



TDK Component Library for Cadence[®] Allegro[®] PCB PI option / PDN Analysis

ver. 2015.07

TDK Corporation
Passive Application Center

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< Applicable condition >

The data in this library is obtained under the condition of 25°C, no DC bias, and small signal operation. Proper result might not be obtained if your condition is different from the above one.

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< How to use the library with Cadence Allegro PDN Analysis >

How to use the library with Cadence Allegro PCB PDN Analysis is shown in the following pages.

< How to use the library with Cadence Allegro PCB PI option >

Please refer to the instruction manual of Cadence Allegro PCB PI option or contact the address below.

Cadence Design Systems, Inc. : http://www.cadence.com/cadence/contact_us/

How to install the library to PDN Analysis

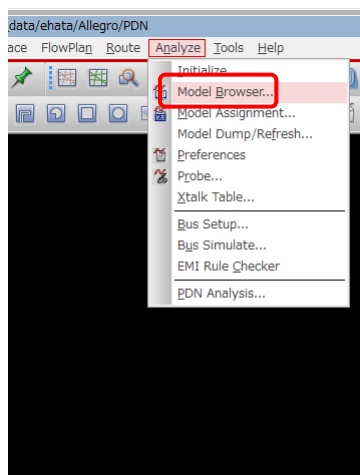
< Unzip the install file >

1)Unzip the zip-formatted install file (e.g. tdk_library_for_allegropi_v201507.zip) and save it at an arbitrary directory.

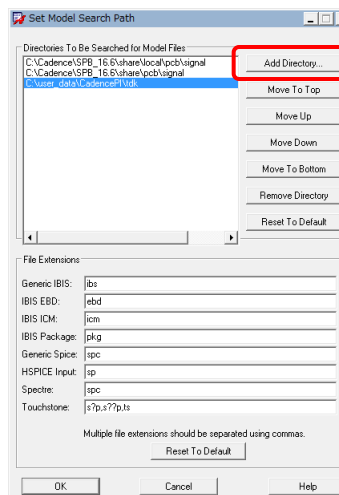
< Registration of the library folder >

- 1)In SigXplorer, select Model Browser... form Analyze menu, then SI Model Browser window opens.
- 2)Click the Set Search Path, then Set Model Search Path window opens.
- 3)Click the Add Directory... and select the unzipped library folder.
- 4)After the registration, available model name will be shown in SI Model Browser window.

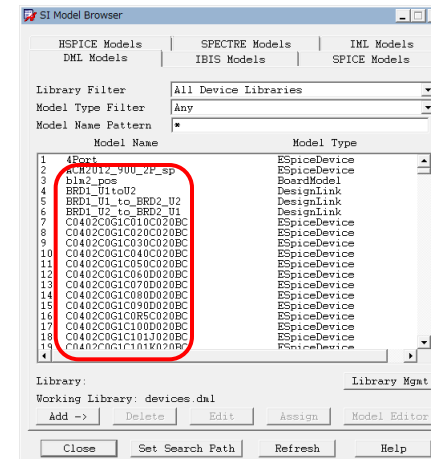
1)Analyze>Model Browser...



