

ASITIC Guide

Introduction

This tutorial will guide you through simple steps to install ASITIC on the Sun workstations located in the UNIX labs. Also it will give a simple example how to use ASITIC and finally show how to import your layout design implemented in ASITIC to Cadence.

Downloading and Installing ASITIC

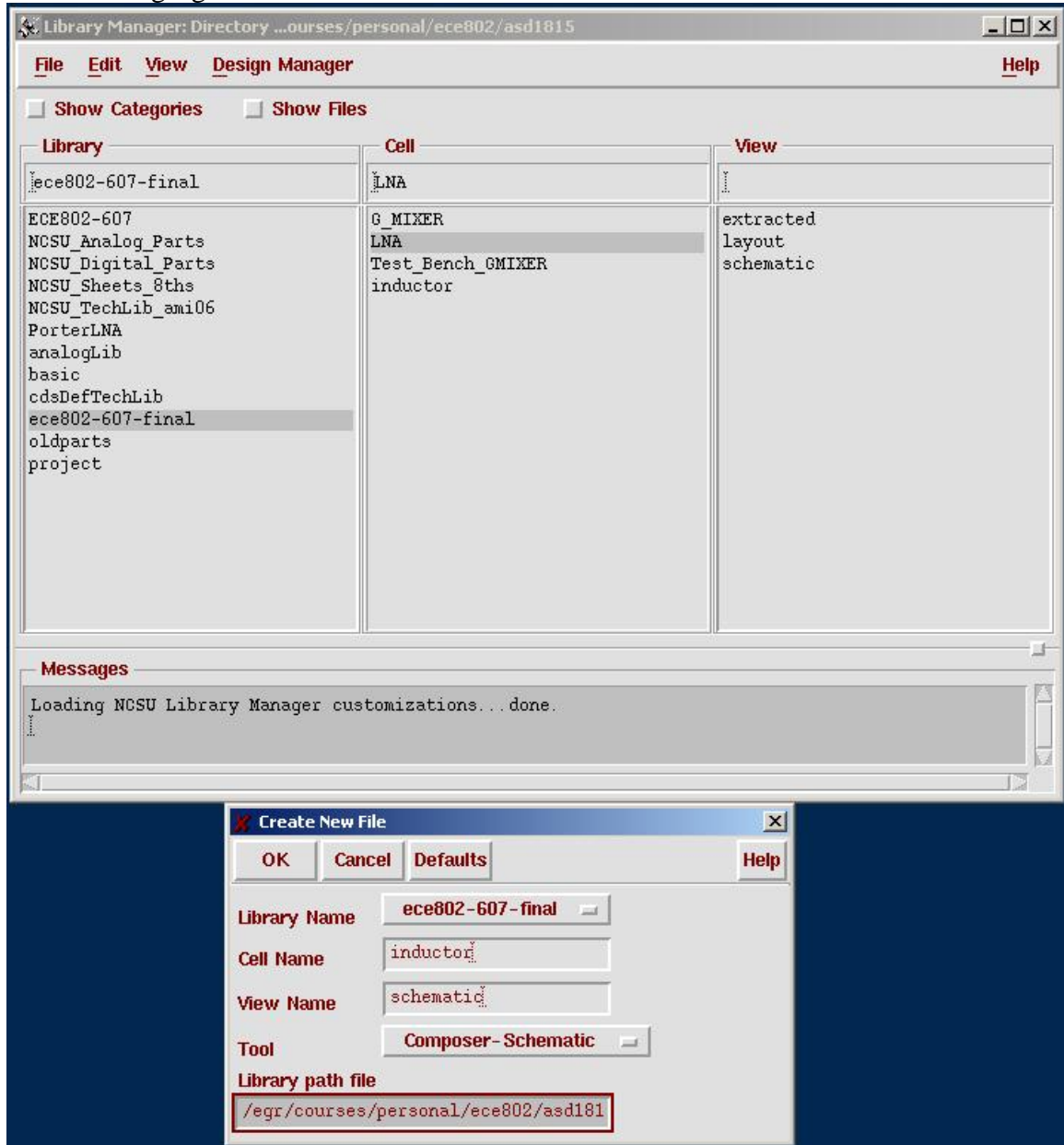
- 1- Start up 'Console' you can use your favorite command line prompt interpreter.
- 2- Create a directory called 'asitic' by typing: ***mkdir asitic***
- 3- Run your internet browser and login to angel website <http://angel.msu.edu>
 - You can always get the latest version of ASITIC from the official website at <http://rfic.eecs.berkeley.edu/~niknejad/asitic.html>
- 4- Download and save the following files under 'asitic' directory you created earlier:
 - A- asitic_sun.gz
 - B- common.tgz
 - C- doc_05_28_01.tgz
 - D- AMI_06.tek
 - E- layer.map
- 5- Go back to the console and go to the asitic directory you created by typing ***cd asitic***
- 6- Extract the gz and tgz files you download by typing:
 - A- ***gunzip -d asitic_sun.gz***
 - B- ***chmod +x asitic_sun***
 - C- ***tar -zxvf common.tgz***
 - D- ***tar -zxvf doc_05_28_01.tgz***
- 7- You can use the documentation and the common files you extract for offline viewing.

