

How to load external library (PowerSI)

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Component Solution Division

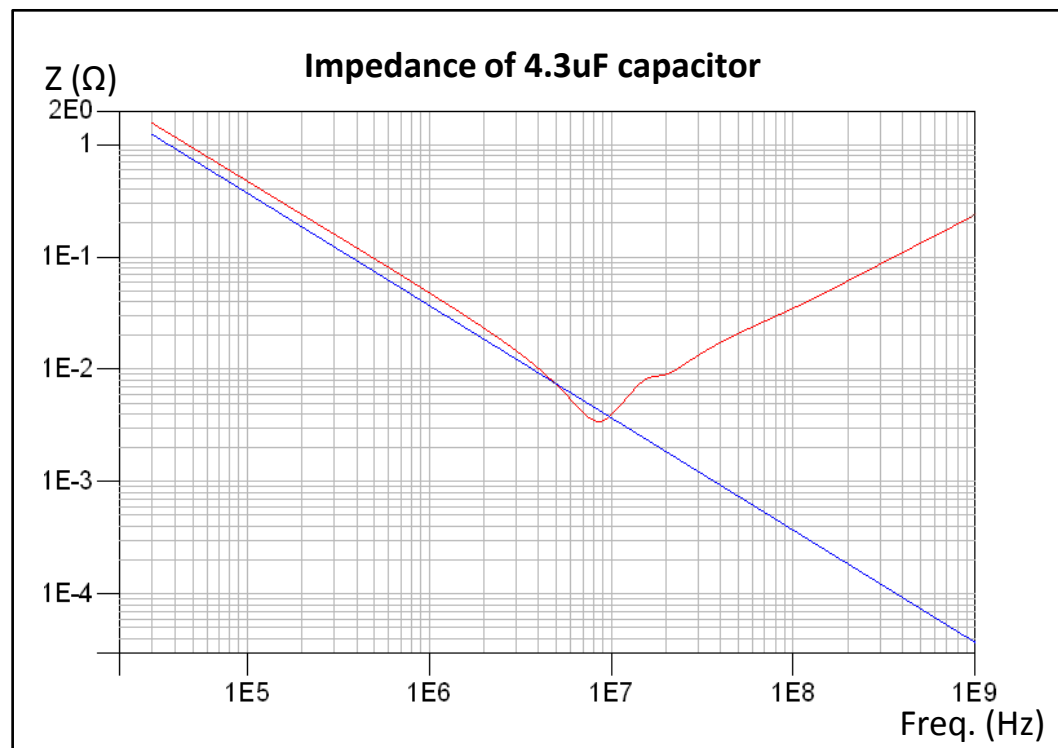
PowerSI setup & simulation

● Link s2p files to components

- **Link s2p files to component**

- When user loads layout file, all component are Lumped.
- Lumped components have ideal characteristics
- For accurate simulation, use s-parameter or ckt circuit model.

— s2p file (s-parameter)
— Lumped component



PowerSI setup & simulation

Link library package

The image illustrates the process of linking a library package in PowerSI through four sequential steps:

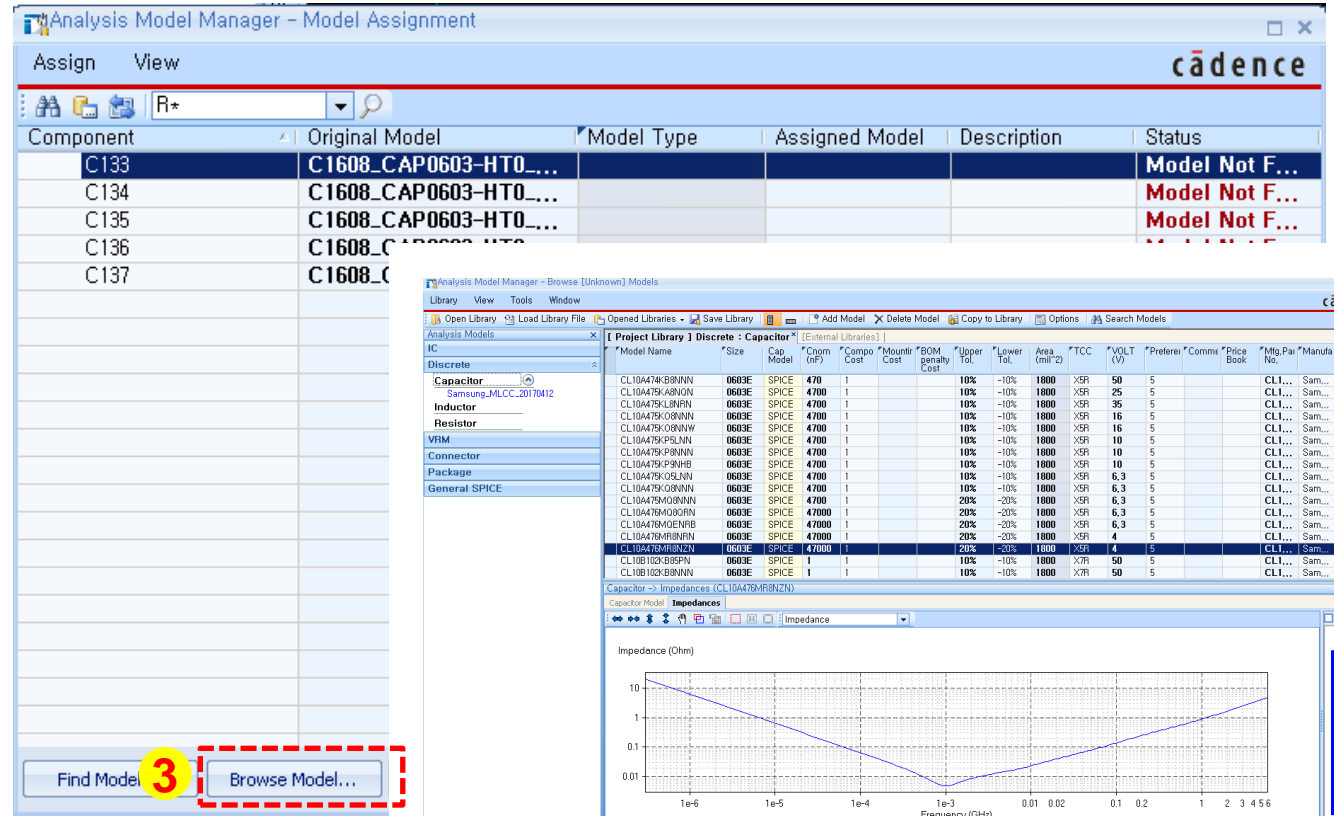
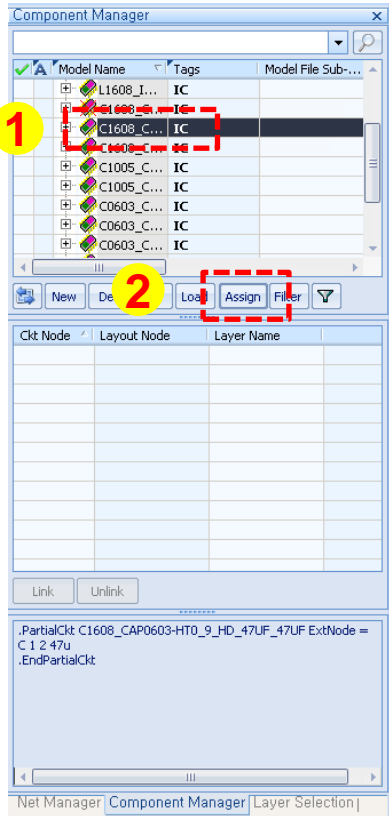
- Step 1:** The user navigates to the **Tools** menu and selects **Analysis Model Manager...**.
- Step 2:** The **Analysis Model Manager** window opens, and the **Project Library** tab is selected.
- Step 3:** The user right-clicks on the **Capacitor** component and selects **Load Library File**.
- Step 4:** The **Analysis Model Manager** window displays a list of capacitor models. The user selects the **Samsung_MLCC_20170412** model.

Model Name	Size	Cap Model	Cnom (nF)	C	B	Upper Tol.	Lower Tol.	A	TCC	VOLT (V)	Pri	Co	Pri Bo	Mi No	Lo Ke
CL01Y104MR...	0306E	SPICE	100	1		20%	-20%	1	X7S	4	5			C	S...
CL01Y105MR...	0306E	SPICE	1000	1		20%	-20%	1	X7S	4	5			C	S...
CL02A102K02...	01005E	SPICE	1	1		10%	-10%		X5R	6,3	5			C	S...
CL02A103K02...	01005E	SPICE	10	1		10%	-10%		X5R	10	5			C	S...
CL02A103K02...	01005E	SPICE	10	1		10%	-10%		X5R	6,3	5			C	S...
CL02A104M0...	01005E	SPICE	100	1		10%	-10%		X5R	6,3	5			C	S...
CL02A104MR...	01005E	SPICE	100	1		20%	-20%		X5R	6,3	5			C	S...
CL02A104M0...	01005E	SPICE	100	1		20%	-20%		X5R	4	5			C	S...
CL02A222K02...	01005E	SPICE	2,2	1		10%	-10%		X5R	6,3	5			C	S...
CL02A224M0...	01005E	SPICE	220	1		20%	-20%		X5R	6,3	5			C	S...
CL02B102K02...	01005E	SPICE	1	1		10%	-10%		X7R	10	5			C	S...
CL02B221K02...	01005E	SPICE	0,22	1		10%	-10%		X7R	10	5			C	S...
CL02B331K02...	01005E	SPICE	0,33	1		10%	-10%		X7R	10	5			C	S...
CL02C010B0...	01005E	SPICE	0,001	1		10%	-10%		COG	16	5			C	S...
CL02C030B0...	01005E	SPICE	0,002	1		5%	-5%		COG	16	5			C	S...
CL02C030B0...	01005E	SPICE	0,003	1		3,3...	-3,3...		COG	16	5			C	S...
CL02C040B0...	01005E	SPICE	0,004	1		2,5%	-2,5%		COG	16	5			C	S...
CL02C070B0...	01005E	SPICE	0,007	1		1,4...	-1,4...		COG	16	5			C	S...
CL02C080C0...	01005E	SPICE	0,008	1		3,1...	-3,1...		COG	16	5			C	S...
CL02C090B0...	01005E	SPICE	0,009	1		1,1...	-1,1...		COG	16	5			C	S...
CL02C0R3B0...	01005E	SPICE	0,0003	1		33...	-33...		COG	16	5			C	S...

1. Click “Tools” → “Analysis Model Manager”.
User can see Analysis Model Manager window.
2. Select Project Library tab.
3. Right click “Capacitor” then select “Load Library File”
4. Browse amm file in library folder, user can see capacitors information.

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1. Click model name that user want to link s-parameter.
2. Click "Assign" button then Model Assignment window pops up.
3. Click Browse Model.
4. Select Capacitor and confirm impedance curve then click select button