

Tool Manual

Name of Tool: Cell-Aware Defect Modeling

Input Files: GDS/GDSII File,

Cell Netlist

Output Files: Text File,

Elements_List,

Element_List_width_order,

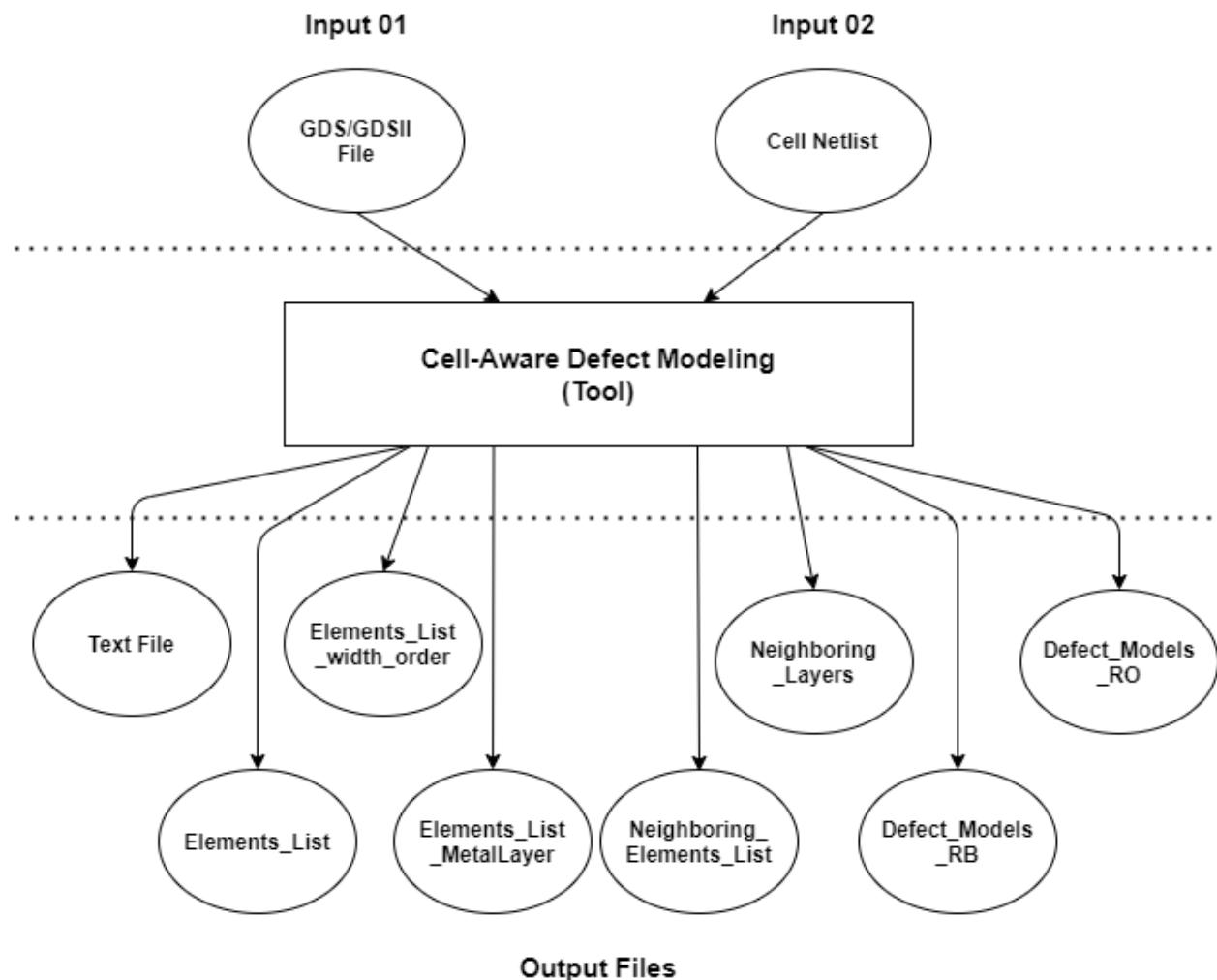
Neighboring_Layers,

Element_List_Metal_Layer,

Neighboring_Elements_List,

Defect_Models_RB,

Defect_Models_RO



Pre-installed Python Libraries Needed:

- pip3 install python-gdsii
- pip3 install python-math
- pip3 install Shapely

Command to Execute:

- python3 <python_script_file.py>

Example: Inverter Cell

Input Files: GDS/GDSII File - INV_X1.gds,
Cell Netlist - INV_X1.sp

Command: python3 gds_to_text.py

Output Files: Text File - INV_X1.txt

Elements_List - INV_X1_element_data.txt
Element_List_width_order - INV_X1_element_width_order.txt
Neighboring_Layers - INV_X1_Layer_Information.txt
Element_List_Metal_Layer - Metal_Layer_Elements.txt
Neighboring_Elements_List - NeighboringElementsList.txt
Defect_Models_RB - Defect_Cell_RB1.sp,
 Defect_Cell_RB2.sp,
 Defect_Cell_RB3.sp,
 Defect_Cell_RB4.sp
Defect_Models_RO - Defect_Cell_RO1.sp,
 Defect_Cell_RO2.sp