Running ASITIC

- 1- As instructed in the previous section. Under the asitic directory to run ASITIC type ***./asitic_sun -t AMI_06.tek***
- 2- A window labeled ASITIC will appear which contains a black grid.
- 3- Go back to the console to type ASITIC command
- 4- To create a sample inductor type ***sq name=ind1:len=175:w=10:s=.5:n=5:xorg=200:yorg=200:metal=m3:exit=m2***
 - * For more information you can follow the instructions at <http://rfic.eecs.berkeley.edu/~niknejad/doc-05-28-01/sample.html>
- 5- To save this layout type the following ASITIC command ***CIFSave ind1 inductor.cif***
 - * This will save the result design to a CIF file which can be important later to Cadence. To exit ASITIC type ***quit***

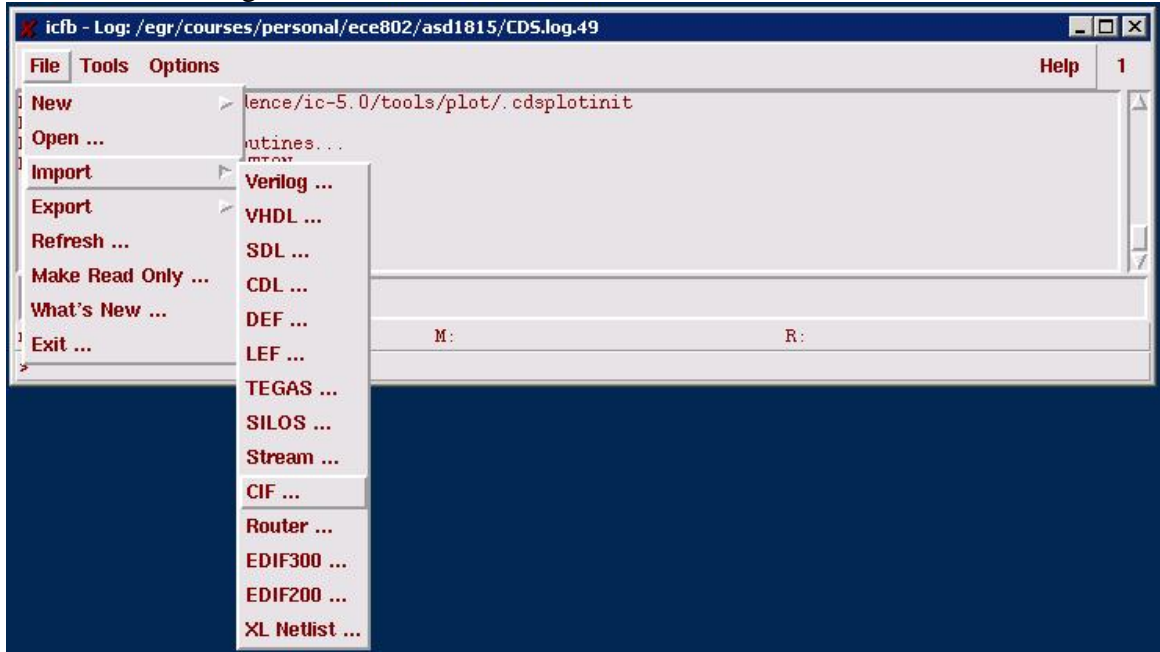
Importing ASITIC layout CIF to Cadence

- 1- Start Cadence and create a new empty schematic called inductor as shown in the following figure.

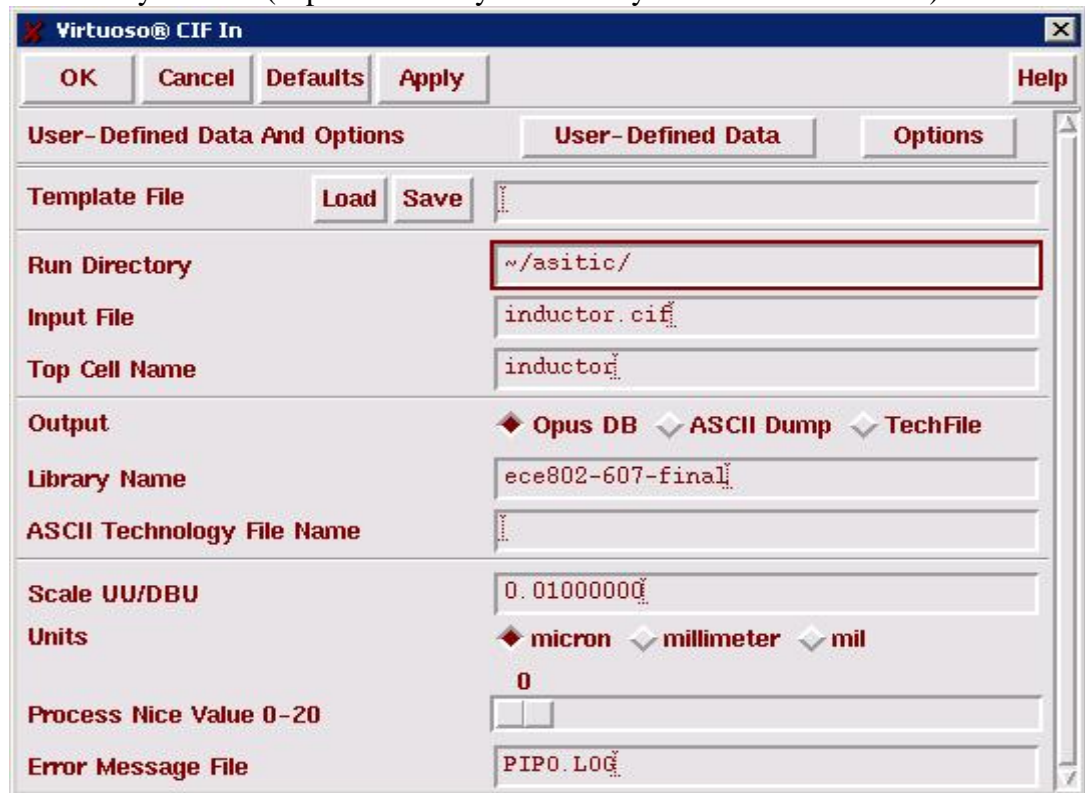


* You do not have to create this every time you create an inductor. You can just replace the old inductor layout with the new one. However, if you want to save different kinds of inductors then create separate empty schematics for each distinct inductor.

