



LSI Logic Design (CO3098)

Report Lab 4: VIRTUOSO

Authors:

Nguyen Thanh Thao Nhi

Student's ID:

2152840

Instructors:

Nguyen Thien An

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1 Inverter Gate

1.1 Schematic

The schematic of the inverter gate consists of both a PMOS and an NMOS transistor.

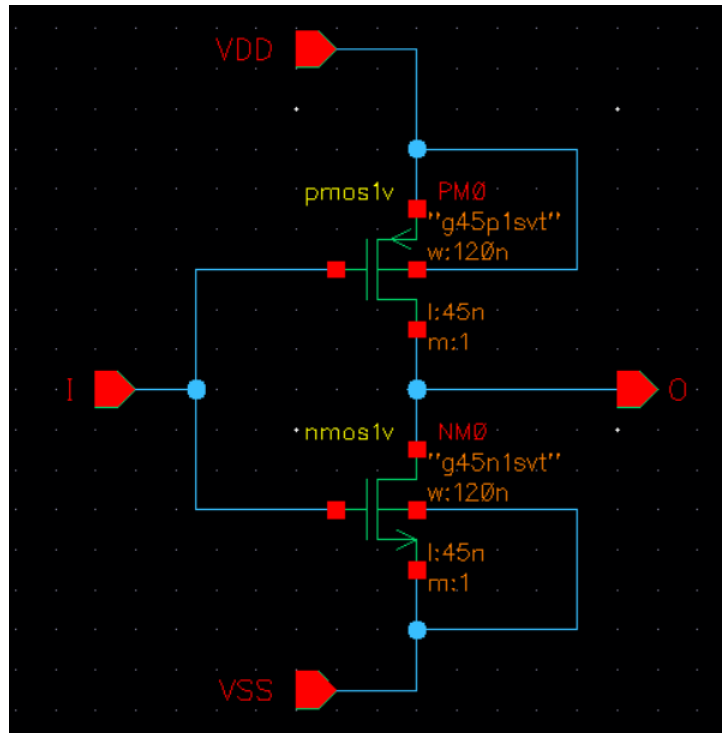


Figure 1: INV schematic

The inverter gate symbol is a triangle with 4 pins including VDD, VSS, input and output.

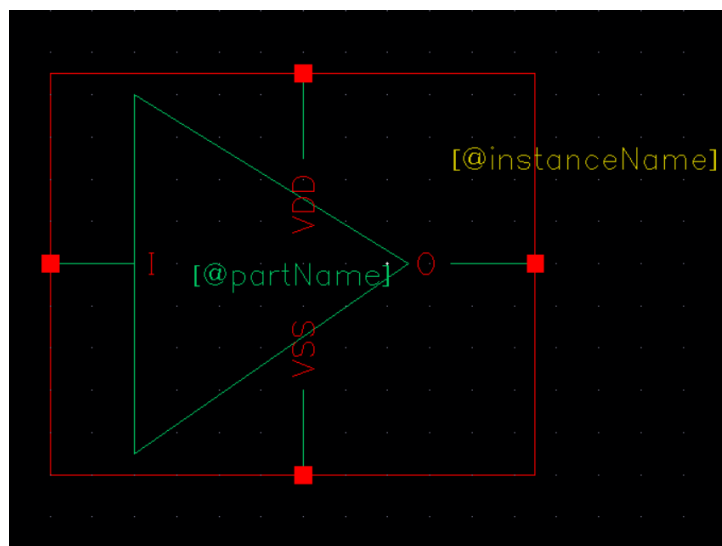


Figure 2: INV symbol

Therefore, the simulating schematic is drawn as below:

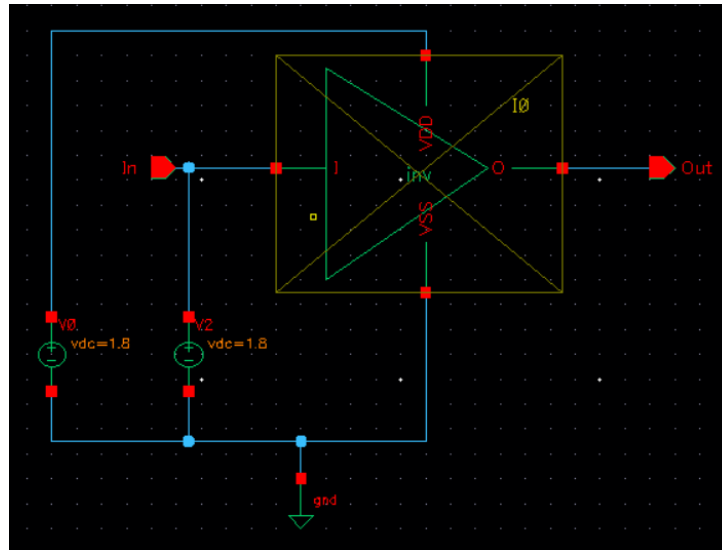


Figure 3: INV simulating schematic

1.2 Simulation

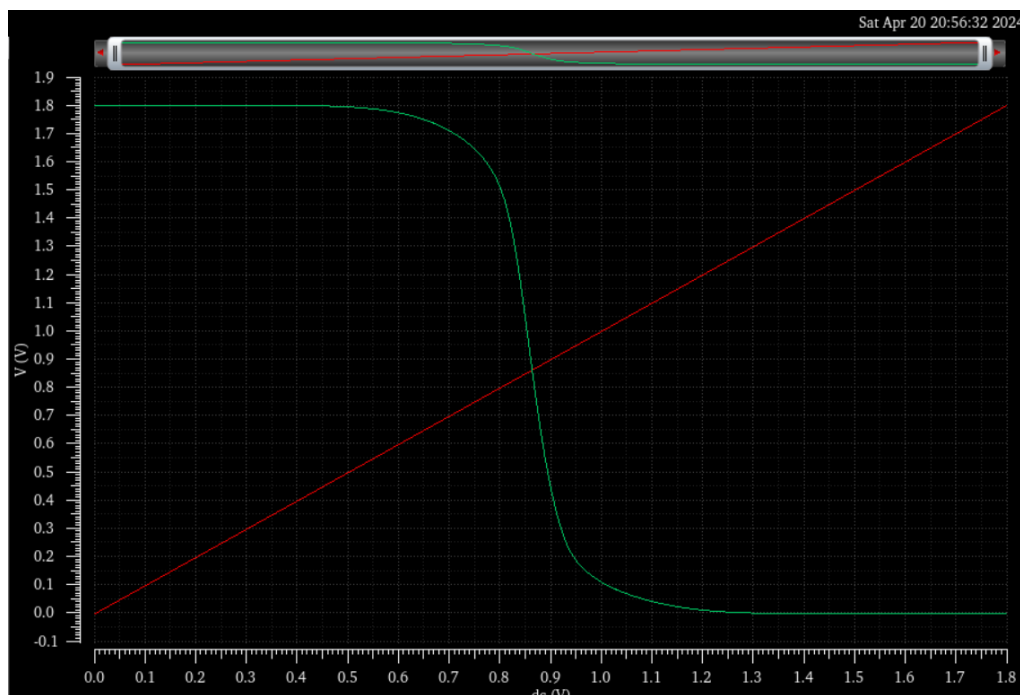


Figure 4: INV simulation

Because it is a NOT gate, output and input have opposite values. The red line is the input of the inverter and the green line is the output of that NOT gate.

1.3 Layout Design

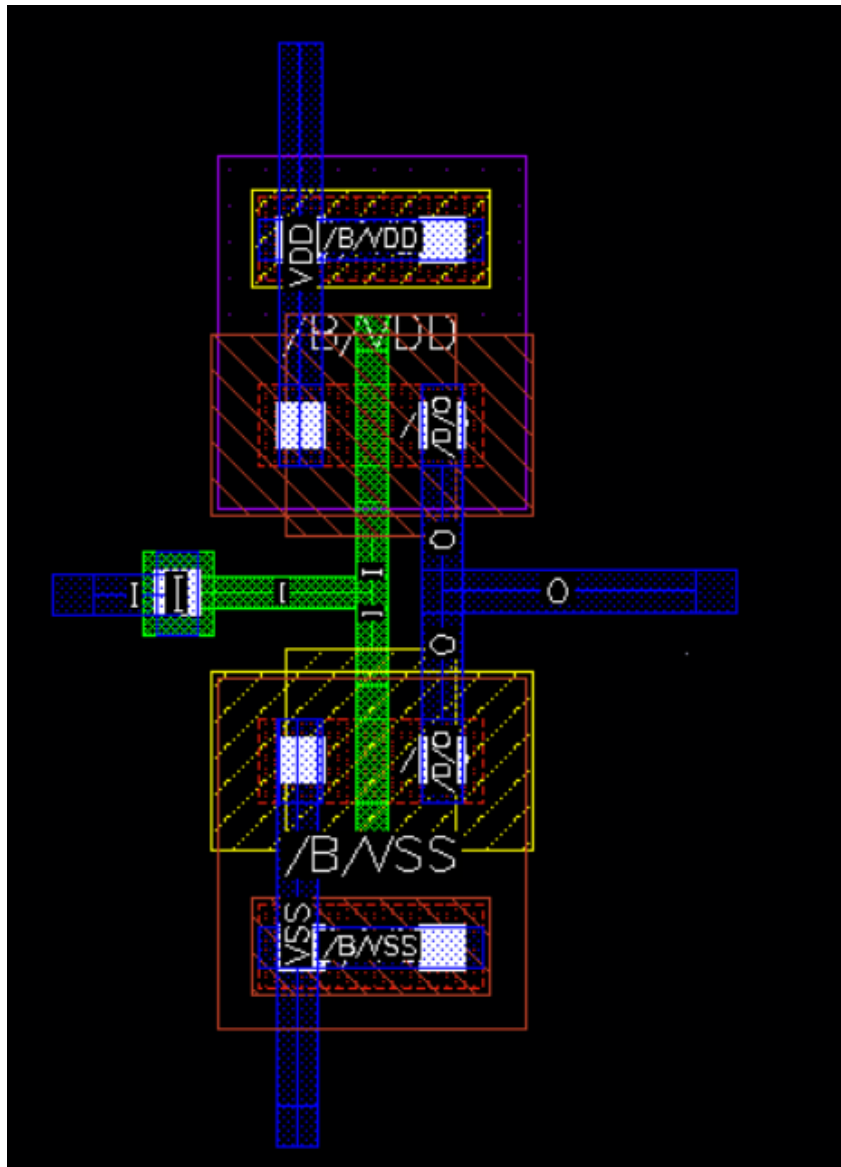


Figure 5: INV layout design

2 AND Gate

The schematic of the AND gate consists of 3 PMOS and 3 NMOS transistors connected as below:

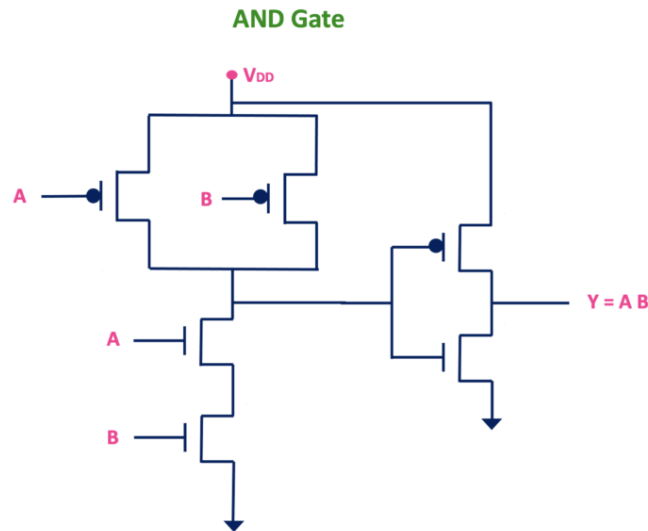


Figure 6: AND schematic

Therefore, the schematic is drawn as below:

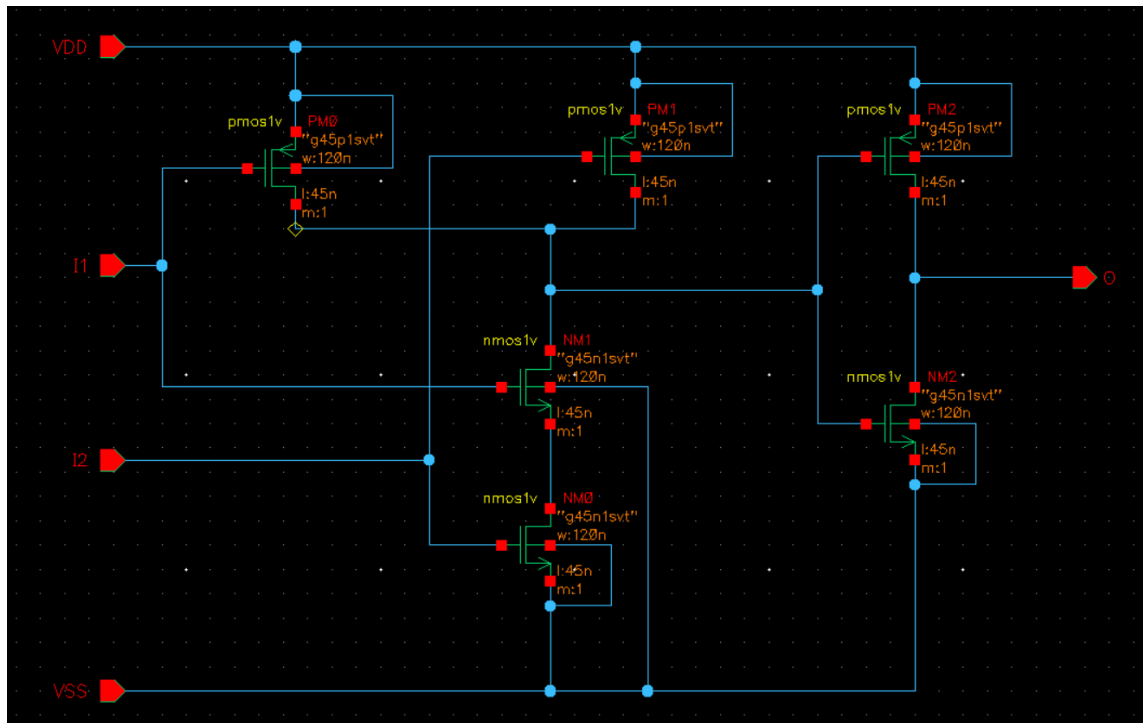


Figure 7: AND schematic

Moreover, this is the symbol of that AND gate:

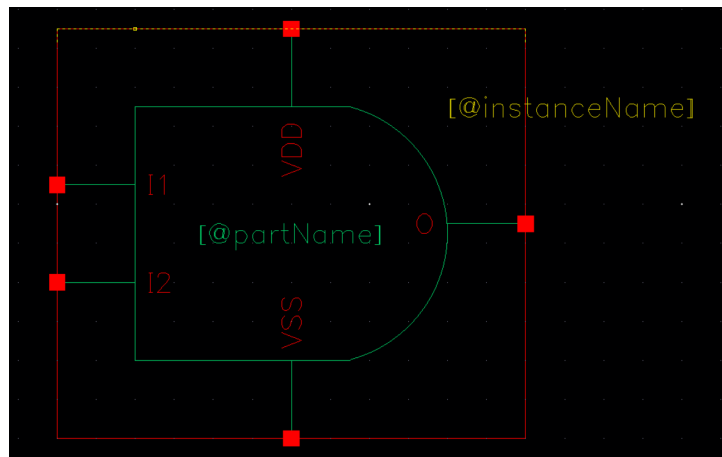


Figure 8: AND symbol

Using the symbol, the simulating schematic is demonstrated:

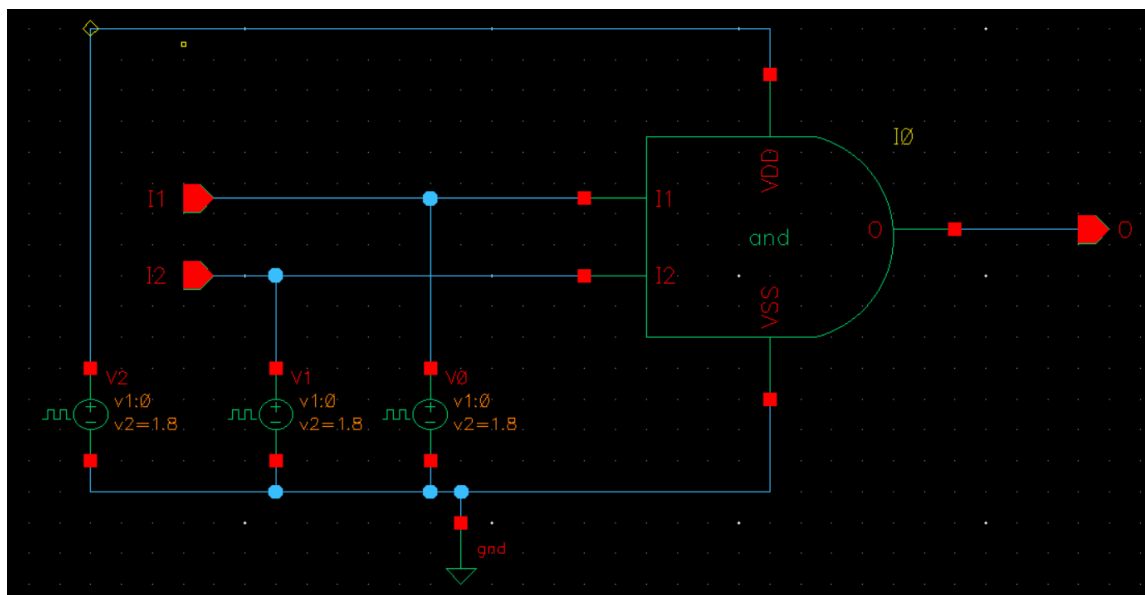


Figure 9: AND simulating schematic

2.1 Simulation

The truth table of AND gate:

I1	I2	O
0	0	0
0	1	0
1	0	0
1	1	1

Based on the table above, we can compare the output value of the real AND gate and the AND gate designed.

