Assura (R) Physical Verification Version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35

Release 4.1\_USR7\_main

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@(#)$CDS: assura\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:34 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/assura on Sat Apr 26 17:53:57 2025

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/aveng /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -exec1 -LVS -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

@(#)$CDS: aveng\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:35 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/aveng on Sat Apr 26 17:53:58 2025

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

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Summary Report: finalschematic.sum

RSF : /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf

Library Name : final\_proj

CDSLIB Path : "/ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib"

Cell Name : finalschematic

View Name : layout

Rules File : /ecel/apps/cds/ic618/local/GPDK045/assura/./extract.rul

Options : -exec1 -LVS -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

Work Directory: .

Operating Mode: Legacy Mode is Off

Starting dfIIToVdb...

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.01s.

@(#)$CDS: dfIIToVdb\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:38 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/dfIIToVdb on Sat Apr 26 17:53:58 2025

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

Loading gpdk045/libInit.il ...

Loading gpdk045/loadCxt.ile ... done!

Loading context 'gpdk045' from library 'gpdk045' ... done!

Loading context 'pdkUtils' from library 'gpdk045' ... done!

Loading gpdk045/gpdk045\_customFilter.il ... done!

Loading gpdk045/libInitCustomExit.il ...

Loading Environment Settings ...

Loading gpdk045/gpdk045\_PDKRegistrations.il ... done!

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\* Cadence Design Systems, Inc. \*

\* \*

\* Generic 45nm PDK \*

\* (gpdk045) \*

\* \*

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VERSION: 6.0 (09-September-2019)

done!

Loaded gpdk045/libInit.il successfully!

Compiling rules...

Loading gpdk180/libInit.il ...

Loading context 'gpdk180' from library 'gpdk180' ... done!

Loading gpdk180/.cdsenv ... \*WARNING\* Master env file /ecel/apps/cds/ASSURA41/tools.lnx86/dfII/etc/tools/spectre/.cdsenv is not readable

done!

Loading gpdk180/libInitCustomExit.il ...

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Cadence Design Systems, Inc. \*

\* \*

\* Generic 180nm PDK \*

\* (gpdk180) \*

\* \*

\* Version 3.2 \*

\* \*

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done!

Loaded gpdk180/libInit.il successfully!

\*WARNING\* Cannot find /ecel/apps/cds/ASSURA41/tools.lnx86/dfII/etc/tools/hspiceD directory to load environment variables

WARNING LVS Run detected.

Non-legacy mode has been disabled for this LVS run

Checking out license for Assura\_LVS

Reading the design data...

Finished dfIIToVdb.

Building the VDB part 2 in background mode.

Building tables for LVS Preprocessing in background mode.

Starting /apps/cds/ASSURA41/tools.lnx86/assura/bin/vdbToCells . finalschematic

Finished /apps/cds/ASSURA41/tools.lnx86/assura/bin/vdbToCells

Starting Nvn PreExtraction...

Starting /apps/cds/ASSURA41/tools.lnx86/assura/bin/nvn /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -preExtract -exec1 -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

Checking out license for Assura\_LVS

@(#)$CDS: nvn\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:39 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 at Sat Apr 26 17:53:59 2025

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GENERIC PDK Assura Compare Rules file

Cadence Design Systems shall not be liable for the accuracy

of this LVS rule file or its ability to capture errors.

The user is responsible for thoroughly testing and

implementing its features.

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Reading schematic network

running dfIIToVldb -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.vlr /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.01s.

@(#)$CDS: dfIIToVldb\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:38 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/dfIIToVldb on Sat Apr 26 17:54:00 2025

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GENERIC PDK Assura Compare Rules file

Cadence Design Systems shall not be liable for the accuracy

of this LVS rule file or its ability to capture errors.

The user is responsible for thoroughly testing and

implementing its features.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Top Cell Library: "final\_proj"

Top Cell Name: "finalschematic"

Top Cell View: "schematic"

Output Data Base Name: "/ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.sdb"

Simulator Name: "auLvs"

View List: "auLvs schematic symbol"

Stop List: "auLvs"

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

Loading gpdk045/libInit.il ...

Loading gpdk045/loadCxt.ile ... done!

Loading context 'gpdk045' from library 'gpdk045' ... done!

Loading context 'pdkUtils' from library 'gpdk045' ... done!

Loading gpdk045/gpdk045\_customFilter.il ... done!

Loading gpdk045/libInitCustomExit.il ...

Loading Environment Settings ...

Loading gpdk045/gpdk045\_PDKRegistrations.il ... done!

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Cadence Design Systems, Inc. \*

\* \*

\* Generic 45nm PDK \*

\* (gpdk045) \*

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VERSION: 6.0 (09-September-2019)

done!

Loaded gpdk045/libInit.il successfully!

Net Listing Mode is Analog

Global net gnd! found

Global net vdd! found

writing /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.sdb

inputting /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.sdb

Reading layout network

inputting network finalschematic.ldb

Preprocessing schematic network phase 1

Preprocessing layout network phase 1

WARNING (AVLVSNN-10034) : bindingFile/bind rule - schematic cell 'g45inds' is not found and

will be considered a dummy cell. The default binding for layout cell 'g45inds(Generic)' will be broken.

WARNING (AVLVSNN-10034) : bindingFile/bind rule - schematic cell 'g45inda' is not found and

will be considered a dummy cell. The default binding for layout cell 'g45inda(IND)' will be broken.

Preprocessing schematic network phase 2

Preprocessing layout network phase 2

cpu=0.00m wall=0.02m mem=77.61mb

Finished /apps/cds/ASSURA41/tools.lnx86/assura/bin/nvn

Executing: bulk = cellBoundary(root)

Building the VDB part 3 in background mode.

Finished building the VDB. VDB build times for main process:

cpu: 0.04 elap: 2 pf: 0 in: 16 out: 72 virt: 101M phys: 578M

Running the Task Processor, 9 cells, 2906 steps...

Top Cell is 'finalschematic layout final\_proj'

Executing: Bondpad = geomOr(Bondpad Bondpad\_pin)

Executing: CapMetal = geomOr(CapMetal CapMetal\_pin)

Executing: Metal1 = geomOr(Metal1 Metal1\_pin)

Executing: Metal2 = geomOr(Metal2 Metal2\_pin)

Executing: Metal3 = geomOr(Metal3 Metal3\_pin)

Executing: Metal4 = geomOr(Metal4 Metal4\_pin)

Executing: Metal5 = geomOr(Metal5 Metal5\_pin)

Executing: Metal6 = geomOr(Metal6 Metal6\_pin)

Executing: Metal7 = geomOr(Metal7 Metal7\_pin)

Executing: Metal8 = geomOr(Metal8 Metal8\_pin)

Executing: Metal9 = geomOr(Metal9 Metal9\_pin)

Executing: Metal10 = geomOr(Metal10 Metal10\_pin)

Executing: Metal11 = geomOr(Metal11 Metal11\_pin)

Executing: Nburied = geomOr(Nburied Nburied\_pin)

Executing: Nimp = geomOr(Nimp Nimp\_pin)

Executing: Nwell = geomOr(Nwell Nwell\_pin)

Executing: Pimp = geomOr(Pimp Pimp\_pin)

Executing: Poly = geomOr(Poly Poly\_pin)

Executing: NOD = geomAnd(Nimp Oxide)

Executing: POD = geomAnd(Oxide Pimp)

Executing: \_npn2 = geomAnd(NPN2dum NPNdummy)

Executing: \_npn5 = geomAnd(NPN5dum NPNdummy)

Executing: \_npn10 = geomAnd(NPN10dum NPNdummy)

Executing: \_resm1 = geomAnd(M1Resdum Metal1)

Executing: \_resm2 = geomAnd(M2Resdum Metal2)

Executing: \_resm3 = geomAnd(M3Resdum Metal3)

Executing: \_resm4 = geomAnd(M4Resdum Metal4)

Executing: \_resm5 = geomAnd(M5Resdum Metal5)

Executing: \_resm6 = geomAnd(M6Resdum Metal6)

Executing: \_resm7 = geomAnd(M7Resdum Metal7)

Executing: \_resm8 = geomAnd(M8Resdum Metal8)

Executing: \_resm9 = geomAnd(M9Resdum Metal9)

Executing: \_resm10 = geomAnd(M10Resdum Metal10)

Executing: \_resm11 = geomAnd(M11Resdum Metal11)

Executing: bp\_tap = geomAnd(Bondpad Metal9)

Executing: cont\_poly = geomAnd(Cont Poly)

Executing: ind10 = geomAnd(INDdummy Metal10)

Executing: ind\_via = geomAnd(INDdummy Via10)

Executing: metal1\_conn = geomAndNot(Metal1 M1Resdum)

