



WEBENCH® Allegro Connector

Getting started with WEBENCH® Allegro Connector – know how to install and use

Note: It is assumed that you have already installed OrCAD Capture CIS SPB 16.6 or higher. If not, please install it before proceeding further.

Download WEBENCH® Allegro Connector

[WEBENCH Allegro Connector C1.3.2-S4.3.0](#)

16 Feb 2015

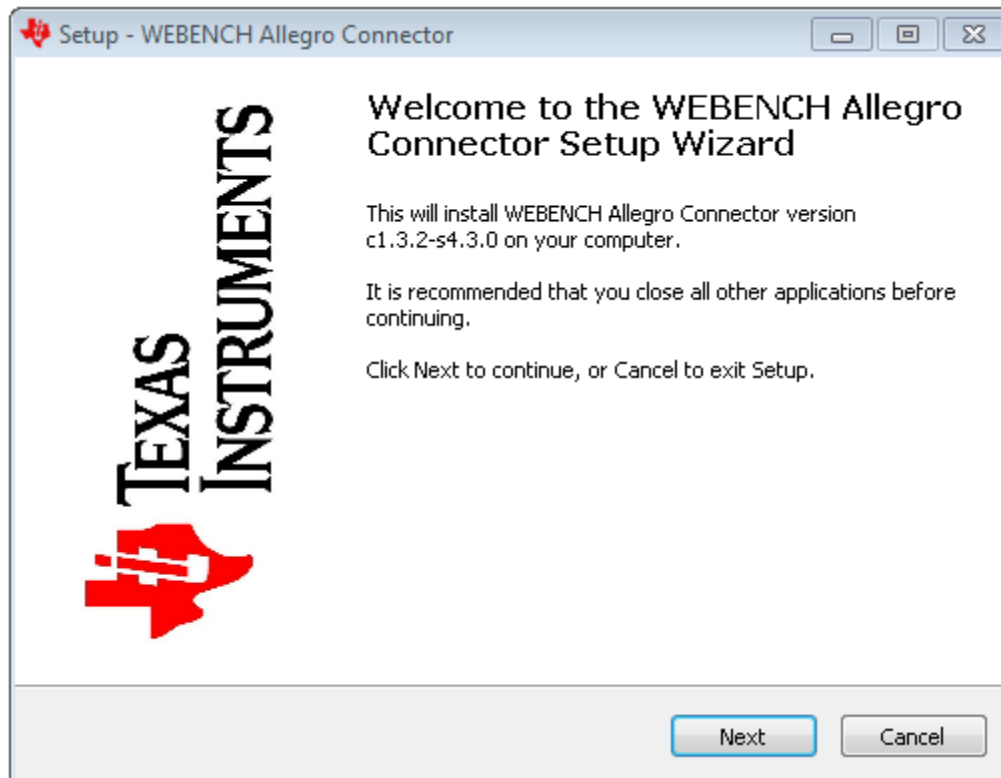
Size: 4,26,88,862 (40.7 MB)

Minimum System Requirements

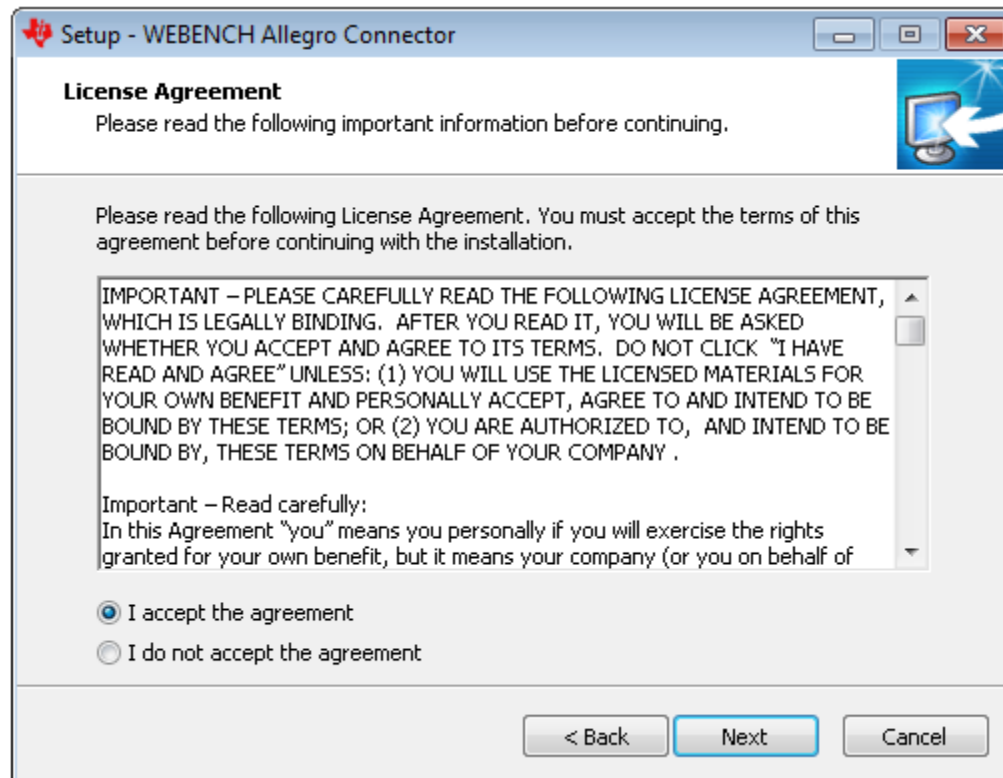
- 1 Ghz or higher processor
- 1 GB of memory
- 5 GB of hard disk space.
- Windows XP, Windows Vista or Windows 7
- For integration: Allegro 16.6

WEBENCH® Allegro Connector setup installation

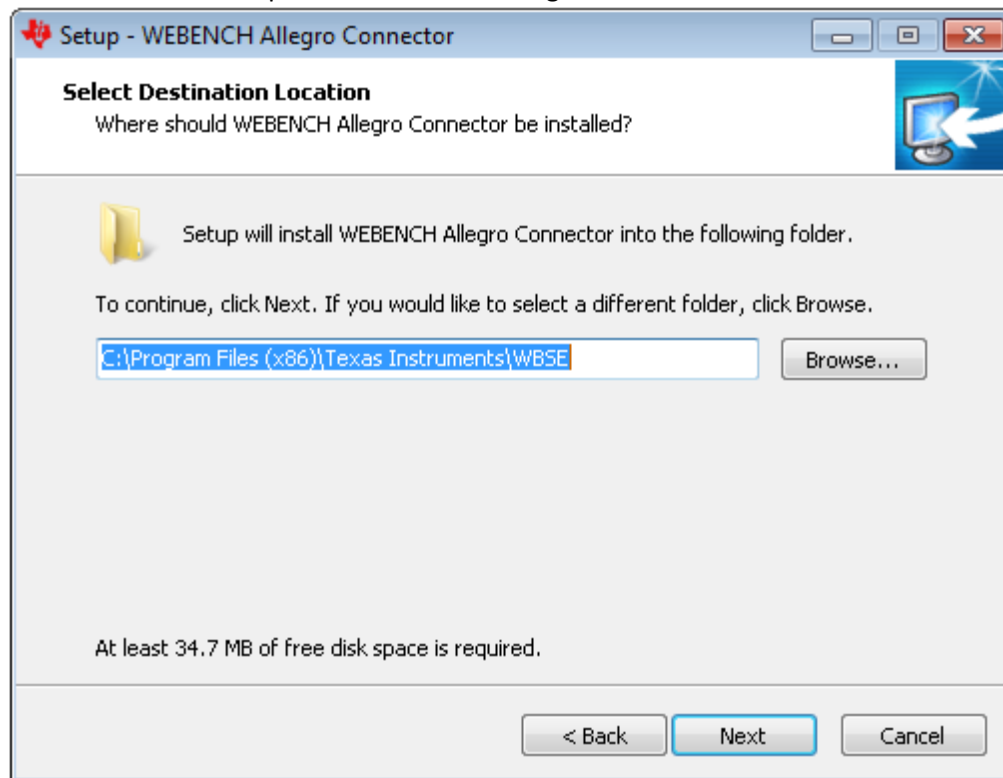
- Download the WEBENCH® Allegro Connector installer.
- Execute the installer file as administrator. It is recommended that you close all instances of Allegro while installing the connector.
- You should get a welcome screen. Press next to continue with the setup.