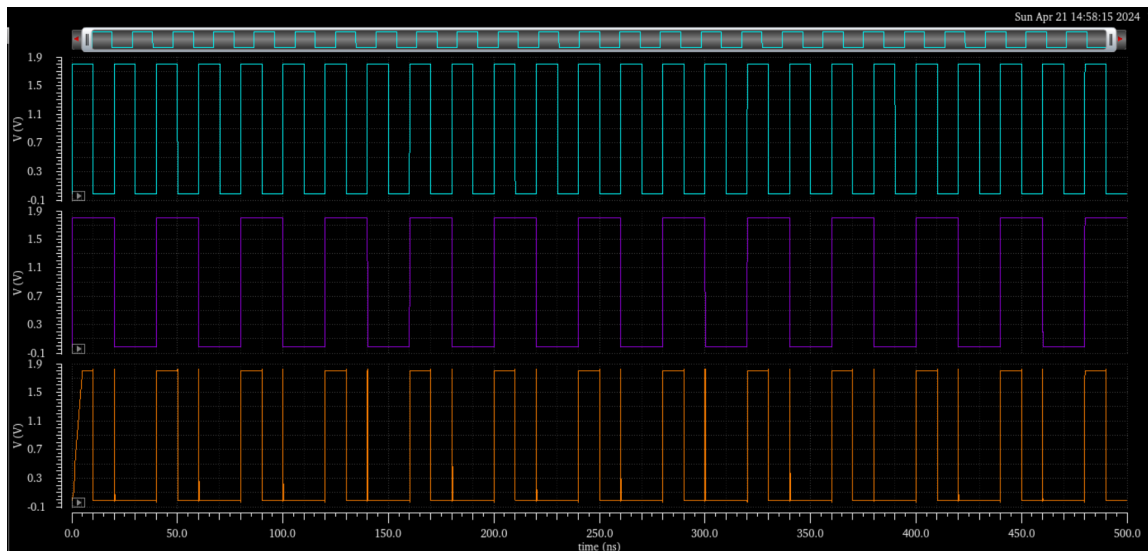


Figure 10: AND simulation

3 OR Gate

Quite similar to AND gate, the schematic of the OR gate consists of 3 PMOS and 3 NMOS transistors connected as below:

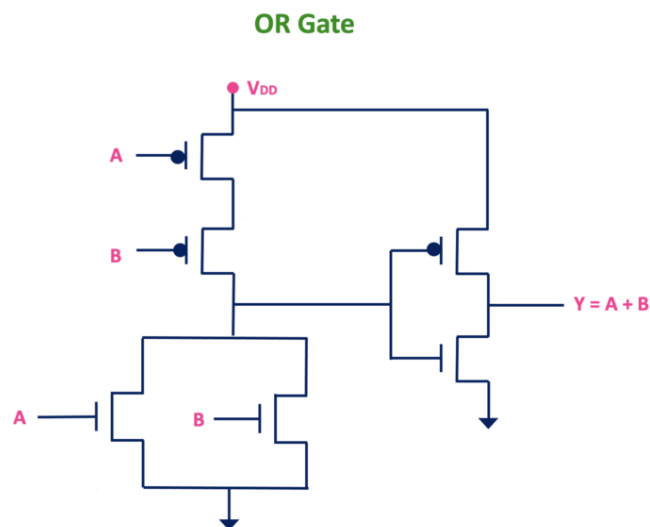


Figure 11: OR schematic

Therefore, the schematic is drawn as below:

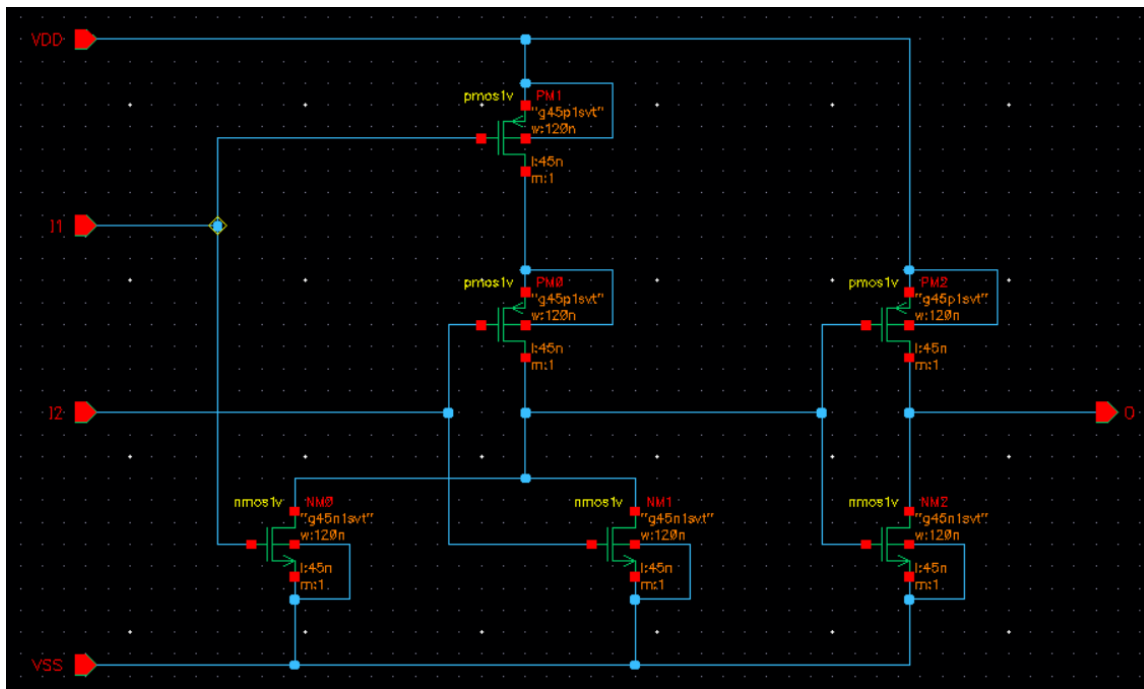


Figure 12: OR schematic

Moreover, this is the symbol of that OR gate:

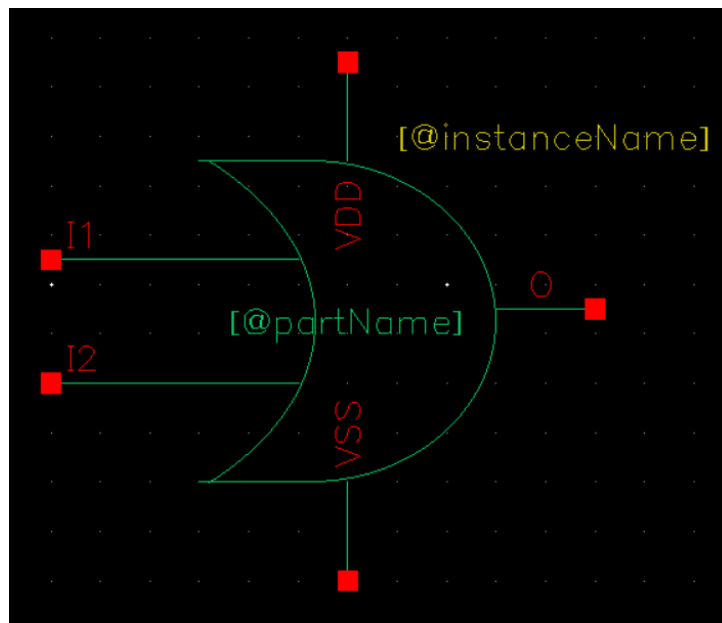


Figure 13: OR symbol

Using the symbol, the simulating schematic is demonstrated:

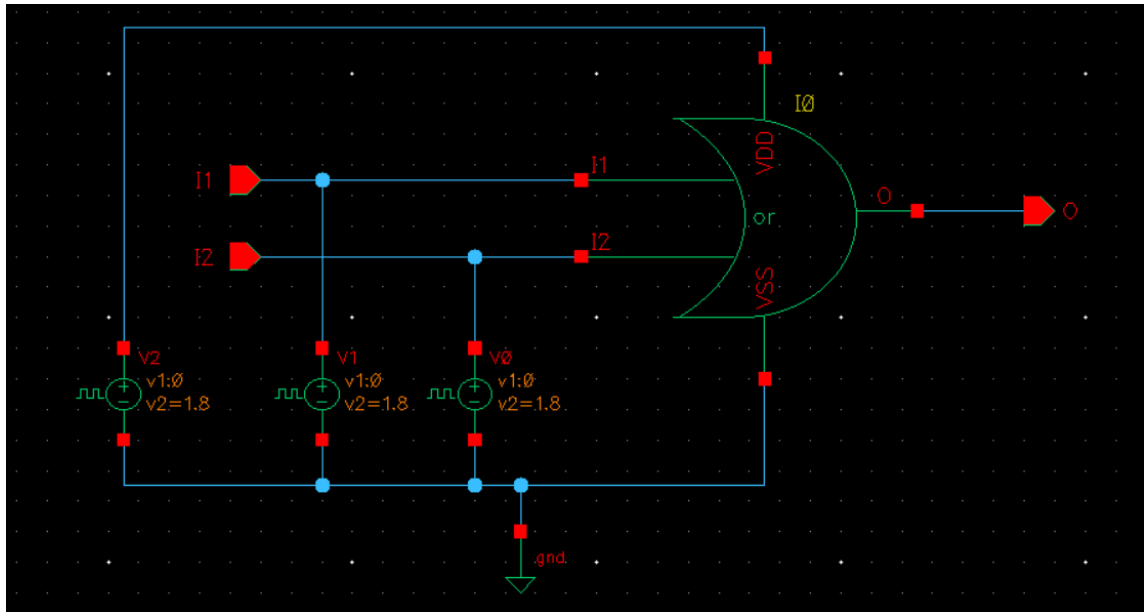


Figure 14: OR simulating schematic

3.1 Simulation

The truth table of OR gate:

I1	I2	O
0	0	0
0	1	1
1	0	1
1	1	1

Based on the table above, we can compare the output value of the real OR gate and the OR gate designed.

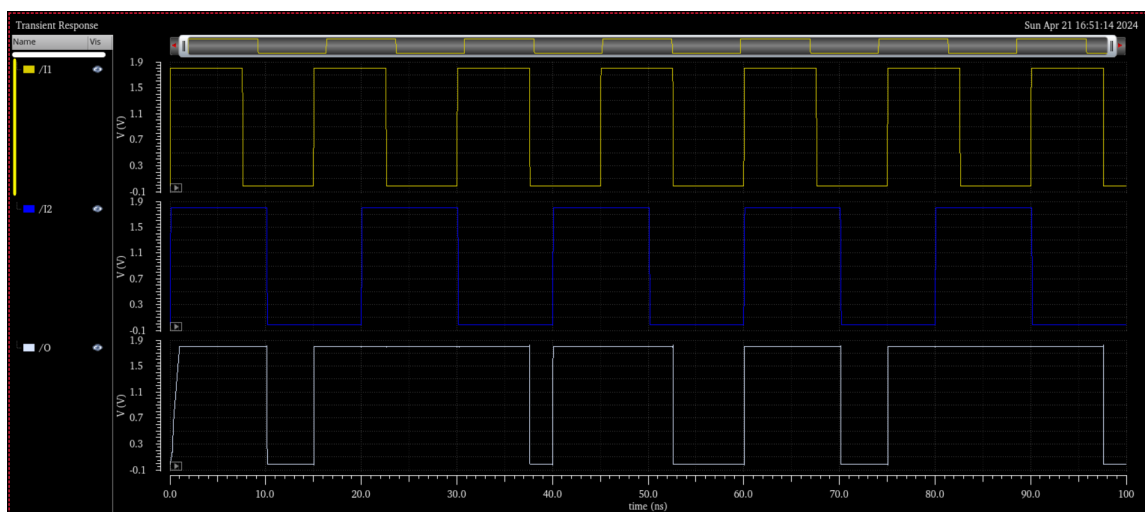


Figure 15: OR simulation

4 Inverter Report

4.1 DRC report

```

Running: /data/cadence/installs/PVS211/tools.lnx86/pvs/bin/64bit/pvsvirt \
-mode drc \
-global_log_file
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/pvsuidrc.log \
-control
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/pvsdrcctl \
-cell_tree
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/cell_tree.txt \
-layLibName testINV \
-layCellName inv \
-layViewName layout \
-igds /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/inv.gds \
-layScale 0.0005 \
-layTechLib gpdk045 \
-convertPin geometry \
-replaceBusBitChar nil \
-noConvertHalfWidthPath nil \
-layHierDepth 32 \
-layMaxVertices 2048 \
-rulesFile
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/.technology.rul
\
-df2_version 6.1.8.0 \
-sign IPVS_1713634110_5932 \
-run_dir /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc \
-no_rules_check

```

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.02s.

```

Product   : Virtuoso(R) XStream Out
Program   : @(#)CDS: strmount version 6.1.8-64b 10/01/2018 19:51 (ip-172-18-22-52) $
           : sub-version IC6.1.8-64b.83
Started at: 21-Apr-2024 00:28:35
User Name : cc01group5
Host Name : ktmt
Directory : /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0
CADENCE Design Systems, Inc.
*****

