ENV setup:

For mixed signal designs - use this env setup:
https://github.com/proppy/conda-eda/releases/tag/v0.0-1406-ga734ede

```
curl -L -O
https://github.com/proppy/conda-eda/releases/download/v0.0-1399-g9288596/mi
xed-signal.gf180mcuc-0-Linux-x86_64.sh
bash mixed-signal.gf180mcuc-0-Linux-x86_64.sh -p silicon-env -b
source silicon-env/bin/activate
```
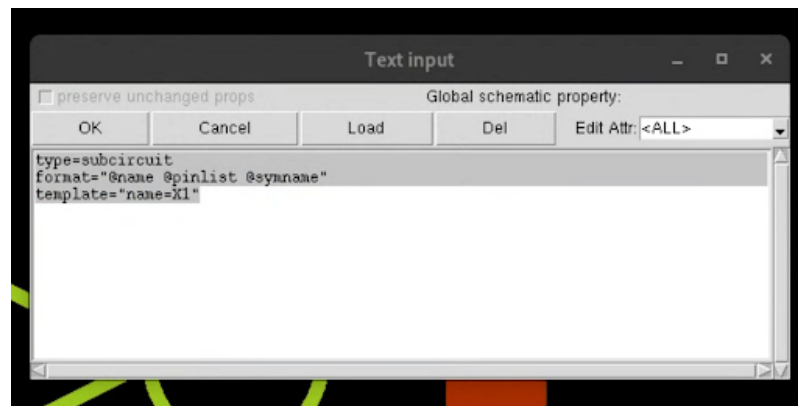
Open mixed signal env: `source silicon-env/bin/activate`

Xschem hierarchy designs

While making symbol to set all the pin attributes -
Ref: ▶️ Creating a Hierarchical Schematic in Xschem
   1. Save the schematic in the same folder as the symbol. With **Same name**
   2. Click outside design in empty space press q and write:

To traverse thru hierarchy - enter - E, exit out is ctrl E
*components-> devices/ **Labpin*** - is used to connects nets with same name at top level

Post layout extraction

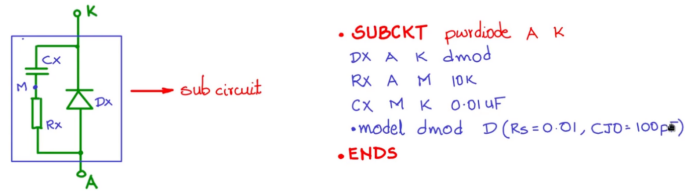▶️ Ngspice Tutorial: Extracting spice from Magic VLSI and running analog simulation
   extract all

Exttospice - creates spice netlist from layout
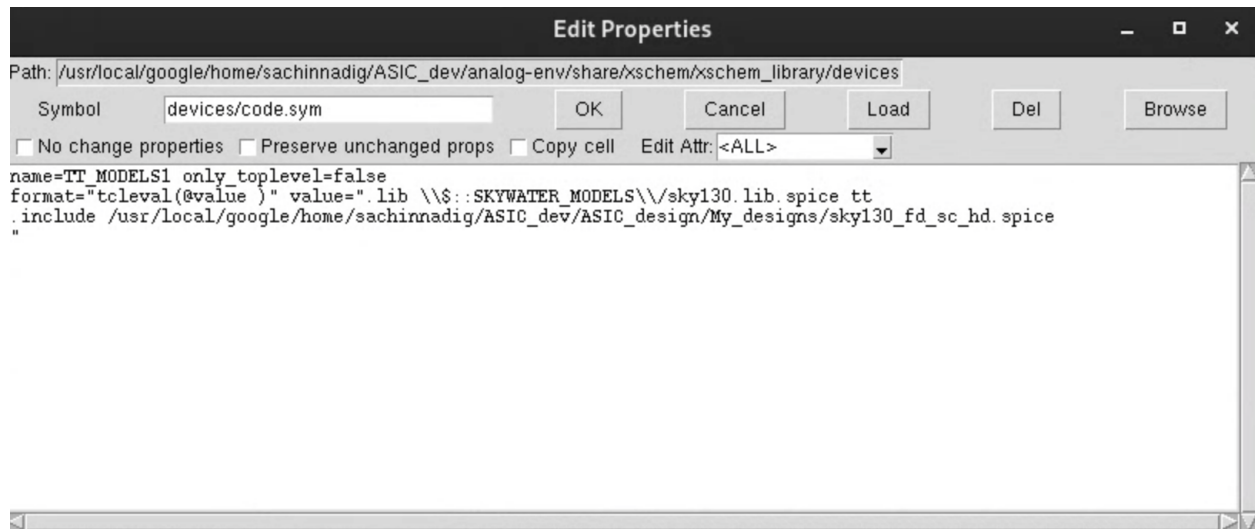
Subcircuit is created with extraction netlist
Example:

Calling a subckt: xInstance net1 net2 subckt name
Example: xD1 in out pwrdiode

Ngspice simulation env setup: tt model

Later, this is fixed in .sch to reflect directly in netlist file from proppy's commit:
https://github.com/spnadig/GF180_GAFE_1/pull/1

Git notes

Git diff -> to check changes
Git checkout -b <branch name>
Git branch -a -> shows all branch
Git status -> shows all the modified files
Git add <> -> files to commit
Git commit -m 'xxx'

git push origin <branch name>   -> now I have main and a new branch on remote called origin

Note: git does not allow for push on remote if its http
Fix: git remote set-url origin git@github.com:spnadig/GF180_GAFE_1.git
Now gnubby to push and pull

Git fetch -> grabs reference locally but wont update
Git log origin/main -> shows all commits and changes
Git pull origin main -> to get changes into local

Klayout updates in env

conda install -c litex-hub klayout

Ongoing designs:

https://github.com/spnadig/GF180_GAFE_1