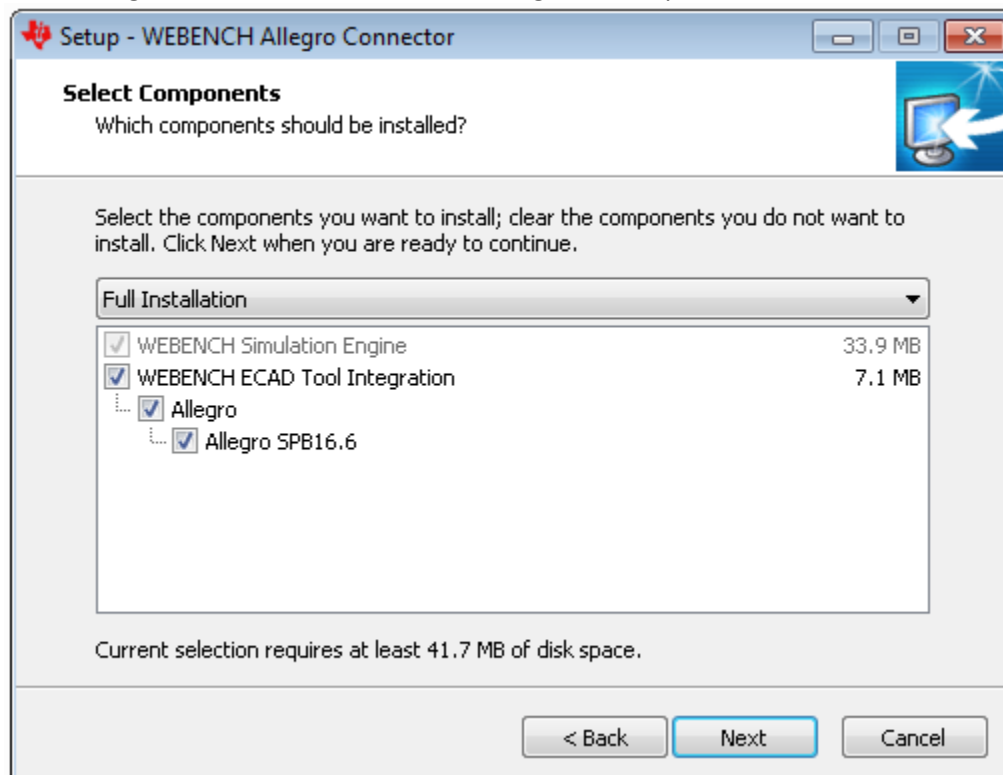
- Read and choose whether to accept the license. Acceptance of the license is required to continue the installation.



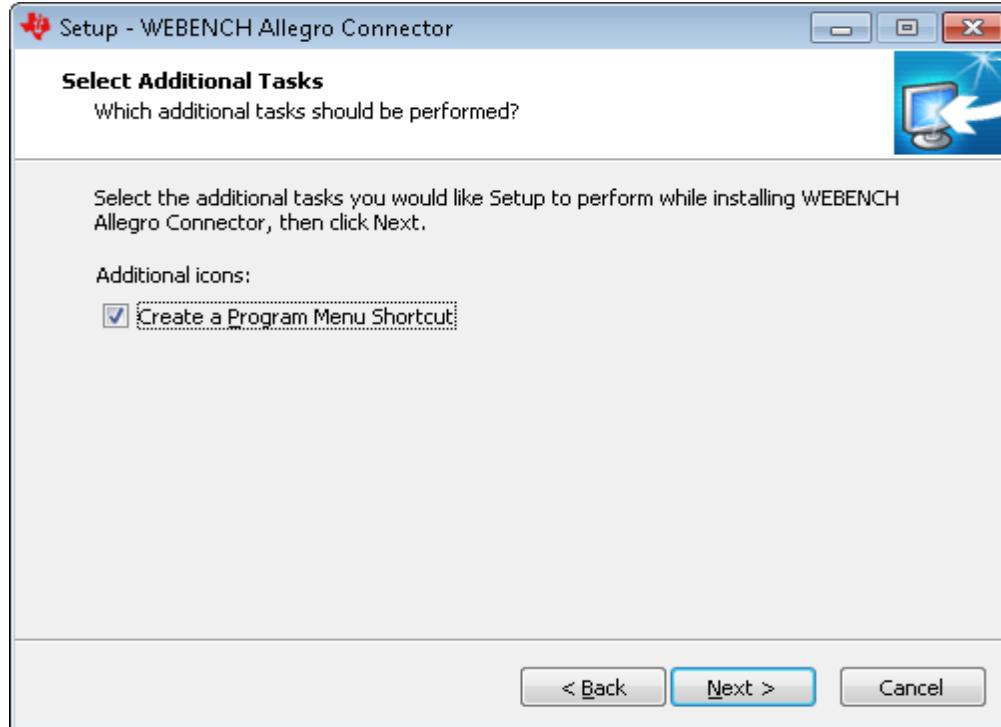
- Select the installation path for WEBENCH Allegro Connector.



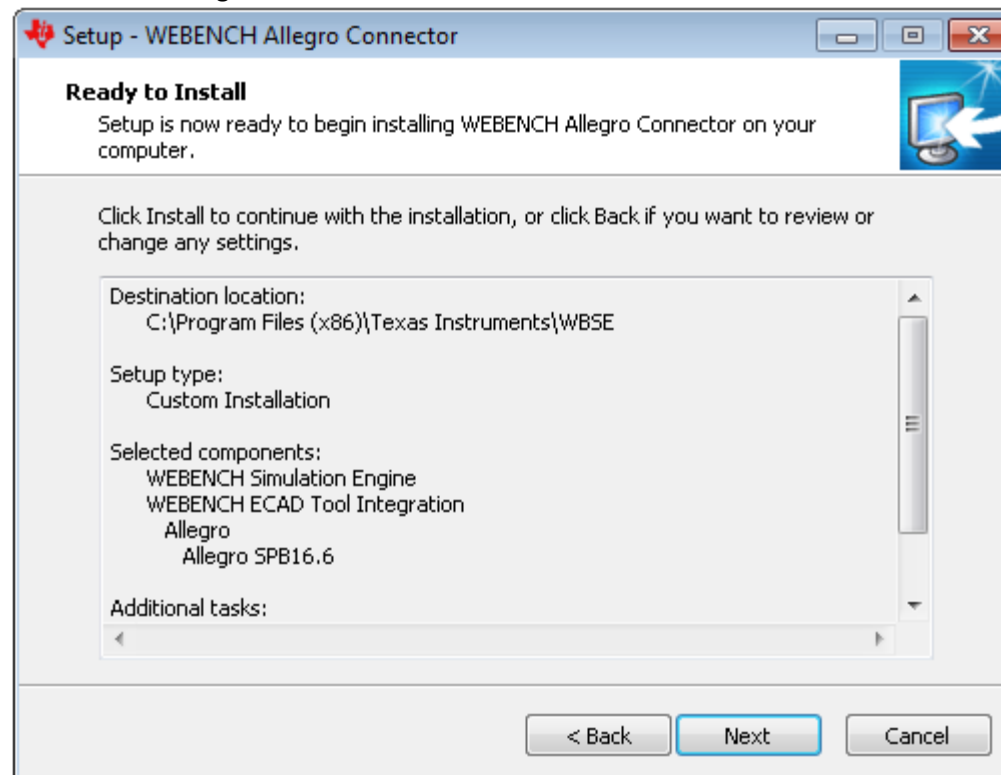
- Select Allegro Version 16.6 to install the integration scripts.



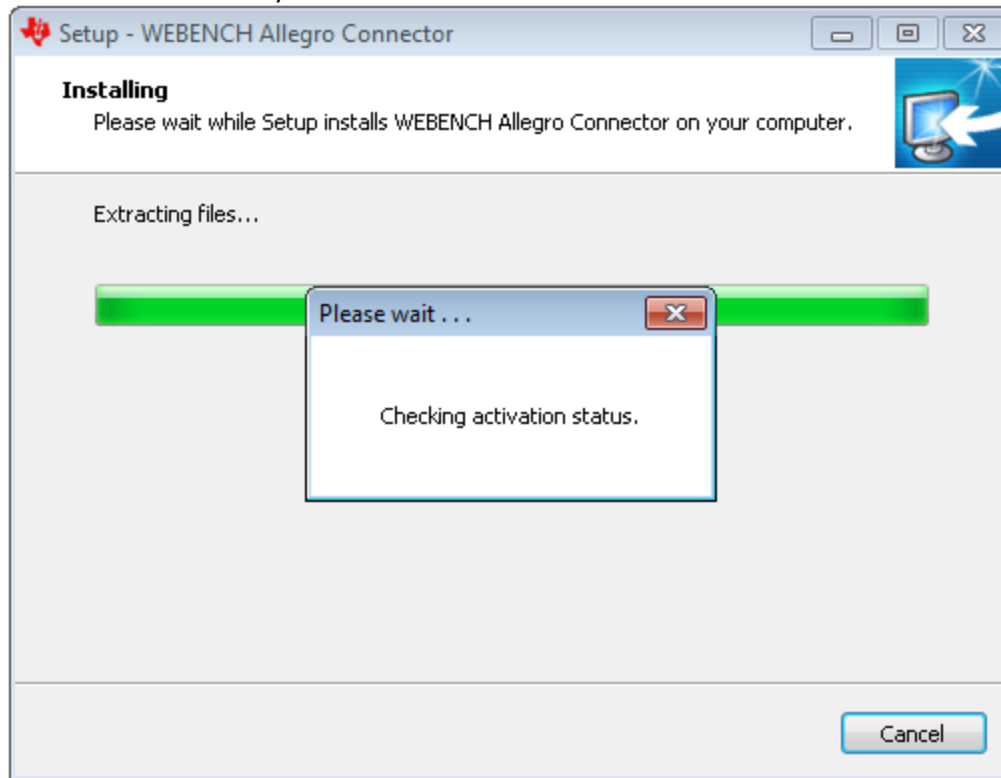
- Select **Create a Program Menu Shortcut** then click **Next**.