```

Info: Cellview Rev Num:99, Tech Rev Num:59

```

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!
WARNING (XSTRM-20): Output Stream file
'/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/drc/inv.gds'
already exists. It will be overwritten.
INFO (XSTRM-217): Reading the layer map file,
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/gpdK045/gpdK045.layermap
INFO (XSTRM-162): You have not used the viaMap option. If the OpenAccess design has native oaVia
instances, use the -viaMap option for preserving oaVia instances in a Stream Out - Stream In round trip.
Using the -viaMap option improves performance and VM usage of applications using the Streamed-In
design. For details on the viaMap option, refer to the "Design Data Translator's Reference" guide for
XStream.

Summary of Options :

library	testINV
strmFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/drc/inv.gds	
topCell	inv
view	layout
runDir	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/drc	
logFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/drc/PIPO1.LOG	
techLib	gpdK045
hierDepth	32
maxVertices	2048
layerMap	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/gpdK045/gpdK045.layermap	
userSkillFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/drc/strmout.il	
labelDepth	32
case	Preserve
convertDot	node

INFO (XSTRM-223): 1. Translating cellView gpdK045/M1_PO/layout as STRUCTURE M1_PO_CDNS_1.
INFO (XSTRM-223): 2. Translating cellView gpdK045/nmos1v/layout as STRUCTURE
nmos1v_CDNS_2.
INFO (XSTRM-223): 3. Translating cellView gpdK045/pmos1v/layout as STRUCTURE
pmos1v_CDNS_3.
INFO (XSTRM-223): 4. Translating cellView testINV/inv/layout as STRUCTURE inv.

Summary of Objects Translated:

Scalar Instances:	2
Array Instances:	0
Polygons:	0
Paths:	0
Rectangles:	46
Lines:	0

Arcs:	0
Donuts:	0
Dots:	0
Ellipses:	0
Boundaries:	0
Area Blockages:	0
Layer Blockages:	0
Area Halos:	0
Markers:	0
Rows:	0
Standard Vias	1
Custom Vias:	0
CdsGen Vias:	0
Pathsegs:	9
Text:	3
TextDisplay:	0
Cells:	4

Elapsed Time: 0.3s User Time: 0.2s CPU Time: 0.1s Peak VM: 5712KB
INFO (XSTRM-234): Translation completed. '0' error(s) and '1' warning(s) found.

pvs 21.12-s022 64 bit (Wed Feb 9 12:12:42 PST 2022)
Build Ref No.: 022 Production (02-09-2022) [pvs_2112]

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All rights reserved worldwide.

Build O/S: Linux x86_64 3.10.0-693.el7.x86_64
Executed on: ktm1 (Linux x86_64 3.10.0-1160.80.1.el7.x86_64)
Process Id: 32484
Starting Time: Sun Apr 21 00:28:35 2024 (Sat Apr 20 17:28:35 2024 GMT)
With parameters: -drc -top_cell inv -ui_data -control
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/pvsdrcctl
-cell_tree
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/cell_tree.txt -ai
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/.technology.rul

#####

Get host info ...

#####

CPU info:

model name : Intel(R) Xeon(R) CPU E5-2640 v3 @ 2.60GHz
cpu MHz : 1200.000
cache size : 20480 KB
physical cores : 16
logical cores : 32
hyper-threading on

Memory info:

128636M physical memory installed.

MemTotal: 131726584 kB
MemFree: 27277656 kB
MemAvailable: 124560560 kB
Buffers: 1157916 kB
Cached: 93153904 kB
SwapCached: 0 kB
Active: 12252700 kB
Inactive: 86497428 kB
Active(anon): 4440276 kB
Inactive(anon): 61408 kB
Active(file): 7812424 kB
Inactive(file): 86436020 kB
Unevictable: 0 kB
Mlocked: 0 kB
SwapTotal: 4194300 kB
SwapFree: 4194300 kB
Dirty: 28 kB
Writeback: 0 kB
AnonPages: 4429768 kB
Mapped: 469152 kB
Shmem: 63620 kB
Slab: 3954544 kB
SReclaimable: 3660600 kB
SUnreclaim: 293944 kB
KernelStack: 18224 kB
PageTables: 68424 kB
NFS_Unstable: 0 kB
Bounce: 0 kB
WritebackTmp: 0 kB
CommitLimit: 70057592 kB
Committed_AS: 11762700 kB
VmallocTotal: 34359738367 kB
VmallocUsed: 493752 kB
VmallocChunk: 34291845116 kB
Percpu: 9856 kB
HardwareCorrupted: 0 kB
AnonHugePages: 1851392 kB
CmaTotal: 0 kB
CmaFree: 0 kB
HugePages_Total: 0
HugePages_Free: 0
HugePages_Rsvd: 0
HugePages_Surp: 0
Hugepagesize: 2048 kB
DirectMap4k: 184828 kB
DirectMap2M: 4925440 kB
DirectMap1G: 131072000 kB

#####

Get environment info ...

#####

ENV VAR: TCL_LIBRARY = /data/cadence/installs/PVS211/share/lib/tcltk/08.64/tcl8.6

ENV VAR: TCLX_LIBRARY = /data/cadence/installs/PVS211/share/lib/tclx/08.40

ENV VAR: TCLLIBPATH = /data/cadence/installs/PVS211/share/lib/itcl/3.4.1

/data/cadence/installs/PVS211/share/lib/tclxml/3.2 /data/cadence/installs/PVS211/share/lib/tcllib/1.18
/data/cadence/installs/PVS211/share/lib/itcl/3.4.1 /data/cadence/installs/PVS211/share/lib/tclxml/3.2
/data/cadence/installs/PVS211/share/lib/tcllib/1.18 /data/cadence/installs/PVS211/share/lib/itcl/3.4.1
/data/cadence/installs/PVS211/share/lib/tclxml/3.2 /data/cadence/installs/PVS211/share/lib/tcllib/1.18

#####

Parsing Control File

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/pvsdrcctl ...

#####

TEXT_DEPTH -primary;

VIRTUAL_CONNECT -colon no;

VIRTUAL_CONNECT -semicolon_as_colon yes;

VIRTUAL_CONNECT -report no;

VIRTUAL_CONNECT -depth -primary;

REPORT_SUMMARY -drc "inv.sum" -replace;

MAX_RESULTS -drc 1000;

MAX_VERTEX -drc 4096;

RESULTS_DB -drc

"/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/inv.drc_errors.

ascii" -ascii;

KEEP_LAYERS -none;

ABORT_ON_LAYOUT_ERROR yes;

LAYOUT_FORMAT gdsii;

LAYOUT_PATH

"/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/inv.gds";

#####

Parsing Rule File

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/.technology.rul

...

#####

TECHNOLOGY gpdk045_pvs -ruleSet default -techLib

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvtech.lib;

[INFO] TECHNOLOGY: Rules file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/.pvIDRC.rul will be
included after the remainder of the current rules are processed.

[INFO] TECHNOLOGY gpdk045_pvs -techLib

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvtech.lib: End of additions.

LAYOUT_PATH "CELLNAME.gds" gdsii;

[WARN]: LAYOUT_PATH at line 30 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/.pvIDRC.rul is skipped. It
is set in control file.

LAYOUT_PRIMARY "CELLNAME";

[WARN] Cmd-line override: LAYOUT_PRIMARY "inv";

RESULTS_DB -drc "CELLNAME.db" -ascii;

[WARN]: RESULTS_DB -ascii at line 32 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/.pvIDRC.rul is skipped. It
is set in control file.

INPUT_SCALE 2000;

GRID 5;

UNIT -length u;

TEXT_DEPTH -primary;

[WARN]: TEXT_DEPTH at line 37 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/.pvIDRC.rul is skipped. It

is set in control file.
FLAG -nonsimple yes;

```
RULE offgrid_check {  
    CAPTION Grid violation;  
    LAYOUT_INPUT -offgrid;  
}
```

```
RULE ortho_45_check {  
    CAPTION Orthogonal and 45 degree violation;  
    LAYOUT_INPUT -skew;  
}
```

```
RULE acute_check {  
    CAPTION Acute angle violation;  
    LAYOUT_INPUT -acute;  
}
```