Executing: metal2\_conn = geomAndNot(Metal2 M2Resdum)

Executing: metal3\_conn = geomAndNot(Metal3 M3Resdum)

Executing: metal4\_conn = geomAndNot(Metal4 M4Resdum)

Executing: metal5\_conn = geomAndNot(Metal5 M5Resdum)

Executing: metal6\_conn = geomAndNot(Metal6 M6Resdum)

Executing: metal7\_conn = geomAndNot(Metal7 M7Resdum)

Executing: metal8\_conn = geomAndNot(Metal8 M8Resdum)

Executing: metal9\_conn = geomAndNot(Metal9 M9Resdum)

Executing: nactive = geomCat(NOD)

Executing: nb\_tap = geomAnd(Nburied Nwell)

Executing: nwell\_conn = geomAndNot(Nwell ResWdum)

Executing: pactive = geomCat(POD)

Executing: pdiff = geomAndNot(pactive Poly)

Executing: pdiff\_conn = geomAndNot(pdiff Resdum)

Executing: cont\_pdiff = geomAnd(Cont pdiff\_conn)

Executing: poly\_conn = geomAndNot(Poly Resdum)

Executing: ndiff = geomAndNot(nactive poly\_conn)

Executing: ndiff\_conn = geomAndNot(ndiff Resdum)

Executing: cont\_ndiff = geomAnd(Cont ndiff\_conn)

Executing: via10\_cap = geomAnd(CapMetal Via10)

Executing: via10\_nocap = geomAndNot(Via10 CapMetal)

Executing: L40182 = geomAnd(Nwell SiProt)

Executing: \_resnwoxide = geomAnd(L40182 ResWdum)

Executing: L25544 = geomAvoiding(Nwell SiProt)

Executing: \_resnwsti = geomAnd(L25544 ResWdum)

Executing: L68803 = geomAnd(BJTdum pdiff\_conn)

Executing: \_vpnp2 = drc(L68803 (area == 4))

Executing: \_vpnp5 = drc(L68803 (area == 25))

Executing: \_vpnp10 = drc(L68803 (area == 100))

Executing: L13465 = geomAnd(INDdummy Metal11)

Executing: L73046 = geomSize(L13465 0.01)

Executing: ind11 = geomSize(L73046 -0.01)

Executing: L72738 = geomEnclose(INDdummy ind11 (keep >= 2))

Executing: \_ind\_a = geomAndNot(INDdummy L72738)

Executing: \_ind\_s = geomAvoiding(INDdummy \_ind\_a)

Executing: L17074 = geomOr(INDdummy M10Resdum)

Executing: metal10\_conn = geomAndNot(Metal10 L17074)

Executing: L86607 = geomOr(INDdummy M11Resdum)

Executing: metal11\_conn = geomAndNot(Metal11 L86607)

Executing: L92042 = geomAnd(metal10\_conn metal11\_conn)

Executing: \_mimcap = geomButtOrOver(CapMetal L92042)

Executing: L61645 = geomAnd(NPNdummy ndiff\_conn)

Executing: npn\_emit = geomAndNot(L61645 Nwell)

Executing: L98077 = geomAnd(Psub pdiff\_conn)

Executing: pnp\_emit = geomAnd(L98077 PNPdummy)

Executing: L47735 = geomOr(CapMetal INDdummy)

Executing: via10\_nodev = geomAndNot(Via10 L47735)

Executing: L98377 = geomGetAngledEdge(IND2dummy (keep == 0))

Executing: L71536 = geomSize(L98377 0.01 edges)

Executing: L93547 = geomAndNot(L71536 IND2dummy)

Executing: ind2\_width = geomInside(L93547 ind11)

Executing: L83584 = geomOr(ind10 ind11)

Executing: L87155 = geomHoles(L83584 innermost)

Executing: ind\_hole = geomGetVertex(L87155 (keep < 14))

Executing: L74405 = geomAnd(Nwell ndiff\_conn)

Executing: L28555 = geomAnd(NPNdummy Psub)

Executing: ntap = geomAndNot(L74405 L28555)

Executing: L65704 = geomAndNot(pdiff\_conn Nwell)

Executing: ptap = geomAndNot(L65704 PNPdummy)

Executing: L54696 = geomAnd(DIOdummy Oxide)

Executing: L77738 = geomAnd(L54696 Oxide\_thk)

Executing: L73169 = geomAnd(L77738 Nzvt)

Executing: \_ndio\_2v\_nvt = geomAndNot(L73169 Nwell)

Executing: L97435 = geomAndNot(L54696 Oxide\_thk)

Executing: L22301 = geomAnd(L97435 Nhvt)

Executing: \_ndio\_hvt = geomAndNot(L22301 Nwell)

Executing: L18457 = geomAnd(L97435 Nlvt)

Executing: \_ndio\_lvt = geomAndNot(L18457 Nwell)

Executing: L5003 = geomAnd(L97435 Nzvt)

Executing: \_ndio\_nvt = geomAndNot(L5003 Nwell)

Executing: L62719 = geomAnd(L97435 Phvt)

Executing: \_pdio\_hvt = geomAnd(L62719 Nwell)

Executing: L58875 = geomAnd(L97435 Plvt)

Executing: \_pdio\_lvt = geomAnd(L58875 Nwell)

Executing: L28394 = geomAndNot(Oxide Oxide\_thk)

Executing: L66375 = geomAnd(L28394 Poly)

Executing: L29970 = geomAnd(L66375 Pimp)

Executing: \_pmos1v\_hvt = geomAnd(L29970 Phvt)

Executing: \_pmos1v\_lvt = geomAnd(L29970 Plvt)

Executing: L52573 = geomAnd(NOD SiProt)

Executing: L17877 = geomAnd(L52573 Resdum)

Executing: \_resnsndiff = geomAndNot(L17877 Nwell)

Executing: L5240 = geomAnd(Poly SiProt)

Executing: L1378 = geomAnd(L5240 Nimp)

Executing: L66582 = geomAnd(L1378 Resdum)

Executing: \_resnsnpoly = geomAndNot(L66582 Nwell)

Executing: \_resnsnpoly\_nw = geomAnd(L66582 Nwell)

Executing: L79583 = geomAnd(POD SiProt)

Executing: L2769 = geomAnd(L79583 Resdum)

Executing: \_resnspdiff = geomAnd(L2769 Nwell)

Executing: L60960 = geomAnd(L5240 Pimp)

Executing: L4294 = geomAnd(L60960 Resdum)

Executing: \_resnsppoly = geomAndNot(L4294 Nwell)

Executing: \_resnsppoly\_nw = geomAnd(L4294 Nwell)

Executing: L51921 = geomAvoiding(NOD SiProt)

Executing: L63811 = geomAnd(L51921 Resdum)

Executing: \_ressndiff = geomAndNot(L63811 Nwell)

Executing: L90381 = geomAndNot(Poly SiProt)

Executing: L49196 = geomAnd(L90381 Nimp)

Executing: L17878 = geomAnd(L49196 Resdum)

Executing: \_ressnpoly = geomAndNot(L17878 Nwell)

Executing: \_ressnpoly\_nw = geomAnd(L17878 Nwell)

Executing: L24911 = geomAvoiding(POD SiProt)

Executing: L83336 = geomAnd(L24911 Resdum)

Executing: \_resspdiff = geomAnd(L83336 Nwell)

Executing: L8778 = geomAnd(L90381 Pimp)

Executing: L54937 = geomAnd(L8778 Resdum)

Executing: \_ressppoly = geomAndNot(L54937 Nwell)

Executing: \_ressppoly\_nw = geomAnd(L54937 Nwell)

Executing: L54420 = geomAnd(ind10 ind11)

Executing: L42364 = geomAnd(L54420 \_ind\_s)

Executing: L12760 = geomButtOnly(L42364 ind\_hole)

Executing: ind\_ct = geomButtOrOver(L12760 Via10)

Executing: L13648 = geomAnd(Via10 \_ind\_s)

Executing: ind\_via\_diva = geomAndNot(L13648 ind\_ct)

Executing: L24975 = geomAnd(Oxide Oxide\_thk)

Executing: L98842 = geomAnd(L24975 Poly)

Executing: L73768 = geomAnd(L98842 Pimp)

Executing: L8948 = geomOr(Cap3dum Capdum)

Executing: \_pmos2v = geomAndNot(L73768 L8948)

Executing: L3699 = geomGetAngledEdge(ind\_ct (keep == 0))

Executing: L12066 = geomSize(L3699 0.1 edges)

Executing: L64022 = geomAnd(L12066 ind10)

Executing: L30099 = geomGetEdge(L64022 butting ind\_hole)

Executing: L43958 = geomSize(L30099 101 edges)

Executing: ind\_rad = geomAnd(L43958 ind\_hole)

Executing: pwell\_iso = geomAvoiding(geomAnd(geomGetHoled(Nwell) Nburied) geomGetHoled(Nb...

