NAME

exp - expand the layout of a cell

SYNOPSIS

exp [-B|-V|-G] [-DHLhvg] [-cL] [-dN] [-oN] [-wXl,Xr,Yb,Yt] [cell ...]

OPTIONS

-B Do only execute makeboxl or makeboxh.

-V Do only execute makevln.

-G Do only execute makegln.

-g Execute makegln instead of makevln.

-D Do not delete the "_bxx" files (makevln or makegln option).

-H Select mixed linear/hierarchical expansion (using makeboxl -H) (default: linear expansion).

-cL Select check level 'L' (positive integer value).

A. When the cell is linearly expanded (default):

The check level specifies the level of the lowest cell which is included in the expansion (default: all cells are included (maximum level)).
The minimum possible level is 0 (which is a special case (read the manual page of makeboxl)).

B. When the cell is hierarchically expanded:

The check level specifies the level of the lowest cells in the cell hierarchy which are expanded. These are separate cell expansions, which contains all overlaps of the underlaying cell levels (default: only the cell on top of the hierarchy is expanded (minimum level = 1)).

-L Expand only Local cells.

-d[N] Discretization, 'N' samples per lambda (default: 8).

-h Select hierarchical expansion (default: linear epansion).

-oN Set the size of the active region during hierarchical expansion to 'N' (default: 6 micron).

-v Verbose mode.

-wXl,Xr,Yb,Yt

Select a partial expansion window. The window coordinates (integer values) must be specified as one argument (no blanks are allowed). Xl,Xr,Yb,Yt are respectively the left and right X-coordinates, and bottom and top Y-coordinates (default: the expansion window is the cell bounding box).

DESCRIPTION

Exp is a front-end program which, depending on the selected options, executes other programs. Default it executes *makeboxl* and *makevln*.

The cell name argument must always be specified (except when using option -V). More than one cell argument can be specified, in which case *exp* does his work for every cell.

If you are using option -V, you can only specify options -D and -v, which are the only makevln options. If you specify cell arguments in this case, makevln is executed with these cell arguments and is not using the "exp_dat" file.

The current working directory must be the project directory.

AUTHOR

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FILES

`NELSISPROJECT/.dmrc`

(input file)

`NELSISPROJECT/layout/`*cell*`/box`
(input file)

`NELSISPROJECT/layout/`*cell*`/mc`
(input file)

`NELSISPROJECT/layout/`*cell*`/nor`
(input file)

`NELSISPROJECT/layout/`*cell*`/term`
(input file)

`NELSISPROJECT/layout/`*cell*`/info`
(in/output file)

`NELSISPROJECT/layout/`*cell*`/spec`
(output file)

`NELSISPROJECT/layout/`*cell*`/tid`
(output file)

`NELSISPROJECT/layout/`*cell*`/LC_bxx`
(output files) LC=LayCode

`NELSISPROJECT/layout/`*cell*`/LC_nxx`
(output files)

`NELSISPROJECT/layout/`*cell*`/LC_vln`
(output files)

`NELSISPROJECT/layout/`*cell*`/teq`
(output file)

`NELSISPROJECT/exp_dat`
(output file)

SEE ALSO

T.G.R. van Leuken, J. Liedorp, "An Hierarchial and Technology Independent Design Rule Checker", in "The Integrated Circuit Design Book".
makeboxh(1ICD), makeboxl(1ICD), makevln(1ICD), makegln(1ICD).