```
LAYER_DEF empty 999;  
LAYER_DEF Bondpad 1000;  
LAYER_MAP 36 -datatype 0 1000;  
LAYER_DEF CapMetal 1001;  
LAYER_MAP 14 -datatype 0 1001;  
LAYER_DEF Cont 1002;  
LAYER_MAP 6 -datatype 0 1002;  
LAYER_DEF ESDdummy 1003;  
LAYER_MAP 74 -datatype 0 1003;  
LAYER_DEF INDdummy 1004;  
LAYER_MAP 16 -datatype 0 1004;  
LAYER_DEF M1Resdum 1005;  
LAYER_MAP 75 -datatype 0 1005;  
LAYER_DEF M2Resdum 1006;  
LAYER_MAP 76 -datatype 0 1006;  
LAYER_DEF M3Resdum 1007;  
LAYER_MAP 77 -datatype 0 1007;  
LAYER_DEF M4Resdum 1008;  
LAYER_MAP 78 -datatype 0 1008;  
LAYER_DEF M5Resdum 1009;  
LAYER_MAP 79 -datatype 0 1009;  
LAYER_DEF M6Resdum 1010;  
LAYER_MAP 80 -datatype 0 1010;  
LAYER_DEF M7Resdum 1011;  
LAYER_MAP 81 -datatype 0 1011;  
LAYER_DEF M8Resdum 1012;  
LAYER_MAP 82 -datatype 0 1012;  
LAYER_DEF M9Resdum 1013;  
LAYER_MAP 83 -datatype 0 1013;  
LAYER_DEF M10Resdum 1014;  
LAYER_MAP 93 -datatype 0 1014;  
LAYER_DEF M11Resdum 1015;  
LAYER_MAP 103 -datatype 0 1015;  
LAYER_DEF Metal1 1016;  
LAYER_MAP 7 -datatype -le 5 1016;  
LAYER_DEF Metal2 1017;  
LAYER_MAP 9 -datatype -le 5 1017;  
LAYER_DEF Metal3 1018;
```

LAYER_MAP 11 -datatype -le 5 1018;
LAYER_DEF Metal4 1019;
LAYER_MAP 31 -datatype -le 5 1019;
LAYER_DEF Metal5 1020;
LAYER_MAP 33 -datatype -le 5 1020;
LAYER_DEF Metal6 1021;
LAYER_MAP 35 -datatype -le 5 1021;
LAYER_DEF Metal7 1022;
LAYER_MAP 38 -datatype -le 5 1022;
LAYER_DEF Metal8 1023;
LAYER_MAP 40 -datatype -le 5 1023;
LAYER_DEF Metal9 1024;
LAYER_MAP 42 -datatype -le 5 1024;
LAYER_DEF Metal10 1025;
LAYER_MAP 152 -datatype -le 5 1025;
LAYER_DEF Metal11 1026;
LAYER_MAP 162 -datatype -le 5 1026;
LAYER_DEF NPNdummy 1027;
LAYER_MAP 20 -datatype 0 1027;
LAYER_DEF Nburied 1028;
LAYER_MAP 19 -datatype 0 1028;
LAYER_DEF Nhvt 1029;
LAYER_MAP 18 -datatype 0 1029;
LAYER_DEF Nimp 1030;
LAYER_MAP 4 -datatype 0 1030;
LAYER_DEF Nlvt 1031;
LAYER_MAP 26 -datatype 0 1031;
LAYER_DEF Nwell 1032;
LAYER_MAP 2 -datatype 0 1032;
LAYER_DEF Nzvt 1033;
LAYER_MAP 52 -datatype 0 1033;
LAYER_DEF Oxide 1034;
LAYER_MAP 1 -datatype 0 1034;
LAYER_DEF Oxide_thk 1035;
LAYER_MAP 24 -datatype 0 1035;
LAYER_DEF PNPdummy 1036;
LAYER_MAP 21 -datatype 0 1036;
LAYER_DEF Phvt 1037;
LAYER_MAP 23 -datatype 0 1037;
LAYER_DEF Pimp 1038;
LAYER_MAP 5 -datatype 0 1038;
LAYER_DEF Plvt 1039;
LAYER_MAP 27 -datatype 0 1039;
LAYER_DEF Poly 1040;
LAYER_MAP 3 -datatype 0 1040;
LAYER_DEF Psub 1041;
LAYER_MAP 25 -datatype 0 1041;
LAYER_DEF ResWdum 1042;
LAYER_MAP 71 -datatype 0 1042;
LAYER_DEF Resdum 1043;
LAYER_MAP 13 -datatype 0 1043;
LAYER_DEF SiProt 1044;
LAYER_MAP 72 -datatype 0 1044;
LAYER_DEF Via1 1045;
LAYER_MAP 8 -datatype 0 1045;

LAYER_DEF Via2 1046;
LAYER_MAP 10 -datatype 0 1046;
LAYER_DEF Via3 1047;
LAYER_MAP 30 -datatype 0 1047;
LAYER_DEF Via4 1048;
LAYER_MAP 32 -datatype 0 1048;
LAYER_DEF Via5 1049;
LAYER_MAP 34 -datatype 0 1049;
LAYER_DEF Via6 1050;
LAYER_MAP 37 -datatype 0 1050;
LAYER_DEF Via7 1051;
LAYER_MAP 39 -datatype 0 1051;
LAYER_DEF Via8 1052;
LAYER_MAP 41 -datatype 0 1052;
LAYER_DEF Via9 1053;
LAYER_MAP 151 -datatype 0 1053;
LAYER_DEF Via10 1054;
LAYER_MAP 161 -datatype 0 1054;
LAYER_DEF metal1_conn_text 1055;
LAYER_MAP 7 -texttype 0 1055;
TEXT_LAYER metal1_conn_text;
LAYER_DEF metal2_conn_text 1056;
LAYER_MAP 9 -texttype 0 1056;
TEXT_LAYER metal2_conn_text;
LAYER_DEF metal3_conn_text 1057;
LAYER_MAP 11 -texttype 0 1057;
TEXT_LAYER metal3_conn_text;
LAYER_DEF metal4_conn_text 1058;
LAYER_MAP 31 -texttype 0 1058;
TEXT_LAYER metal4_conn_text;
LAYER_DEF metal5_conn_text 1059;
LAYER_MAP 33 -texttype 0 1059;
TEXT_LAYER metal5_conn_text;
LAYER_DEF metal6_conn_text 1060;
LAYER_MAP 35 -texttype 0 1060;
TEXT_LAYER metal6_conn_text;
LAYER_DEF metal7_conn_text 1061;
LAYER_MAP 38 -texttype 0 1061;
TEXT_LAYER metal7_conn_text;
LAYER_DEF metal8_conn_text 1062;
LAYER_MAP 40 -texttype 0 1062;
TEXT_LAYER metal8_conn_text;
LAYER_DEF metal9_conn_text 1063;
LAYER_MAP 42 -texttype 0 1063;
TEXT_LAYER metal9_conn_text;
LAYER_DEF metal10_conn_text 1064;
LAYER_MAP 152 -texttype 0 1064;
TEXT_LAYER metal10_conn_text;
LAYER_DEF metal11_conn_text 1065;
LAYER_MAP 162 -texttype 0 1065;
TEXT_LAYER metal11_conn_text;
LAYER_DEF poly_conn_text 1066;
LAYER_MAP 3 -texttype 0 1066;
TEXT_LAYER poly_conn_text;
EXTENT bulk;

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SIZE Bondpad -by 5 -underover bondpad_sq;
AND Bondpad Metal9 bp_tap;
SELECT -with_neighbor Cont -ge 3 -space lt 0.1 cont_cluster_lt_pt1;
AND Cont Poly cont_poly;
AND Oxide Poly gate;
NOT Metal1 M1Resdum metal1_conn;
NOT Metal2 M2Resdum metal2_conn;
NOT Metal3 M3Resdum metal3_conn;
NOT Metal4 M4Resdum metal4_conn;
NOT Metal5 M5Resdum metal5_conn;
NOT Metal6 M6Resdum metal6_conn;
NOT Metal7 M7Resdum metal7_conn;
NOT Metal8 M8Resdum metal8_conn;
NOT Metal9 M9Resdum metal9_conn;
AND Nimp Oxide nactive;
AND Nburied Nwell nb_tap;
NOT Nwell ResWdum nwell_conn;
AND Nwell ResWdum nwellres;
AND Oxide Pimp pactive;
NOT pactive Poly pdiff;
NOT pdiff Resdum pdiff_conn;
AND Cont pdiff_conn cont_pdiff;
NOT Poly Resdum poly_conn;
NOT nactive poly_conn ndiff;
NOT ndiff Resdum ndiff_conn;
AND Cont ndiff_conn cont_ndiff;
SELECT -touch ndiff_conn Poly nsd;
AND ESDdummy nsd nsd_esd;
SELECT -touch pdiff_conn Poly psd;
AND ESDdummy psd psd_esd;
SELECT -interact Nzvt Oxide -gt 1 rule_NZVT_X_4;
AND CapMetal Via10 via10_cap;
NOT Via10 CapMetal via10_nocap;
AREA bulk -gt 100000 L31068;
ENC Bondpad L31068 -lt 50 -metric opposite -para only -output region bondpad_to_die_edge;
AND Bondpad Via1 L92260;
SIZE L92260 -by 0.3 -overunder bondpad_via1_array;
AND Bondpad Via2 L92259;
SIZE L92259 -by 0.3 -overunder bondpad_via2_array;
AND Bondpad Via3 L92258;
SIZE L92258 -by 0.3 -overunder bondpad_via3_array;
AND Bondpad Via4 L92257;
SIZE L92257 -by 0.3 -overunder bondpad_via4_array;
AND Bondpad Via5 L92256;
SIZE L92256 -by 0.3 -overunder bondpad_via5_array;
AND Bondpad Via6 L92255;
SIZE L92255 -by 0.3 -overunder bondpad_via6_array;
AND Bondpad Via7 L92254;
SIZE L92254 -by 0.3 -overunder bondpad_via7_array;
AND Bondpad Via8 L92253;
SIZE L92253 -by 0.3 -overunder bondpad_via8_array;
AND Bondpad Via9 L92252;
SIZE L92252 -by 0.3 -overunder bondpad_via9_array;
AND Bondpad Via10 L45652;
SIZE L45652 -by 0.3 -overunder bondpad_via10_array;

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AND Metal1 Metal2 L38712;
SELECT -enclose L38712 Via1 m1m2v1;
AND Metal2 Metal3 L18248;
SELECT -enclose L18248 Via2 m2m3v2;
AND Metal3 Metal4 L92088;
SELECT -enclose L92088 Via3 m3m4v3;
AND Metal4 Metal5 L2424;
SELECT -enclose L2424 Via4 m4m5v4;
AND Metal5 Metal6 L54536;
SELECT -enclose L54536 Via5 m5m6v5;
AND Metal6 Metal7 L55800;
SELECT -enclose L55800 Via6 m6m7v6;
AND Metal7 Metal8 L1160;
SELECT -enclose L1160 Via7 m7m8v7;
AND Metal8 Metal9 L9176;
SELECT -enclose L9176 Via8 m8m9v8;
OR INDdummy M10Resdum L17074;
NOT Metal10 L17074 metal10_conn;
OR INDdummy M11Resdum L86607;
NOT Metal11 L86607 metal11_conn;
AND NPNdummy ndiff_conn L61645;
NOT L61645 Nwell npn_emit;
SELECT -outside -not Nwell Oxide L60860;
SELECT -outside -not L60860 ResWdum nwell_in_od_res;
SELECT -cut Oxide Resdum L36999;
SELECT -cut L36999 SiProt oxide_in_res;
SELECT -cut Poly Resdum L80658;
SELECT -cut L80658 SiProt poly_in_res;
NOT pdiff_conn Nwell L61994;
NOT L61994 PNPdummy ptap;
AND ESDdummy ptap ptap_esd;
SELECT -touch ptap_esd nsd_esd rule_ESD_7_nmos;
EDGE_EXPAND bondpad_to_die_edge -outside_by 68 L23193;
OR L23193 bondpad_to_die_edge L45856;
SELECT -inside bondpad_sq L45856 rule_BONDPAD_L_1;
HOLES Nwell L90546;
NOT L90546 Nwell L90545;
SELECT -outside Nburied L90545 rule_NBL_X_1;
SIZE L38712 -by 0.75 -underover rule_VIA1_E_3_PLATE;
SIZE L18248 -by 0.75 -underover rule_VIA2_E_3_PLATE;
SIZE L92088 -by 0.75 -underover rule_VIA3_E_3_PLATE;
SIZE L2424 -by 0.75 -underover rule_VIA4_E_3_PLATE;
SIZE L54536 -by 0.75 -underover rule_VIA5_E_3_PLATE;
SIZE L55800 -by 0.75 -underover rule_VIA6_E_3_PLATE;
SIZE L1160 -by 0.75 -underover rule_VIA7_E_3_PLATE;
SIZE L9176 -by 0.75 -underover rule_VIA8_E_3_PLATE;
SIZE Cont -by 0.09 L26410;
SIZE L26410 -by 0.409 -underover L61819;
SIZE L61819 -by -0.09 cont_array_zone;
AND Nwell ndiff_conn L74405;
AND NPNdummy Psub L28555;
NOT L74405 L28555 ntap;
AND ESDdummy ntap ntap_esd;
SELECT -touch ntap_esd psd_esd rule_ESD_7_pmos;
SELECT -cut Oxide nsd_esd L54535;

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HOLES ptap_esd L31818;
NOT L31818 ptap_esd L31817;
NOT L54535 L31817 rule_ESD_5;
SELECT -cut Oxide psd_esd L52827;
HOLES ntap_esd L85192;
NOT L85192 ntap_esd L85191;
NOT L52827 L85191 rule_ESD_6;
SELECT -interact Oxide Nzvt L33971;
SIZE L33971 -by 0.16 L90685;
XOR L90685 Nzvt rule_NZVT_O_1;
SIZE Via1 -by 0.11 L17980;
SIZE L17980 -by 0.499 -underover L90952;
SIZE L90952 -by -0.11 via1_array_zone;
SIZE Via2 -by 0.11 L47131;
SIZE L47131 -by 0.499 -underover L42681;
SIZE L42681 -by -0.11 via2_array_zone;
SIZE Via3 -by 0.11 L76282;
SIZE L76282 -by 0.499 -underover L64294;
SIZE L64294 -by -0.11 via3_array_zone;
SIZE Via4 -by 0.11 L5433;
SIZE L5433 -by 0.499 -underover L77470;
SIZE L77470 -by -0.11 via4_array_zone;
SIZE Via5 -by 0.11 L34584;
SIZE L34584 -by 0.499 -underover L55171;
SIZE L55171 -by -0.11 via5_array_zone;
SIZE Via6 -by 0.11 L63735;
SIZE L63735 -by 0.499 -underover L83479;
SIZE L83479 -by -0.11 via6_array_zone;
SIZE Via7 -by 0.11 L92886;
SIZE L92886 -by 0.499 -underover L76842;
SIZE L76842 -by -0.11 via7_array_zone;
SIZE Via8 -by 0.11 L22037;
SIZE L22037 -by 0.499 -underover L12415;
SIZE L12415 -by -0.11 via8_array_zone;
EDGE_EXPAND Resdum -outside_by 0.001 L4140;
OR Oxide Poly L32232;
SELECT -outside L4140 L32232 L10364;
OR L10364 Resdum resdum_sz;
SIZE Metal1 -by 0.2 -underover L82991;
SIZE Metal2 -by 0.2 -underover L12142;
OR L12142 L82991 L21748;
AND L21748 Via1 via1_x_1;
SIZE Metal1 -by 0.5 -underover L83084;
SIZE Metal2 -by 0.5 -underover L12235;
OR L12235 L83084 L4033;
AND L4033 Via1 via1_x_2;
SIZE Metal3 -by 0.2 -underover L41293;
OR L12142 L41293 L52348;
AND L52348 Via2 via2_x_1;
SIZE Metal3 -by 0.5 -underover L41386;
OR L12235 L41386 L53252;
AND L53252 Via2 via2_x_2;
SIZE Metal4 -by 0.2 -underover L70444;
OR L41293 L70444 L48815;
AND L48815 Via3 via3_x_1;

SIZE Metal4 -by 0.5 -underover L70537;
OR L41386 L70537 L87119;
AND L87119 Via3 via3_x_2;
SIZE Metal5 -by 0.2 -underover L99595;
OR L70444 L99595 L18361;
AND L18361 Via4 via4_x_1;
SIZE Metal5 -by 0.5 -underover L99688;
OR L70537 L99688 L43335;
AND L43335 Via4 via4_x_2;
SIZE Metal6 -by 0.2 -underover L28746;
OR L28746 L99595 L91359;
AND L91359 Via5 via5_x_1;
SIZE Metal6 -by 0.5 -underover L28839;
OR L28839 L99688 L14241;
AND L14241 Via5 via5_x_2;
SIZE Metal7 -by 0.2 -underover L57897;
OR L28746 L57897 L42140;
AND L42140 Via6 via6_x_1;
SIZE Metal7 -by 0.5 -underover L57990;
OR L28839 L57990 L63481;
AND L63481 Via6 via6_x_2;
SIZE Metal8 -by 0.2 -underover L87048;
OR L57897 L87048 L79204;
AND L79204 Via7 via7_x_1;
SIZE Metal8 -by 0.5 -underover L87141;
OR L57990 L87141 L96196;
AND L96196 Via7 via7_x_2;
SIZE Metal9 -by 0.2 -underover L16199;
OR L16199 L87048 L19700;
AND L19700 Via8 via8_x_1;
SIZE Metal9 -by 0.5 -underover L16292;
OR L16292 L87141 L2708;
AND L2708 Via8 via8_x_2;
AND Via1 Via2 L90744;
AND L90744 Via3 L33864;
AND L33864 Via4 L30797;
AND L30797 Via5 via_1_5_stack;
AND Via2 Via3 L19896;
AND L19896 Via4 L73372;
AND L73372 Via5 L56520;
AND L56520 Via6 via_2_6_stack;
AND Via3 Via4 L49048;
AND L49048 Via5 L40741;
AND L40741 Via6 L13939;
AND L13939 Via7 via_3_7_stack;
AND Via4 Via5 L78200;
AND L78200 Via6 L54054;
AND L54054 Via7 L29444;
AND L29444 Via8 via_4_8_stack;
AND L38712 Metal3 L46076;
AND L46076 Metal4 L40611;
AND L40611 Metal5 L40951;
AND L40951 Metal6 metal_1_6_stack;
SELECT -enclose metal_1_6_stack via_1_5_stack -eq 1 rule_VIAk_X_3_X_4a;
AND L18248 Metal4 L79489;

AND L79489 Metal5 L42786;
AND L42786 Metal6 L29755;
AND L29755 Metal7 metal_2_7_stack;
SELECT -enclose metal_2_7_stack via_2_6_stack -eq 1 rule_VIAk_X_3_X_4b;
AND L92088 Metal5 L76038;
AND L76038 Metal6 L74596;
AND L74596 Metal7 L15038;
AND L15038 Metal8 metal_3_8_stack;
SELECT -enclose metal_3_8_stack via_3_7_stack -eq 1 rule_VIAk_X_3_X_4c;
AND L2424 Metal6 L13512;
AND L13512 Metal7 L29855;
AND L29855 Metal8 L78947;
AND L78947 Metal9 metal_4_9_stack;
SELECT -enclose metal_4_9_stack via_4_8_stack -eq 1 rule_VIAk_X_3_X_4d;
NOT bulk nb_tap L14174;
SIZE Psub -by -0.001 L86601;
NOT Psub L86601 L7495;
NOT L14174 L7495 psubstrate;
HOLES Metal1 L11511;
OR L11511 Metal1 L94375;
SELECT -enclose L94375 Bondpad L83147;
SIZE L83147 -by 25 -underover L11659;
AND L11659 L94375 L22419;
SELECT -enclose L22419 Bondpad bondpad_metal1_filled;
HOLES Metal2 L11512;
OR L11512 Metal2 L94376;
SELECT -enclose L94376 Bondpad L28684;
SIZE L28684 -by 25 -underover L91294;
AND L91294 L94376 L29447;
SELECT -enclose L29447 Bondpad bondpad_metal2_filled;
HOLES Metal3 L11513;
OR L11513 Metal3 L94377;
SELECT -enclose L94377 Bondpad L25779;
SIZE L25779 -by 25 -underover L57208;
AND L57208 L94377 L38857;
SELECT -enclose L38857 Bondpad bondpad_metal3_filled;
HOLES Metal4 L11514;
OR L11514 Metal4 L94378;
SELECT -enclose L94378 Bondpad L87054;
SIZE L87054 -by 25 -underover L10974;
AND L10974 L94378 L74553;
SELECT -enclose L74553 Bondpad bondpad_metal4_filled;
HOLES Metal5 L11515;
OR L11515 Metal5 L94379;
SELECT -enclose L94379 Bondpad L67409;
SIZE L67409 -by 25 -underover L60622;
AND L60622 L94379 L45717;
SELECT -enclose L45717 Bondpad bondpad_metal5_filled;
HOLES Metal6 L11516;
OR L11516 Metal6 L94380;
SELECT -enclose L94380 Bondpad L59931;
SIZE L59931 -by 25 -underover L61125;
AND L61125 L94380 L25614;
SELECT -enclose L25614 Bondpad bondpad_metal6_filled;
HOLES Metal7 L11517;

OR L11517 Metal7 L94381;
SELECT -enclose L94381 Bondpad L52902;
SIZE L52902 -by 25 -underover L96368;
AND L94381 L96368 L79426;
SELECT -enclose L79426 Bondpad bondpad_metal7_filled;
HOLES Metal8 L11518;
OR L11518 Metal8 L94382;
SELECT -enclose L94382 Bondpad L1561;
SIZE L1561 -by 25 -underover L79037;
AND L79037 L94382 L79063;
SELECT -enclose L79063 Bondpad bondpad_metal8_filled;
HOLES Metal9 L11519;
OR L11519 Metal9 L94383;
SELECT -enclose L94383 Bondpad L11272;
SIZE L11272 -by 25 -underover L32833;
AND L32833 L94383 L91025;
SELECT -enclose L91025 Bondpad bondpad_metal9_filled;
HOLES Metal10 L77703;
OR L77703 Metal10 L58377;
SELECT -enclose L58377 Bondpad L17125;
SIZE L17125 -by 25 -underover L33952;
AND L33952 L58377 L66545;
SELECT -enclose L66545 Bondpad bondpad_metal10_filled;
HOLES Metal11 L77702;
OR L77702 Metal11 L58378;
SELECT -enclose L58378 Bondpad L37338;
SIZE L37338 -by 25 -underover L51450;
AND L51450 L58378 L85739;
SELECT -enclose L85739 Bondpad bondpad_metal11_filled;
SIZE Cont -by 6 -inside_of Poly -step 0.2 L2596;
NOT Poly L2596 L29188;
SELECT -touch L29188 L2596 -eq 2 L92413;
SIZE Poly -by 0.07 -underover L99542;
NOT L92413 L99542 rule_POLY_SE_3;
EXTE m1m2v1 rule_VIA1_E_3_PLATE -le 3 -output region L12009;
OR Metal1 Metal2 L38948;
AND L12009 L38948 L73527;
OR m1m2v1 rule_VIA1_E_3_PLATE L41560;
EDGE_BOOLEAN -coincident_only L41560 L73527 -outside L36434;
EDGE_EXPAND L36434 -inside_by 0.001 L13878;
SELECT -interact L41560 L13878 L93892;
SELECT -interact L73527 L93892 -gt 1 L17164;
EDGE_BOOLEAN -coincident_only L17164 m1m2v1 -outside L70743;
EDGE_EXPAND L70743 -inside_by 0.001 L54357;
SELECT -interact m1m2v1 L54357 via1_e_3;
SELECT -enclose via1_e_3 Via1 -ge 2 L91113;
SELECT -interact -not via1_e_3 L91113 rule_VIA1_E_3;
EXTE m2m3v2 rule_VIA2_E_3_PLATE -le 3 -output region L53957;
OR Metal2 Metal3 L18012;
AND L18012 L53957 L40458;
OR m2m3v2 rule_VIA2_E_3_PLATE L63548;
EDGE_BOOLEAN -coincident_only L63548 L40458 -outside L12095;
EDGE_EXPAND L12095 -inside_by 0.001 L83875;
SELECT -interact L63548 L83875 L56322;
SELECT -interact L40458 L56322 -gt 1 L10561;

EDGE_BOOLEAN -coincident_only L10561 m2m3v2 -outside L1628;
EDGE_EXPAND L1628 -inside_by 0.001 L50163;
SELECT -interact m2m3v2 L50163 via2_e_3;
SELECT -enclose via2_e_3 Via2 -ge 2 L60617;
SELECT -interact -not via2_e_3 L60617 rule_VIA2_E_3;
EXTE m3m4v3 rule_VIA3_E_3_PLATE -le 3 -output region L71391;
OR Metal3 Metal4 L92324;
AND L71391 L92324 L35458;
OR m3m4v3 rule_VIA3_E_3_PLATE L81760;
EDGE_BOOLEAN -coincident_only L81760 L35458 -outside L58175;
EDGE_EXPAND L58175 -inside_by 0.001 L16740;
SELECT -interact L81760 L16740 L86069;
SELECT -interact L35458 L86069 -gt 1 L92125;
EDGE_BOOLEAN -coincident_only L92125 m3m4v3 -outside L84867;
EDGE_EXPAND L84867 -inside_by 0.001 L70219;
SELECT -interact m3m4v3 L70219 via3_e_3;
SELECT -enclose via3_e_3 Via3 -ge 2 L30121;
SELECT -interact -not via3_e_3 L30121 rule_VIA3_E_3;
EXTE m4m5v4 rule_VIA4_E_3_PLATE -le 3 -output region L29443;
OR Metal4 Metal5 L64636;
AND L29443 L64636 L17594;
OR m4m5v4 rule_VIA4_E_3_PLATE L40228;
EDGE_BOOLEAN -coincident_only L40228 L17594 -outside L70608;
EDGE_EXPAND L70608 -inside_by 0.001 L62883;
SELECT -interact L40228 L62883 L29638;
SELECT -interact L17594 L29638 -gt 1 L74674;
EDGE_BOOLEAN -coincident_only L74674 m4m5v4 -outside L16251;
EDGE_EXPAND L16251 -inside_by 0.001 L86369;
SELECT -interact m4m5v4 L86369 via4_e_3;
SELECT -enclose via4_e_3 Via4 -ge 2 L67671;
SELECT -interact -not via4_e_3 L67671 rule_VIA4_E_3;
EXTE m5m6v5 rule_VIA5_E_3_PLATE -le 3 -output region L12505;
OR Metal5 Metal6 L45700;
AND L12505 L45700 L31348;
OR m5m6v5 rule_VIA5_E_3_PLATE L5080;
EDGE_BOOLEAN -coincident_only L5080 L31348 -outside L93348;
EDGE_EXPAND L93348 -inside_by 0.001 L55531;
SELECT -interact L5080 L55531 L72905;
SELECT -interact L31348 L72905 -gt 1 L33990;
EDGE_BOOLEAN -coincident_only L33990 m5m6v5 -outside L17102;
EDGE_EXPAND L17102 -inside_by 0.001 L75771;
SELECT -interact m5m6v5 L75771 via5_e_3;
SELECT -enclose via5_e_3 Via5 -ge 2 L98167;
SELECT -interact -not via5_e_3 L98167 rule_VIA5_E_3;
EXTE m6m7v6 rule_VIA6_E_3_PLATE -le 3 -output region L54453;
OR Metal6 Metal7 L56036;
AND L54453 L56036 L71402;
OR m6m7v6 rule_VIA6_E_3_PLATE L16908;
EDGE_BOOLEAN -coincident_only L16908 L71402 -outside L88866;
EDGE_EXPAND L88866 -inside_by 0.001 L46224;
SELECT -interact L16908 L46224 L70795;
SELECT -interact L71402 L70795 -gt 1 L95392;
EDGE_BOOLEAN -coincident_only L95392 m6m7v6 -outside L33457;
EDGE_EXPAND L33457 -inside_by 0.001 L32366;
SELECT -interact m6m7v6 L32366 via6_e_3;

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SELECT -enclose via6_e_3 Via6 -ge 2 L28663;
SELECT -interact -not via6_e_3 L28663 rule_VIA6_E_3;
EXTE m7m8v7 rule_VIA7_E_3_PLATE -le 3 -output region L96401;
OR Metal7 Metal8 L924;
AND L924 L96401 L5972;
OR m7m8v7 rule_VIA7_E_3_PLATE L28400;
EDGE_BOOLEAN -coincident_only L28400 L5972 -outside L87131;
EDGE_EXPAND L87131 -inside_by 0.001 L59624;
SELECT -interact L28400 L59624 L20027;
SELECT -interact L5972 L20027 -gt 1 L26193;
EDGE_BOOLEAN -coincident_only L26193 m7m8v7 -outside L50045;
EDGE_EXPAND L50045 -inside_by 0.001 L84206;
SELECT -interact m7m8v7 L84206 via7_e_3;
SELECT -enclose via7_e_3 Via7 -ge 2 L59159;
SELECT -interact -not via7_e_3 L59159 rule_VIA7_E_3;
EXTE m8m9v8 rule_VIA8_E_3_PLATE -le 3 -output region L28947;
OR Metal8 Metal9 L9412;
AND L28947 L9412 L74245;
OR m8m9v8 rule_VIA8_E_3_PLATE L93588;
EDGE_BOOLEAN -coincident_only L93588 L74245 -outside L81251;
EDGE_EXPAND L81251 -inside_by 0.001 L34227;
SELECT -interact L93588 L34227 L85158;
SELECT -interact L74245 L85158 -gt 1 L89061;
EDGE_BOOLEAN -coincident_only L89061 m8m9v8 -outside L37117;
EDGE_EXPAND L37117 -inside_by 0.001 L64149;
SELECT -interact m8m9v8 L64149 via8_e_3;
SELECT -enclose via8_e_3 Via8 -ge 2 L89655;
SELECT -interact -not via8_e_3 L89655 rule_VIA8_E_3;
AND Metal1 bondpad_metal1_filled bondpad_metal1;
HOLES bondpad_metal1 L16219;
NOT L16219 bondpad_metal1 bondpad_metal1_slot;
EXTE bondpad_metal1_slot bondpad_metal1_slot -le 2.5 -metric opposite -para only -notch not -output
region L51557;
SELECT -touch bondpad_metal1_slot L51557 -eq 1 bondpad_metal1_slot_on_edge;
INTE bondpad_metal1_slot bondpad_metal1_slot -eq 1.5 -metric opposite -para only -output region
L74117;
NOT bondpad_metal1_slot L74117 L74117b;
NOT L74117b bondpad_metal1_slot_on_edge rule_BONDPAD_SP_5_metal1;
EXTE bondpad_metal1_slot bondpad_metal1_slot -le 2.5 -metric opposite -para only -output region
L23896a;
EXTE bondpad_metal1_slot bondpad_metal1_slot -eq 1 -metric opposite -para only -output region
L23896b;
NOT L23896a L23896b rule_BONDPAD_W_4_metal1;
AND Metal2 bondpad_metal2_filled bondpad_metal2;
HOLES bondpad_metal2 L16220;
NOT L16220 bondpad_metal2 bondpad_metal2_slot;
EXTE bondpad_metal2_slot bondpad_metal2_slot -le 2.5 -metric opposite -para only -output region
L34276;
SELECT -touch bondpad_metal2_slot L34276 -eq 1 bondpad_metal2_slot_on_edge;
INTE bondpad_metal2_slot bondpad_metal2_slot -eq 1.5 -metric opposite -para only -output region
L56836;
NOT bondpad_metal2_slot L56836 L56836b;
NOT L56836b bondpad_metal2_slot_on_edge rule_BONDPAD_SP_5_metal2;
EXTE bondpad_metal2_slot bondpad_metal2_slot -le 2.5 -metric opposite -para only -output region
L41177a;

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EXTE bondpad_metal2_slot bondpad_metal2_slot -eq 1 -metric opposite -para only -output region L41177b;
NOT L41177a L41177b rule_BONDPAD_W_4_metal2;
AND Metal3 bondpad_metal3_filled bondpad_metal3;
HOLES bondpad_metal3 L16221;
NOT L16221 bondpad_metal3 bondpad_metal3_slot;
