

Example: pntool_example1.prm

This example is also discussed in the documentation file associated with Figure 3 and is repeated here.

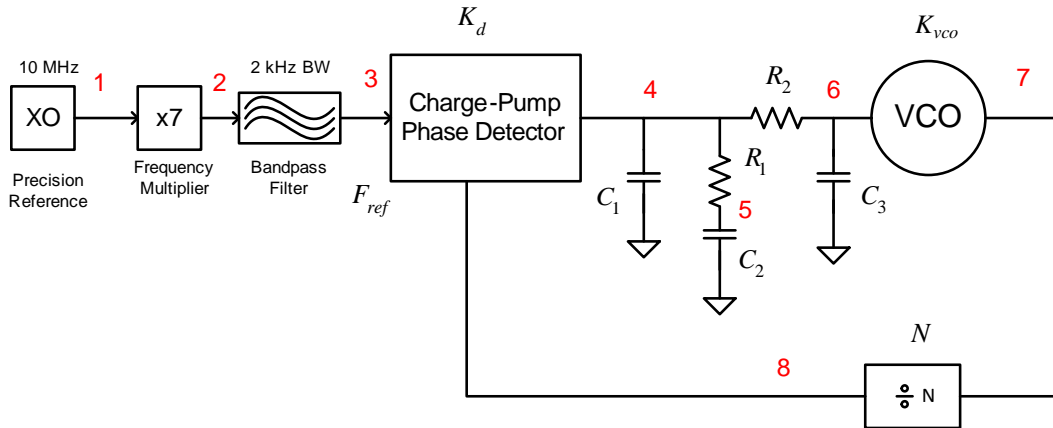
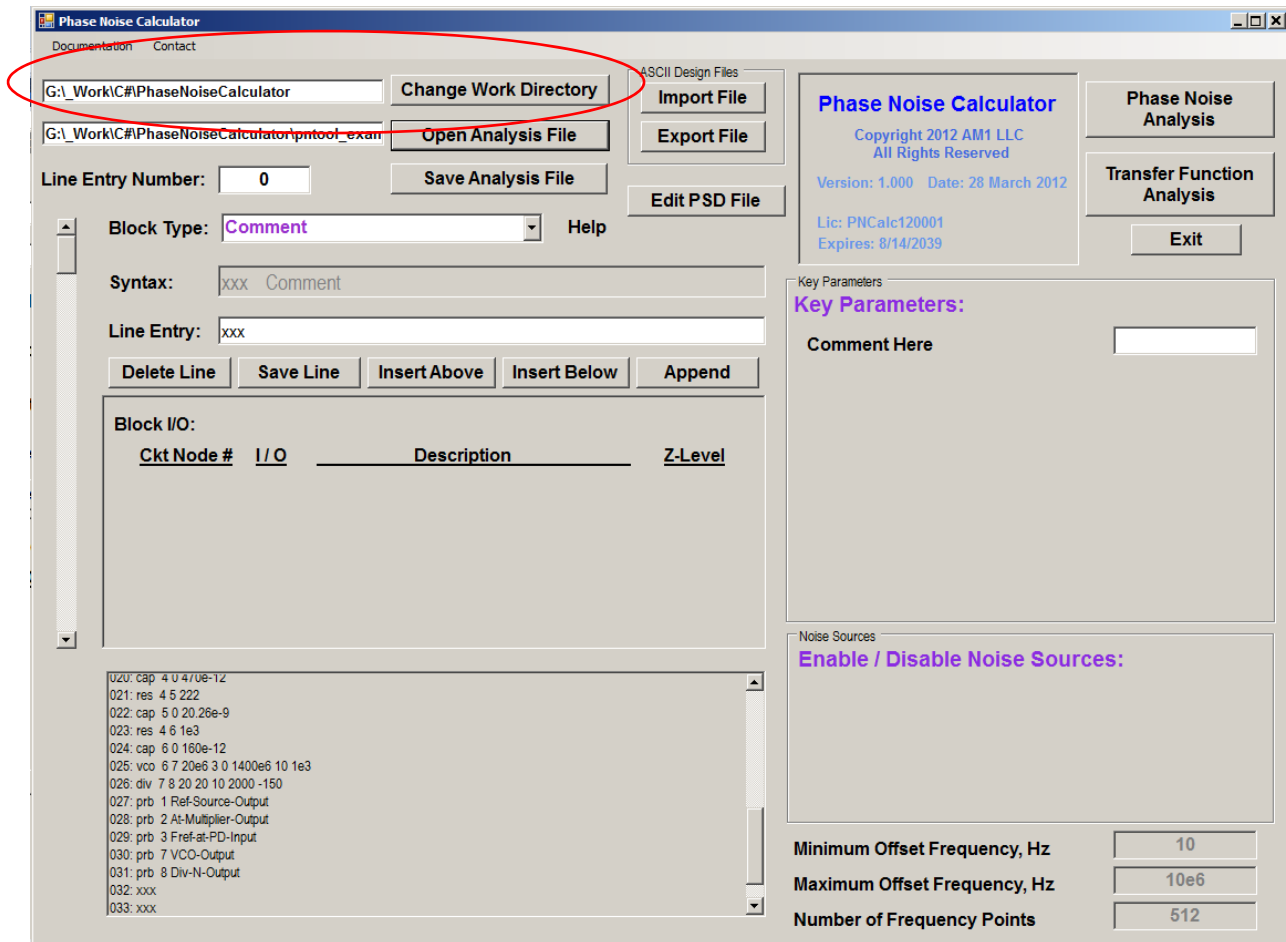


