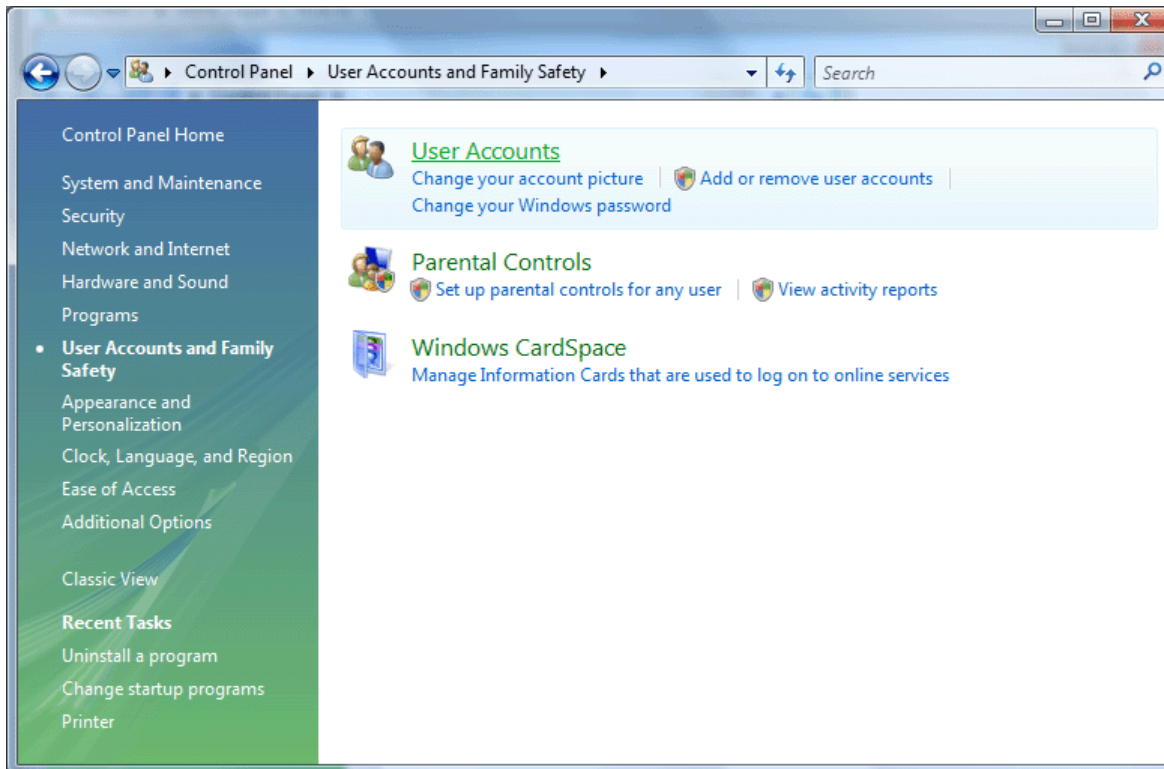
# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