Executing: psub\_R = geomAndNot(Psub geomSize(Psub -0.001))

Executing: pwell\_iso\_R = geomAndNot(pwell\_iso geomSize(pwell\_iso -0.001))

Executing: pwell = geomAndNot(geomAndNot(bulk pwell\_iso\_R) psub\_R)

Executing: L89552 = geomAnd(L66375 Nimp)

Executing: L70180 = geomAnd(L89552 Nzvt)

Executing: L21328 = geomAndNot(L70180 Nhvt)

Executing: \_nmos\_12\_native = geomAndNot(L21328 Nburied)

Executing: L14186 = geomAnd(L98842 Nimp)

Executing: L15681 = geomAnd(L14186 Nzvt)

Executing: L10869 = geomAndNot(L15681 Nhvt)

Executing: \_nmos\_25\_native = geomAndNot(L10869 Nburied)

Executing: L62041 = geomAnd(L97435 Pimp)

Executing: L28017 = geomAndNot(L62041 Plvt)

Executing: L17166 = geomAndNot(L28017 Phvt)

Executing: \_pdio = geomAnd(L17166 Nwell)

Executing: L16131 = geomAnd(L77738 Pimp)

Executing: L48360 = geomAndNot(L16131 Plvt)

Executing: L917 = geomAndNot(L48360 Phvt)

Executing: \_pdio\_2v = geomAnd(L917 Nwell)

Executing: L31956 = geomSize(IND2dummy 1.0)

Executing: L70261 = geomSize(L31956 4.0)

Executing: L66884 = geomSize(INDdummy -1)

Executing: L26372 = geomAndNot(L70261 L66884)

Executing: L19884 = geomAnd(INDdummy L26372)

Executing: L73859 = geomAndNot(L19884 ind11)

Executing: ind2\_sp1 = geomButting(L73859 ind11 (keep == 2))

Executing: L21623 = geomAnd(L97435 Nimp)

Executing: L12020 = geomAndNot(L21623 Nlvt)

Executing: L4397 = geomAndNot(L12020 Nhvt)

Executing: L8315 = geomAndNot(L4397 Nzvt)

Executing: \_ndio = geomAndNot(L8315 Nwell)

Executing: L56549 = geomAnd(L77738 Nimp)

Executing: L18325 = geomAndNot(L56549 Nlvt)

Executing: L87119 = geomAndNot(L18325 Nhvt)

Executing: L50344 = geomAndNot(L87119 Nzvt)

Executing: \_ndio\_2v = geomAndNot(L50344 Nwell)

Executing: L87478 = geomAnd(L89552 Nhvt)

Executing: L49009 = geomOr(Nlvt Nzvt)

Executing: L13756 = geomOr(L49009 Nburied)

Executing: \_nmos1v\_hvt = geomAndNot(L87478 L13756)

Executing: L83634 = geomAnd(L89552 Nlvt)

Executing: L25035 = geomOr(Nhvt Nzvt)

Executing: L68361 = geomOr(L25035 Nburied)

Executing: \_nmos1v\_lvt = geomAndNot(L83634 L68361)

Executing: L25441 = geomAndNot(L89552 Nzvt)

Executing: L70734 = geomAndNot(L25441 Nhvt)

Executing: L8530 = geomAndNot(L70734 Nburied)

Executing: \_nmoscap1v = geomAnd(Capdum L8530)

Executing: L55994 = geomAndNot(L14186 Nzvt)

Executing: L55604 = geomAndNot(L55994 Nhvt)

Executing: L64343 = geomAndNot(L55604 Nburied)

Executing: \_nmoscap2v = geomAnd(Capdum L64343)

Executing: L20537 = geomOr(Phvt Plvt)

Executing: L86632 = geomOr(Capdum L20537)

Executing: L85139 = geomOr(Cap3dum L86632)

Executing: \_pmos1v = geomAndNot(L29970 L85139)

Executing: L5017 = geomAndNot(L29970 Nzvt)

Executing: L28655 = geomAndNot(L5017 Nhvt)

Executing: L38143 = geomAndNot(L28655 Nburied)

Executing: \_pmoscap1v = geomAnd(Capdum L38143)

Executing: L4203 = geomAndNot(L73768 Nzvt)

Executing: L16207 = geomAndNot(L4203 Nhvt)

Executing: L72451 = geomAndNot(L16207 Nburied)

Executing: \_pmoscap2v = geomAnd(Capdum L72451)

Executing: \_nmos\_25 = geomAndNot(L64343 L8948)

Executing: L40124 = geomOr(L25035 Nlvt)

Executing: L71361 = geomOr(L40124 Nburied)

Executing: L32193 = geomOr(Capdum L71361)

Executing: L26526 = geomOr(Cap3dum L32193)

Executing: \_nmos1v = geomAndNot(L89552 L26526)

Executing: SPOKE\_T?460 = geomOr(ind10)

Executing: TMP\_T?461 = geomOr(ind11)

Executing: TMP\_T?462 = geomInside(TMP\_T?461 SPOKE\_T?460)

Executing: SPIRAL\_T?463 = geomAndNot(TMP\_T?461 TMP\_T?462)

Executing: SPRL\_AND\_SPK\_T?464 = geomAnd(SPIRAL\_T?463 SPOKE\_T?460)

Executing: CONN\_REGION\_T?465 = geomEnclose(SPRL\_AND\_SPK\_T?464 ind\_via)

Executing: SPRL\_CTR\_T?467 = X\_innerDiaErrLyr\_g45inda = X\_spacingErrLyr\_g45inda = X\_width...

Executing: GOOD\_SPRL\_SPK\_CONN\_T?471 = geomOverlap(CONN\_REGION\_T?465 SPRL\_CTR\_T?467)

Executing: RECOG\_NEW\_T?472 = geomEnclose(\_ind\_a GOOD\_SPRL\_SPK\_CONN\_T?471)

Executing: joinErrLyr\_g45inda = geomAndNot(\_ind\_a RECOG\_NEW\_T?472)

errorLayer(joinErrLyr\_g45inda "SI g45inda connectionErrors")

Executing: spacingErrLyr\_g45inda = geomEnclose(\_ind\_a X\_spacingErrLyr\_g45inda)

errorLayer(spacingErrLyr\_g45inda "SI g45inda spacingErrors")

Executing: innerDiaErrLyr\_g45inda = geomEnclose(\_ind\_a X\_innerDiaErrLyr\_g45inda)

errorLayer(innerDiaErrLyr\_g45inda "SI g45inda innerDiameterErrors")

Executing: widthErrLyr\_g45inda = geomEnclose(\_ind\_a X\_widthErrLyr\_g45inda)

errorLayer(widthErrLyr\_g45inda "SI g45inda widthErrors")

Executing: SPRL\_T?478 = geomOverlap(ind11 GOOD\_SPRL\_SPK\_CONN\_T?471)

Executing: SPK\_T?479 = geomOverlap(ind10 GOOD\_SPRL\_SPK\_CONN\_T?471)

Executing: geomConnect((via bp\_tap Bondpad metal11\_conn) (via via10\_cap metal11\_conn Cap...

See the label report in "finalschematic.erc" file for details.

Executing: geomStamp(ptap pdiff\_conn error)

Executing: geomStamp(pwell ptap error)

Executing: geomStamp(ntap ndiff\_conn error)

Executing: geomStamp(nwell\_conn ntap error)

Executing: geomStamp(nb\_tap nwell\_conn error)

Executing: geomStamp(Nburied nb\_tap error)

Executing: geomConnect((buttOrOver ind11 metal11\_conn) (via ind\_via\_diva ind11 ind10) (v...

See the label report in "finalschematic.erc" file for details.

Executing: geomStamp(ptap pdiff\_conn error)

Executing: geomStamp(pwell ptap error)

Executing: geomStamp(ntap ndiff\_conn error)

Executing: geomStamp(nwell\_conn ntap error)

Executing: geomStamp(nb\_tap nwell\_conn error)

Executing: geomStamp(Nburied nb\_tap error)

Executing: geomStamp(SPRL\_T?478 ind11)

Executing: geomStamp(SPK\_T?479 ind10)

Executing: DEVICE\_LAYER\_RECOG\_NEW\_T?472\_SI\_1 = \_extractSIDevice("g45inda" RECOG\_NEW\_T?47...

Executing: widthValLyr\_g45inda = \_measureSIParameter((width IND\_SPIRAL\_T?586) (turnOnSpi...

Executing: spacingValLyr\_g45inda = \_measureSIParameter((spacing IND\_SPIRAL\_T?586) (turnO...