Figure 1 Analysis example with nodes numbered in red

Step 1: Change the *work directory* to the directory where the example file is located.



Step 2: Use the *Open Analysis File* button to select the analysis file named *pntool_example1.prm*.

Step 3: The network details can be edited from this window but no edits will be performed at this time.

Step 4: Press the *Phase Noise Analysis* button to proceed to the analysis portion of the program as shown in Figure 2.

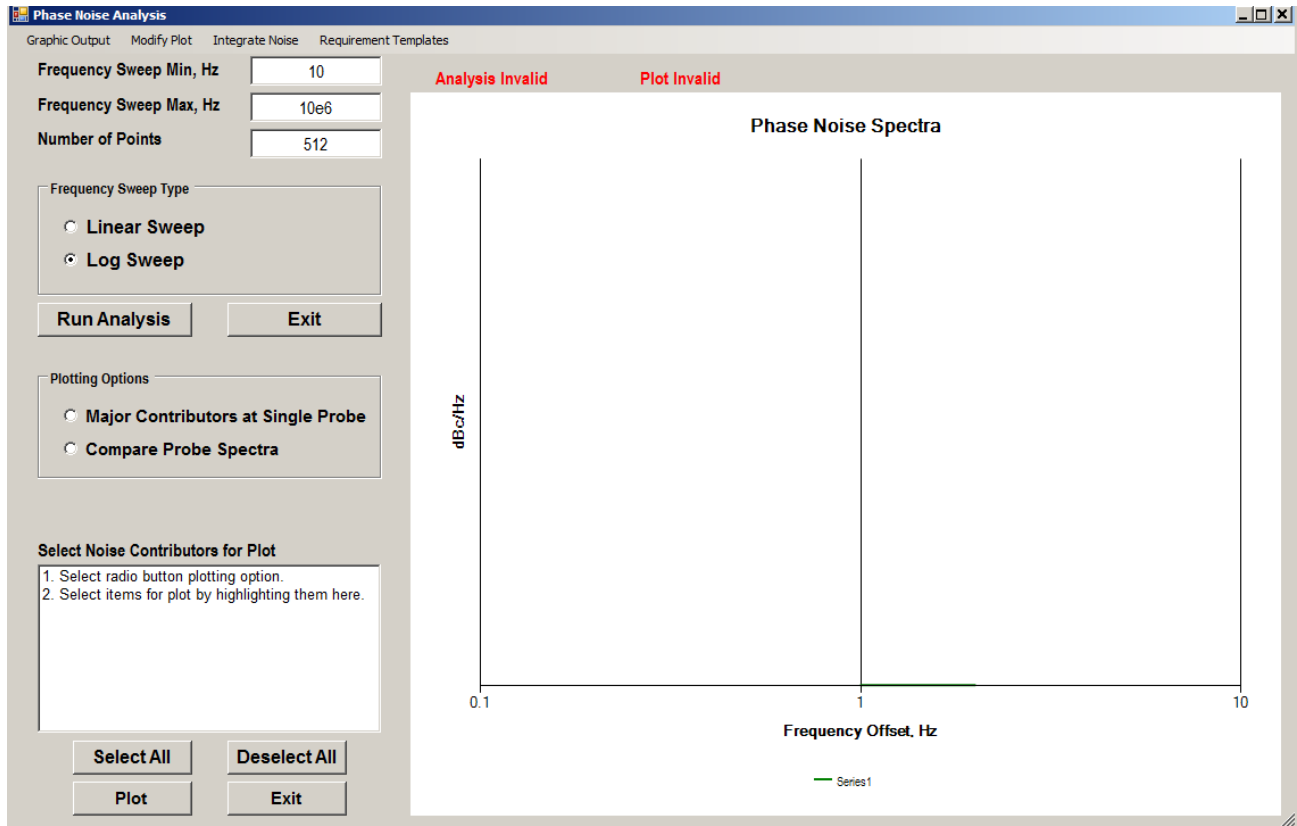


Figure 2 Analysis window portion of the program

Step 5: Run the analysis by pressing the *Run Analysis* button.

Step 6: Select the items for plotting. Specifically select the radio button named *Major Contributors at Single Probe*. This changes the analysis window to that shown in Figure 3

Step 7: Press the *Select All* button to select all noise contributors for plotting

Step 8: Next use the combo-box to select *VCO Output* for the probe name of interest. This is the probe point (node number) in the schematic where the phase noise contribution from each noise source will be evaluated.

Step 9: Press the *Plot* button to see the initial results shown in Figure 4.