## Standard View, step 1 of 4: Click “User Accounts and Family Safety”



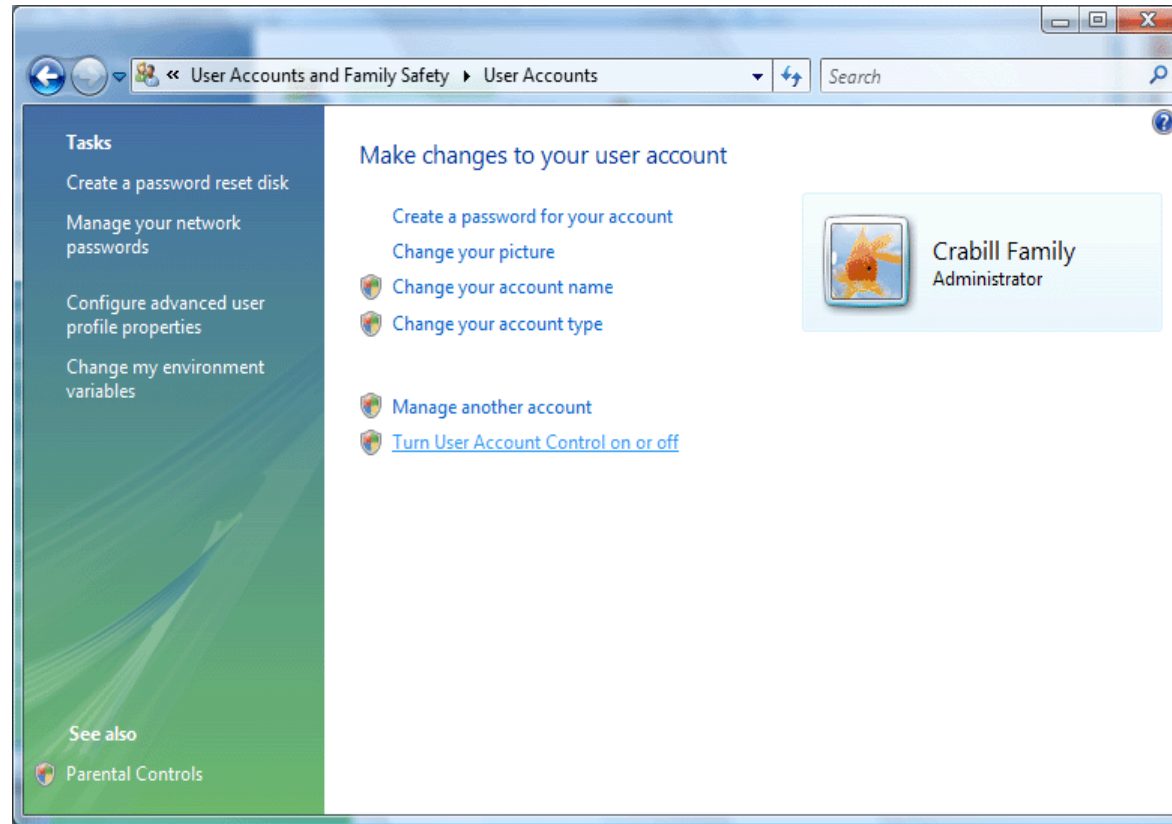
# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

## Standard View, step 2 of 4: Click “User Accounts”



# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

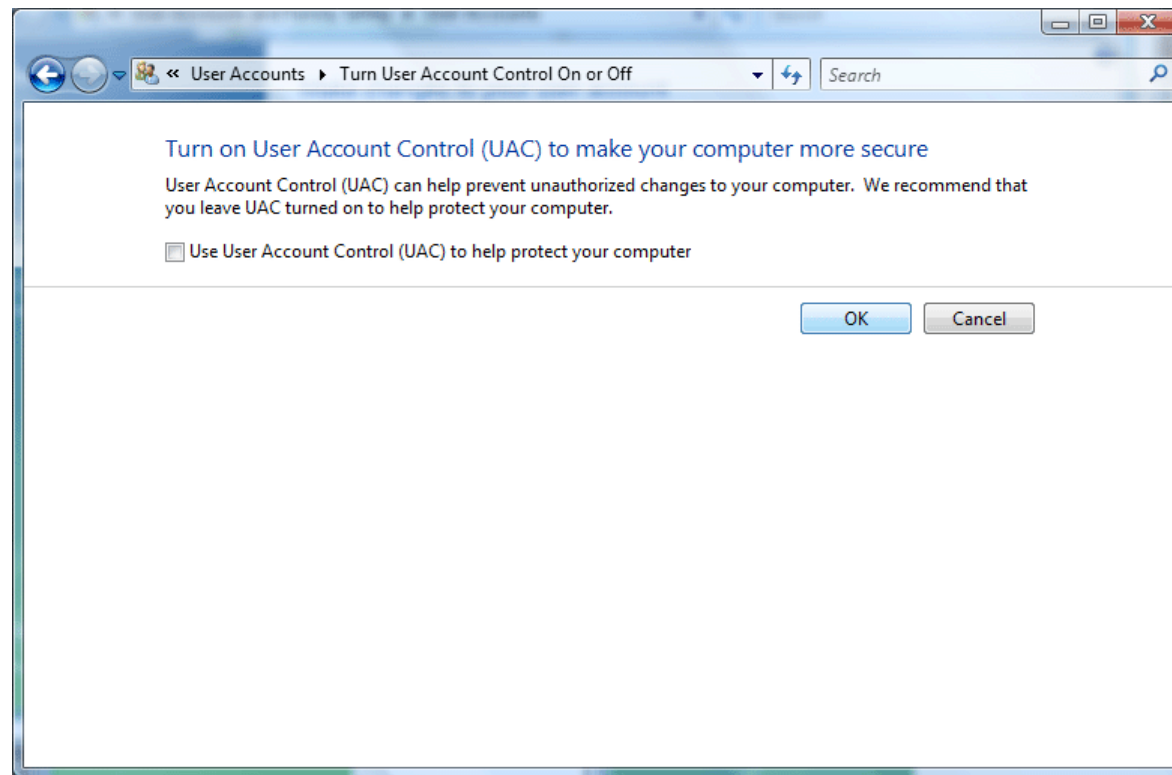
Standard View, step 3 of 4: Click “Turn User Account Control on or off”