Executing: numTurnValLyr\_g45inda = \_measureSIParameter((turn IND\_SPIRAL\_T?586) (turnOnSp...

Executing: innerDiaValLyr\_g45inda = \_measureSIParameter((innerDia IND\_SPIRAL\_T?586) (tur...

Executing: extractMOS("g45n1svt" \_nmos1v (poly\_conn "G") (ndiff\_conn "S" "D") (pwell "B"...

2 'g45n1svt' created in cell 'nand2\_45 layout final\_proj'.

1 'g45n1svt' created in cell 'inverter layout final\_proj'.

4 'g45n1svt' created in cell 'SRAM\_cell\_1 layout final\_proj'.

3 'g45n1svt' created in cell 'sense\_amp layout final\_proj'.

4 'g45n1svt' created in cell 'rw\_control layout final\_proj'.

35 'g45n1svt' created in cell 'rowDecoder layout final\_proj'.

4 'g45n1svt' created in cell 'Coldecoder layout final\_proj'.

Executing: attachParameter(w "w" \_nmos1v)

Executing: attachParameter(l "l" \_nmos1v)

Executing: attachParameter(ad "ad" \_nmos1v)

Executing: attachParameter(as "as" \_nmos1v)

Executing: attachParameter(pd "pd" \_nmos1v)

Executing: attachParameter(ps "ps" \_nmos1v)

Executing: width = measureParameter(length (\_nmos1v butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos1v))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45n1hvt" \_nmos1v\_hvt (poly\_conn "G") (ndiff\_conn "S" "D") (pwell...

Executing: attachParameter(w "w" \_nmos1v\_hvt)

Executing: attachParameter(l "l" \_nmos1v\_hvt)

Executing: attachParameter(ad "ad" \_nmos1v\_hvt)

Executing: attachParameter(as "as" \_nmos1v\_hvt)

Executing: attachParameter(pd "pd" \_nmos1v\_hvt)

Executing: attachParameter(ps "ps" \_nmos1v\_hvt)

Executing: width = measureParameter(length (\_nmos1v\_hvt butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos1v\_hvt))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45n1lvt" \_nmos1v\_lvt (poly\_conn "G") (ndiff\_conn "S" "D") (pwell...

Executing: attachParameter(w "w" \_nmos1v\_lvt)

Executing: attachParameter(l "l" \_nmos1v\_lvt)

Executing: attachParameter(ad "ad" \_nmos1v\_lvt)

Executing: attachParameter(as "as" \_nmos1v\_lvt)

Executing: attachParameter(pd "pd" \_nmos1v\_lvt)

Executing: attachParameter(ps "ps" \_nmos1v\_lvt)

Executing: width = measureParameter(length (\_nmos1v\_lvt butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos1v\_lvt))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45n1nvt" \_nmos\_12\_native (poly\_conn "G") (ndiff\_conn "S" "D") (p...

Executing: attachParameter(w "w" \_nmos\_12\_native)

Executing: attachParameter(l "l" \_nmos\_12\_native)

Executing: attachParameter(ad "ad" \_nmos\_12\_native)

Executing: attachParameter(as "as" \_nmos\_12\_native)

Executing: attachParameter(pd "pd" \_nmos\_12\_native)

Executing: attachParameter(ps "ps" \_nmos\_12\_native)

Executing: width = measureParameter(length (\_nmos\_12\_native butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos\_12\_native))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45n2svt" \_nmos\_25 (poly\_conn "G") (ndiff\_conn "S" "D") (pwell "B...

Executing: attachParameter(w "w" \_nmos\_25)

Executing: attachParameter(l "l" \_nmos\_25)

Executing: attachParameter(ad "ad" \_nmos\_25)

Executing: attachParameter(as "as" \_nmos\_25)

Executing: attachParameter(pd "pd" \_nmos\_25)

Executing: attachParameter(ps "ps" \_nmos\_25)

Executing: width = measureParameter(length (\_nmos\_25 butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos\_25))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45n2nvt" \_nmos\_25\_native (poly\_conn "G") (ndiff\_conn "S" "D") (p...

Executing: attachParameter(w "w" \_nmos\_25\_native)

Executing: attachParameter(l "l" \_nmos\_25\_native)

Executing: attachParameter(ad "ad" \_nmos\_25\_native)

Executing: attachParameter(as "as" \_nmos\_25\_native)

Executing: attachParameter(pd "pd" \_nmos\_25\_native)

Executing: attachParameter(ps "ps" \_nmos\_25\_native)

Executing: width = measureParameter(length (\_nmos\_25\_native butting ndiff\_conn) 0.5)

Executing: area = measureParameter(area (\_nmos\_25\_native))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45ncap1" \_nmoscap1v (poly\_conn "G") (ndiff\_conn "S" "D") (pwell ...

Executing: attachParameter(w "w" \_nmoscap1v)

Executing: attachParameter(l "l" \_nmoscap1v)

Executing: attachParameter(ad "ad" \_nmoscap1v)

Executing: attachParameter(as "as" \_nmoscap1v)

Executing: attachParameter(pd "pd" \_nmoscap1v)

Executing: attachParameter(ps "ps" \_nmoscap1v)

Executing: extractMOS("g45ncap2" \_nmoscap2v (poly\_conn "G") (ndiff\_conn "S" "D") (pwell ...

Executing: attachParameter(w "w" \_nmoscap2v)

Executing: attachParameter(l "l" \_nmoscap2v)

Executing: attachParameter(ad "ad" \_nmoscap2v)

Executing: attachParameter(as "as" \_nmoscap2v)

Executing: attachParameter(pd "pd" \_nmoscap2v)

Executing: attachParameter(ps "ps" \_nmoscap2v)

Executing: extractMOS("g45p1svt" \_pmos1v (poly\_conn "G") (pdiff\_conn "S" "D") (nwell\_con...

2 'g45p1svt' created in cell 'nand2\_45 layout final\_proj'.

1 'g45p1svt' created in cell 'inverter layout final\_proj'.

2 'g45p1svt' created in cell 'SRAM\_cell\_1 layout final\_proj'.

2 'g45p1svt' created in cell 'sense\_amp layout final\_proj'.

2 'g45p1svt' created in cell 'rw\_control layout final\_proj'.

35 'g45p1svt' created in cell 'rowDecoder layout final\_proj'.

4 'g45p1svt' created in cell 'Coldecoder layout final\_proj'.

Executing: attachParameter(w "w" \_pmos1v)

Executing: attachParameter(l "l" \_pmos1v)

Executing: attachParameter(ad "ad" \_pmos1v)

Executing: attachParameter(as "as" \_pmos1v)

Executing: attachParameter(pd "pd" \_pmos1v)

Executing: attachParameter(ps "ps" \_pmos1v)

Executing: width = measureParameter(length (\_pmos1v butting pdiff\_conn) 0.5)

Executing: area = measureParameter(area (\_pmos1v))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45p1hvt" \_pmos1v\_hvt (poly\_conn "G") (pdiff\_conn "S" "D") (nwell...

Executing: attachParameter(w "w" \_pmos1v\_hvt)

Executing: attachParameter(l "l" \_pmos1v\_hvt)

Executing: attachParameter(ad "ad" \_pmos1v\_hvt)

Executing: attachParameter(as "as" \_pmos1v\_hvt)

Executing: attachParameter(pd "pd" \_pmos1v\_hvt)

Executing: attachParameter(ps "ps" \_pmos1v\_hvt)

Executing: width = measureParameter(length (\_pmos1v\_hvt butting pdiff\_conn) 0.5)

Executing: area = measureParameter(area (\_pmos1v\_hvt))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45p1lvt" \_pmos1v\_lvt (poly\_conn "G") (pdiff\_conn "S" "D") (nwell...

Executing: attachParameter(w "w" \_pmos1v\_lvt)

Executing: attachParameter(l "l" \_pmos1v\_lvt)

Executing: attachParameter(ad "ad" \_pmos1v\_lvt)

Executing: attachParameter(as "as" \_pmos1v\_lvt)

Executing: attachParameter(pd "pd" \_pmos1v\_lvt)

Executing: attachParameter(ps "ps" \_pmos1v\_lvt)

Executing: width = measureParameter(length (\_pmos1v\_lvt butting pdiff\_conn) 0.5)

Executing: area = measureParameter(area (\_pmos1v\_lvt))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45p2svt" \_pmos2v (poly\_conn "G") (pdiff\_conn "S" "D") (nwell\_con...

