

NAME

dblist - list cells in the database

SYNOPSIS

dblist [-lcf] [-h] [-d] [-r] [cell]

OPTIONS

- l** List only cells of the layout view.
- c** List only cells of the circuit view.
- f** List only cells of the floorplan view.
- h** Make a hierarchical listing.
- d** List also device calls in the circuit in a hierarchical listing.
- r** List only the roots in a hierarchical listing.

DESCRIPTION

Dblist is a program that makes a listing of the cells that are present in the IC design database.

When the option -h is specified, a hierarchical listing of the cells will be shown. In this situation, a cell can be specified for which its tree is shown. When no cell is specified, a listing of all cell trees is made.

When the option -h is not specified, a cell name or regular expression ('?', '*' or '[') may be specified and only the matching cell names are listed.

EXAMPLES

The first example lists all cells that are present in a database:

```
% dblist
```

layout:

```
feedback mod2_fb sel_reg8 xmc?  
latch rand_cnt select xyz!
```

circuit:

```
feedback mod2_fb rand_cnt select  
latch multiplex sel_reg8 total
```

function:

```
f_latch
```

imported:

```
Xlatch Xselect
```

floorplan:

Note that for a cell name followed with a '?' the "mc" file is not found. And for a cell name with '!' the cell directory is not found.

The second example lists only the cells of the layout view:

```
% dblist -l
```

```
feedback mod2_fb sel_reg8 xmc?  
latch rand_cnt select xyz!
```

The third example lists only the cells of the layout view, which begin with the letter 's':

```
% dblist -l 's*'
```

```
sel_reg8  select
```

The fourth example lists only the cells of the layout view, but in a single column if stdout is redirected:

```
% dblist -l | cat -n
 1 feedback
 2 latch
 3 mod2_fb
 4 rand_cnt
 5 sel_reg8
 6 select
 7 xmc?
 8 xyz!
```

The fifth example lists the cell tree of cell "rand_cnt" for the layout view:

```
% dblist -lh rand_cnt
1 - rand_cnt  (2)
 2 - sel_reg8    1 (2)
   3 - latch      8 (0)
   3 - select     8 (0)
 2 - feedback    1 (3)
   3 - mod2_fb     3 (0)
```

The first number on a line is the level of the corresponding cell in the cell tree. The second number (if present) is the total number of times (incl. copies) the cell is used, and the third or last number (between parenthesis) is the number of sub cells. For example, cell "sel_reg8" is on level 2, it is used 1 time by "rand_cnt", and it has 2 sub cells. One of the sub cells is "latch", which is used 8 times by "sel_reg8", and which has no sub cells itself. (It is a leaf cell). Because "sel_reg8" has only 2 sub cells, there must have been used a cell copy statement (array specification) to get 8 "latch" cells.

For the circuit view, the third or last number (between parenthesis) counts also the device cell calls. When a cell call is a call to a function block (if file "fterm" exists) the third number for this cell will be replaced by 'function'.

AUTHOR

S. de Graaf

FILES

proj_dir/view/celllist
(input file)

proj_dir/view/cell/mc
(input file)

proj_dir/circuit/cell/fterm
(input file)