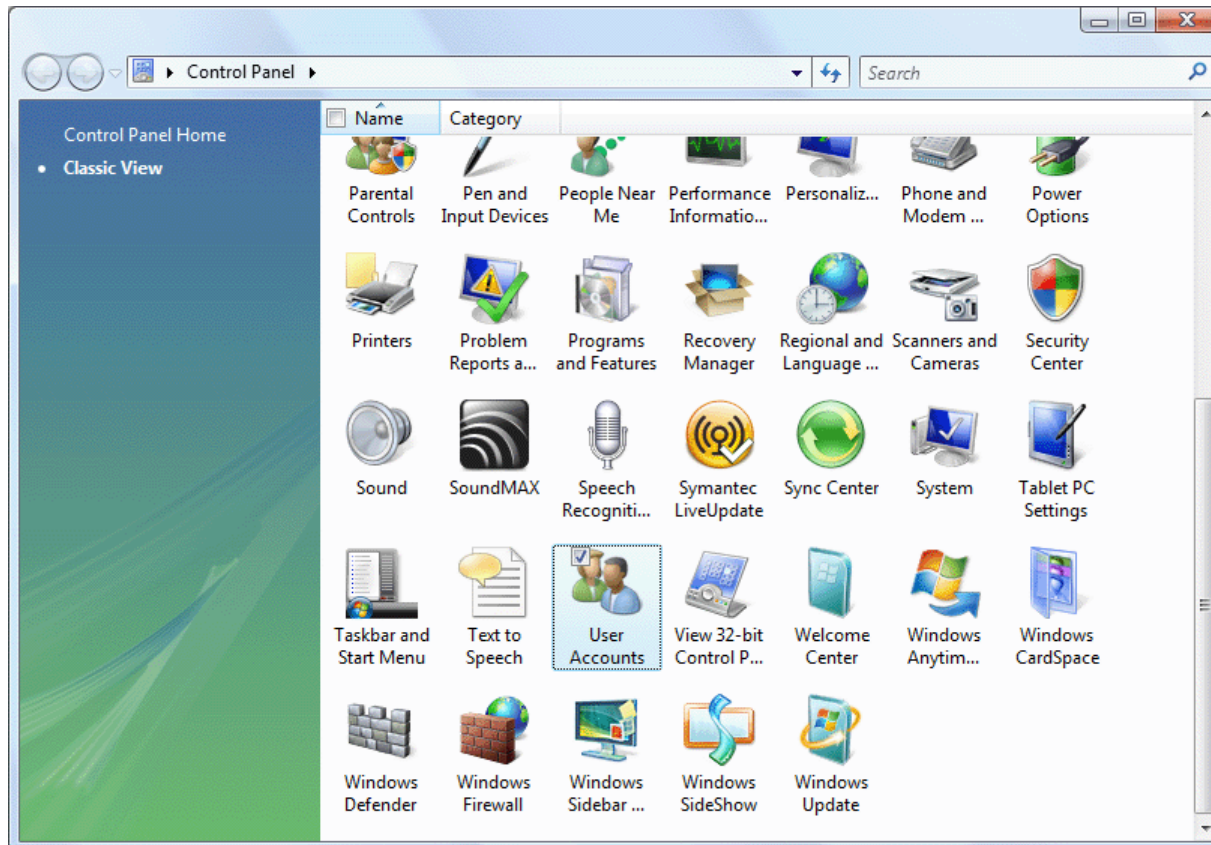
# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