EXTE bondpad_metal3_slot bondpad_metal3_slot -le 2.5 -metric opposite -para only -notch not -output region L16995;
SELECT -touch bondpad_metal3_slot L16995 -eq 1 bondpad_metal3_slot_on_edge;
INTE bondpad_metal3_slot bondpad_metal3_slot -eq 1.5 -metric opposite -para only -output region L39555;
NOT bondpad_metal3_slot L39555 L39555b;
NOT L39555b bondpad_metal3_slot_on_edge rule_BONDPAD_SP_5_metal3;
EXTE bondpad_metal3_slot bondpad_metal3_slot -le 2.5 -metric opposite -para only -output region L58458a;
EXTE bondpad_metal3_slot bondpad_metal3_slot -eq 1 -metric opposite -para only -output region L58458b;
NOT L58458a L58458b rule_BONDPAD_W_4_metal3;
AND Metal4 bondpad_metal4_filled bondpad_metal4;
HOLES bondpad_metal4 L16222;
NOT L16222 bondpad_metal4 bondpad_metal4_slot;
EXTE bondpad_metal4_slot bondpad_metal4_slot -le 2.5 -metric opposite -para only -notch not -output region L99714;
SELECT -touch bondpad_metal4_slot L99714 -eq 1 bondpad_metal4_slot_on_edge;
INTE bondpad_metal4_slot bondpad_metal4_slot -eq 1.5 -metric opposite -para only -output region L22274;
NOT bondpad_metal2_slot L22274 L22274b;
NOT L22274b bondpad_metal4_slot_on_edge rule_BONDPAD_SP_5_metal4;
EXTE bondpad_metal4_slot bondpad_metal4_slot -le 2.5 -metric opposite -para only -output region L75739a;
EXTE bondpad_metal4_slot bondpad_metal4_slot -eq 1 -metric opposite -para only -output region L75739b;
NOT L75739a L75739b rule_BONDPAD_W_4_metal4;
AND Metal5 bondpad_metal5_filled bondpad_metal5;
HOLES bondpad_metal5 L16223;
NOT L16223 bondpad_metal5 bondpad_metal5_slot;
EXTE bondpad_metal5_slot bondpad_metal5_slot -le 2.5 -metric opposite -para only -notch not -output region L82433;
SELECT -touch bondpad_metal5_slot L82433 -eq 1 bondpad_metal5_slot_on_edge;
INTE bondpad_metal5_slot bondpad_metal5_slot -eq 1.5 -metric opposite -para only -output region L4993;
NOT bondpad_metal5_slot L4993 L4993b;
NOT L4993b bondpad_metal5_slot_on_edge rule_BONDPAD_SP_5_metal5;
EXTE bondpad_metal5_slot bondpad_metal5_slot -le 2.5 -metric opposite -para only -output region L93020a;
EXTE bondpad_metal5_slot bondpad_metal5_slot -eq 1 -metric opposite -para only -output region L93020b;
NOT L93020a L93020b rule_BONDPAD_W_4_metal5;
AND Metal6 bondpad_metal6_filled bondpad_metal6;
HOLES bondpad_metal6 L16224;
NOT L16224 bondpad_metal6 bondpad_metal6_slot;
EXTE bondpad_metal6_slot bondpad_metal6_slot -le 2.5 -metric opposite -para only -notch not -output region L65152;
SELECT -touch bondpad_metal6_slot L65152 -eq 1 bondpad_metal6_slot_on_edge;
INTE bondpad_metal6_slot bondpad_metal6_slot -eq 1.5 -metric opposite -para only -output region

L87712;
 NOT bondpad_metal6_slot L87712 L87712b;
 NOT L87712b bondpad_metal6_slot_on_edge rule_BONDPAD_SP_5_metal6;
 EXTE bondpad_metal6_slot bondpad_metal6_slot -le 2.5 -metric opposite -para only -output region
 L10301a;
 EXTE bondpad_metal6_slot bondpad_metal6_slot -eq 1 -metric opposite -para only -output region
 L10301b;
 NOT L10301a L10301b rule_BONDPAD_W_4_metal6;
 AND Metal7 bondpad_metal7_filled bondpad_metal7;
 HOLES bondpad_metal7 L16225;
 NOT L16225 bondpad_metal7 bondpad_metal7_slot;
 EXTE bondpad_metal7_slot bondpad_metal7_slot -le 2.5 -metric opposite -para only -notch not -output
 region L47871;
 SELECT -touch bondpad_metal7_slot L47871 -eq 1 bondpad_metal7_slot_on_edge;
 INTE bondpad_metal7_slot bondpad_metal7_slot -eq 1.5 -metric opposite -para only -output region
 L70431;
 NOT bondpad_metal7_slot L70431 L70431b;
 NOT L70431b bondpad_metal7_slot_on_edge rule_BONDPAD_SP_5_metal7;
 EXTE bondpad_metal7_slot bondpad_metal7_slot -le 2.5 -metric opposite -para only -output region
 L27582a;
 EXTE bondpad_metal7_slot bondpad_metal7_slot -eq 1 -metric opposite -para only -output region
 L27582b;
 NOT L27582a L27582b rule_BONDPAD_W_4_metal7;
 AND Metal8 bondpad_metal8_filled bondpad_metal8;
 HOLES bondpad_metal8 L16226;
 NOT L16226 bondpad_metal8 bondpad_metal8_slot;
 EXTE bondpad_metal8_slot bondpad_metal8_slot -le 2.5 -metric opposite -para only -notch not -output
 region L30590;
 SELECT -touch bondpad_metal8_slot L30590 -eq 1 bondpad_metal8_slot_on_edge;
 INTE bondpad_metal8_slot bondpad_metal8_slot -eq 1.5 -metric opposite -para only -output region
 L53150;
 NOT bondpad_metal8_slot L53150 L53150b;
 NOT L53150b bondpad_metal8_slot_on_edge rule_BONDPAD_SP_5_metal8;
 EXTE bondpad_metal8_slot bondpad_metal8_slot -le 2.5 -metric opposite -para only -output region
 L44863a;
 EXTE bondpad_metal8_slot bondpad_metal8_slot -eq 1 -metric opposite -para only -output region
 L44863b;
 NOT L44863a L44863b rule_BONDPAD_W_4_metal8;
 AND Metal9 bondpad_metal9_filled bondpad_metal9;
 HOLES bondpad_metal9 L16227;
 NOT L16227 bondpad_metal9 bondpad_metal9_slot;
 EXTE bondpad_metal9_slot bondpad_metal9_slot -le 2.5 -metric opposite -para only -notch not -output
 region L13309;
 SELECT -touch bondpad_metal9_slot L13309 -eq 1 bondpad_metal9_slot_on_edge;
 INTE bondpad_metal9_slot bondpad_metal9_slot -eq 1.5 -metric opposite -para only -output region
 L35869;
 NOT bondpad_metal9_slot L35869 L35869b;
 NOT L35869b bondpad_metal9_slot_on_edge rule_BONDPAD_SP_5_metal9;
 EXTE bondpad_metal9_slot bondpad_metal9_slot -le 2.5 -metric opposite -para only -output region
 L62144a;
 EXTE bondpad_metal9_slot bondpad_metal9_slot -eq 1 -metric opposite -para only -output region
 L62144b;
 NOT L62144a L62144b rule_BONDPAD_W_4_metal9;
 AND Metal10 bondpad_metal10_filled bondpad_metal10;
 HOLES bondpad_metal10 L35415;

NOT L35415 bondpad_metal10 bondpad_metal10_slot;
EXTE bondpad_metal10_slot bondpad_metal10_slot -le 2.5 -metric opposite -para only -notch not -output region L59435;
SELECT -touch bondpad_metal10_slot L59435 -eq 1 bondpad_metal10_slot_on_edge;
INTE bondpad_metal10_slot bondpad_metal10_slot -eq 1.5 -metric opposite -para only -output region L36875;
NOT bondpad_metal10_slot L36875 L36875b;
NOT L36875b bondpad_metal10_slot_on_edge rule_BONDPAD_SP_5_metal10;
EXTE bondpad_metal10_slot bondpad_metal10_slot -le 2.5 -metric opposite -para only -output region L69464a;
EXTE bondpad_metal10_slot bondpad_metal10_slot -eq 1 -metric opposite -para only -output region L69464b;
NOT L69464a L69464b rule_BONDPAD_W_4_metal10;
AND Metal11 bondpad_metal11_filled bondpad_metal11;
SIZE Cont -by 6 -inside_of Oxide -step 0.1 L25906;
NOT Oxide L25906 L94579;
SIZE Oxide -by 0.09 -underover L39287;
NOT Oxide L39287 L30786;
SELECT -interact L94579 L30786 L83634;
SELECT -touch L83634 L25906 rule_OXIDE_L_1_L_2;
SIZE bondpad_metal1_filled -by -25 L95323;
SIZE L95323 -by 20 L90795;
EDGE_EXPAND L90795 -outside_by 5 L19940;
EXTE bondpad_metal1_slot bondpad_metal1_slot -le 10 -metric opposite -para only -notch not -output region L97067;
OR L97067 bondpad_metal1_slot L52936;
NOT bondpad_metal1_filled L52936 L47599;
INTE L47599 L47599 -eq 5 -metric opposite -para only -output region L53804;
SELECT -outside L19940 L53804 rule_BONDPAD_W_5_metal1;
SIZE bondpad_metal2_filled -by -25 L36698;
SIZE L36698 -by 20 L3707;
EDGE_EXPAND L3707 -outside_by 5 L74735;
EXTE bondpad_metal2_slot bondpad_metal2_slot -le 10 -metric opposite -para only -notch not -output region L74;
OR L74 bondpad_metal2_slot L81007;
NOT bondpad_metal2_filled L81007 L35857;
INTE L35857 L35857 -eq 5 -metric opposite -para only -output region L45326;
SELECT -outside L74735 L45326 rule_BONDPAD_W_5_metal2;
SIZE bondpad_metal3_filled -by -25 L21927;
SIZE L21927 -by 20 L31022;
EDGE_EXPAND L31022 -outside_by 5 L77926;
EXTE bondpad_metal3_slot bondpad_metal3_slot -le 10 -metric opposite -para only -notch not -output region L64215;
OR L64215 bondpad_metal3_slot L98923;
NOT bondpad_metal3_filled L98923 L56717;
INTE L56717 L56717 -eq 5 -metric opposite -para only -output region L53462;
SELECT -outside L77926 L53462 rule_BONDPAD_W_5_metal3;
SIZE bondpad_metal4_filled -by -25 L80552;
SIZE L80552 -by 20 L95699;
EDGE_EXPAND L95699 -outside_by 5 L27426;
EXTE bondpad_metal4_slot bondpad_metal4_slot -le 10 -metric opposite -para only -notch not -output region L61208;
OR L61208 bondpad_metal4_slot L90065;
NOT bondpad_metal4_filled L90065 L61675;
INTE L61675 L61675 -eq 5 -metric opposite -para only -output region L23149;

SELECT -outside L27426 L23149 rule_BONDPAD_W_5_metal4;
SIZE bondpad_metal5_filled -by -25 L39177;
SIZE L39177 -by 20 L21314;
EDGE_EXPAND L21314 -outside_by 5 L61825;
EXTE bondpad_metal5_slot bondpad_metal5_slot -le 10 -metric opposite -para only -notch not -output region L58201;
OR L58201 bondpad_metal5_slot L24897;
NOT bondpad_metal5_filled L24897 L91512;
INTE L91512 L91512 -eq 5 -metric opposite -para only -output region L26632;
SELECT -outside L61825 L26632 rule_BONDPAD_W_5_metal5;
SIZE bondpad_metal6_filled -by -25 L97802;
SIZE L97802 -by 20 L15441;
EDGE_EXPAND L15441 -outside_by 5 L19957;
EXTE bondpad_metal6_slot bondpad_metal6_slot -le 10 -metric opposite -para only -notch not -output region L55194;
OR L55194 bondpad_metal6_slot L74852;
NOT bondpad_metal6_filled L74852 L77773;
INTE L77773 L77773 -eq 5 -metric opposite -para only -output region L17229;
SELECT -outside L19957 L17229 rule_BONDPAD_W_5_metal6;
SIZE bondpad_metal7_filled -by -25 L10869;
SIZE L10869 -by 20 L5615;
EDGE_EXPAND L5615 -outside_by 5 L24363;
EXTE bondpad_metal7_slot bondpad_metal7_slot -le 10 -metric opposite -para only -notch not -output region L52187;
OR L52187 bondpad_metal7_slot L83586;
NOT bondpad_metal7_filled L83586 L20526;
INTE L20526 L20526 -eq 5 -metric opposite -para only -output region L2261;
SELECT -outside L24363 L2261 rule_BONDPAD_W_5_metal7;
SIZE bondpad_metal8_filled -by -25 L52244;
SIZE L52244 -by 20 L85496;
EDGE_EXPAND L85496 -outside_by 5 L3964;
EXTE bondpad_metal8_slot bondpad_metal8_slot -le 10 -metric opposite -para only -notch not -output region L49180;
OR L49180 bondpad_metal8_slot L18418;
NOT bondpad_metal8_filled L18418 L11829;
INTE L11829 L11829 -eq 5 -metric opposite -para only -output region L12231;
SELECT -outside L3964 L12231 rule_BONDPAD_W_5_metal8;
SIZE bondpad_metal9_filled -by -25 L93619;
SIZE L93619 -by 20 L53065;
EDGE_EXPAND L53065 -outside_by 5 L79015;
EXTE bondpad_metal9_slot bondpad_metal9_slot -le 10 -metric opposite -para only -notch not -output region L46173;
OR L46173 bondpad_metal9_slot L9560;
NOT bondpad_metal9_filled L9560 L46654;
INTE L46654 L46654 -eq 5 -metric opposite -para only -output region L54989;
SELECT -outside L79015 L54989 rule_BONDPAD_W_5_metal9;
SIZE bondpad_metal10_filled -by -25 L22427;
SIZE L22427 -by 20 L40524;
EDGE_EXPAND L40524 -outside_by 5 L22723;
EXTE bondpad_metal10_slot bondpad_metal10_slot -le 10 -metric opposite -para only -notch not -output region L97563;
OR L97563 bondpad_metal10_slot L62913;
NOT bondpad_metal10_filled L62913 L90437;
INTE L90437 L90437 -eq 5 -metric opposite -para only -output region L45819;
SELECT -outside L22723 L45819 rule_BONDPAD_W_5_metal10;

SELECT -enclose L38712 via1_x_2 L8073;
SIZE via1_x_2 -by 0.15 L62796;
AND L38712 L62796 L3292;
SELECT -enclose L3292 via1_x_2 -gt 3 L84071;
SELECT -outside L8073 L84071 L71267;
SIZE via1_x_2 -by 0.3 L62739;
AND L38712 L62739 L3109;
SELECT -enclose L3109 via1_x_2 -gt 8 L29299;
SELECT -outside L71267 L29299 rule_VIA1_X_2;
SELECT -enclose L18248 via2_x_2 L18588;
SIZE via2_x_2 -by 0.15 L90995;
AND L18248 L90995 L49606;
SELECT -enclose L49606 via2_x_2 -gt 3 L66271;
SELECT -outside L18588 L66271 L89859;
SIZE via2_x_2 -by 0.3 L91052;
AND L18248 L91052 L70621;
SELECT -enclose L70621 via2_x_2 -gt 8 L66389;
SELECT -outside L89859 L66389 rule_VIA2_X_2;
SELECT -enclose L92088 via3_x_2 L45131;
SIZE via3_x_2 -by 0.15 L77490;
AND L77490 L92088 L64637;
SELECT -enclose L64637 via3_x_2 -gt 3 L11835;
SELECT -outside L45131 L11835 L17874;
SIZE via3_x_2 -by 0.3 L77547;
AND L77547 L92088 L97334;
SELECT -enclose L97334 via3_x_2 -gt 8 L31676;
SELECT -outside L17874 L31676 rule_VIA3_X_2;
SELECT -enclose L2424 via4_x_2 L91763;
SIZE via4_x_2 -by 0.15 L63985;
AND L2424 L63985 L2406;
SELECT -enclose L2406 via4_x_2 -gt 3 L1562;
SELECT -outside L91763 L1562 L98807;
SIZE via4_x_2 -by 0.3 L64042;
AND L2424 L64042 L23421;
SELECT -enclose L23421 via4_x_2 -gt 8 L65761;
SELECT -outside L98807 L65761 rule_VIA4_X_2;
SELECT -enclose L54536 via5_x_2 L74091;
SIZE via5_x_2 -by 0.15 L50480;
AND L50480 L54536 L47841;
SELECT -enclose L47841 via5_x_2 -gt 3 L17351;
SELECT -outside L74091 L17351 L12707;
SIZE via5_x_2 -by 0.3 L50537;
AND L50537 L54536 L53166;
SELECT -enclose L53166 via5_x_2 -gt 8 L35999;
SELECT -outside L12707 L35999 rule_VIA5_X_2;
SELECT -enclose L55800 via6_x_2 L62391;
SIZE via6_x_2 -by 0.15 L36975;
AND L36975 L55800 L17051;
SELECT -enclose L17051 via6_x_2 -gt 3 L59980;
SELECT -outside L62391 L59980 L15581;
SIZE via6_x_2 -by 0.3 L37032;
AND L37032 L55800 L93212;
SELECT -enclose L93212 via6_x_2 -gt 8 L40196;
SELECT -outside L15581 L40196 rule_VIA6_X_2;
SELECT -enclose L1160 via7_x_2 L66944;

SIZE via7_x_2 -by 0.15 L23470;
AND L1160 L23470 L29245;
SELECT -enclose L29245 via7_x_2 -gt 3 L94577;
SELECT -outside L66944 L94577 L75238;
SIZE via7_x_2 -by 0.3 L23527;
AND L1160 L23527 L28432;
SELECT -enclose L28432 via7_x_2 -gt 8 L32727;
SELECT -outside L75238 L32727 rule_VIA7_X_2;
SELECT -enclose L9176 via8_x_2 L34724;
SIZE via8_x_2 -by 0.15 L9965;
AND L9176 L9965 L72731;
SELECT -enclose L72731 via8_x_2 -gt 3 L85854;
SELECT -outside L34724 L85854 L59769;
SIZE via8_x_2 -by 0.3 L10022;
AND L10022 L9176 L98961;
SELECT -enclose L98961 via8_x_2 -gt 8 L27934;
SELECT -outside L59769 L27934 rule_VIA8_X_2;
SELECT -enclose L38712 via1_x_1 L8074;
SIZE via1_x_1 -by 0.15 L91947;
AND L38712 L91947 L45832;
SELECT -enclose L45832 via1_x_1 -gt 1 L70080;
SELECT -outside L8074 L70080 L96413;
SIZE via1_x_1 -by 0.3 L91890;
AND L38712 L91890 L45019;
SELECT -enclose L45019 via1_x_1 -gt 3 L53699;
SELECT -outside L96413 L53699 L53828;
NOT L53828 rule_VIA1_X_2 rule_VIA1_X_1;
SELECT -enclose L18248 via2_x_1 L18587;
SIZE via2_x_1 -by 0.15 L61844;
AND L18248 L61844 L7717;
SELECT -enclose L7717 via2_x_1 -gt 1 L38181;
SELECT -outside L18587 L38181 L67613;
SIZE via2_x_1 -by 0.3 L61901;
AND L18248 L61901 L8551;
SELECT -enclose L8551 via2_x_1 -gt 3 L51226;
SELECT -outside L67613 L51226 L36344;
NOT L36344 rule_VIA2_X_2 rule_VIA2_X_1;
SELECT -enclose L92088 via3_x_1 L45132;
SIZE via3_x_1 -by 0.15 L48339;
AND L48339 L92088 L32665;
SELECT -enclose L32665 via3_x_1 -gt 1 L4930;
SELECT -outside L45132 L4930 L84908;
SIZE via3_x_1 -by 0.3 L48396;
AND L48396 L92088 L44066;
SELECT -enclose L44066 via3_x_1 -gt 3 L42854;
SELECT -outside L84908 L42854 L59033;
NOT L59033 rule_VIA3_X_2 rule_VIA3_X_1;
SELECT -enclose L2424 via4_x_1 L91762;
SIZE via4_x_1 -by 0.15 L34834;
AND L2424 L34834 L60517;
SELECT -enclose L60517 via4_x_1 -gt 1 L96440;
SELECT -outside L91762 L96440 L31171;
SIZE via4_x_1 -by 0.3 L34891;
AND L2424 L34891 L60700;
SELECT -enclose L60700 via4_x_1 -gt 3 L80442;

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SELECT -outside L31171 L80442 L53778;
NOT L53778 rule_VIA4_X_2 rule_VIA4_X_1;
SELECT -enclose L54536 via5_x_1 L74092;
SIZE via5_x_1 -by 0.15 L21329;
AND L21329 L54536 L17835;
SELECT -enclose L17835 via5_x_1 -gt 1 L62342;
SELECT -outside L74092 L62342 L75634;
SIZE via5_x_1 -by 0.3 L21386;
AND L21386 L54536 L6434;
SELECT -enclose L6434 via5_x_1 -gt 3 L39709;
SELECT -outside L75634 L39709 L46534;
NOT L46534 rule_VIA5_X_2 rule_VIA5_X_1;
SELECT -enclose L55800 via6_x_1 L62390;
SIZE via6_x_1 -by 0.15 L7824;
AND L55800 L7824 L86972;
SELECT -enclose L86972 via6_x_1 -gt 1 L41787;
SELECT -outside L62390 L41787 L89680;
SIZE via6_x_1 -by 0.3 L7881;
AND L55800 L7881 L86789;
SELECT -enclose L86789 via6_x_1 -gt 3 L25793;
SELECT -outside L89680 L25793 L95770;
NOT L95770 rule_VIA6_X_2 rule_VIA6_X_1;
SELECT -enclose L1160 via7_x_1 L66945;
SIZE via7_x_1 -by 0.15 L94319;
AND L1160 L94319 L35945;
SELECT -enclose L35945 via7_x_1 -gt 1 L71964;
SELECT -outside L66945 L71964 L14328;
SIZE via7_x_1 -by 0.3 L94384;
AND L1160 L94384 L35733;
SELECT -enclose L35733 via7_x_1 -gt 3 L32987;
SELECT -outside L14328 L32987 L70360;
NOT L70360 rule_VIA7_X_2 rule_VIA7_X_1;
SELECT -enclose L9176 via8_x_1 L34723;
SIZE via8_x_1 -by 0.15 L80814;
AND L80814 L9176 L4547;
SELECT -enclose L4547 via8_x_1 -gt 1 L11363;
SELECT -outside L34723 L11363 L58690;
SIZE via8_x_1 -by 0.3 L80871;
AND L80871 L9176 L79078;
SELECT -enclose L79078 via8_x_1 -gt 3 L32204;
SELECT -outside L58690 L32204 L17966;
NOT L17966 rule_VIA8_X_2 rule_VIA8_X_1;
EXTE bondpad_metal1_filled bondpad_metal1_filled -le 40 -metric opposite -para only -notch not -output
region L75346;
NOT bondpad_metal1_filled L75346 L78279;
VERTEX L78279 -lt 8 rule_BONDPAD_B_1_m1;
EXTE bondpad_metal2_filled bondpad_metal2_filled -le 40 -metric opposite -para only -notch not -output
region L76463;
NOT bondpad_metal2_filled L76463 L6397;
VERTEX L6397 -lt 8 rule_BONDPAD_B_1_m2;
EXTE bondpad_metal3_filled bondpad_metal3_filled -le 40 -metric opposite -para only -notch not -output
region L28272;
NOT bondpad_metal3_filled L28272 L85497;
VERTEX L85497 -lt 8 rule_BONDPAD_B_1_m3;
EXTE bondpad_metal4_filled bondpad_metal4_filled -le 40 -metric opposite -para only -notch not -output

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region L87215;
NOT bondpad_metal4_filled L87215 L48458;
VERTEX L48458 -lt 8 rule_BONDPAD_B_1_m4;
EXTE bondpad_metal5_filled bondpad_metal5_filled -le 40 -metric opposite -para only -notch not -output
region L64594;
NOT bondpad_metal5_filled L64594 L314;
VERTEX L314 -lt 8 rule_BONDPAD_B_1_m5;
EXTE bondpad_metal6_filled bondpad_metal6_filled -le 40 -metric opposite -para only -notch not -output
region L50893;
NOT bondpad_metal6_filled L50893 L11692;
VERTEX L11692 -lt 8 rule_BONDPAD_B_1_m6;
EXTE bondpad_metal7_filled bondpad_metal7_filled -le 40 -metric opposite -para only -notch not -output
region L99084;
NOT bondpad_metal7_filled L99084 L17986;
VERTEX L17986 -lt 8 rule_BONDPAD_B_1_m7;
EXTE bondpad_metal8_filled bondpad_metal8_filled -le 40 -metric opposite -para only -notch not -output
region L52725;
NOT bondpad_metal8_filled L52725 L93580;
VERTEX L93580 -lt 8 rule_BONDPAD_B_1_m8;
EXTE bondpad_metal9_filled bondpad_metal9_filled -le 40 -metric opposite -para only -notch not -output
region L62762;
NOT bondpad_metal9_filled L62762 L81871;
VERTEX L81871 -lt 8 rule_BONDPAD_B_1_m9;
EXTE bondpad_metal10_filled bondpad_metal10_filled -le 40 -metric opposite -para only -notch not
-output region L10594;
NOT bondpad_metal10_filled L10594 L9655;
VERTEX L9655 -lt 8 rule_BONDPAD_B_1_m10;
EXTE bondpad_metal11_filled bondpad_metal11_filled -le 40 -metric opposite -para only -notch not
-output region L58785;
NOT bondpad_metal11_filled L58785 L71528;
VERTEX L71528 -lt 8 rule_BONDPAD_B_1_m11;
CONNECT Bondpad metal11_conn -by bp_tap;
CONNECT metal11_conn CapMetal -by via10_cap;
CONNECT metal11_conn metal10_conn -by via10_nocap;
CONNECT metal10_conn metal9_conn -by Via9;
CONNECT metal9_conn metal8_conn -by Via8;
CONNECT metal8_conn metal7_conn -by Via7;
CONNECT metal7_conn metal6_conn -by Via6;
CONNECT metal6_conn metal5_conn -by Via5;
CONNECT metal5_conn metal4_conn -by Via4;
CONNECT metal4_conn metal3_conn -by Via3;
CONNECT metal3_conn metal2_conn -by Via2;
CONNECT metal2_conn metal1_conn -by Via1;
CONNECT metal1_conn poly_conn -by cont_poly;
CONNECT metal1_conn pdiff_conn -by cont_pdiff;
CONNECT metal1_conn npn_emit -by cont_ndiff;
CONNECT metal1_conn ndiff_conn -by cont_ndiff;
SCONNECT pdiff_conn ptap;

RULE soft_check_1 {
    CAPTION soft_check_1: pdiff_conn causing multiple stamped connections to ptap;
    EXTE pdiff_conn ptap -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_2 {

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    CAPTION soft_check_2: ptap has multiple stamped connections from pdiff_conn;
    SELECT -interact ptap pdiff_conn -gt 1 -by_net;
}

RULE soft_check_3 {
    CAPTION soft_check_3: ptap missing stamped connections from pdiff_conn;
    SELECT -interact -not ptap pdiff_conn;
}
SCONNECT ptap psubstrate;

RULE soft_check_4 {
    CAPTION soft_check_4: ptap causing multiple stamped connections to psubstrate;
    EXTE ptap psubstrate -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_5 {
    CAPTION soft_check_5: psubstrate has multiple stamped connections from ptap;
    SELECT -interact psubstrate ptap -gt 1 -by_net;
}

RULE soft_check_6 {
    CAPTION soft_check_6: psubstrate missing stamped connections from ptap;
    SELECT -interact -not psubstrate ptap;
}
SCONNECT ndiff_conn ntap;

RULE soft_check_7 {
    CAPTION soft_check_7: ndiff_conn causing multiple stamped connections to ntap;
    EXTE ndiff_conn ntap -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_8 {
    CAPTION soft_check_8: ntap has multiple stamped connections from ndiff_conn;
    SELECT -interact ntap ndiff_conn -gt 1 -by_net;
}

RULE soft_check_9 {
    CAPTION soft_check_9: ntap missing stamped connections from ndiff_conn;
    SELECT -interact -not ntap ndiff_conn;
}
SCONNECT ntap nwell_conn;

RULE soft_check_10 {
    CAPTION soft_check_10: ntap causing multiple stamped connections to nwell_conn;
    EXTE ntap nwell_conn -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_11 {
    CAPTION soft_check_11: nwell_conn has multiple stamped connections from ntap;
    SELECT -interact nwell_conn ntap -gt 1 -by_net;
}

RULE soft_check_12 {
    CAPTION soft_check_12: nwell_conn missing stamped connections from ntap;
    SELECT -interact -not nwell_conn ntap;
}