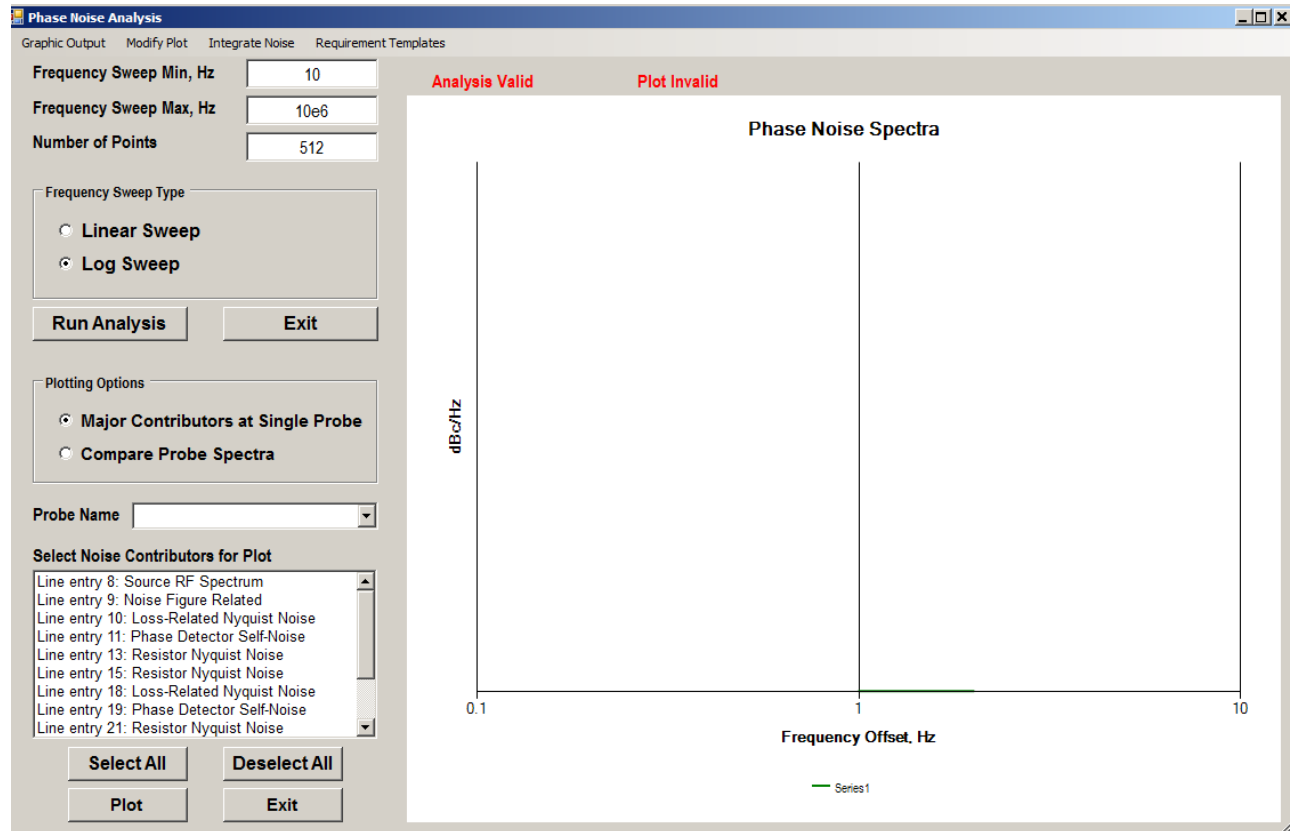


Figure 3 Analysis window after selecting *Major Contributors at Single Probe* option

Step 10: Plot modifications, integrated noise calculations, and graphical output options are available through the upper left-hand toolbar as shown. Several modifications are shown in Figure 5.

Step 11: Once the desired plot modifications have been made, the *Graphical Output* tool menu item can be used to copy the plot to the clipboard (and pasted as shown in Figure 6), or the entire numerical record for all of the plotted curves can be exported to an ASCII text file for subsequent analysis.