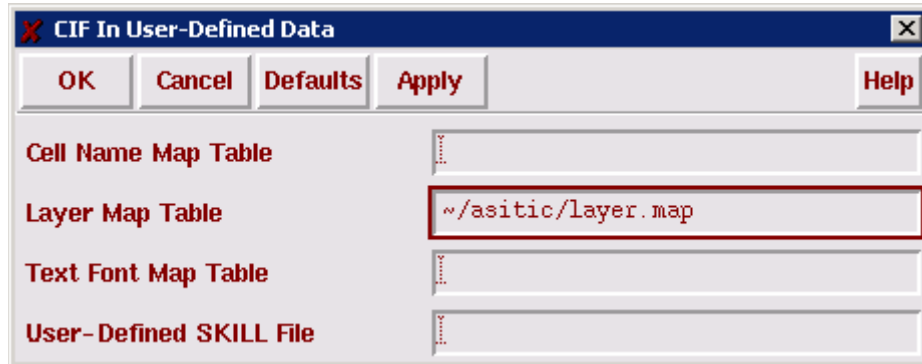
- 2- Go to the icfb window then click on File → Import → CIF
As shown in the figure below



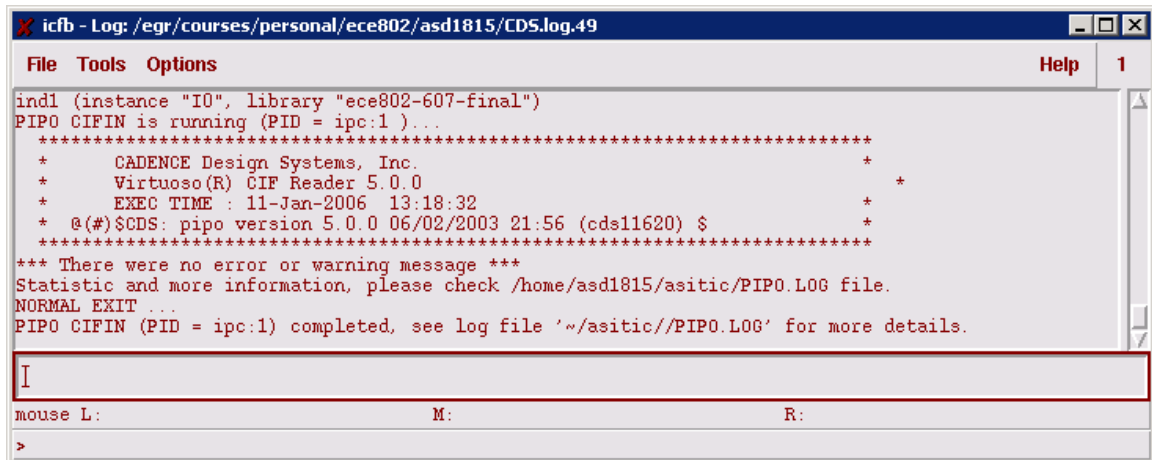
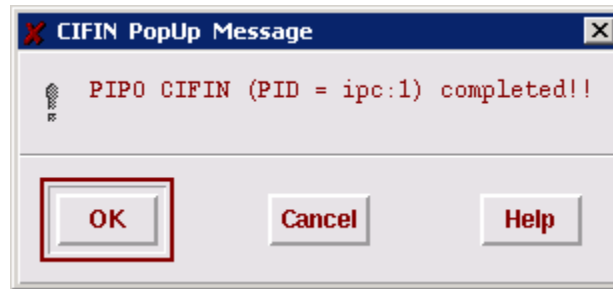
- 3- Change the following values
A- Run directory = `~/asitic/`
B- Input file = `inductor.cif`
C- Top cell name = `inductor`
D- Library name = (depends where you created your inductor cell view)