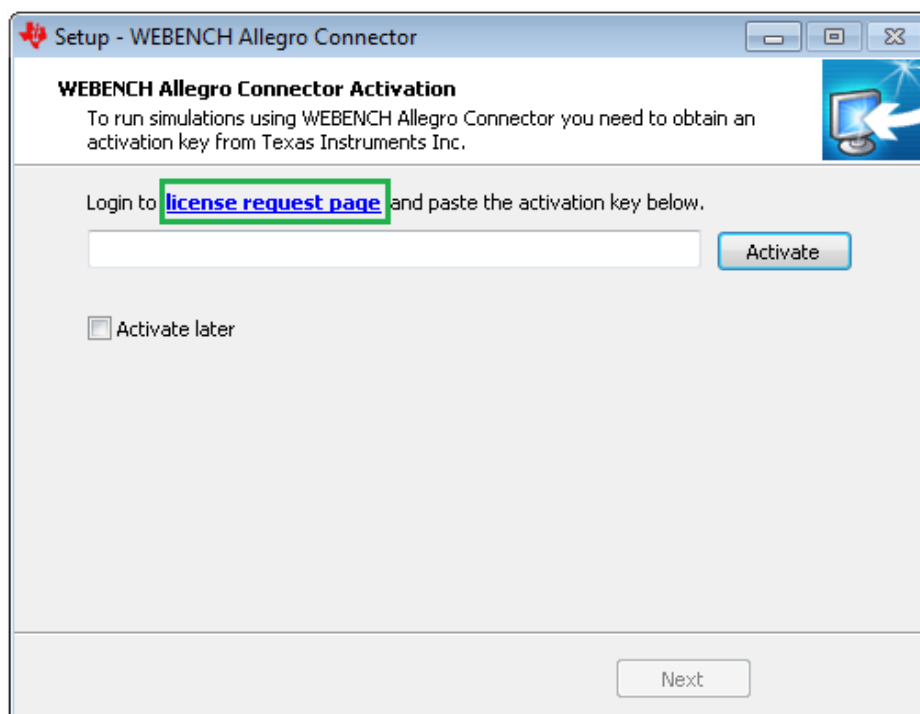
- Review the settings then click **Next**.



The valid activation key is checked after installation.



- If the Connector is not activated, click on license request page link to get the activation key.



When the license request page opens up, enter your myTI user credentials and login.

The screenshot shows the myTI Account page on the Texas Instruments website. The page is divided into two main sections: 'Existing myTI user?' and 'New user? Register for free:'. The 'Existing myTI user?' section includes a 'Your email address' field, a 'Your myTI password' field, a 'Remember me' checkbox, a 'Login' button, and a 'Forgot your password?' link. The 'New user? Register for free:' section includes a 'Your country or region' dropdown menu, a 'Login information' section with 'Your email address', 'Confirm email address', 'Create a password', and 'Confirm password' fields, a 'Remember me' checkbox, and a list of benefits on the right side. The benefits list includes: 'Order samples & tools', 'Get support on E2E', 'Simulate designs in WEBENCH®', 'Set alerts for products & software', and 'Personalize your web experience'. The Texas Instruments logo is visible at the top left, and the myTI logo is on the right side of the registration section.

WEBENCH: Log In

https://myportal.ti.com/portal/dt?provider=TIPassLoginSingleContainer<=myti&j5=2&j3=1&goto=http%3A%2F%2Fwww.ti.com%...

Everything Search

Products Applications & designs Tools & software Support & community Sample & buy About TI

myTI Account

Existing myTI user?

Your email address

Your myTI password

☒ Remember me

Login

[Forgot your password?](#)

Log in to use WEBENCH® Design Tools

New user? Register for free:

Your country or region

Select one

Login information

Your email address

Confirm email address

Create a password

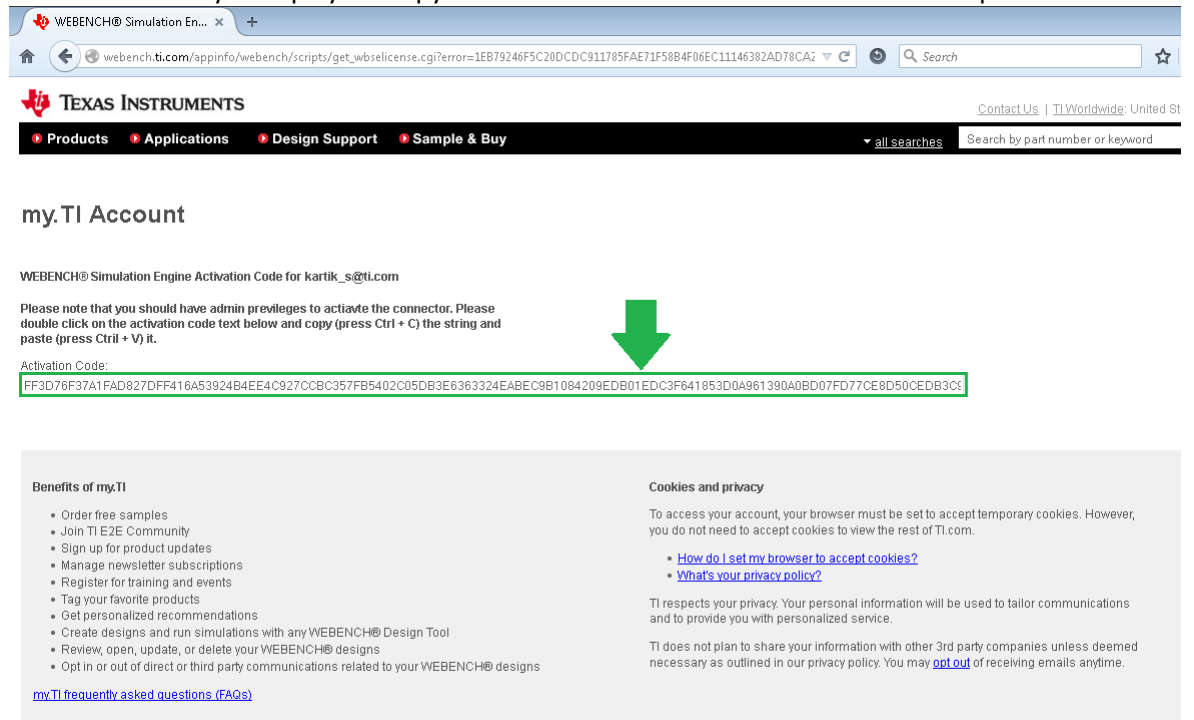
Confirm password

☒ Remember me

- Order samples & tools
- Get support on E2E
- Simulate designs in WEBENCH®
- Set alerts for products & software
- Personalize your web experience

myTI

- The activation key is displayed. Copy the activation code and use it in the next step.



WEBENCH@ Simulation Engine Activation Code for kartik_s@ti.com

Please note that you should have admin privileges to activate the connector. Please double click on the activation code text below and copy (press Ctrl + C) the string and paste (press Ctrl + V) it.

Activation Code:
 FF3D78F37A1FAD827DFF416A53924B4EE4C927CCBC357FB5402C05DB3E6363324EABEC9B1084209EDB01EDC3F641853D0A961390A0BD07FD77CE8D50CEDB3C9D

Benefits of my.TI

- Order free samples
- Join TI E2E Community
- Sign up for product updates
- Manage newsletter subscriptions
- Register for training and events
- Tag your favorite products
- Get personalized recommendations
- Create designs and run simulations with any WEBENCH@ Design Tool
- Review, open, update, or delete your WEBENCH@ designs
- Opt in or out of direct or third party communications related to your WEBENCH@ designs

[my.TI frequently asked questions \(FAQs\)](#)