Executing: attachParameter(w "w" \_pmos2v)

Executing: attachParameter(l "l" \_pmos2v)

Executing: attachParameter(ad "ad" \_pmos2v)

Executing: attachParameter(as "as" \_pmos2v)

Executing: attachParameter(pd "pd" \_pmos2v)

Executing: attachParameter(ps "ps" \_pmos2v)

Executing: width = measureParameter(length (\_pmos2v butting pdiff\_conn) 0.5)

Executing: area = measureParameter(area (\_pmos2v))

Executing: w = calculateParameter((width \* 1e-06))

Executing: l = calculateParameter(((area / width) \* 1e-06))

Executing: gL = calculateParameter((len \* 1000000.0))

Executing: gW = calculateParameter((wid \* 1000000.0))

Executing: measureSTI(gate activeArea 50 (output isa isb) (calculateExp (sw / gW / (sa + (gL \* 0.5))) (sw / gW / (sb + (gL \* 0.5)))))

Executing: SA = calculateParameter((((1 / isa) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SA "sa")

Executing: SB = calculateParameter((((1 / isb) - (0.5 \* gL)) \* 1e-06))

Executing: nameParameter(SB "sb")

Executing: SCC\_raw = SCB\_raw = SCA\_raw = measureProximity2(gate mosBase 5.0 (output SCA\_...

Executing: sca = calculateParameter(((((1 / wid) \* 1) / len) \* SCA\_raw))

Executing: scb = calculateParameter(((((1 / wid) \* 1) / len) \* SCB\_raw))

Executing: scc = calculateParameter(((((1 / wid) \* 1) / len) \* SCC\_raw))

Executing: attachParameter(sca "sca" gate)

Executing: attachParameter(scb "scb" gate)

Executing: attachParameter(scc "scc" gate)

Executing: extractMOS("g45pcap1" \_pmoscap1v (poly\_conn "G") (pdiff\_conn "S" "D") (nwell\_...

Executing: attachParameter(w "w" \_pmoscap1v)

Executing: attachParameter(l "l" \_pmoscap1v)

Executing: attachParameter(ad "ad" \_pmoscap1v)

Executing: attachParameter(as "as" \_pmoscap1v)

Executing: attachParameter(pd "pd" \_pmoscap1v)

Executing: attachParameter(ps "ps" \_pmoscap1v)

Executing: extractMOS("g45pcap2" \_pmoscap2v (poly\_conn "G") (pdiff\_conn "S" "D") (nwell\_...

Executing: attachParameter(w "w" \_pmoscap2v)

Executing: attachParameter(l "l" \_pmoscap2v)

Executing: attachParameter(ad "ad" \_pmoscap2v)

Executing: attachParameter(as "as" \_pmoscap2v)

Executing: attachParameter(pd "pd" \_pmoscap2v)

Executing: attachParameter(ps "ps" \_pmoscap2v)

Executing: extractRES("g45rm1" \_resm1 (metal1\_conn "PLUS" "MINUS") (spiceModel "g45rm1")...

Executing: attachParameter(w "w" \_resm1)

Executing: attachParameter(wSim "wSim" \_resm1)

Executing: attachParameter(l "l" \_resm1)

Executing: attachParameter(lSim "lSim" \_resm1)

Executing: extractRES("g45rm2" \_resm2 (metal2\_conn "PLUS" "MINUS") (spiceModel "g45rm2")...

Executing: attachParameter(w "w" \_resm2)

Executing: attachParameter(wSim "wSim" \_resm2)

Executing: attachParameter(l "l" \_resm2)

Executing: attachParameter(lSim "lSim" \_resm2)

Executing: extractRES("g45rm3" \_resm3 (metal3\_conn "PLUS" "MINUS") (spiceModel "g45rm3")...

Executing: attachParameter(w "w" \_resm3)

Executing: attachParameter(wSim "wSim" \_resm3)

Executing: attachParameter(l "l" \_resm3)

Executing: attachParameter(lSim "lSim" \_resm3)

Executing: extractRES("g45rm4" \_resm4 (metal4\_conn "PLUS" "MINUS") (spiceModel "g45rm4")...

Executing: attachParameter(w "w" \_resm4)

Executing: attachParameter(wSim "wSim" \_resm4)

Executing: attachParameter(l "l" \_resm4)

Executing: attachParameter(lSim "lSim" \_resm4)

Executing: extractRES("g45rm5" \_resm5 (metal5\_conn "PLUS" "MINUS") (spiceModel "g45rm5")...

Executing: attachParameter(w "w" \_resm5)

Executing: attachParameter(wSim "wSim" \_resm5)

Executing: attachParameter(l "l" \_resm5)

Executing: attachParameter(lSim "lSim" \_resm5)

Executing: extractRES("g45rm6" \_resm6 (metal6\_conn "PLUS" "MINUS") (spiceModel "g45rm6")...

Executing: attachParameter(w "w" \_resm6)

Executing: attachParameter(wSim "wSim" \_resm6)

Executing: attachParameter(l "l" \_resm6)

Executing: attachParameter(lSim "lSim" \_resm6)

Executing: extractRES("g45rm7" \_resm7 (metal7\_conn "PLUS" "MINUS") (spiceModel "g45rm7")...

Executing: attachParameter(w "w" \_resm7)

Executing: attachParameter(wSim "wSim" \_resm7)

Executing: attachParameter(l "l" \_resm7)

Executing: attachParameter(lSim "lSim" \_resm7)

Executing: extractRES("g45rm8" \_resm8 (metal8\_conn "PLUS" "MINUS") (spiceModel "g45rm8")...

Executing: attachParameter(w "w" \_resm8)

Executing: attachParameter(wSim "wSim" \_resm8)

Executing: attachParameter(l "l" \_resm8)

Executing: attachParameter(lSim "lSim" \_resm8)

Executing: extractRES("g45rm9" \_resm9 (metal9\_conn "PLUS" "MINUS") (spiceModel "g45rm9")...

Executing: attachParameter(w "w" \_resm9)

Executing: attachParameter(wSim "wSim" \_resm9)

Executing: attachParameter(l "l" \_resm9)

Executing: attachParameter(lSim "lSim" \_resm9)

Executing: extractRES("g45rm10" \_resm10 (metal10\_conn "PLUS" "MINUS") (spiceModel "g45rm...

Executing: attachParameter(w "w" \_resm10)

Executing: attachParameter(wSim "wSim" \_resm10)

Executing: attachParameter(l "l" \_resm10)

Executing: attachParameter(lSim "lSim" \_resm10)

Executing: extractRES("g45rm11" \_resm11 (metal11\_conn "PLUS" "MINUS") (spiceModel "g45rm...

Executing: attachParameter(w "w" \_resm11)

Executing: attachParameter(wSim "wSim" \_resm11)

Executing: attachParameter(l "l" \_resm11)

Executing: attachParameter(lSim "lSim" \_resm11)

Executing: extractRES("g45rsnd" \_ressndiff (ndiff\_conn "PLUS" "MINUS") (pwell "B") (spic...

Executing: attachParameter(w "w" \_ressndiff)

Executing: attachParameter(wSim "wSim" \_ressndiff)

Executing: attachParameter(l "l" \_ressndiff)

Executing: attachParameter(lSim "lSim" \_ressndiff)

Executing: extractRES("g45rnsnd" \_resnsndiff (ndiff\_conn "PLUS" "MINUS") (pwell "B") (sp...

Executing: attachParameter(w "w" \_resnsndiff)

Executing: attachParameter(wSim "wSim" \_resnsndiff)

Executing: attachParameter(l "l" \_resnsndiff)

Executing: attachParameter(lSim "lSim" \_resnsndiff)

Executing: extractRES("g45rsnp" \_ressnpoly (poly\_conn "PLUS" "MINUS") (pwell "B") (spice...

Executing: attachParameter(w "w" \_ressnpoly)

Executing: attachParameter(wSim "wSim" \_ressnpoly)

Executing: attachParameter(l "l" \_ressnpoly)

Executing: attachParameter(lSim "lSim" \_ressnpoly)

Executing: extractRES("g45rsnp" \_ressnpoly\_nw (poly\_conn "PLUS" "MINUS") (nwell\_conn "B"...

Executing: attachParameter(w "w" \_ressnpoly\_nw)

Executing: attachParameter(wSim "wSim" \_ressnpoly\_nw)

Executing: attachParameter(l "l" \_ressnpoly\_nw)

Executing: attachParameter(lSim "lSim" \_ressnpoly\_nw)

Executing: extractRES("g45rnsnp" \_resnsnpoly (poly\_conn "PLUS" "MINUS") (pwell "B") (spi...

Executing: attachParameter(w "w" \_resnsnpoly)

Executing: attachParameter(wSim "wSim" \_resnsnpoly)

Executing: attachParameter(l "l" \_resnsnpoly)

Executing: attachParameter(lSim "lSim" \_resnsnpoly)

Executing: extractRES("g45rnsnp" \_resnsnpoly\_nw (poly\_conn "PLUS" "MINUS") (nwell\_conn "...