```

```

}
SCONNECT nwell_conn nb_tap;

RULE soft_check_13 {
  CAPTION soft_check_13: nwell_conn causing multiple stamped connections to nb_tap;
  EXTE nwell_conn nb_tap -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_14 {
  CAPTION soft_check_14: nb_tap has multiple stamped connections from nwell_conn;
  SELECT -interact nb_tap nwell_conn -gt 1 -by_net;
}

RULE soft_check_15 {
  CAPTION soft_check_15: nb_tap missing stamped connections from nwell_conn;
  SELECT -interact -not nb_tap nwell_conn;
}
SCONNECT nb_tap Nburied;

RULE soft_check_16 {
  CAPTION soft_check_16: nb_tap causing multiple stamped connections to Nburied;
  EXTE nb_tap Nburied -eq 0 -inside_also -not_connected -output region;
}

RULE soft_check_17 {
  CAPTION soft_check_17: Nburied has multiple stamped connections from nb_tap;
  SELECT -interact Nburied nb_tap -gt 1 -by_net;
}

RULE soft_check_18 {
  CAPTION soft_check_18: Nburied missing stamped connections from nb_tap;
  SELECT -interact -not Nburied nb_tap;
}
ATTACH metal11_conn_text metal11_conn;
ATTACH metal10_conn_text metal10_conn;
ATTACH metal9_conn_text metal9_conn;
ATTACH metal8_conn_text metal8_conn;
ATTACH metal7_conn_text metal7_conn;
ATTACH metal6_conn_text metal6_conn;
ATTACH metal5_conn_text metal5_conn;
ATTACH metal4_conn_text metal4_conn;
ATTACH metal3_conn_text metal3_conn;
ATTACH metal2_conn_text metal2_conn;
ATTACH metal1_conn_text metal1_conn;
ATTACH poly_conn_text poly_conn;
ANTENNA ndiff_conn Bondpad -gt 0 L80382;
SELECT -touch Poly L80382 L73764;
AND ndiff_conn ESDdummy esd_ndiff_conn;
SELECT -touch esd_ndiff_conn L73764 nmos_io_esd;
ANTENNA pdiff_conn Bondpad -gt 0 L64324;
SELECT -touch Poly L64324 L1826;
AND pdiff_conn ESDdummy esd_pdiff_conn;
SELECT -touch esd_pdiff_conn L1826 pmos_io_esd;
SELECT -touch nsd_esd Poly -eq 1 L78152;
ANTENNA ndiff_conn psubstrate -gt 0 L10595;