Cookies and privacy

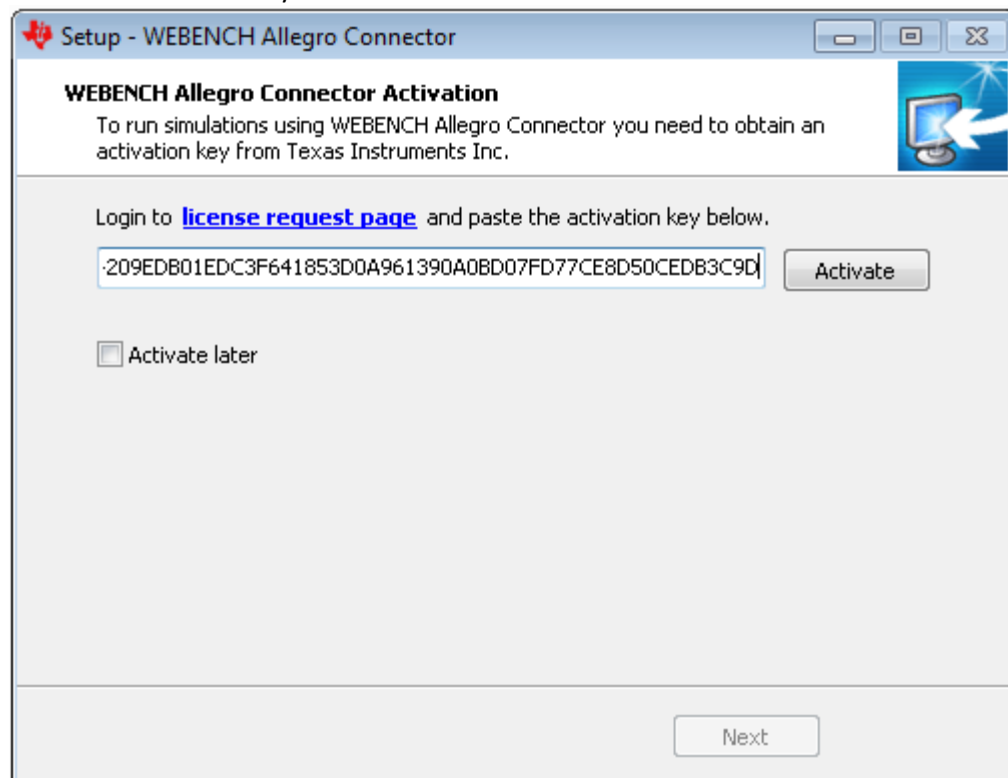
To access your account, your browser must be set to accept temporary cookies. However, you do not need to accept cookies to view the rest of TI.com.

- [How do I set my browser to accept cookies?](#)
- [What's your privacy policy?](#)

TI respects your privacy. Your personal information will be used to tailor communications and to provide you with personalized service.

TI does not plan to share your information with other 3rd party companies unless deemed necessary as outlined in our privacy policy. You may [opt out](#) of receiving emails anytime.

- Enter the activation key then click on **Activate**.



Setup - WEBENCH Allegro Connector

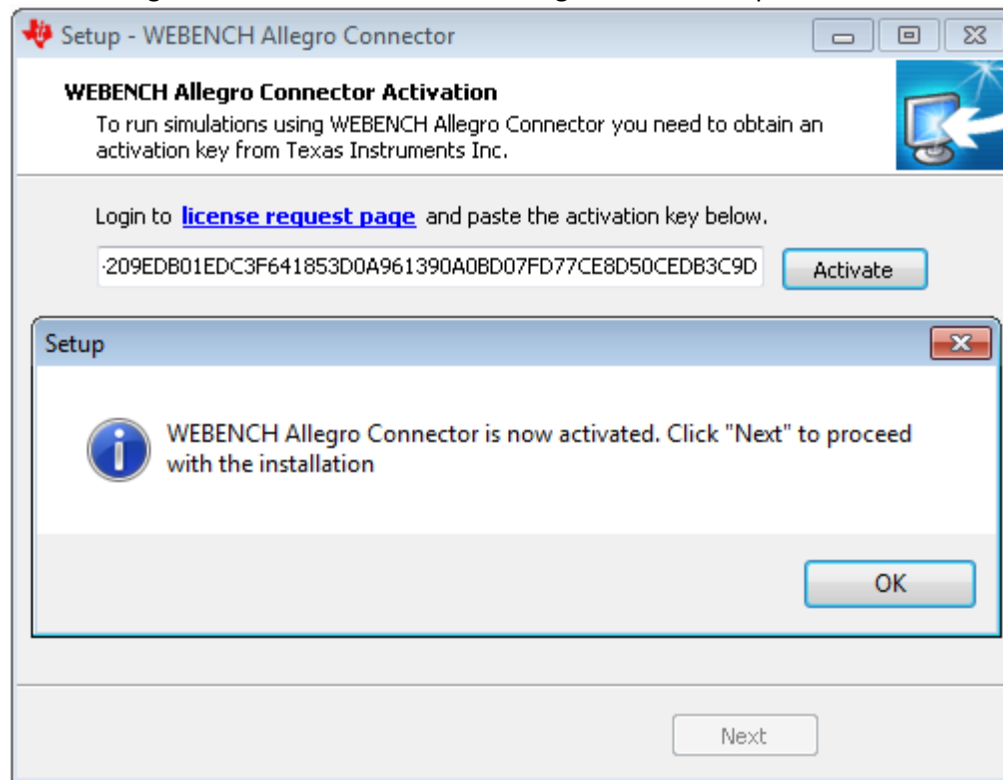
WEBENCH Allegro Connector Activation

To run simulations using WEBENCH Allegro Connector you need to obtain an activation key from Texas Instruments Inc.

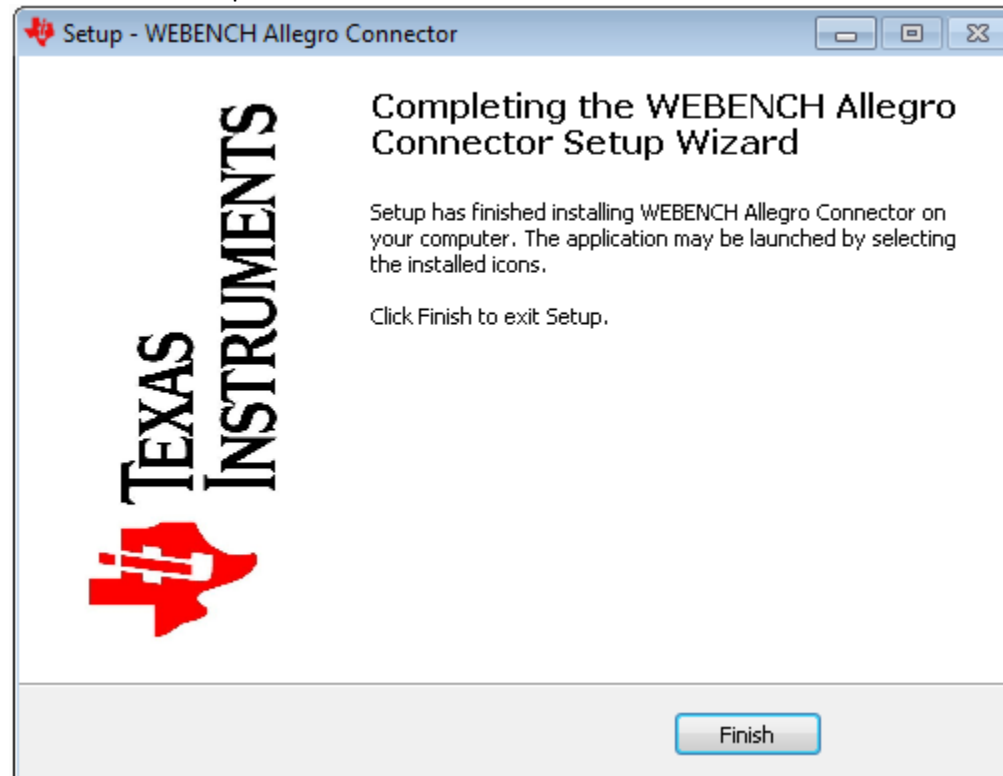
Login to [license request page](#) and paste the activation key below.

☐ Activate later

- You should get an activation successful message. Click **Next** to proceed.



- Click **Finish** to complete the installation.

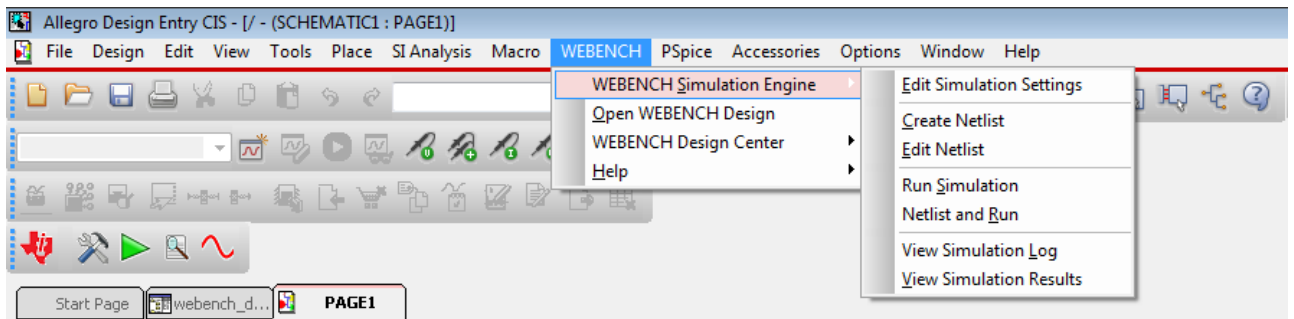


- You are ready to use WEBENCH Allegro Connector. You will find the WEBENCH menu and toolbar next time you open Allegro.