Executing: attachParameter(w "w" \_resnsnpoly\_nw)

Executing: attachParameter(wSim "wSim" \_resnsnpoly\_nw)

Executing: attachParameter(l "l" \_resnsnpoly\_nw)

Executing: attachParameter(lSim "lSim" \_resnsnpoly\_nw)

Executing: extractRES("g45rspd" \_resspdiff (pdiff\_conn "PLUS" "MINUS") (nwell\_conn "B") ...

Executing: attachParameter(w "w" \_resspdiff)

Executing: attachParameter(wSim "wSim" \_resspdiff)

Executing: attachParameter(l "l" \_resspdiff)

Executing: attachParameter(lSim "lSim" \_resspdiff)

Executing: extractRES("g45rnspd" \_resnspdiff (pdiff\_conn "PLUS" "MINUS") (nwell\_conn "B"...

Executing: attachParameter(w "w" \_resnspdiff)

Executing: attachParameter(wSim "wSim" \_resnspdiff)

Executing: attachParameter(l "l" \_resnspdiff)

Executing: attachParameter(lSim "lSim" \_resnspdiff)

Executing: extractRES("g45rspp" \_ressppoly (poly\_conn "PLUS" "MINUS") (pwell "B") (spice...

Executing: attachParameter(w "w" \_ressppoly)

Executing: attachParameter(wSim "wSim" \_ressppoly)

Executing: attachParameter(l "l" \_ressppoly)

Executing: attachParameter(lSim "lSim" \_ressppoly)

Executing: extractRES("g45rspp" \_ressppoly\_nw (poly\_conn "PLUS" "MINUS") (nwell\_conn "B"...

Executing: attachParameter(w "w" \_ressppoly\_nw)

Executing: attachParameter(wSim "wSim" \_ressppoly\_nw)

Executing: attachParameter(l "l" \_ressppoly\_nw)

Executing: attachParameter(lSim "lSim" \_ressppoly\_nw)

Executing: extractRES("g45rnspp" \_resnsppoly (poly\_conn "PLUS" "MINUS") (pwell "B") (spi...

Executing: attachParameter(w "w" \_resnsppoly)

Executing: attachParameter(wSim "wSim" \_resnsppoly)

Executing: attachParameter(l "l" \_resnsppoly)

Executing: attachParameter(lSim "lSim" \_resnsppoly)

Executing: extractRES("g45rnspp" \_resnsppoly\_nw (poly\_conn "PLUS" "MINUS") (nwell\_conn "...

Executing: attachParameter(w "w" \_resnsppoly\_nw)

Executing: attachParameter(wSim "wSim" \_resnsppoly\_nw)

Executing: attachParameter(l "l" \_resnsppoly\_nw)

Executing: attachParameter(lSim "lSim" \_resnsppoly\_nw)

Executing: extractRES("g45rnws" \_resnwsti (nwell\_conn "PLUS" "MINUS") (pwell "B") (spice...

Executing: attachParameter(w "w" \_resnwsti)

Executing: attachParameter(wSim "wSim" \_resnwsti)

Executing: attachParameter(l "l" \_resnwsti)

Executing: attachParameter(lSim "lSim" \_resnwsti)

Executing: extractRES("g45rnwo" \_resnwoxide (nwell\_conn "PLUS" "MINUS") (pwell "B") (spi...

Executing: attachParameter(w "w" \_resnwoxide)

Executing: attachParameter(wSim "wSim" \_resnwoxide)

Executing: attachParameter(l "l" \_resnwoxide)

Executing: attachParameter(lSim "lSim" \_resnwoxide)

Executing: extractDIODE("g45nd1svt" \_ndio (pwell "PLUS") (ndiff\_conn "MINUS") (spiceMode...

Executing: attachParameter(area "area" \_ndio)

Executing: attachParameter(pj "pj" \_ndio)

Executing: extractDIODE("g45nd1lvt" \_ndio\_lvt (pwell "PLUS") (ndiff\_conn "MINUS") (spice...

Executing: attachParameter(area "area" \_ndio\_lvt)

Executing: attachParameter(pj "pj" \_ndio\_lvt)

Executing: extractDIODE("g45nd1hvt" \_ndio\_hvt (pwell "PLUS") (ndiff\_conn "MINUS") (spice...

Executing: attachParameter(area "area" \_ndio\_hvt)

Executing: attachParameter(pj "pj" \_ndio\_hvt)

Executing: extractDIODE("g45nd1nvt" \_ndio\_nvt (pwell "PLUS") (ndiff\_conn "MINUS") (spice...

Executing: attachParameter(area "area" \_ndio\_nvt)

Executing: attachParameter(pj "pj" \_ndio\_nvt)

Executing: extractDIODE("g45nd2svt" \_ndio\_2v (pwell "PLUS") (ndiff\_conn "MINUS") (spiceM...

Executing: attachParameter(area "area" \_ndio\_2v)

Executing: attachParameter(pj "pj" \_ndio\_2v)

Executing: extractDIODE("g45nd2nvt" \_ndio\_2v\_nvt (pwell "PLUS") (ndiff\_conn "MINUS") (sp...

Executing: attachParameter(area "area" \_ndio\_2v\_nvt)

Executing: attachParameter(pj "pj" \_ndio\_2v\_nvt)

Executing: extractDIODE("g45pd1svt" \_pdio (pdiff\_conn "PLUS") (nwell\_conn "MINUS") (spic...

Executing: attachParameter(area "area" \_pdio)

Executing: attachParameter(pj "pj" \_pdio)

Executing: extractDIODE("g45pd1lvt" \_pdio\_lvt (pdiff\_conn "PLUS") (nwell\_conn "MINUS") (...

Executing: attachParameter(area "area" \_pdio\_lvt)

Executing: attachParameter(pj "pj" \_pdio\_lvt)

Executing: extractDIODE("g45pd1hvt" \_pdio\_hvt (pdiff\_conn "PLUS") (nwell\_conn "MINUS") (...

Executing: attachParameter(area "area" \_pdio\_hvt)

Executing: attachParameter(pj "pj" \_pdio\_hvt)

Executing: extractDIODE("g45pd2svt" \_pdio\_2v (pdiff\_conn "PLUS") (nwell\_conn "MINUS") (s...

Executing: attachParameter(area "area" \_pdio\_2v)

Executing: attachParameter(pj "pj" \_pdio\_2v)

Executing: extractBJT("g45vpnp2" \_vpnp2 (pwell "C") (nwell\_conn "B") (pdiff\_conn "E") (s...

Executing: attachParameter(area "area" \_vpnp2)

Executing: extractBJT("g45vpnp5" \_vpnp5 (pwell "C") (nwell\_conn "B") (pdiff\_conn "E") (s...

Executing: attachParameter(area "area" \_vpnp5)

Executing: extractBJT("g45vpnp10" \_vpnp10 (pwell "C") (nwell\_conn "B") (pdiff\_conn "E") ...

Executing: attachParameter(area "area" \_vpnp10)

Executing: extractBJT("g45vnpn2" \_npn2 (nwell\_conn "C") (pwell "B") (npn\_emit "E") (spic...

Executing: attachParameter(area "area" \_npn2)

Executing: extractBJT("g45vnpn5" \_npn5 (nwell\_conn "C") (pwell "B") (npn\_emit "E") (spic...

Executing: attachParameter(area "area" \_npn5)

Executing: extractBJT("g45vnpn10" \_npn10 (nwell\_conn "C") (pwell "B") (npn\_emit "E") (sp...

Executing: attachParameter(area "area" \_npn10)

Executing: extractCAP("g45cmim" \_mimcap (CapMetal "PLUS") (metal10\_conn "MINUS") (pwell ...

Executing: attachParameter(w "w" \_mimcap)

Executing: attachParameter(l "l" \_mimcap)

Executing: attachParameter(c "c" \_mimcap)

Executing: attachParameter(area "area" \_mimcap)

Executing: attachParameter(perim "perim" \_mimcap)

Executing: extractDevice("g45inds" \_ind\_s (ind11 "PLUS") (ind11 "MINUS") (pwell "B") (bu...