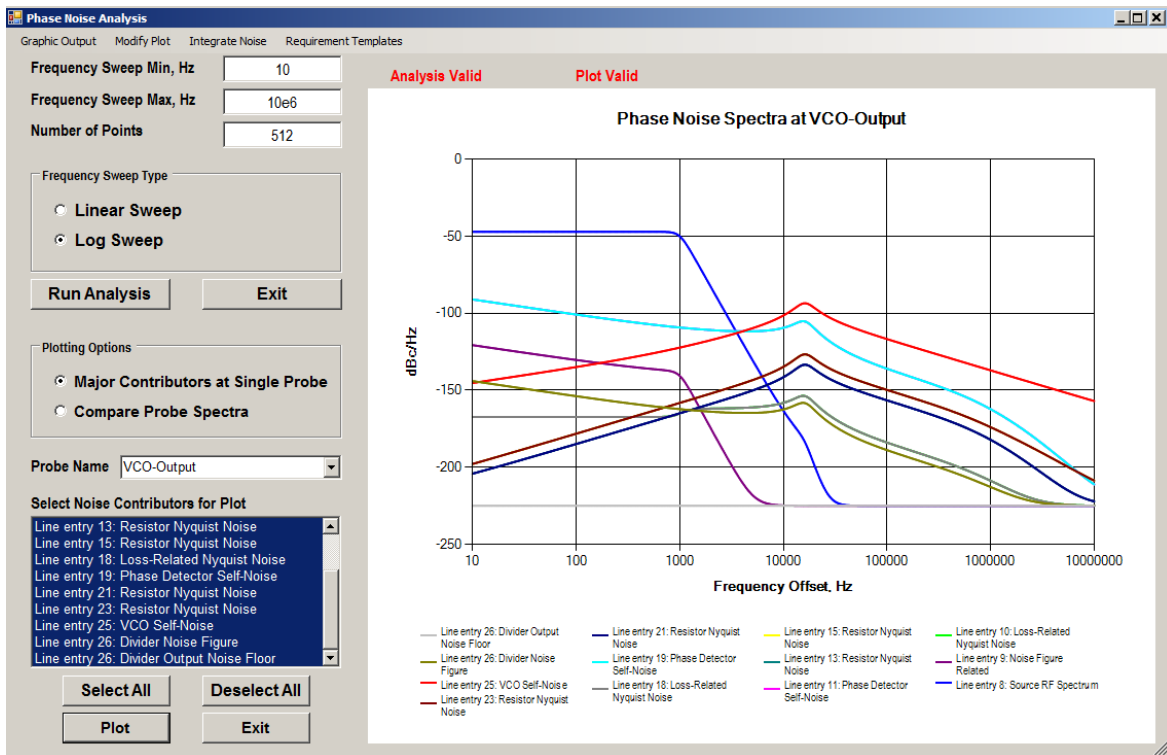


Figure 4 Analysis results for the contribution of all noise sources observed at the VCO Output node