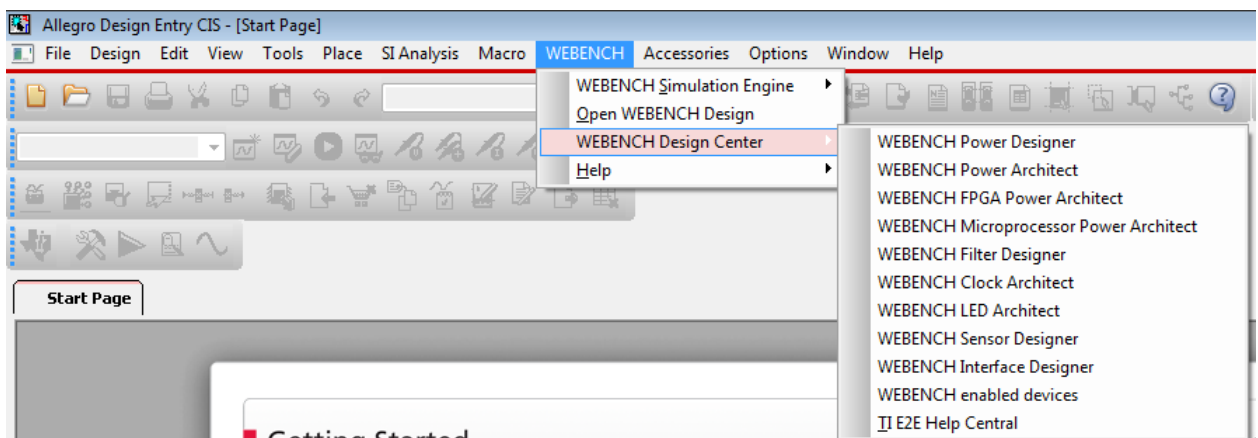
WEBENCH® menu

WEBENCH® menu is added to the menu bar in the Allegro Capture window. WEBENCH toolbar is also added in the tool panel.

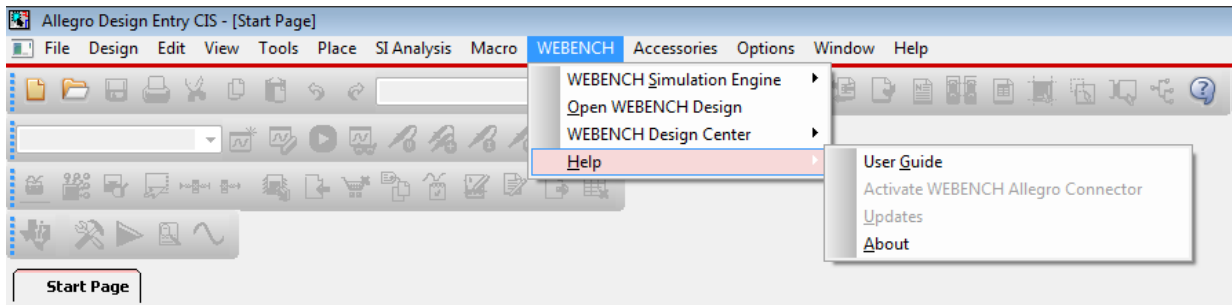
Menu -> WEBENCH -> WEBENCH Simulation Engine



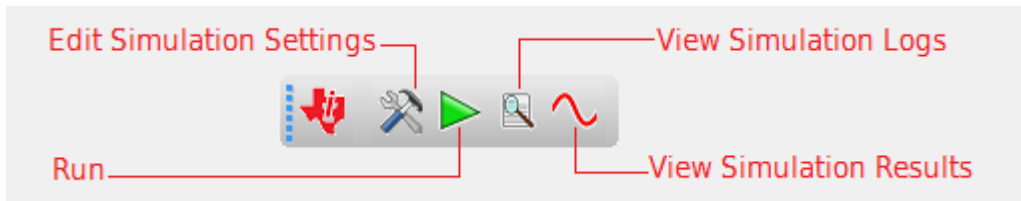
Select WEBENCH -> WEBENCH Design Center to see a list of WEBENCH tools



Select WEBENCH -> Help to obtain the user guide and version details



WEBENCH toolbar



The following options are present under the WEBENCH menu:

- **WEBENCH Simulation Engine**
 - Edit Simulation Settings
 - Create Netlist
 - Edit Netlist
 - Run Simulation
 - Netlist and Run
 - View Simulation Logs
 - View Simulation Results
- **Open WEBENCH Design**
- **WEBENCH Design Center**
 - Links to WEBENCH designer
 - Link to TI E2E Help
- **Help**
 - User Guide
 - Activate WEBENCH Allegro Connector (For future use)
 - Updates (For future use)
 - About

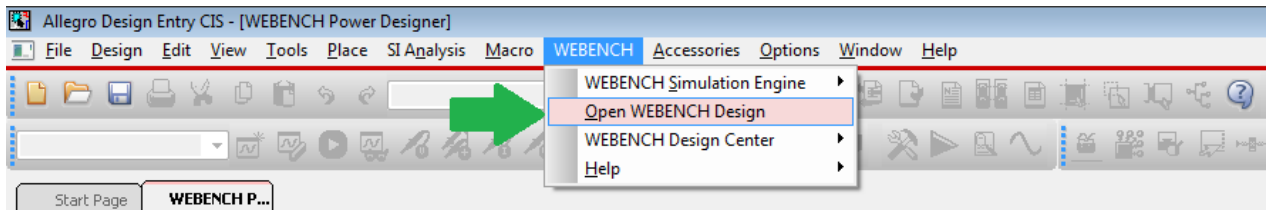
Exporting designs from WEBENCH®

You can export your power and filter designs from WEBENCH® tools as shown [here](#).

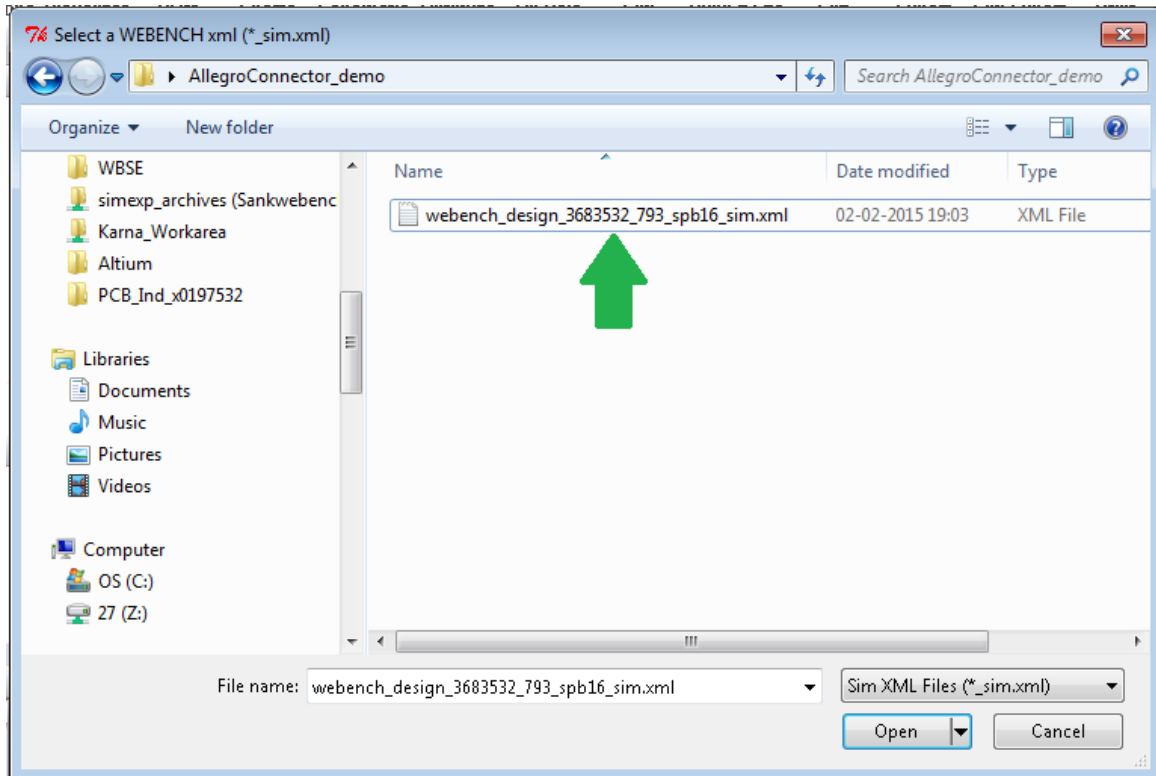
Importing WEBENCH® designs in Allegro®

The following is the procedure to open the design exported in the previous steps.