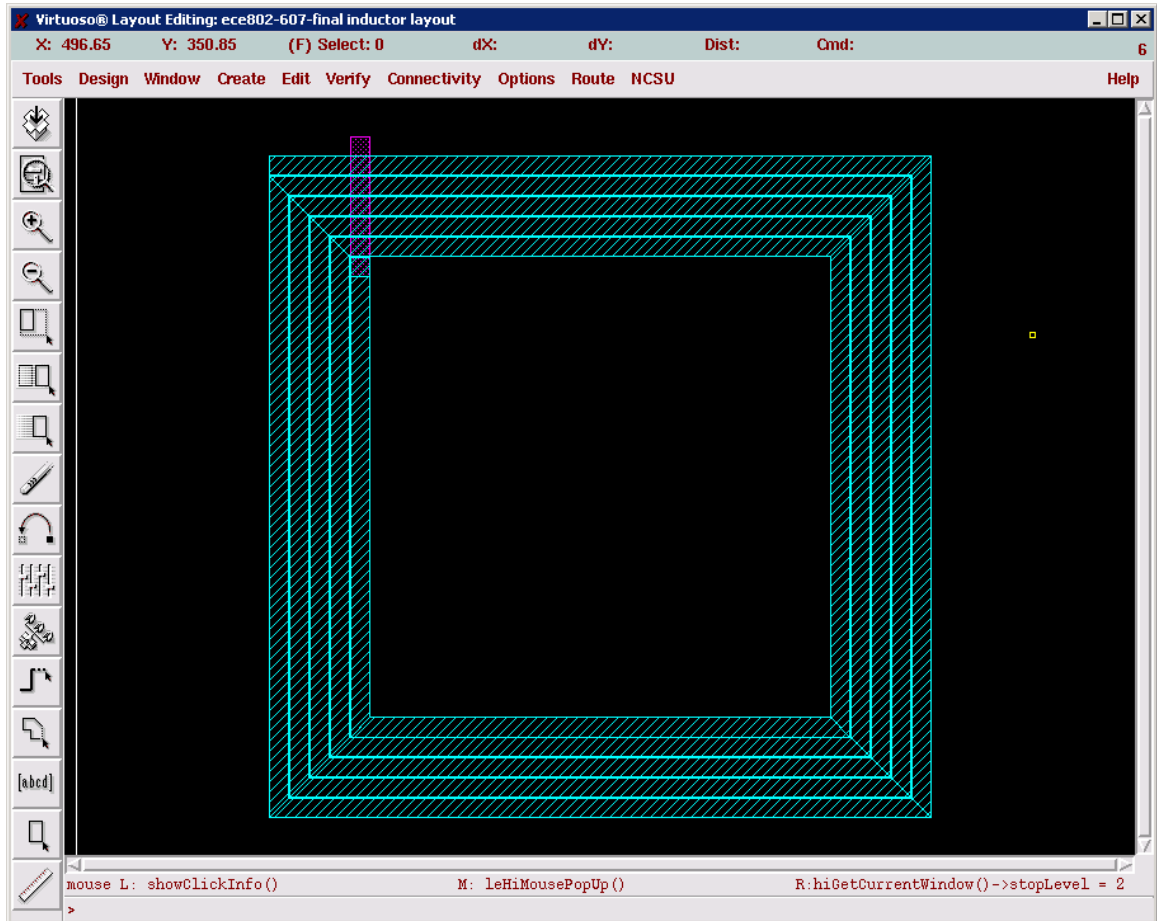
- 4- Click on User-Defined data and change the Layer Map Table to *~/asitic/layer.map*



- 5- Now click on OK then OK again and watch the icfb window you should get something similar to the following.



- 6- Open the layout for the cell view 'inductor' you create in the beginning. You should find an instance called 'ind1'



- * If you have any questions or comments please contact me at asd1815@msu.edu
- * This tutorial was written by Faisal Abu-Nimeh and was updated on 1/11/2006