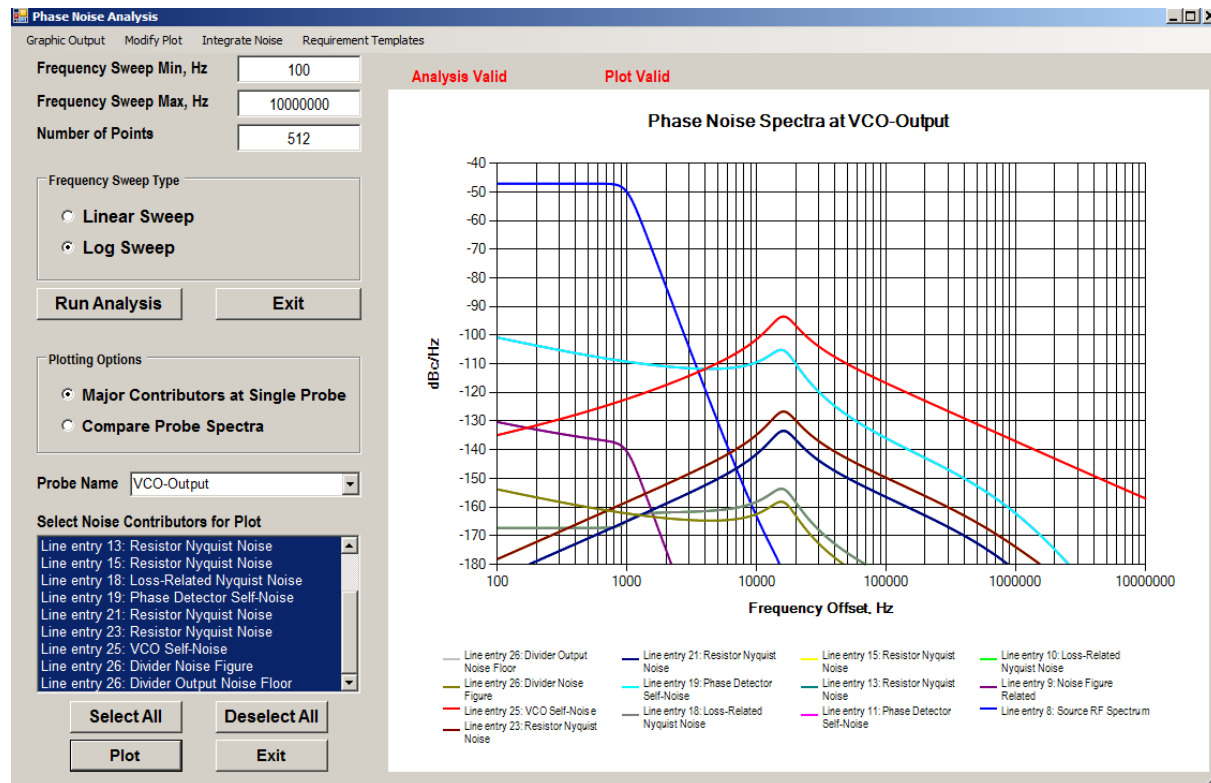


Figure 5 Analysis figure after simple plot modifications

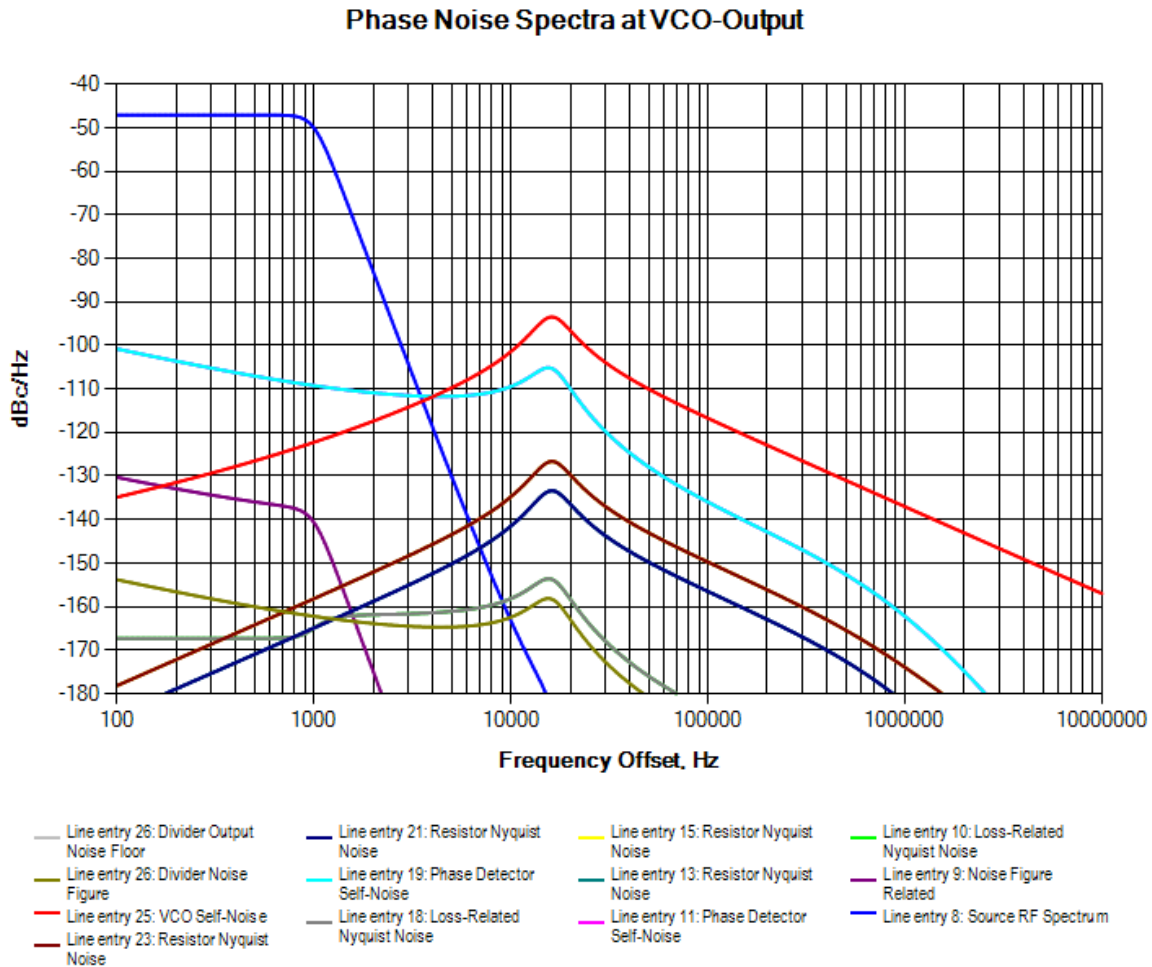


Figure 6 Final graphical output using the *Copy to Clipboard* function which is available under the *Graphical Output* menu item