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icc2 shell> man set floorplan length rules
     2. Synopsys Commands
                                                                  Command Reference
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                               set floorplan length rules
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    NAME
 6
            set floorplan length rules
 7
                   Defines a length floorplan rule in the design.
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    SYNTAX
10
            set floorplan length rules
11
                   -from object types from type list
12
                   -to object types to type list
13
                   -from lib cells lib cells
14
                   -to lib cells lib cells
15
                   -type parallel run | projection_difference
                   -direction direction list
16
17
                  -name rule name
18
                   [-max spacing distance]
19
                   [-min parallel run length distance]
20
                   [-identical]
21
                   [-mirror]
22
                   [-asymmetric]
23
                   [-from layers layer list]
24
                   [-to layers layer list]
25
                   [-max distance]
26
                   [-min distance]
27
28
        Data Types
29
           from type list
                            list
30
            to type list
                            list
31
           lib_cells
                            collection
32
           direction list list
33
            rule name
                           string
34
            distance
                            float
35
            layer list
                            list
36
37
    ARGUMENTS
38
            -from object types from type list
                   Specifies the list of "from" object types for the length floor-
39
40
                   plan rule. Length between these type of objects and other
41
                   objects specified with -to object types or library cells speci-
42
                   fied with -to lib cells will be checked. Valid values for this
43
                   option are hard macro, routing blockage, shape, soft macro,
                   std_cell_area and boundary_cell_region. This option is mutually
44
45
                   exclusive with -from lib cells and you must specify one or the
46
                   other.
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48
            -to object types to type list
49
                   Specifies the list of "to" object types for the length floorplan
50
                   rule. Length between these type of objects and other objects
51
                   specified with -from_object_types or library cells specified
52
                   with -from lib cells will be checked. Valid values for this
53
                   option are hard macro, routing blockage, shape, soft macro,
54
                   std cell area and boundary cell region. This option is mutually
55
                   exclusive with -to lib cells and you must specify one or the
56
                   other.
57
58
            -from lib cells lib cells
                   Specifies the collection of library cells for the length floor-
59
                   plan rule. Length between these library cells and other objects
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61
                   specified with -to_object_types or library cells specified with
62
                   -to lib cells will be checked. This option is mutually exclusive
63
                   with -from object types and you must specify one or the other.
64
65
            -to lib cells lib cells
                   Specifies the collection of library cells for the length floor-
67
                   plan rule. Length between these library cells and other objects
68
                   specified with -from object types or library cells specified
                   with -from lib cells will be checked. This option is mutually
69
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70 exclusive with -to object types and you must specify one or the 71 other. 72 73 -type parallel run | projection difference 74 Specifies the length type of the length check. Valid values are 75 parallel run and projection difference. This is a mandatory 76 option. 77 78 -direction direction list 79 Specifies the sides or directions in which length of object or 80 library cells needs to be checked. Valid values are horizontal 81 and vertical. The horizontal argument includes both left and 82 right. Similarly, the vertical argument includes both bottom and 83 top. This is a mandatory option. 84 85 -name rule name 86 Specifies the name of the length floorplan rule. This is a 87 mandatory option. 88 89 -max spacing distance 90 Specifies the maximum spacing between "from" and "to" objects 91 for this rule to be applied. The specified value cannot be nega-92 tive. This is an optional option. 93 94 -min parallel run length distance 95 Specifies the minimum overlap length between "from" and "to" 96 objects for this rule to be applied. This is an optional option. 97 98 -identical 99 Specifies whether this rule applies to hard macros of same ref-100 erence. This is an optional option. 101 102 -mirror Specifies whether this rule applies when hard macros face each 103 104 other mirrored. This is an optional option. 105 106 -asymmetric 107 Specifies whether this rule applies asymmetric or not. If speci-108 fied, need to measure the difference only from object specified 109 in -from object types. This option must be used along with -type 110 projection difference. This is an optional option. 111 112 -from layers layer list 113 Specifies the routing layers to be considered for routing block-114 age or shape object types. This option must be used along with -from object types routing blockage or -from_object_types shape. 115 116 This is an optional option. 117 118 -to layers layer list Specifies the routing layers to be considered **for** routing block-119 120 age or shape object types. This option must be used along with 121 -to object types routing blockage or -to object types shape. 122 This is an optional option. 123 124 -max distance 125 Specifies the maximum value of length type between "from" object 126 or "from" library cell and "to" object or "to" library cell. The distance cannot be greater than this value. The specified value 127 cannot be negative. If -min is also specified then this value 128 129 must be greater than the min value. This is an optional option. 130 131 -min distance 132 Specifies the minimum value of length type between "from" object 133 or "from" library cell and "to" object or "to" library cell. The 134 distance cannot be less than this value. The specified value

cannot be negative. If -max is also specified then this value

must be lesser than the max value. This is an optional option.

DESCRIPTION

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The set floorplan length rules command defines a named length floorplan 140 rule in the current design. The defined rule is persistent. If another 141 floorplan rule by the same name exists then the command errors out. 142 143 a difference between the object type core area and 144 std cell area. The core area object type means core boundary region 145 without cutting out any blockages and is typically applicable for top 146 level whereas std cell area object type means core boundary region 147 after cutting out all blockages and is typically applicable for block 148 level. 149 150 If a length rule is defined for a library cell and another length rule 151 is defined for a hard macro then the length rule defined for the 152 library cell will take precedence over the length rule defined for hard 153 macro when checks are done for that library cell. 154 155 EXAMPLES 156 The following example creates a length rule named le1 to check length 157 between the standard cell area and the hard macro in the vertical 158 direction, both top and bottom. The length must be at least 5. 159 160 prompt> set floorplan length rules -name le1 \ -from object types std cell_area -to_object_types hard_macro \ 161 162 -direction vertical -min 5 163 164 SEE ALSO 165 set floorplan area rules (2) 166 set_floorplan_enclosure_rules(2) 167 set floorplan extension rules (2) 168 set floorplan exception rules (2) 169 set floorplan halo rules (2) 170 set floorplan forbidden rules (2) 171 set floorplan spacing rules (2) 172 set floorplan width rules (2) 173 remove floorplan rules (2) 174 report floorplan rules (2) 175 176 Version S-2021.06-SP5

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