**Standard View, step 4 of 4: Uncheck “Use User Account Control” if checked, click OK.**



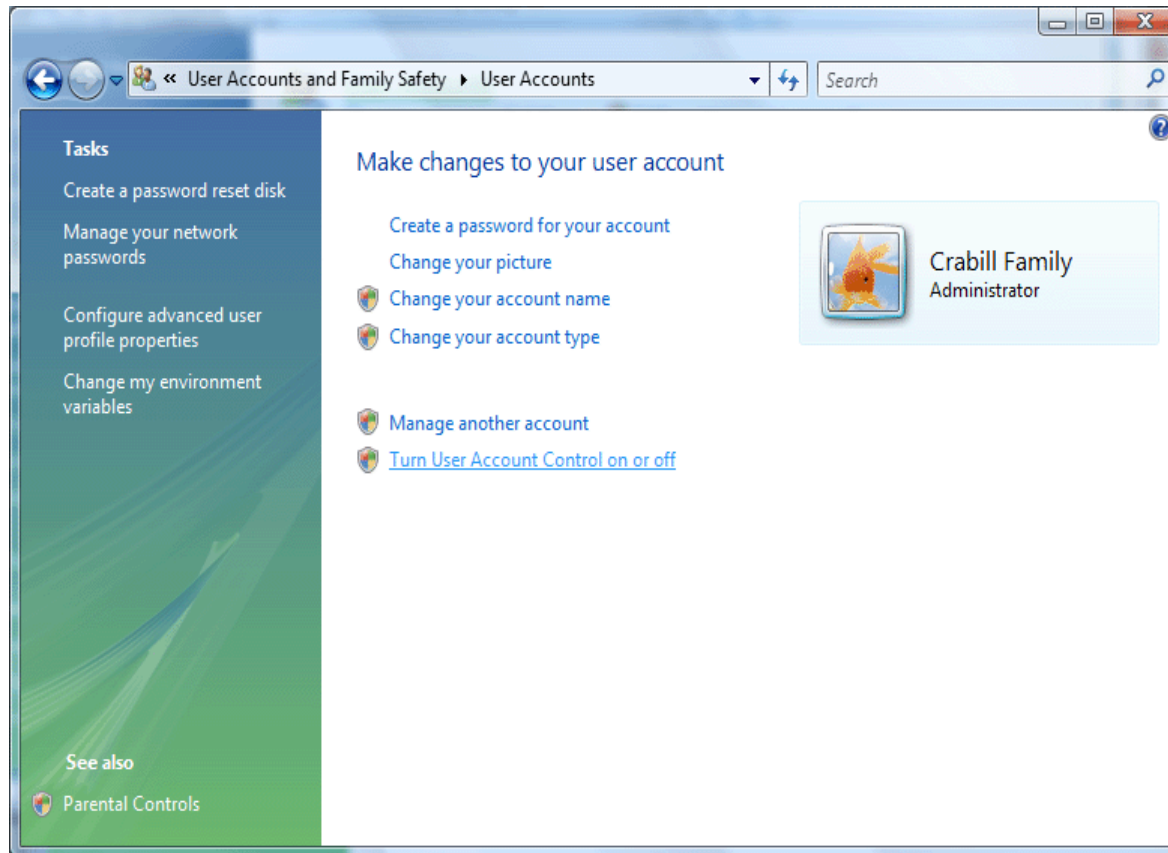
# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

