DRC AND PEX USING PEGASUS AND QUANTUS

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DRC

- Files Required:
    1. DRC Rule file (.pvl)
    2. gds file
- Steps to run DRC from Innovus:
    1. Launch Innovus and load the design.
    2. Type the following on the Innovus terminal:

run_pegasus_drc s8_drcRules.pvl -mapfile streamOut.map -stream_out -merge ../sky130_osu_sc_t18/18T_ms/gds/*.gds

This command generates a temporary gds file to run DRC.

DRC

- Outputs:
    1. Filename.sum - gives the summary of the drc run
    2. Filename.ascii - specifies the error markers
- To run DRC from the command line:

pegasus -drc -ui_data -gds mult_seq.gds -tc mult_seq -run-dir ./DRC/ s8_drcRules.pvl

GDS

- To generate the gds file:
    1. Launch Innovus and load the design
    2. On the Innovus terminal, type the following:

streamOut mult_seq.gds -mapFile ./streamOut.map -libName DesignLib -structureName mult_seq -merge ../sky130_osu_sc_t18/18T_ms/gds/*.gds -units 2000 -mode ALL

PEX

- Go the Innovus directory (cd pnrInnovus)
- Edit the setup.tcl to add the qrcTechfile.
- Edit innovus_config.tcl to set the effort level for RC extraction.
- make
- Results can be seen in rc_typ.spef.

PEX

- To run from Innovus command prompt:
    1. setExtractRCMode -engine postRoute -effortLevel <specify the effort level>
    2. extractRC
    3. rcOut -spef SPEF/<file.spef>