

1 icc2_shell> man check_floorplan_rules

2 2. Synopsys Commands

Command Reference

3 check_floorplan_rules

4
5 NAME

6 check_floorplan_rules

7 Reports violations of related floorplan spacing, enclosure,
8 halo, length, area, width rules **and** track constraints.

9
10 SYNTAX

11 collection check_floorplan_rules

12 [list_of_rule_names]

13 [-object_types list_of_object_types]

14 [-lib_cells collection_of_lib_cells]

15 [-exclude_rules list_of_rule_names]

16 [-exclude_lib_cells collection_of_lib_cells]

17 [-objects macro_list]

18 [-bbox { {llx lly} {urx ury} }]

19 [-error_view view_name]

20 [-enable_rule_override true | false]

21
22 Data Types

23 list_of_rule_names list

24 list_of_object_types list

25 collection_of_lib_cells list

26 macro_list list

27 llx float

28 lly float

29 urx float

30 ury float

31 view_name **string**

32
33 ARGUMENTS

34 list_of_rule_names

35 Specifies the list of floorplan rule names to report related
36 violations. By **default** is checking all floorplan rules set by
37 user.

38
39 -object_types list_of_object_types

40 Report floorplan rule violations on the listed object types. The
41 object types **include** hard_macro, std_cell_area, soft_macro,
42 block_boundary, core_area. This option cannot be specified **with**
43 the -bbox **and** -objects options.

44
45 -lib_cells collection_of_lib_cells

46 Report floorplan rule violations on the listed lib cells. This
47 option cannot be specified **with** the -bbox, -objects **and**
48 -exclude_lib_cells options.

49
50 -exclude_rules list_of_rule_names

51 Specifies the list of floorplan rules that will **not** report vio-
52 lations.

53
54 -exclude_lib_cells collection_of_lib_cells

55 Specified the lib cells that the violations will **not** be reported
56 on them. If **this** option is specified **with** "-exclude_rules", only
57 the violations match the "-exclude_lib_cells" **and**
58 "-exclude_rules" will **not** be reported. This option cannot be
59 specified **with** the -bbox, -objects **and** -lib_cells options.

60
61 -objects macro_list

62 Report floorplan rule violations on the listed macros. This
63 option cannot be specified **with** the -bbox, -object_types,
64 -exclude_lib_cells **and** -lib_cells options.

65
66 -bbox { {llx lly} {urx ury} }

67 Report floorplan rule violations of macros that fully **inside**
68 **this** region. This option cannot be specified **with** the -objects,
69 -object_types, -exclude_lib_cells **and** -lib_cells options.

-error_view view_name
Specifies the name of the generated error view. If **this** options is specified, the command saves the error view data to a file in XML format **with** the specified name. If the view_name file already exists under the current run directory, the command overwrites the file. If a file extension is specified, it must be ".err", otherwise it is ignored. If no extension is specified, the ".err" extension is appended to the file name. If **this** options is **not** specified, an attachment is created/modified **and** saved in to the **design** database **with** the file name as "#block_name#_floorplanRules.err" .

-enable_rule_override true | false
When set true, **if** a lib_cell has its own rule, the corresponding rules **for** hard_macro would **not** apply to instances of **this** lib_cell; In other words, one **or** more lib_cell rules to an object_type/lib_cell of a certain **constraint type** overrides any general rule to the same object_type/lib_cell of the same **constraint type**. Besides **this**, when it set true, cmd allow lib_cell-routing_blockage enclosure rule to override both hard_macro-routing_blockage enclosure rules **and** halo rules; Similarly, allow lib_cell-routing_blockage halo rule to override both hard_macro-routing_blockage enclosure rules **and** halo rules. The **default** value is false.

DESCRIPTION

This command check floorplan rule violations set by the commands: set_floorplan_spacing_rules set_floorplan_enclosure_rules set_floorplan_halo_rules set_floorplan_width_rules set_floorplan_area_rules set_track_constraint

EXAMPLES

The following command checks floorplan rule_1 on hard **and** soft macros.

```
prompt> check_floorplan_rules rule_1 -object_types {hard_macro soft_macro}
```

Assuming DTCD lib is the **ref** lib of a DTCD **cell** **and** DTCD **cell** has the **design type** of hard macro, the following command reports all macro **cell** violations except **for** DTCD cells.

```
prompt> set_floorplan_spacing_rules -name R1 \  
-from_lib_cells DTCD_lib -to_object_types std_cell_area
```

```
prompt> set_floorplan_spacing_rules -name R2 \  
-from_object_types hard_macro -to_object_types std_cell_area
```

```
prompt> check_floorplan_rules R2 -enable_rule_override
```

SEE ALSO

```
set_floorplan_area_rules(2)  
set_floorplan_enclosure_rules(2)  
set_floorplan_halo_rules(2)  
set_floorplan_spacing_rules(2)  
set_floorplan_width_rules(2)  
set_floorplan_length_rules(2)  
remove_floorplan_rules(2)  
report_floorplan_rules(2)  
set_track_constraint(2)
```

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