Go to the WEBENCH menu and select **Open WEBENCH Design**



Select the xml file.



[illegible]

SNVU482

Working with WEBENCH® Simulation Engine

Edit Simulation Settings

Edit Simulation Settings is used to create a simulation settings file and edit the simulation settings. This menu entry opens up a GUI, which allows the user to create new simulation settings file and edit the simulation parameters for existing simulation setting files.

Create Netlist

Create Netlist is used to generate a top level netlist. This netlist contains simulation parameters for WBSE simulation. These parameters are based on the values entered by the user in simulation settings editor window.

Edit Netlist

This option can be used to edit the generated netlist. This function enables the tuning of simulation parameters.

Warning: User may edit the parameters by **Edit Netlist** menu, but it is better to change the settings with the settings menu. Changes done through the edit netlist menu will be overwritten by the next **Create Netlist** request or **Netlist and Run** request.

Run Simulation

This function runs the edited netlist of an active simulation settings file. It looks for a netlist (TIS File) in the desired path and runs it. If the netlist is not present it generates a log message and asks the user to create a netlist to use the function.

Netlist and Run

This function generates a netlist and simulates it. At every request this function will generate a fresh netlist from the active simulation settings file and simulate it. This will lead to an overwrite of any edited netlist already generated.

View Simulation Logs

This can be used to view simulation logs for the last run of any active simulation profile(s).

View Simulation Results

This function is used to display the simulation results in AMS Simulator Window. In first run it only opens the result DAT file in AMS Window. In subsequent runs it plots the waveforms plotted in the last session.

Important Note: All AMS windows must be closed before using this function.

Simulation settings editor - UI components

Simulation settings editor UI can be opened from the **Edit Simulation Settings** menu item under WEBENCH Simulation Engine menu.

1. Includes tab

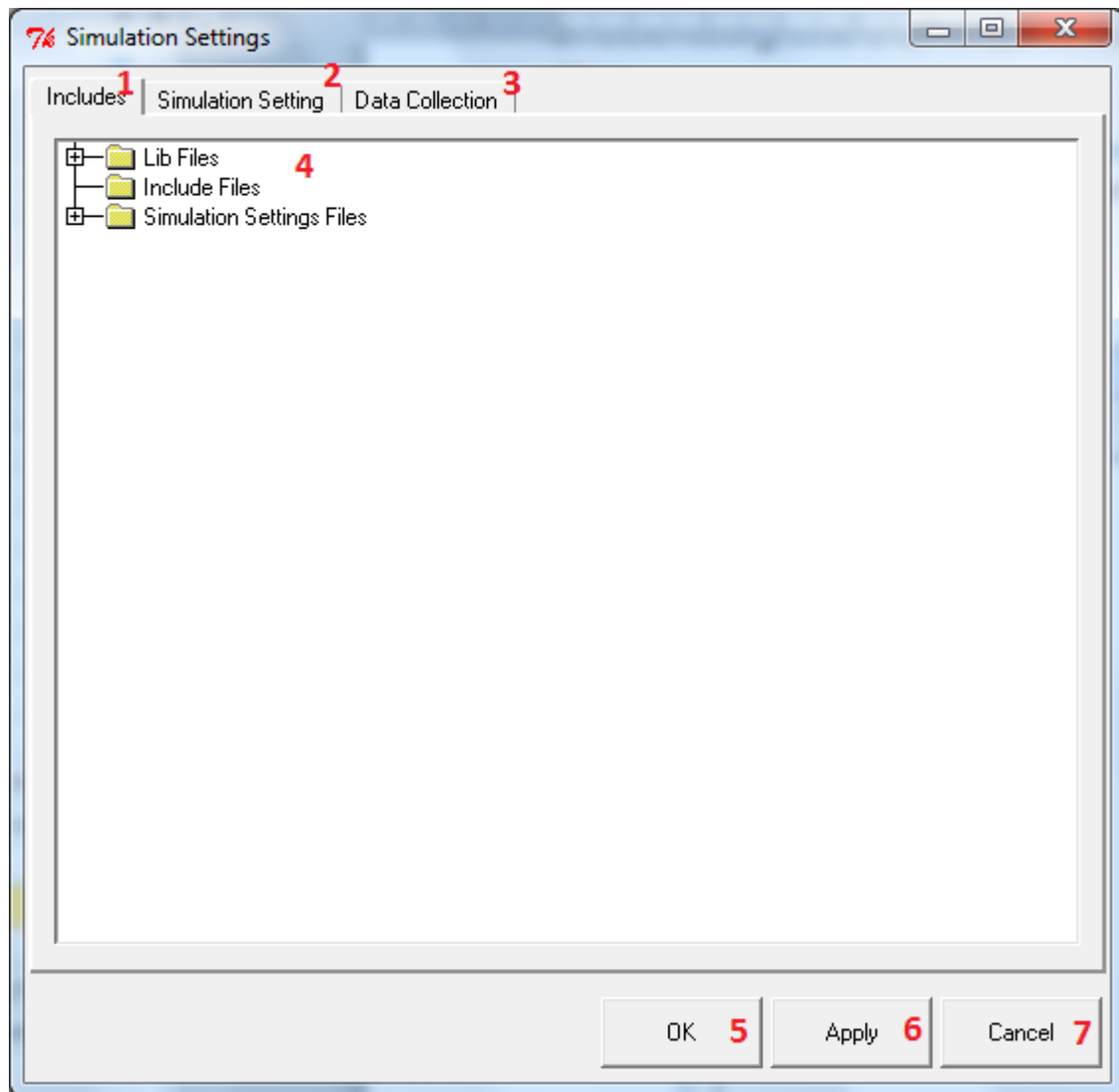


Fig: The Simulation Setting Editor UI – Main window

- 1 – Tab displaying the tree structure for all the files included in simulation of the project
- 2 – Tab for editing the simulation settings for an active simulation profile
- 3 – Tab with options related to simulation data collection
- 4 – Project tree displaying the files included in the project

Include Files:

WEBENCH Simulation Engine does not require you to put everything it needs for the simulation in one single input file. Some pieces of data generated by others can be included as well, provided the data is available on your network. These could be:

- Models you use on your device instances; these are commonly known as "model files".

- Sub circuits (stand-alone netlist) of one or more building blocks of your design
- Analysis descriptions and/or options that have been fine-tuned and stored in a file.

Lib Files:

The Lib files references a model or a sub circuit library in another file. It is similar to the include command.

Simulation Settings Files:

Contains simulation settings for a profile

5 – **OK** saves the settings and closes the UI

6 – **Apply** saves the settings.

7 – **Cancel** closes the UI without saving.