3) click Add Directory.... button to register the library folder



4)names of available model are shown



2)Set Search Path button

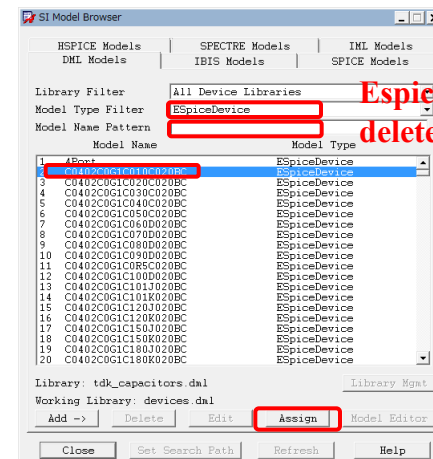
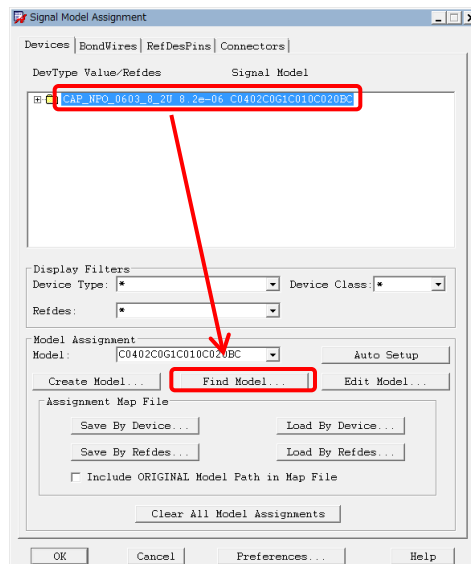
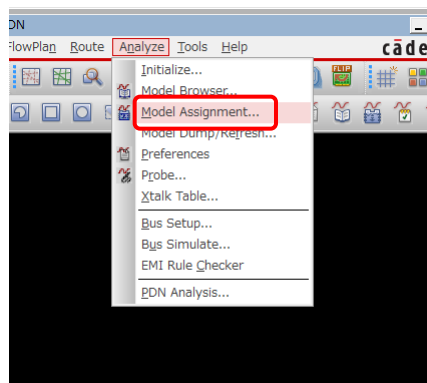
< Placement of the model >

- 1) Open a PCB data. Select Model Assignment... from Analyze menu, then Signal Model Assignment window opens. Select the part that you want to assign the simulation model with and click Find Model button.
- 2) In SI Model Browser window, select “EspiceDevice” for Model Type Filter. Delete the content of Model Name Pattern and click the Tab key, then available models are listed. Select the model that you want to use and click Assign button, then simulation model is assigned with the selected part.

1) Analyze > Model Assignment...

2) Select the part and click Find Model...

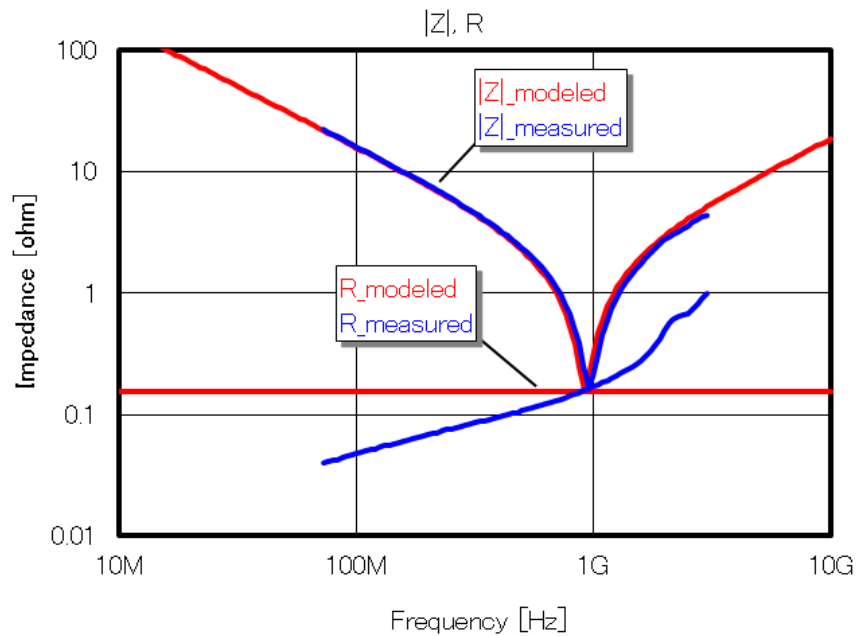
3) Select the model



< Comparison between equivalent circuit models and measured data >

Comparison between the equivalent circuit models and measured data are shown in the following. Since the equivalent circuit models well match to measured results as shown in the following pages, simulation result that matches to actual property can be obtained.

Capacitor "C0603CH1H101J030BA"



Capacitor "C1005X5R1A105K050BB"

