# 3DIC Tutorial

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# Introduction

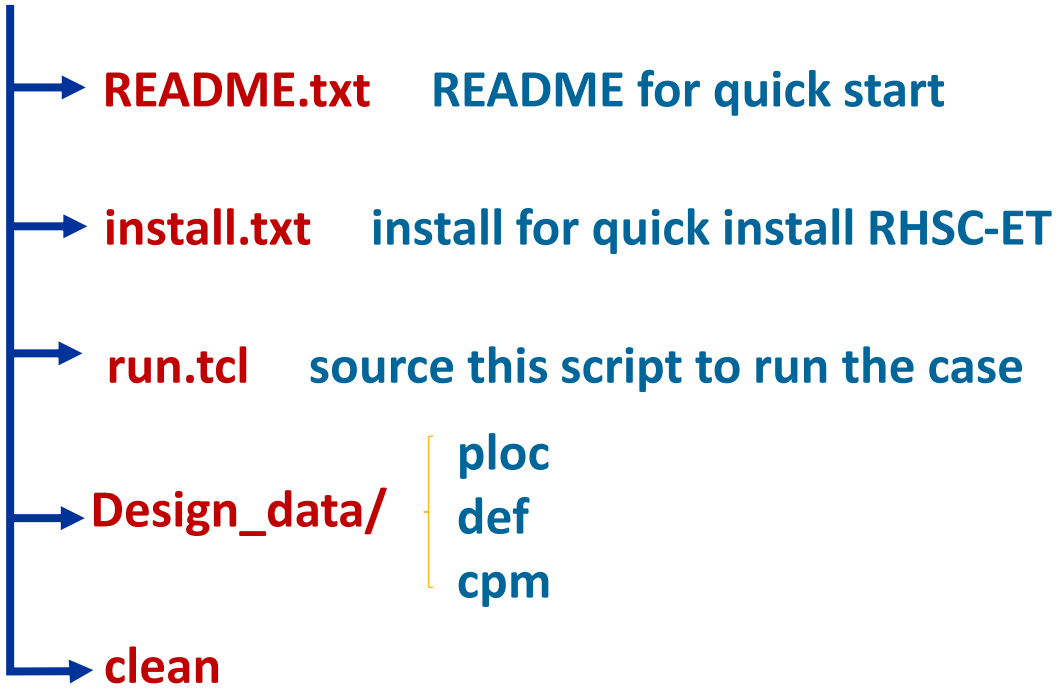
※ We will be taking RHSC 3DIC through 1 set of run and analysis scripts:

※ 1st run scripts:

- run.tcl: this script does the following:
  - ✓ Imports data
  - ✓ Performs channel setting
  - ✓ Performs analysis model runs
- Bring up RHSC-ET GUI to view results

# Directory Structure

## Training directory



# Step I: Install and Set License

- **Set Redhawk-SC Electrothermal  path and license :**
  - setenv CPSROOT <choose the version installed on your server>
  - set path = ( $CPSROOT/bin $path )
  - setenv ANSYSLMD_LICENSE_FILE <To your redhawk_sc_electrothermal/redhawk_3d license>
- **To execute Redhawk-SC Electrothermal :**
  - redhawk_sc_et -3dic

