



## ***Nand2 Layout***

***PROVE***

***irsim tool using***

***$h \rightarrow \text{high voltage}(1)$***

***$l \rightarrow \text{low voltage}(0)$***

***$h \rightarrow \text{vdd}$***

***$l \rightarrow \text{gnd}$***

***1)  $h a$***

***$h b$   $a$  ve  $b$  ye 1 verdik sonuç 0 çıktı***

***2)  $l a$***

***$h b$   $a$  ve  $b$  ye 1 verdik sonuç 1 çıktı***

3) *h a*  
*l b a ve b ye 1 verdik sonuç 1 çıktı*

4) *l a*  
*l b a ve b ye 1 verdik sonuç 1 çıktı*

*nand in doğruluk tablosu sağlanmış oldu.(nand2.sim)*

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tkcon 2.3 Main
File Console Edit Interp Prefs History Help

layout
Usage: windownames [all | client_type]
Valid window types are:
  netlist
  color
  layout

% extract
Extracting nand2 into /home/orkun/Desktop/kzz/nand2.ext:
% extract do all
% save nand2
% extract do all
% extract
% exttospice rthresh
infinite
% exttospice rthresh 1
% exttospice cthresh 0.01
% exttospice scale off
% exttospice
exttospice finished.
% ext2sim
ext2sim finished.
% irsim nand2.sim
Warning: irsim command 'tag' use fully-qualified name '::irsim::tag'
Warning: irsim command 'time' use fully-qualified name '::irsim::time'
Warning: irsim command 'help' use fully-qualified name '::irsim::help'
Warning: irsim command 'zoom' use fully-qualified name '::irsim::zoom'
Warning: irsim command 'print' use fully-qualified name '::irsim::print'
Warning: irsim command 'path' use fully-qualified name '::irsim::path'
Warning: irsim command 'clear' use fully-qualified name '::irsim::clear'
Warning: irsim command 'alias' use fully-qualified name '::irsim::alias'
Warning: irsim command 'exit' use fully-qualified name '::irsim::exit'
Starting irsim under Tcl interpreter
IRSIM 9.7.93 compiled on Sat Jan 16 23:11:33 UTC 2016
Parameter file scnos100.prm determined from header line
nand2.sim: Ignoring lumped-resistance ('R' construct)

Read nand2.sim lambda:1.00u format:MIT
Parameter file scnos100.prm determined from header line

Read ./nand2.sim lambda:1.00u format:MIT
6 nodes: transistors: n-channel=4 p-channel=4
parallel txtors: n-channel=4 p-channel=4
% stepsize 50
% h Vdd
% l Gnd
% a b f
% s
f=X b=X a=X time=0.000000ns
% s
f=X b=X a=X time=50.000000ns
% s
f=0 b=1 a=1 time=100.000000ns
% h a
% l b
% s
f=1 b=0 a=1 time=150.000000ns
% l a
% l b
% s
f=1 b=1 a=0 time=200.000000ns
% l a
% l b
% s
f=1 b=0 a=0 time=250.000000ns
% l
```