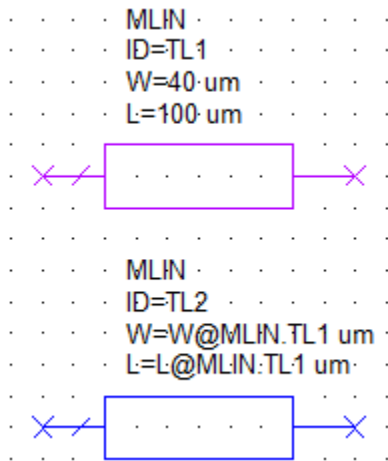# Intelligent Model Syntax Assign

To run this script

Select **Scripts >Schematic>Intelligent Model Syntax Assign** from the Menus.

Or, in versions that support the script, you can run the utility directly from this page using this button.
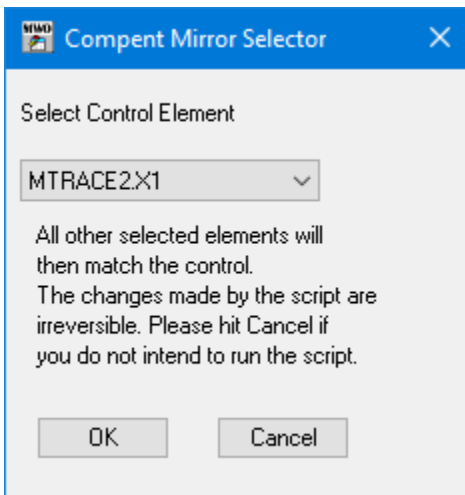
Description

The AWR Design Environment supports a parameter syntax that allows one parameter to have the same value as another model parameter without the need for equations. The general parameter syntax is <Parameter>@<Model>.<ID>. Where <Parameter> is the parameter of the referenced model, <Model> is the name of the referenced model and <ID> is the ID of the referenced model. For example, see the picture below showing the top MLIN being the control element and the bottom MLIN has this parameter definition type setup.

For several parameters, typing in these values is simple. This gets more complicated if there are many parameters that need to be set or if many elements need to reference one model. This script helps with this process by selecting the items that should be linked together and then selecting which of the items will be in control and then assigning all of the parameters of the other times to match this model.
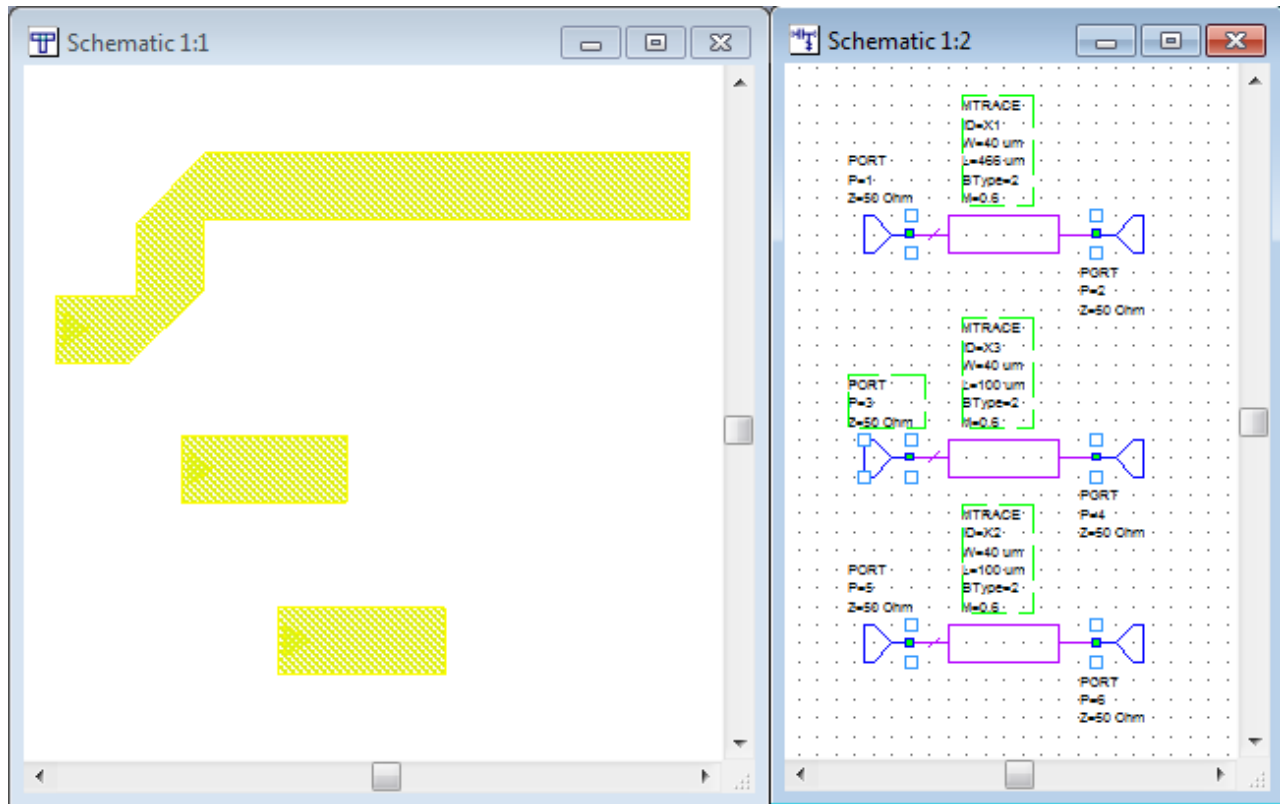
To use the script:

1. Save your project or make a backup before running the script.
2. Make the schematic you are working in the active schematic. If a schematic window is not the active window, you will get an error.
3. Select the models that should be linked together in the schematic. You can choose more than two if you want multiple to match the control model. If you do not select two or more items, you will get an error.
4. Run the script.
5. The dialog below will open for you to choose which of the selected items is the control element.
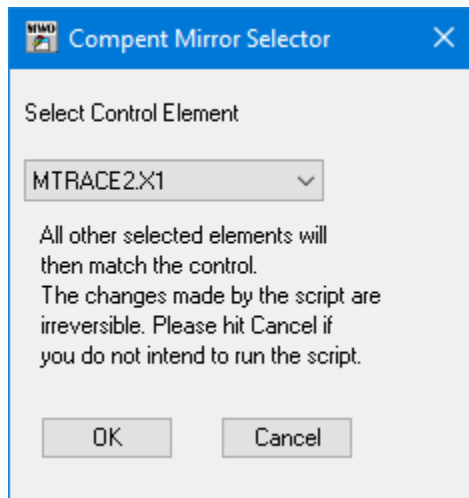
6. Click the OK button to let the script assign the intelligent syntax to the model parameters to match the control. The script will only work on models that have the same name as the control model. If the names do not match, nothing is changed.
7. A log file is added to the data files of the project and opened for viewing. The date and time are encoded in the log file. The log file lists every change made to the project in case you need to go back to your original values.
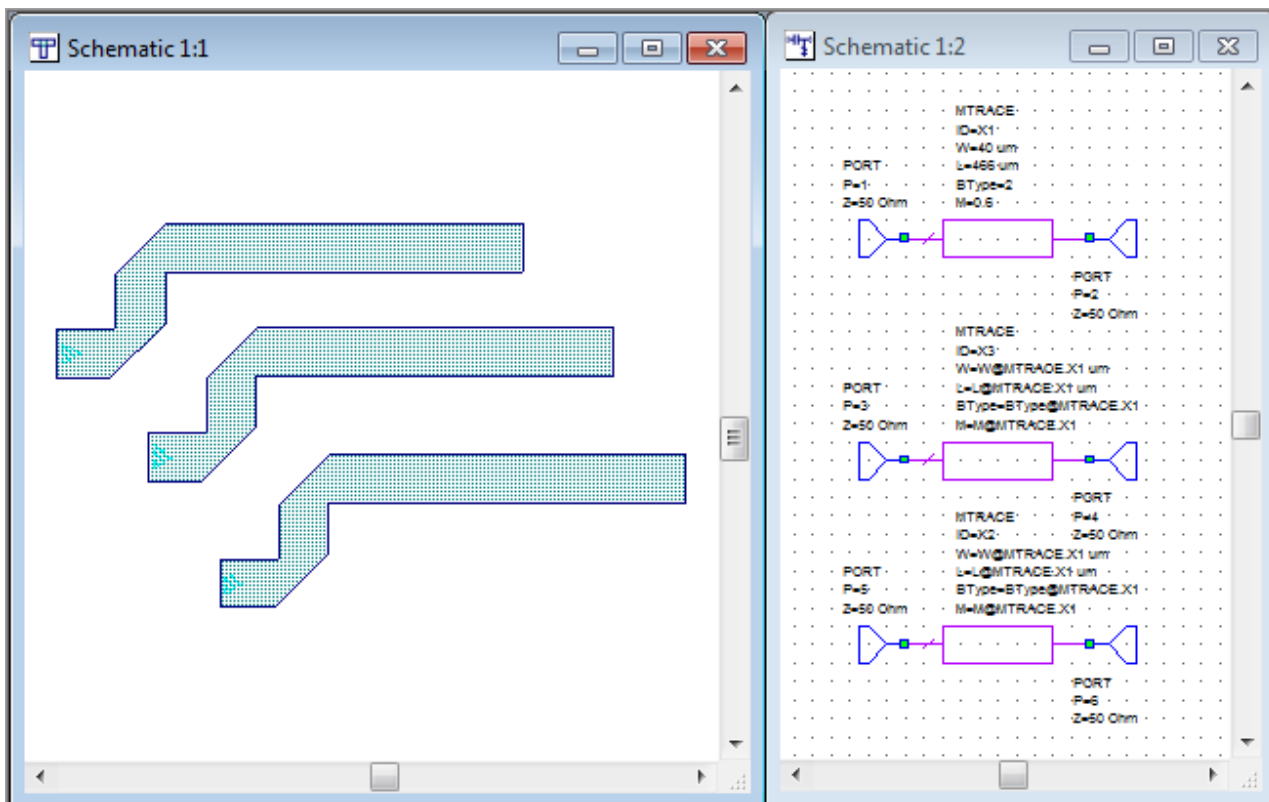
For example, see the schematic below that has 3 MTRACE elements. The top MTRACE is routed and the bottom two should mirror the top element.

