

## NAME

colaps - flatten the hierarchy of a cell in the circuit view

## SYNOPSIS

colaps [...options...] [project] <sdinputcell>

## PARAMETERS

project      Name of the (seadif) library project, if not specified  
              local (seadif) library name is taken.

<sdinputcell>  
              Name of the (seadif) cell of the library project.

## OPTIONS

-h Help--- print list of options.

-k <keepfile>  
              Input file containing a list with circuits and/or  
              instances which should not be flattened.

-c            Flatten everything as far as the primary cell level,  
              that is, down to the level which consists exclusively  
              of transistors, capacitances or resistances.

-o <sdoutputcell>  
              Name of the output (seadif) cell to be created in local  
              (seadif) library. The default output cell is <sdinputcellFlt>  
              for an (seadif) imported cell or <sdinputcell> for a local  
              cell.

-l            Keep track of the flattened paths of the instances.

-f <trackfile>  
              Output file containing the list with flattened paths  
              and their instances. By default the <outputcell.list>  
              is taken.

-q            Do not print the state of the program during execution.

## DESCRIPTION

COLAPS reads the circuit description of an <sdinputcell> and recursively of all its children. It then removes the model calls a certain optional level. Finally, it writes the flattened cell into the <sdoutputcell> of local (seadif) library. COLAPS is operat cells used must have a correspondent (seadif) description.

By default, COLAPS flattens all the circuits found in the <sdinputcell> to the <sdoutputcell>. If one or more <childcircuit> all but the specified circuits and/or instances are flattened to the output. If -c option is specified then all but primary cells ar file> are possible.

## FILES

To run properly the command requires that a <keepfile> is present in your current directory when -k option is specified. This which shouldn't be flattened. Each line in this file should contain first the circuit name and/or second the instance name whic fied then this particular circuit is not flattened. If, both a circuit and an instance name are specified then this particular instan ments is treated as comment. The lines starting with procent character (%) are also treated as comment lines.

An example of such a <keepfile> is:

```
%keepfile for my inputcell
.
.
.
<sdfinputcell> <childinstance1> do not flatten <childinstance1>
                                %of circuit <sdfinputcell>
<childcircuit1>                %do not flatten <childcircuit1>
<childcircuit2> <childinstance1> do not flatten <childinstance1>
                                %of circuit <childcircuit2>
.
.
.
%end of the list
```

#### EXAMPLE

Use the program nelsea to convert the cell between nelsis and seadif. To flatten all cells of nelsis circuit 'myadder' down to the

```
nelsea -C myadder
colaps -c myadder
nelsea -rC myadder
```

To flatten all cells of imported circuit 'impcell\_adder' from project 'other\_proj', exclusively the cells specified in 'nonflatfile'

```
colaps -l -k nonflatfile other_proj impcell_adder
```

Examples of other possibilities:

```
colaps -l -f trackfile_name other_proj impcell_adder
colaps -c -o outputcell_name other_proj impcell_adder
colaps -c -k nonflatfile -o outputcell_name other_proj impcell_adder
```

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#### SEE ALSO

nelsea(1SDF)