2. Simulation Setting tab

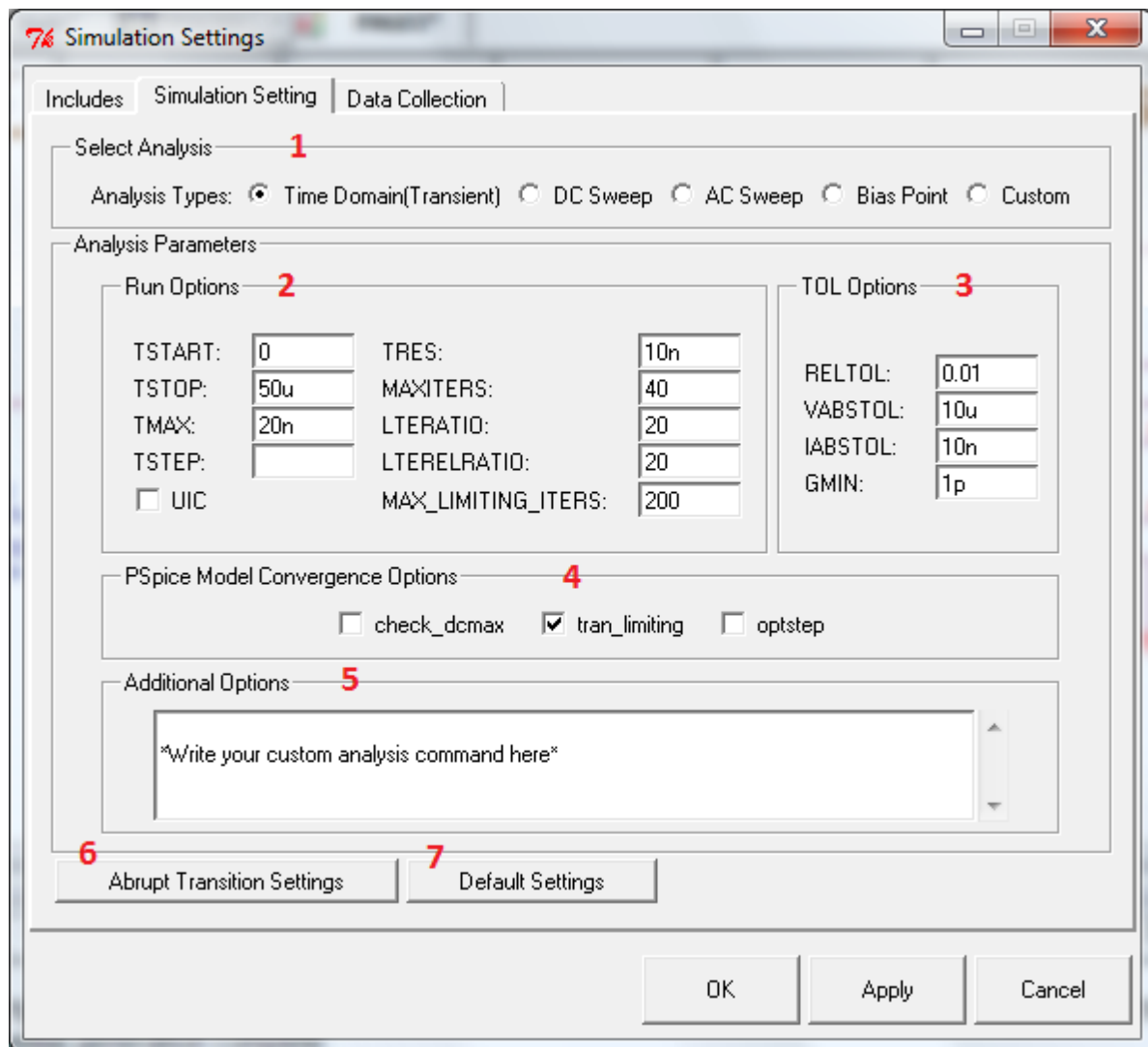


Fig: The Simulation Setting Editor UI – Main window

1. Select the analysis to be performed. Selecting **Custom** enables the user to utilize SPICE commands directly (in netlist format).
2. **Run Options** is used for setting the options applicable to a selected analysis
3. **TOL options** are used for SPICE tolerance settings for the simulation
4. **PSpice Model Convergence Options** are used to simulate the PSpice behavioral model properly

5. **Additional Options** text box allows the user to enter custom commands specific to the selected analysis. Data entered in this text box will be directly appended to the created netlist. Please follow the syntax as described below to avoid any errors while simulating.

Use the following syntax to append to the selected analysis statement

```
+ <Parameter_Name1>=<Parameter_Value1>
+ <Parameter_Name2>=<Parameter_Value2>
+ ...
```

Use the following syntax to add parameter to .options statement

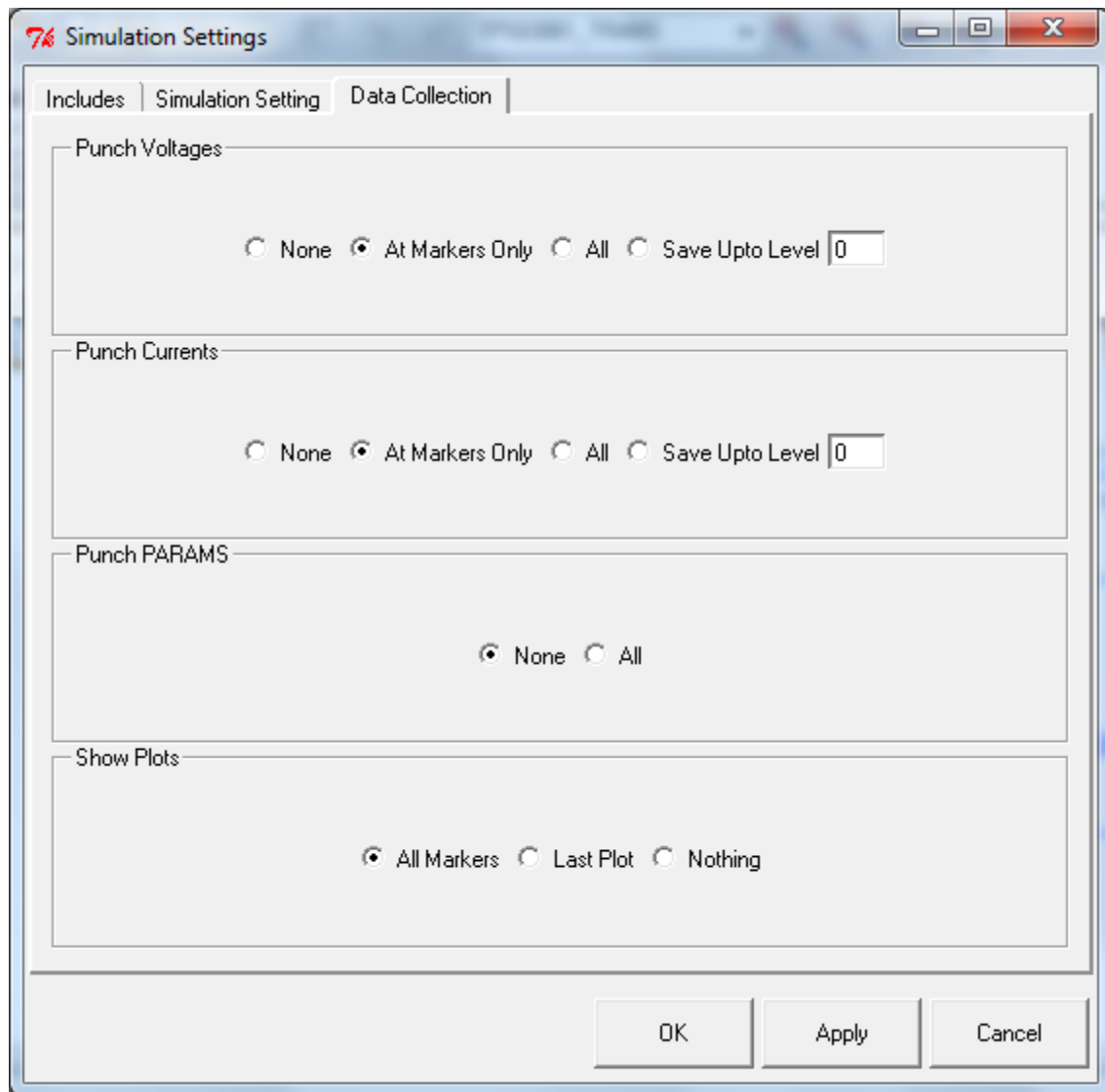
```
.options <Parameter_Name1>=<Parameter_Value1>
.options <Parameter_Name2>=<Parameter_Value2>
.option ...
```

Note: Please follow the order as above. First, all simulation parameters, if any, and then .option parameters

6. **Abrupt Transition Settings** for adjusting the simulation parameter for simulation of a model with abrupt transitions (loose setting).

7. **Default Settings** for adjusting the simulation parameter to default settings.

3. Data Collection tab



This tab provides the options related to simulation data collection. The user can select the punch options for voltages, currents and PARAMS.

Save Upto Level:

'0' - punch signals at current level (top level of the netlist)

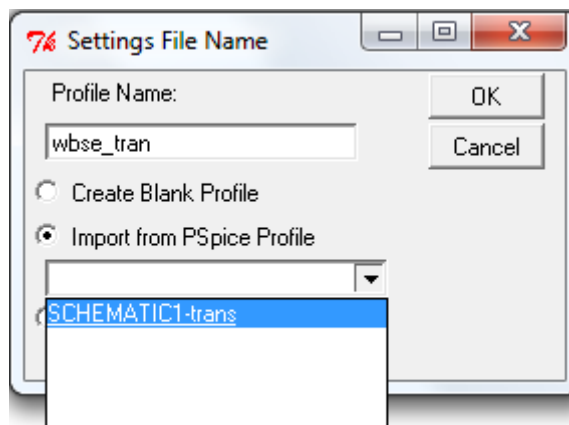
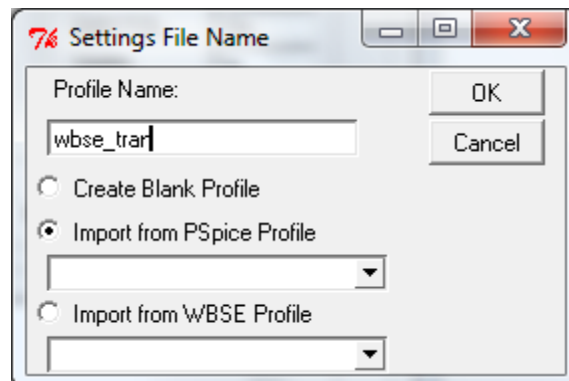
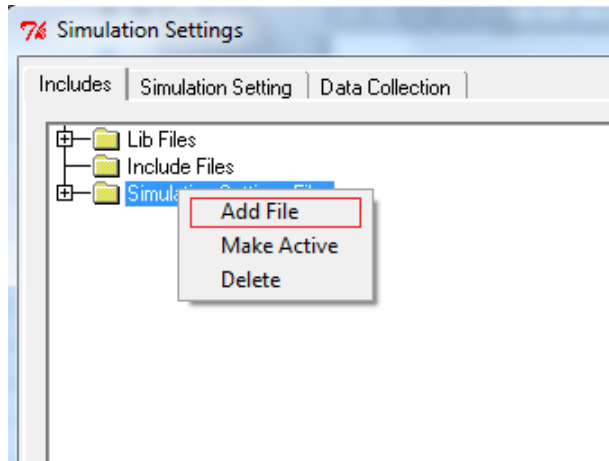
'1' - punch signals at current level and one level below it and so on.