```

```

OR L10595 L80382 L87558;
NOT L78152 L87558 rule_ESD_4_nmos;
SELECT -touch psd_esd Poly -eq 1 L90202;
ANTENNA pdiff_conn nwell_conn -gt 0 L65219;
OR L64324 L65219 L40217;
NOT L90202 L40217 rule_ESD_4_pmos;
SELECT -touch nsd_esd Poly -eq 2 L78153;
NOT L78153 L87558 L40153;
SELECT -outside L40153 SiProt rule_ESD_8_nmos;
SELECT -touch psd_esd Poly -eq 2 L90201;
ANTENNA pdiff_conn psubstrate -gt 0 L12421;
OR L12421 L64324 L42888;
NOT L90201 L42888 L65050;
SELECT -outside L65050 SiProt rule_ESD_8_pmos;

```

```

RULE NBL.W.1 {
  CAPTION NBL.W.1: Minimum Nburied Width >= 0.8 um;
  INTE Nburied Nburied -lt 0.8 -output region -singular -abut lt 90;
}

```

```

RULE NBL.E.1 {
  CAPTION NBL.E.1: Minimum Nburied to Nwell enclosure >= 0.2 um;
  SELECT -cut Nwell Nburied L99284;
  NOT L99284 Nburied;
  ENC Nwell Nburied -lt 0.2 -output region -singular -abut lt 90;
}

```

```

RULE NBL.SP.1 {
  CAPTION NBL.SP.1: Minimum Nburied to Nburied spacing >= 2.0 um;
  EXTE Nburied Nburied -lt 2 -output region -singular -abut lt 90;
}

```

```

RULE NBL.SE.1 {
  CAPTION NBL.SE.1: Minimum Nburied to non-related Nwell spacing >= 2.2 um;
  SELECT -cut Nburied Nwell L27316;
  SELECT -cut Nwell Nburied L90252;
  AND L27316 L90252;
  EXTE Nburied Nwell -lt 2.2 -output region -singular -abut lt 90;
}

```

```

RULE NBL.SE.2 {
  CAPTION NBL.SE.2: Minimum Nburied to non-related Oxide spacing >= 1.2 um;
  SELECT -cut Nburied Oxide L70415;
  SELECT -cut Oxide Nburied L80783;
  AND L70415 L80783;
  EXTE Nburied Oxide -lt 1.2 -output region -singular -abut lt 90;
}

```

```

RULE NBL.X.1 {
  CAPTION NBL.X.1: Nburied must have an Nwell isolation ring;
  COPY rule_NBL_X_1;
}
AND Nburied Pimp L76974;
AND L76974 Oxide L50485;
AND L90545 Nburied L92339;

```

```

RULE NBL.SE.3 {
  CAPTION NBL.SE.3: Minimum Nwell ring (on Nburied) to P+ Active spacing >= 0.09 um;
  SELECT -cut L50485 L92339 L68349;
  NOT L68349 L92339;
  ENC L50485 L92339 -lt 0.09 -output region -singular -abut lt 90;
}
AND Nburied Nimp L17392;
AND L17392 Oxide L18556;

RULE NBL.SE.4 {
  CAPTION NBL.SE.4: Minimum Nwell ring (on Nburied) to N+ Active spacing >= 0.09 um;
  SELECT -cut L18556 L92339 L15286;
  NOT L15286 L92339;
  ENC L18556 L92339 -lt 0.09 -output region -singular -abut lt 90;
}

RULE NW.SP.1 {
  CAPTION NW.SP.1: Minimum Nwell spacing to Nwell (same potential) >= 0.3 um;
  EXTE nwell_conn nwell_conn -lt 0.3 -output region -connected -singular -abut lt 90;
}

RULE NW.SP.2 {
  CAPTION NW.SP.2: Minimum Nwell spacing to Nwell (different potential) >= 0.6 um;
  SELECT -cut nwell_conn nwellres L84526;
  SELECT -cut nwellres nwell_conn L68740;
  AND L84526 L68740;
  EXTE nwell_conn nwellres -lt 0.6 -output region -singular -abut ltgt 0 90;
}

RULE NW.SP.2_2 {
  CAPTION NW.SP.2: Minimum Nwell spacing to Nwell (different potential) >= 0.6 um;
  EXTE nwellres nwellres -lt 0.6 -output region -singular -abut lt 90;
}

RULE NW.W.1 {
  CAPTION NW.W.1: Minimum Nwell Width >= 0.3 um;
  INTE Nwell Nwell -lt 0.3 -output region -singular -abut lt 90;
}

RULE NW.SP.2_3 {
  CAPTION NW.SP.2: Minimum Nwell spacing to Nwell (different potential) >= 0.6 um;
  EXTE nwell_conn nwell_conn -lt 0.6 -output region -not_connected -singular -notch not;
}

RULE NW.SE.2 {
  CAPTION NW.SE.2: Minimum Nwell spacing to P+ Active Area >= 0.16 um;
  SELECT -cut Nwell pactive L37621;
  SELECT -cut pactive Nwell L46539;
  AND L37621 L46539;
  EXTE Nwell pactive -lt 0.16 -output region -singular -abut lt 90;
}
NOT Nwell nwell_in_od_res L66724;

RULE NW.SE.1 {

```

```

CAPTION NW.SE.1: Minimum Nwell spacing to N+ Active Area >= 0.16 um;
SELECT -cut L66724 nactive L71704;
SELECT -cut nactive L66724 L46976;
AND L71704 L46976;
EXTE L66724 nactive -lt 0.16 -output region -singular -abut lt 90;
}
AND Nimp Oxide_thk L512;
AND L512 Oxide L40980;

RULE NW.SE.3 {
  CAPTION NW.SE.3: Minimum Nwell spacing to N+ 1.8V Active Area >= 0.24 um;
  SELECT -cut Nwell L40980 L98636;
  SELECT -cut L40980 Nwell L92116;
  AND L98636 L92116;
  EXTE Nwell L40980 -lt 0.24 -output region -singular -abut lt 90;
}
AND Oxide_thk Pimp L4884;
AND L4884 Oxide L13412;

RULE NW.SE.4 {
  CAPTION NW.SE.4: Minimum Nwell spacing to P+ 1.8V Active Area >= 0.24 um;
  SELECT -cut Nwell L13412 L84846;
  SELECT -cut L13412 Nwell L38518;
  AND L84846 L38518;
  EXTE Nwell L13412 -lt 0.24 -output region -singular -abut lt 90;
}
NOT Nimp nwell_in_od_res L72408;
AND L72408 Oxide L48097;

RULE NW.E.1 {
  CAPTION NW.E.1: Minimum Nwell enclosure of N+ Active Area >= 0.06 um;
  SELECT -cut L48097 L66724 L87416;
  NOT L87416 L66724;
  ENC L48097 L66724 -lt 0.06 -output region -singular -abut lt 90;
}

RULE NW.E.2 {
  CAPTION NW.E.2: Minimum Nwell enclosure of P+ Active Area >= 0.06 um;
  SELECT -cut pactive Nwell L42997;
  NOT L42997 Nwell;
  ENC pactive Nwell -lt 0.06 -output region -singular -abut lt 90;
}

RULE NW.E.3 {
  CAPTION NW.E.3: Minimum Nwell enclosure of N+ 1.8V Active Area >= 0.24 um;
  SELECT -cut L40980 Nwell L59084;
  NOT L59084 Nwell;
  ENC L40980 Nwell -lt 0.24 -output region -singular -abut lt 90;
}

RULE NW.E.4 {
  CAPTION NW.E.4: Minimum Nwell enclosure of P+ 1.8V Active Area >= 0.24 um;
  SELECT -cut L13412 Nwell L12682;
  NOT L12682 Nwell;
  ENC L13412 Nwell -lt 0.24 -output region -singular -abut lt 90;
}

```


}

```
RULE NW.A.1 {  
  CAPTION NW.A.1: Minimum Nwell area >= 0.18 um;  
  AREA Nwell -lt 0.18;  
}
```

```
RULE NW.EA.1 {  
  CAPTION NW.EA.1: Minimum Nwell enclosed area >= 0.18 um;  
  AREA L90545 -lt 0.18;  
}
```

```
RULE NWR.SE.1 {  
  CAPTION NWR.SE.1: Minimum Resist Protect Oxide to Nwell spacing >= 0.16 um;  
  EXTE SiProt nwell_in_od_res -lt 0.16 -output region -singular -abut lt 90;  
}
```

```
RULE NWR.E.1 {  
  CAPTION NWR.E.1: Minimum Active Area to Nwell (in resistor) enclosure >= 0.6 um;  
  ENC nwell_in_od_res Oxide -lt 0.6 -output region -singular -abut lt 90;  
}
```

```
RULE NWR.E.2 {  
  CAPTION NWR.E.2: Minimum salicided Nwell to Contact enclosure >= 0.16 um;  
  SELECT -cut Cont nwell_in_od_res L61306;  
  NOT L61306 nwell_in_od_res;  
  ENC Cont nwell_in_od_res -lt 0.16 -output region -singular -abut lt 90;  
}  
AND Oxide_thk nwell_in_od_res L48131;
```

```
RULE NWR.X.1 {  
  CAPTION NWR.X.1: Thick Oxide is NOT allowed over Nwell resistor;  
  COPY L48131;  
}  
EDGE_BOOLEAN -inside Nimp Nwell L26283;  
EDGE_BOOLEAN -inside SiProt Nwell L62966;
```

```
RULE NWR.O.1 {  
  CAPTION NWR.O.1: Minimum N+ Implant to Resist Protect Oxide overlap >= 0.22 um;  
  INTE L26283 L62966 -lt 0.22 -output region -abut lt 90;  
}
```

```
RULE OXIDE.W.1 {  
  CAPTION OXIDE.W.1: Minimum Active Area width >= 0.05 um;  
  INTE Oxide Oxide -lt 0.05 -output region -singular -abut lt 90;  
}  
AND Nimp Poly L30789;  
NOT L30789 Oxide_thk L71851;  
EDGE_BOOLEAN -inside Oxide L71851 L7166;
```

```
RULE OXIDE.W.2.1.1 {  
  CAPTION OXIDE.W.2.1.1: Minimum 1.1V N-channel gate width >= 0.12 um;  
  INTE L7166 L7166 -lt 0.12 -output region -abut lt 90;  
}  
AND L512 Poly L94841;
```