# Step II: Running the script: run.tcl

※ First cd into the run directory

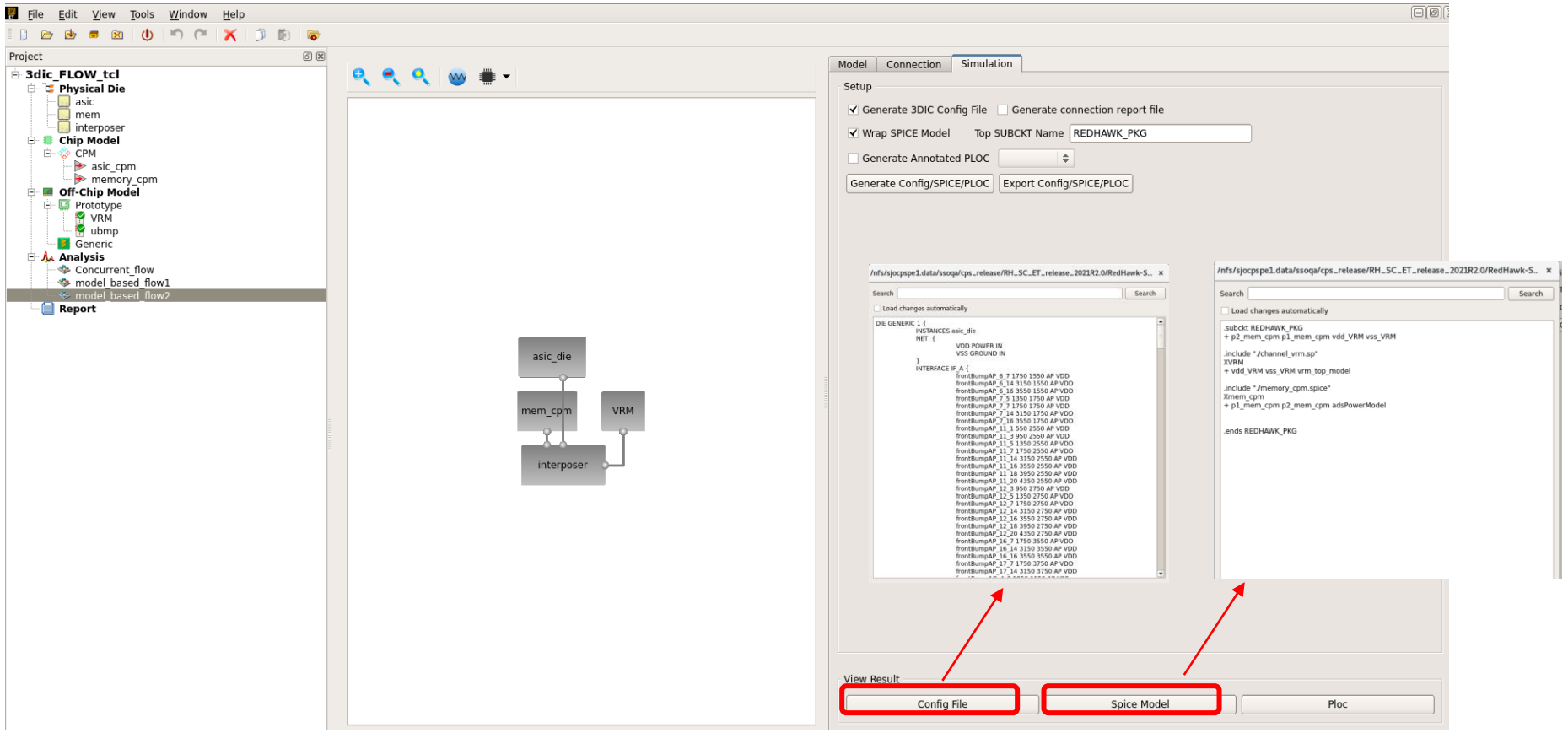
※ Make sure the design_data is in the same path

※ To run the script：
- % cd Training_testcase/3DIC/
- % redhawk_sc_et -3dic -ng run.tcl or // batch run, there is no GUI
- % redhawk_sc_et -3dic run.tcl //GUI run
- % redhawk_sc_et -3dic, and then source the run.tcl in TCL window

※ What does run.tcl do？
- ✓ Create the new project
- ✓ Import defs, cpm and ploc files
- ✓ Create physical die, Chip model, off-chip model and analysis model
- ✓ Run 3 analysis models, 1 generate 3DIC config file, 1 generate wrap spice model, 1 generates 3DIC config file and wrap spice model at the same time.

# Step III: Result Exploration using GUI

- **View the results in RHSC-ET GUI**

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