Executing: attachParameter(\_inds\_w "width" \_ind\_s)

Executing: attachParameter(rad "rad" \_ind\_s)

Executing: attachParameter(\_inds\_s "space" \_ind\_s)

Executing: attachParameter(turns "nr" \_ind\_s)

Executing: (saveInterconnect (Bondpad "Bondpad"))

Executing: (saveInterconnect (metal11\_conn "Metal11"))

Executing: (saveInterconnect (metal10\_conn "Metal10"))

Executing: (saveInterconnect (metal9\_conn "Metal9"))

Executing: (saveInterconnect (metal8\_conn "Metal8"))

Executing: (saveInterconnect (metal7\_conn "Metal7"))

Executing: (saveInterconnect (metal6\_conn "Metal6"))

Executing: (saveInterconnect (metal5\_conn "Metal5"))

Executing: (saveInterconnect (metal4\_conn "Metal4"))

Executing: (saveInterconnect (metal3\_conn "Metal3"))

Executing: (saveInterconnect (metal2\_conn "Metal2"))

Executing: (saveInterconnect (metal1\_conn "Metal1"))

Executing: (saveInterconnect (pdiff\_conn "Pimp"))

Executing: (saveInterconnect (ndiff\_conn "Nimp"))

Executing: (saveInterconnect (nwell\_conn "Nwell"))

Executing: (saveInterconnect (CapMetal "CapMetal"))

Executing: (saveInterconnect (poly\_conn "Poly"))

Executing: (saveInterconnect (npn\_emit "Nimp"))

Executing: (saveInterconnect (Nburied "Nburied"))

Executing: (saveInterconnect (ind11 "Metal11"))

Executing: (saveInterconnect (metal11\_conn "Metal11"))

Executing: (saveInterconnect (ind\_ct "Metal11"))

Executing: (saveInterconnect (ind10 "Metal10"))

Executing: (saveInterconnect (metal10\_conn "Metal10"))

Executing: (saveInterconnect (metal9\_conn "Metal9"))

Executing: (saveInterconnect (metal8\_conn "Metal8"))

Executing: (saveInterconnect (metal7\_conn "Metal7"))

Executing: (saveInterconnect (metal6\_conn "Metal6"))

Executing: (saveInterconnect (metal5\_conn "Metal5"))

Executing: (saveInterconnect (metal4\_conn "Metal4"))

Executing: (saveInterconnect (metal3\_conn "Metal3"))

Executing: (saveInterconnect (metal2\_conn "Metal2"))

Executing: (saveInterconnect (metal1\_conn "Metal1"))

Executing: (saveInterconnect (pdiff\_conn "Pimp"))

Executing: (saveInterconnect (ndiff\_conn "Nimp"))

Executing: (saveInterconnect (nwell\_conn "Nwell"))

Executing: (saveInterconnect (CapMetal "CapMetal"))

Executing: (saveInterconnect (poly\_conn "Poly"))

Executing: (saveInterconnect (pnp\_emit "Pimp"))

Executing: (saveInterconnect (npn\_emit "Nimp"))

Executing: (saveInterconnect (Nburied "Nburied"))

Finished running rules. Task processor time in main process:

cpu: 0.32 elap: 0 pf: 0 in: 0 out: 720 virt: 147M phys: 751M

No output post-processing: This is not a DRC run

Finished building the persistent database.

cpu: 0.01 elap: 0 pf: 0 in: 0 out: 6472 virt: 152M phys: 759M

\*\*\*\*\* aveng terminated normally \*\*\*\*\*

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/aveng

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/avrpt /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -exec1

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

@(#)$CDS: avrpt\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:35 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/avrpt on Sat Apr 26 17:54:01 2025

Creating Error Database 'finalschematic'...

Reading VDB ...