Creating a simulation setting file

When the simulation settings editor user interface is used for the first time for an Allegro project, only the **Includes** tab is enabled. To start simulation, the user needs to create the simulation setting file. A simulation setting file can be created by:

- Right click on the **Simulation Settings Files** icon in the project tree and click on **Add File**.
- This will open a pop-up window with options for creating a new simulation settings file.
- Enter the profile name for the simulation settings file. This will create a simulation settings file for root schematics in the Allegro design.
- **Create Blank Profile** generates a profile with WBSE default options. Importing from the PSpice profile allows the user to import simulation parameters from a PSpice (SIM file). The user can also import settings from a previously created profile for the same component. The simulation profile for import can be selected from the combo box in the window. The image below shows importing from a PSpice profile.

Note: Simulation profile, when imported from PSpice profile, will take parameter values that are compatible with WEBENCH Simulation Engine. Other parameters are forced to their default values.



- Click **OK** and a new simulation settings file is created. The newly created file is the active profile for the simulation.

Note: The active profile is the WBSE simulation settings file, which will be used for all operations like **Create Netlist**, **Run** and **View Results**. The **Simulation Setting** and **Data Collection** tabs are disabled if no active profile is present.

- A simulation setting file can be changed or made active by right clicking on the profile name in the Simulation Setting File tree and select **Make Active**.

Note: There is no distinction between active and non-active profiles so be sure you know which profile is active before running the simulation.

- Once a simulation profile is created and made active, the simulation parameters and options can be edited in the **Simulation Setting** tab.

Click on **Apply** to save the current settings. Then click **OK** to save the settings and close the user interface.

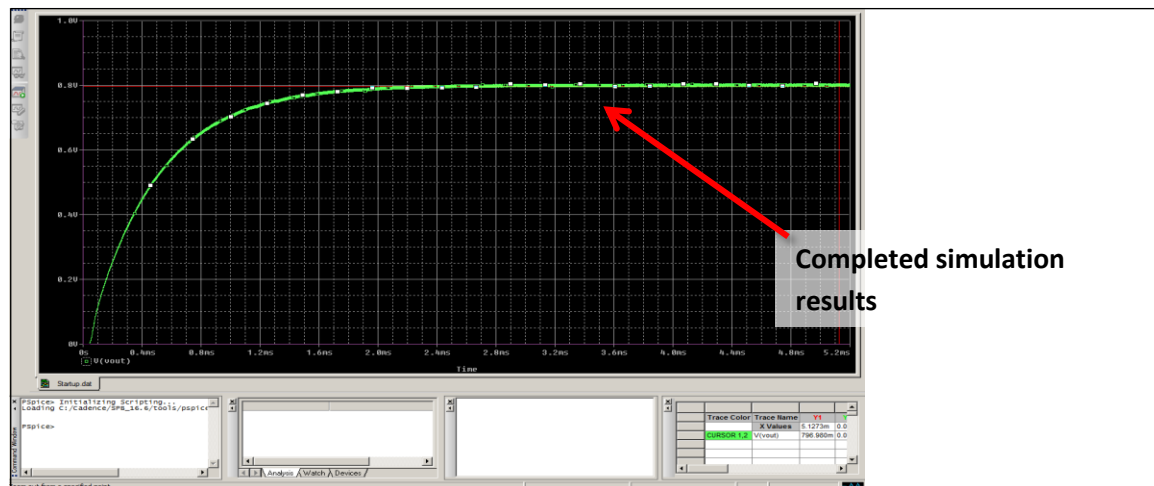
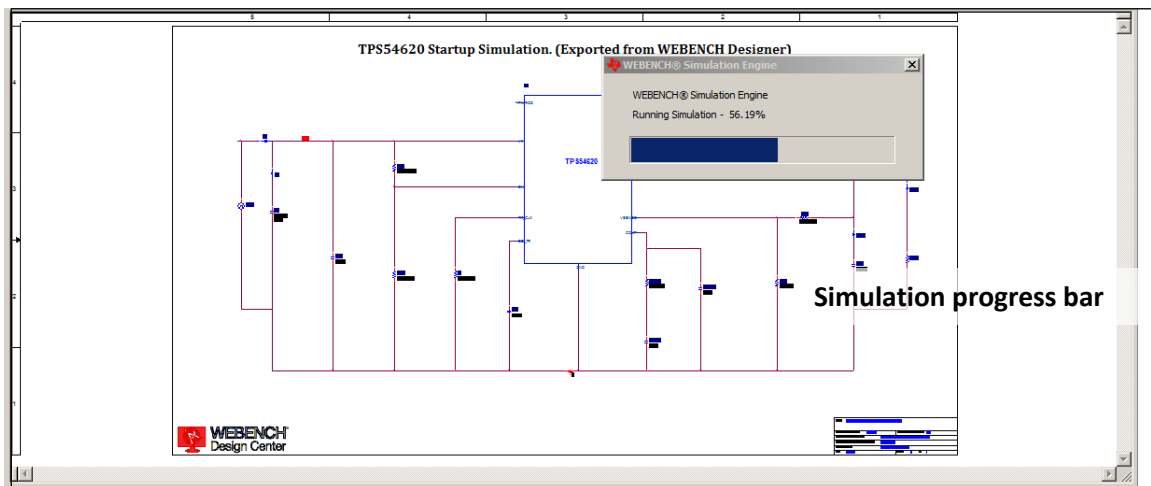
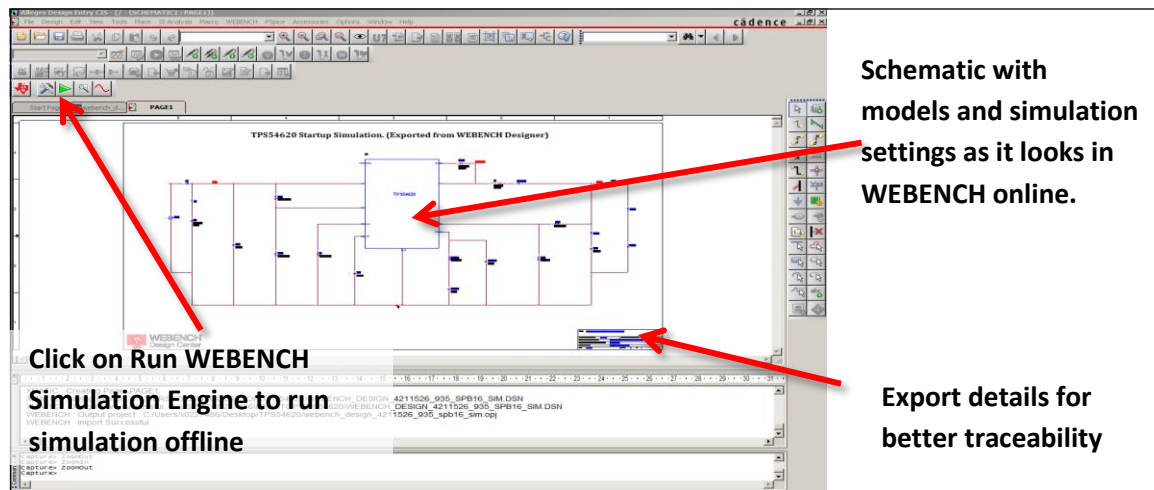
Editing netlist and running simulations

Editing netlist is not recommended if you are not comfortable with the SPICE netlists. Incorrect editing may break the netlist and may result in simulation errors. If any additional command needs to be added, it is recommended to add it in the **Additional Options** area.

To edit the netlist and simulate the edited netlist

- Go to **Create Netlist**
- Go to **Edit Netlist**. Modify the analysis parameters based on your design requirements.
- Save and close the netlist.
- Go to menu **Run**.

The netlist edits are overwritten if **Create Netlist** or **Netlist and Run** are used after editing the netlist. Using the **Additional Options** area for custom commands saves the commands with the simulation setting file and is not affected by other operations.



Getting Help

- WEBENCH® Allegro Connector User guide will be installed by the setup program. User guide can be accessed from **Start Menu -> Programs -> Texas Instruments -> WEBENCH Allegro Connector -> Documents -> User Guide**.
- The User Guide can also be accessed from the WEBENCH menu in the Allegro Capture Window. Go to menu **WEBENCH->WEBENCH Simulation Engine-> Manuals-> User Guide**.
- For help on simulating a PSpice model, refer to:
http://e2e.ti.com/support/development_tools/webench_design_center/
- For help on Allegro-related issues, refer to Allegro help manuals.

Feedback

Please submit feedback to the [WEBENCH E2E Community](#).

[See our disclaimer](#)

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