## Classic View, step 1 of 3: Click “User Accounts”



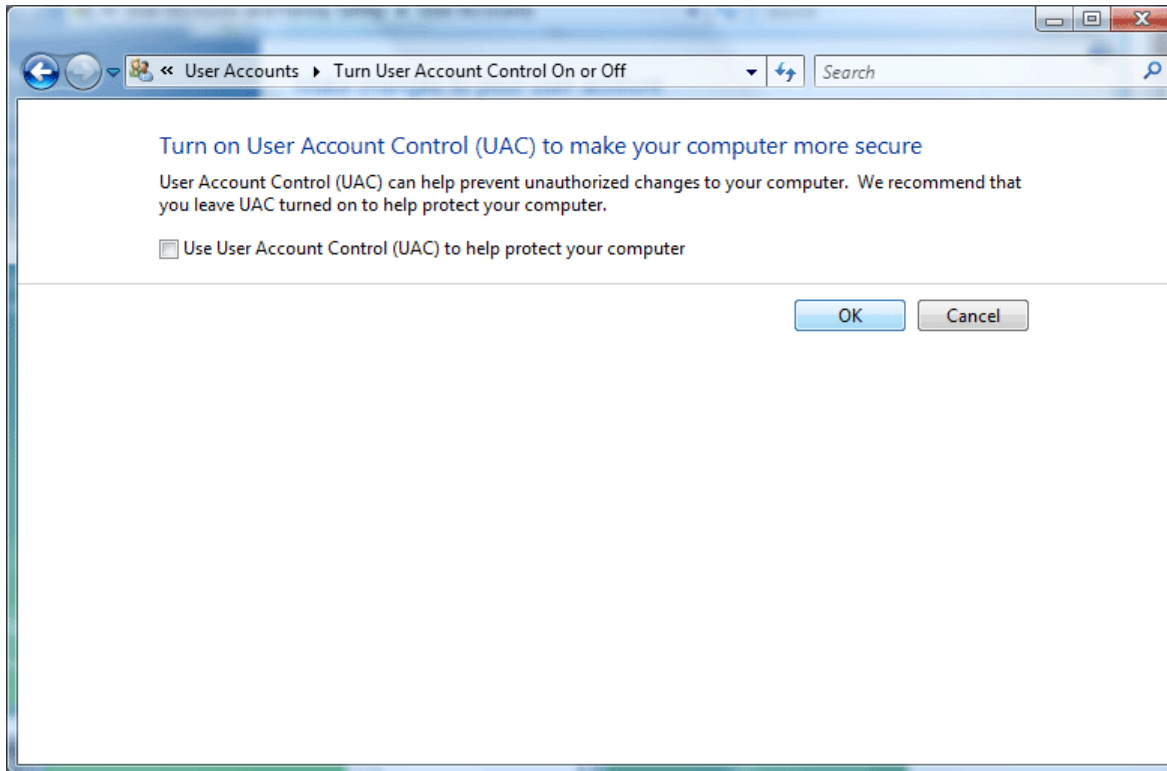
# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

**Classic View, step 2 of 3: Click “Turn User Account Control on or off”**



# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)

**Classic View, step 3 of 3: Uncheck “Use User Account Control” if checked, click OK**



# REQUIRED WORKAROUND (WINDOWS VISTA HOME ONLY)



**Windows Security Center may issue warnings once UAC is turned off. If desired, turn UAC on after installation.**