--------------------------------------------------------------------------------

Rule Message FlatCount RealCount

--------------------------------------------------------------------------------

( 1) dataAuditErrors 0 0

( 2) SI g45inda connectionErrors 0 0

( 3) SI g45inda spacingErrors 0 0

( 4) SI g45inda innerDiameterErrors 0 0

( 5) SI g45inda widthErrors 0 0

( 6) ptap\_StampErrorFloat 0 0

( 7) ptap\_StampErrorMult 0 0

( 8) ptap\_StampErrorConnect 0 0

( 9) pwell\_StampErrorFloat 0 0

( 10) pwell\_StampErrorMult 0 0

( 11) pwell\_StampErrorConnect 0 0

( 12) ntap\_StampErrorFloat 0 0

( 13) ntap\_StampErrorMult 0 0

( 14) ntap\_StampErrorConnect 0 0

( 15) nwell\_conn\_StampErrorFloat 0 0

( 16) nwell\_conn\_StampErrorMult 0 0

( 17) nwell\_conn\_StampErrorConnect 0 0

( 18) nb\_tap\_StampErrorFloat 0 0

( 19) nb\_tap\_StampErrorMult 0 0

( 20) nb\_tap\_StampErrorConnect 0 0

( 21) Nburied\_StampErrorFloat 0 0

( 22) Nburied\_StampErrorMult 0 0

( 23) Nburied\_StampErrorConnect 0 0

( 24) ptap\_StampErrorFloat 0 0

( 25) ptap\_StampErrorMult 0 0

( 26) ptap\_StampErrorConnect 0 0

( 27) pwell\_StampErrorFloat 0 0

( 28) pwell\_StampErrorMult 0 0

( 29) pwell\_StampErrorConnect 0 0

( 30) ntap\_StampErrorFloat 0 0

( 31) ntap\_StampErrorMult 0 0

( 32) ntap\_StampErrorConnect 0 0

( 33) nwell\_conn\_StampErrorFloat 0 0

( 34) nwell\_conn\_StampErrorMult 0 0

( 35) nwell\_conn\_StampErrorConnect 0 0

( 36) nb\_tap\_StampErrorFloat 0 0

( 37) nb\_tap\_StampErrorMult 0 0

( 38) nb\_tap\_StampErrorConnect 0 0

( 39) Nburied\_StampErrorFloat 0 0

( 40) Nburied\_StampErrorMult 0 0

( 41) Nburied\_StampErrorConnect 0 0

( 42) all malformed SI g45inda 0 0

( 43) malformed device RECOG\_NEW\_T?472 0 0

( 44) malformed device \_nmos1v 0 0

( 45) malformed device \_nmos1v\_hvt 0 0

( 46) malformed device \_nmos1v\_lvt 0 0

( 47) malformed device \_nmos\_12\_native 0 0

( 48) malformed device \_nmos\_25 0 0

( 49) malformed device \_nmos\_25\_native 0 0

( 50) malformed device \_nmoscap1v 0 0

( 51) malformed device \_nmoscap2v 0 0

( 52) malformed device \_pmos1v 0 0

( 53) malformed device \_pmos1v\_hvt 0 0

( 54) malformed device \_pmos1v\_lvt 0 0

( 55) malformed device \_pmos2v 0 0

( 56) malformed device \_pmoscap1v 0 0

( 57) malformed device \_pmoscap2v 0 0

( 58) malformed device \_resm1 0 0

( 59) malformed device \_resm2 0 0

( 60) malformed device \_resm3 0 0

( 61) malformed device \_resm4 0 0

( 62) malformed device \_resm5 0 0

( 63) malformed device \_resm6 0 0

( 64) malformed device \_resm7 0 0

( 65) malformed device \_resm8 0 0

( 66) malformed device \_resm9 0 0

( 67) malformed device \_resm10 0 0

( 68) malformed device \_resm11 0 0

( 69) malformed device \_ressndiff 0 0

( 70) malformed device \_resnsndiff 0 0

( 71) malformed device \_ressnpoly 0 0

( 72) malformed device \_ressnpoly\_nw 0 0

( 73) malformed device \_resnsnpoly 0 0

( 74) malformed device \_resnsnpoly\_nw 0 0

( 75) malformed device \_resspdiff 0 0

( 76) malformed device \_resnspdiff 0 0

( 77) malformed device \_ressppoly 0 0

( 78) malformed device \_ressppoly\_nw 0 0

( 79) malformed device \_resnsppoly 0 0

( 80) malformed device \_resnsppoly\_nw 0 0

( 81) malformed device \_resnwsti 0 0

( 82) malformed device \_resnwoxide 0 0

( 83) malformed device \_ndio 0 0

( 84) malformed device \_ndio\_lvt 0 0

( 85) malformed device \_ndio\_hvt 0 0

( 86) malformed device \_ndio\_nvt 0 0

( 87) malformed device \_ndio\_2v 0 0

( 88) malformed device \_ndio\_2v\_nvt 0 0

( 89) malformed device \_pdio 0 0

( 90) malformed device \_pdio\_lvt 0 0

( 91) malformed device \_pdio\_hvt 0 0

( 92) malformed device \_pdio\_2v 0 0

( 93) malformed device \_vpnp2 0 0

( 94) malformed device \_vpnp5 0 0

( 95) malformed device \_vpnp10 0 0

( 96) malformed device \_npn2 0 0

( 97) malformed device \_npn5 0 0

( 98) malformed device \_npn10 0 0

( 99) malformed device \_mimcap 0 0

( 100) malformed device \_ind\_s 0 0

( 101) unstable device for \_ind\_s\_Device\_58 0 0

( 103) unstable device for \_mimcap\_CAP\_57 0 0

( 105) unstable device for \_npn10\_BJT\_56 0 0

( 107) unstable device for \_npn5\_BJT\_55 0 0

( 109) unstable device for \_npn2\_BJT\_54 0 0

( 111) unstable device for \_vpnp10\_BJT\_53 0 0

( 113) unstable device for \_vpnp5\_BJT\_52 0 0

( 115) unstable device for \_vpnp2\_BJT\_51 0 0

( 117) unstable device for \_pdio\_2v\_DIODE\_50 0 0

( 119) unstable device for \_pdio\_hvt\_DIODE\_49 0 0

( 121) unstable device for \_pdio\_lvt\_DIODE\_48 0 0

( 123) unstable device for \_pdio\_DIODE\_47 0 0

( 125) unstable device for \_ndio\_2v\_nvt\_DIODE\_4 0 0

( 127) unstable device for \_ndio\_2v\_DIODE\_45 0 0

( 129) unstable device for \_ndio\_nvt\_DIODE\_44 0 0

( 131) unstable device for \_ndio\_hvt\_DIODE\_43 0 0

( 133) unstable device for \_ndio\_lvt\_DIODE\_42 0 0

( 135) unstable device for \_ndio\_DIODE\_41 0 0

( 137) unstable device for \_resnwoxide\_RES\_40 0 0

( 139) unstable device for \_resnwsti\_RES\_39 0 0

( 141) unstable device for \_resnsppoly\_nw\_RES\_3 0 0

( 143) unstable device for \_resnsppoly\_RES\_37 0 0

( 145) unstable device for \_ressppoly\_nw\_RES\_36 0 0

( 147) unstable device for \_ressppoly\_RES\_35 0 0

( 149) unstable device for \_resnspdiff\_RES\_34 0 0

( 151) unstable device for \_resspdiff\_RES\_33 0 0

( 153) unstable device for \_resnsnpoly\_nw\_RES\_3 0 0

( 155) unstable device for \_resnsnpoly\_RES\_31 0 0

( 157) unstable device for \_ressnpoly\_nw\_RES\_30 0 0

( 159) unstable device for \_ressnpoly\_RES\_29 0 0

( 161) unstable device for \_resnsndiff\_RES\_28 0 0

( 163) unstable device for \_ressndiff\_RES\_27 0 0

( 165) unstable device for \_resm11\_RES\_26 0 0

( 167) unstable device for \_resm10\_RES\_25 0 0

( 169) unstable device for \_resm9\_RES\_24 0 0

( 171) unstable device for \_resm8\_RES\_23 0 0

( 173) unstable device for \_resm7\_RES\_22 0 0

( 175) unstable device for \_resm6\_RES\_21 0 0

( 177) unstable device for \_resm5\_RES\_20 0 0

( 179) unstable device for \_resm4\_RES\_19 0 0

( 181) unstable device for \_resm3\_RES\_18 0 0

( 183) unstable device for \_resm2\_RES\_17 0 0

( 185) unstable device for \_resm1\_RES\_16 0 0

( 187) unstable device for \_pmoscap2v\_MOS\_15 0 0

( 189) unstable device for \_pmoscap1v\_MOS\_14 0 0

( 191) unstable device for \_pmos2v\_MOS\_13 0 0

( 193) unstable device for \_pmos1v\_lvt\_MOS\_12 0 0

( 195) unstable device for \_pmos1v\_hvt\_MOS\_11 0 0

( 197) unstable device for \_pmos1v\_MOS\_10 0 0

( 199) unstable device for \_nmoscap2v\_MOS\_9 0 0

( 201) unstable device for \_nmoscap1v\_MOS\_8 0 0

( 203) unstable device for \_nmos\_25\_native\_MOS\_ 0 0

( 205) unstable device for \_nmos\_25\_MOS\_6 0 0

( 207) unstable device for \_nmos\_12\_native\_MOS\_ 0 0

( 209) unstable device for \_nmos1v\_lvt\_MOS\_4 0 0

( 211) unstable device for \_nmos1v\_hvt\_MOS\_3 0 0

( 213) unstable device for \_nmos1v\_MOS\_2 0 0

( 215) unstable device for DEVICE\_LAYER\_RECOG\_N 0 0

--------------------------------------------------------------------------------

Total errors: 0 0

--------------------------------------------------------------------------------

Finished creating Error Database ...

Writing Report into ./finalschematic.err ...

avrpt cpu sec: 0.06 elapsed: 0 virtual: 93M

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/avrpt

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/avcallproc /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -exec1 -LVS -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/avcallproc

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/avnx /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -exec1 -LVS -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.01s.

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Checking out license for Assura\_LVS

@(#)$CDS: avnx\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:35 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 from /ecel/apps/cds/ASSURA41/tools.lnx86/assura/bin/64bit/avnx on Sat Apr 26 17:54:02 2025

avnx started...

cpu: 0.08 elap: 0 pf: 0 in: 0 out: 56 virt: 550M phys: 890M

Run time = 0.00 seconds

CPU time = 0.09 seconds

End of Summary Report

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

cpu: 0.01 elap: 0 pf: 0 in: 0 out: 13160 virt: 477M phys: 890M

\*\*\*\*\* avnx terminated normally \*\*\*\*\*

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/avnx

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/nvn /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -postExtract -exec1 -cdslib /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib

Checking out license for Assura\_LVS

@(#)$CDS: nvn\_64 version av4.1:Production:dfII6.1.8-64b:IC6.1.8-64b.500.35 07/29/2024 05:39 (sjfhw885) $

sub-version 4.1\_USR7\_main, integ signature 2024-07-29-0506

run on ece-lnx-01 at Sat Apr 26 17:54:02 2025

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

GENERIC PDK Assura Compare Rules file

Cadence Design Systems shall not be liable for the accuracy

of this LVS rule file or its ability to capture errors.

The user is responsible for thoroughly testing and

implementing its features.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Reading schematic network

Reading layout network

inputting network finalschematic.ldb

Preprocessing schematic network phase 1

Preprocessing layout network phase 1

\*WARNING\* deleteCellPin - Unable to find cell 'g45inds'

Preprocessing schematic network phase 2

Preprocessing layout network phase 2

Comparing nand2\_45 schematic final\_proj vs nand2\_45 layout final\_proj

Comparing inverter schematic final\_proj vs inverter layout final\_proj

Comparing rw\_control schematic final\_proj vs rw\_control layout final\_proj

Comparing sense\_amp schematic final\_proj vs sense\_amp layout final\_proj

Comparing Coldecoder schematic final\_proj vs Coldecoder layout final\_proj

Comparing rowDecoder schematic final\_proj vs rowDecoder layout final\_proj

Expanding inverter: binding cell missing on layout.

Comparing SRAM\_cell\_1 schematic final\_proj vs SRAM\_cell\_1 layout final\_proj

Comparing 8x2sram schematic final\_proj vs 8x2sram layout final\_proj

Top cell finalschematic schematic final\_proj vs finalschematic layout final\_proj

Schematic and Layout Match

cpu=0.00m wall=0.00m mem=78.94mb

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/nvn

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/vldbToRpa finalschematic.snn finalschematic.tre finalschematic.cel

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/vldbToRpa

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/vldbToRpa finalschematic.lnn finalschematic.tre2 finalschematic.cel2

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/vldbToRpa

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/ercChk /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.01s.

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

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Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

\*WARNING\* LIB avTech from File /ecel/UFAD/brookheyd/Desktop/VLSI/cds.lib Line 8 redefines

LIB avTech from the same file (defined earlier.)

Loading gpdk045/libInit.il ...

Loading gpdk045/loadCxt.ile ... done!

Loading context 'gpdk045' from library 'gpdk045' ... done!

Loading context 'pdkUtils' from library 'gpdk045' ... done!

Loading gpdk045/gpdk045\_customFilter.il ... done!

Loading gpdk045/libInitCustomExit.il ...

Loading Environment Settings ...

Loading gpdk045/gpdk045\_PDKRegistrations.il ... done!

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Cadence Design Systems, Inc. \*

\* \*

\* Generic 45nm PDK \*

\* (gpdk045) \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

VERSION: 6.0 (09-September-2019)

done!

Loaded gpdk045/libInit.il successfully!

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/ercChk

Starting /apps/cds/ASSURA41//tools.lnx86/assura/bin/avcallproc /ecel/UFAD/brookheyd/Desktop/VLSI/finalschematic.rsf -trp -exec1

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Loading tech rule set file : /ecel/apps/cds/ic618/local/GPDK045/assura/techRuleSets

Finished /apps/cds/ASSURA41//tools.lnx86/assura/bin/avcallproc

Assura LVS terminated normally.

Run ended: Sat Apr 26 17:54:03 2025

\*\*\*\*\* Assura terminated normally \*\*\*\*\*