The situation above has all three MTRACE's selected and one of the ports accidentally. When the script was run MTRACE2.X1 was selected as the control element.

When the script is done, the schematics and layout have changed as shown below.

The log file shows exactly which model was the control model, what model parameters changed and also if models did not match the control element that nothing was changed.


```
control element = MTRACE2.X1 in schematic = Schematic 1
Processing changed element MTRACE2.X2
      changing parameter W from 40 to W@MTRACE2.X1
      changing parameter L from 100 to L@MTRACE2.X1
      changing parameter BType from 2 to BType@MTRACE2.X1
      changing parameter M from 1 to M@MTRACE2.X1
      changing parameter DB from {0} to DB@MTRACE2.X1
      changing parameter RB from {0} to RB@MTRACE2.X1
      changing parameter RC from 0 to RC@MTRACE2.X1
Processing changed element MTRACE2.X3
      changing parameter W from 40 to W@MTRACE2.X1
      changing parameter L from 100 to L@MTRACE2.X1
      changing parameter BType from 2 to BType@MTRACE2.X1
      changing parameter M from 1 to M@MTRACE2.X1
      changing parameter DB from {0} to DB@MTRACE2.X1
      changing parameter RB from {0} to RB@MTRACE2.X1
      changing parameter RC from 0 to RC@MTRACE2.X1
```