EDGE_BOOLEAN -inside Oxide L94841 L43550;

```
RULE OXIDE.W.2.1.2 {  
  CAPTION OXIDE.W.2.1.2: Minimum 1.8V N-channel gate width >= 0.32 um;  
  INTE L43550 L43550 -lt 0.32 -output region -abut lt 90;  
}  
AND Pimp Poly L78137;  
NOT L78137 Oxide_thk L6254;  
EDGE_BOOLEAN -inside Oxide L6254 L47177;
```

```
RULE OXIDE.W.2.2.1 {  
  CAPTION OXIDE.W.2.2.1: Minimum 1.1V P-channel gate width >= 0.12 um;  
  INTE L47177 L47177 -lt 0.12 -output region -abut lt 90;  
}  
AND L4884 Poly L54679;  
EDGE_BOOLEAN -inside Oxide L54679 L47645;
```

```
RULE OXIDE.W.2.2.2 {  
  CAPTION OXIDE.W.2.2.2: Minimum 1.8V P-channel gate width >= 0.32 um;  
  INTE L47645 L47645 -lt 0.32 -output region -abut lt 90;  
}  
ANGLE Oxide -ltgt 0 90 L19535;
```

```
RULE OXIDE.W.3 {  
  CAPTION OXIDE.W.3: Minimum Active Area bent 45 degress width >= 0.06 um;  
  INTE L19535 L19535 -lt 0.06 -output region -abut lt 90;  
}
```

```
RULE OXIDE.SP.1 {  
  CAPTION OXIDE.SP.1: Minimum N+ Active Area to N+ Active Area spacing >= 0.08 um;  
  EXTE nactive nactive -lt 0.08 -output region -singular -abut lt 90;  
}
```

```
RULE OXIDE.SP.2 {  
  CAPTION OXIDE.SP.2: Minimum P+ Active Area to P+ Active Area spacing >= 0.08 um;  
  EXTE pactive pactive -lt 0.08 -output region -singular -abut lt 90;  
}  
EDGE_BOOLEAN -inside Oxide Nimp L95182;  
EDGE_BOOLEAN -inside Oxide Pimp L54764;
```

```
RULE OXIDE.SP.3 {  
  CAPTION OXIDE.SP.3: Minimum N+ Active Area to P+ Active Area spacing >= 0.1 um;  
  EXTE L95182 L54764 -lt 0.1 -output region -abut ltgt 0 90;  
}
```

```
RULE OXIDE.SE.1 {  
  CAPTION OXIDE.SE.1: Minimum Active Area to Thick Active Area spacing >= 0.18 um;  
  EXTE Oxide Oxide_thk -lt 0.18 -output region -singular -abut lt 90;  
}
```

```
RULE OXIDE.SP.4 {  
  CAPTION OXIDE.SP.4: Minimum Active Area bent 45 degress to Active Area spacing >= 0.1 um;  
  EXTE Oxide L19535 -lt 0.1 -output region -abut ltgt 0 90;  
}
```

```

RULE OXIDE.A.1 {
  CAPTION OXIDE.A.1: Minimum area for Active Area >= 0.035 um;
  AREA Oxide -lt 0.035;
}
HOLES Oxide L33644;
NOT L33644 Oxide L65624;

RULE OXIDE.EA.1 {
  CAPTION OXIDE.EA.1: Minimum Active Area enclosed area >= 0.04 um;
  AREA L65624 -lt 0.04;
}

RULE OXIDE.L.1_OXIDE.L.2 {
  CAPTION OXIDE.L.1_OXIDE.L.2: Maximum Oxide length between two contacts (when the Oxide width
is <= 0.18um) must be <= 12.0um and Maximum Oxide length between one contact and the end of the
Oxide line (when the Oxide width is <= 0.18um) must be <= 6.0um;
  COPY rule_OXIDE_L_1_L_2;
}
OR Nimp Nzvt L70159;
OR L70159 Pimp L66257;
OR L66257 SiProt L23048;
NOT Oxide L23048 L12243;

RULE OXIDE.X.1 {
  CAPTION OXIDE.X.1: Oxide must be covered by N+ Implant or Nzvt or Salicide Block;
  COPY L12243;
}

RULE OXIDER.SE.2 {
  CAPTION OXIDER.SE.2: Minimum Active Resistor to N+ or P+ Implant spacing >= 0.16 um;
  SELECT -cut Nimp oxide_in_res L10785;
  SELECT -cut oxide_in_res Nimp L93677;
  AND L10785 L93677;
  EXTE Nimp oxide_in_res -lt 0.16 -output region -singular -abut lt 90;
}

RULE OXIDER.SE.2_2 {
  CAPTION OXIDER.SE.2: Minimum Active Resistor to N+ or P+ Implant spacing >= 0.16 um;
  SELECT -cut Pimp oxide_in_res L8609;
  SELECT -cut oxide_in_res Pimp L34095;
  AND L8609 L34095;
  EXTE Pimp oxide_in_res -lt 0.16 -output region -singular -abut lt 90;
}

RULE OXIDER.E.1 {
  CAPTION OXIDER.E.1: Minimum Salicide Block to Active Resistor enclosure >= 0.12 um;
  ENC oxide_in_res SiProt -lt 0.12 -output region -singular -abut lt 90;
}
OR Nimp Pimp L13121;
NOT oxide_in_res L13121 L23345;

RULE OXIDER.X.1 {
  CAPTION OXIDER.X.1: Oxide resistors must have N+ or P+ Implant;
  COPY L23345;
}

```

```

RULE OXIDETHK.W.1 {
  CAPTION OXIDETHK.W.1: Minimum Thick Active Area width >= 0.35 um;
  INTE Oxide_thk Oxide_thk -lt 0.35 -output region -singular -abut lt 90;
}

RULE OXIDETHK.SP.1 {
  CAPTION OXIDETHK.SP.1: Minimum Thick Active Area to Thick Active Area spacing >= 0.16 um;
  EXTE Oxide_thk Oxide_thk -lt 0.16 -output region -singular -abut lt 90;
}
ANGLE Oxide_thk -ltgt 0 90 L59527;

RULE OXIDETHK.SP.2 {
  CAPTION OXIDETHK.SP.2: Minimum Thick Active Area bent 45 degrees to Thick Active Area spacing
  >= 0.32 um;
  EXTE Oxide_thk L59527 -lt 0.32 -output region -abut ltgt 0 90;
}

RULE OXIDETHK.SE.1 {
  CAPTION OXIDETHK.SE.1: Minimum N+ 1.8V Active Area to 1.8V N+ Active Area spacing >= 0.1 um;
  EXTE L40980 L40980 -lt 0.1 -output region -singular -abut lt 90;
}

RULE OXIDETHK.SE.2 {
  CAPTION OXIDETHK.SE.2: Minimum P+ 1.8V Active Area to 1.8V P+ Active Area spacing >= 0.1 um;
  EXTE L13412 L13412 -lt 0.1 -output region -singular -abut lt 90;
}

RULE OXIDETHK.SE.3 {
  CAPTION OXIDETHK.SE.3: Minimum N+ 1.8V Active Area to 1.8V P+ Active Area spacing >= 0.12
  um;
  EXTE L40980 L13412 -lt 0.12 -output region -singular -abut ltgt 0 90;
}

RULE OXIDETHK.E.1 {
  CAPTION OXIDETHK.E.1: Minimum Thick Active Area to Active Area enclosure >= 0.16 um;
  ENC Oxide Oxide_thk -lt 0.16 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -inside Oxide_thk Oxide L2679;
EDGE_BOOLEAN -inside Poly Oxide L19486;

RULE OXIDETHK.SE.5 {
  CAPTION OXIDETHK.SE.5: Minimum Thick Active Area to 1.1V Poly gate spacing >= 0.18 um;
  EDGE_EXPAND L2679 -inside_by 0.001 L63662;
  EDGE_EXPAND L19486 -inside_by 0.001 L24866;
  AND L63662 L24866;
  EXTE L2679 L19486 -lt 0.18 -output region -abut lt 90;
}

RULE OXIDETHK.E.2 {
  CAPTION OXIDETHK.E.2: Minimum Thick Active Area to Thick Poly gate enclosure >= 0.18 um;
  ENC L19486 L2679 -lt 0.18 -output region -abut lt 90;
}

RULE NHVT.W.1 {

```

```
CAPTION NHVT.W.1: Minimum Nhvt width >= 0.12;  
INTE Nhvt Nhvt -lt 0.12 -output region -singular -abut lt 90;  
}
```

```
RULE NHVT.SP.1 {  
    CAPTION NHVT.SP.1: Minimum Nhvt spacing >= 0.12;  
    EXTE Nhvt Nhvt -lt 0.12 -output region -singular -abut lt 90;  
}  
AND Nhvt Nwell L89597;
```

```
RULE NHVT.X.2 {  
    CAPTION NHVT.X.2: Nhvt is NOT allowed on Nwell;  
    COPY L89597;  
}  
AND Nhvt pactive L87497;
```

```
RULE NHVT.X.3 {  
    CAPTION NHVT.X.3: Nhvt is NOT allowed on P+ Oxide;  
    COPY L87497;  
}  
AND Nhvt Nzvt L13111;
```

```
RULE NHVT.X.4 {  
    CAPTION NHVT.X.4: Nhvt is NOT allowed on Nzvt;  
    COPY L13111;  
}
```

```
RULE PHVT.W.1 {  
    CAPTION PHVT.W.1: Minimum Phvt width >= 0.12;  
    INTE Phvt Phvt -lt 0.12 -output region -singular -abut lt 90;  
}
```

```
RULE PHVT.SP.1 {  
    CAPTION PHVT.SP.1: Minimum Phvt spacing >= 0.12;  
    EXTE Phvt Phvt -lt 0.12 -output region -singular -abut lt 90;  
}  
NOT Phvt Nwell L88255;
```

```
RULE PHVT.X.2 {  
    CAPTION PHVT.X.2: Phvt is NOT allowed outside Nwell;  
    COPY L88255;  
}  
AND Phvt nactive L37875;
```

```
RULE PHVT.X.3 {  
    CAPTION PHVT.X.3: Phvt is NOT allowed on N+ Oxide;  
    COPY L37875;  
}  
AND Nzvt Phvt L44131;
```

```
RULE PHVT.X.4 {  
    CAPTION PHVT.X.4: Phvt is NOT allowed on Nzvt;  
    COPY L44131;  
}
```

```
RULE NLVT.W.1 {  
    CAPTION NLVT.W.1: Minimum Nlvt width >= 0.12;  
    INTE Nlvt Nlvt -lt 0.12 -output region -singular -abut lt 90;  
}
```

```
RULE NLVT.SP.1 {  
    CAPTION NLVT.SP.1: Minimum Nlvt spacing >= 0.12;  
    EXTE Nlvt Nlvt -lt 0.12 -output region -singular -abut lt 90;  
}  
AND Nlvt Nwell L60959;
```

```
RULE NLVT.X.2 {  
    CAPTION NLVT.X.2: Nlvt is NOT allowed on Nwell;  
    COPY L60959;  
}  
AND Nlvt pactive L58341;
```

```
RULE NLVT.X.3 {  
    CAPTION NLVT.X.3: Nlvt is NOT allowed on P+ Oxide;  
    COPY L58341;  
}  
AND Nlvt Nzvt L6363;
```

```
RULE NLVT.X.4 {  
    CAPTION NLVT.X.4: Nlvt is NOT allowed on Nzvt;  
    COPY L6363;  
}
```

```
RULE PLVT.W.1 {  
    CAPTION PLVT.W.1: Minimum Plvt width >= 0.12;  
    INTE Plvt Plvt -lt 0.12 -output region -singular -abut lt 90;  
}
```

```
RULE PLVT.SP.1 {  
    CAPTION PLVT.SP.1: Minimum Plvt spacing >= 0.12;  
    EXTE Plvt Plvt -lt 0.12 -output region -singular -abut lt 90;  
}  
NOT Plvt Nwell L62301;
```

```
RULE PLVT.X.2 {  
    CAPTION PLVT.X.2: Plvt is NOT allowed outside Nwell;  
    COPY L62301;  
}  
AND Plvt nactive L265;
```

```
RULE PLVT.X.3 {  
    CAPTION PLVT.X.3: Plvt is NOT allowed on N+ Oxide;  
    COPY L265;  
}  
AND Nzvt Plvt L47975;
```

```
RULE PLVT.X.4 {  
    CAPTION PLVT.X.4: Plvt is NOT allowed on Nzvt;  
    COPY L47975;  
}
```

```

RULE NZVT.W.1 {
  CAPTION NZVT.W.1: Minimum Nzvt width >= 0.35 um;
  INTE Nzvt Nzvt -lt 0.35 -output region -singular -abut lt 90;
}

RULE NZVT.SP.1 {
  CAPTION NZVT.SP.1: Minimum Nzvt to Nzvt spacing >= 0.3 um;
  EXTE Nzvt Nzvt -lt 0.3 -output region -singular -abut lt 90;
}

RULE NZVT.O.1 {
  CAPTION NZVT.O.1: Minimum and maximum Nzvt to Active Area overlap == 0.16 um;
  COPY rule_NZVT_O_1;
}

RULE NZVT.SE.1 {
  CAPTION NZVT.SE.1: Minimum Nzvt to Active spacing >= 0.18 um;
  SELECT -cut Nzvt Oxide L17075;
  SELECT -cut Oxide Nzvt L53744;
  AND L17075 L53744;
  EXTE Nzvt Oxide -lt 0.18 -output region -singular -abut lt 90;
}

RULE NZVT.SE.2 {
  CAPTION NZVT.SE.2: Minimum Nzvt to Nwell spacing >= 0.6 um;
  EXTE Nwell Nzvt -lt 0.6 -output region -singular -abut lt 90 -inside_also;
}
AND Nzvt Oxide L62764;

RULE NZVT.E.1 {
  CAPTION NZVT.E.1: Minimum N+ Poly gate end cap to Native Active Area enclosure >= 0.1 um;
  ENC L62764 Poly -lt 0.1 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -inside Poly L62764 L55408;

RULE NZVT.L.1 {
  CAPTION NZVT.L.1: Minimum Native device Poly gate length >= 0.30 um;
  INTE L55408 L55408 -lt 0.3 -output region -abut lt 90;
}
AND Nzvt Poly L50553;
EDGE_BOOLEAN -inside Oxide L50553 L27452;

RULE NZVT.W.2 {
  CAPTION NZVT.W.2: Minimum Native device Poly gate width >= 0.50 um;
  INTE L27452 L27452 -lt 0.5 -output region -abut lt 90;
}
AND Nzvt Pimp L44809;
AND L44809 Oxide L32095;

RULE NZVT.X.3 {
  CAPTION NZVT.X.3: P+ Oxide is NOT allowed in Nzvt;
  COPY L32095;
}

```

```

RULE NZVT.X.4 {
  CAPTION NZVT.X.4: Only one Oxide region may be in an Nzvt region;
  COPY rule_NZVT_X_4;
}
EDGE_BOOLEAN -inside Poly nactive L78161;

RULE POLY.W.1 {
  CAPTION POLY.W.1: Minimum 1.1V N-channel gate length >= 0.045 um;
  INTE L78161 L78161 -lt 0.045 -output region -abut lt 90;
}
EDGE_BOOLEAN -inside Poly pactive L81773;

RULE POLY.W.2 {
  CAPTION POLY.W.2: Minimum 1.1V P-channel gate length >= 0.045 um;
  INTE L81773 L81773 -lt 0.045 -output region -abut lt 90;
}
AND Oxide_thk nactive L29500;
EDGE_BOOLEAN -inside Poly L29500 L43067;

RULE POLY.W.3 {
  CAPTION POLY.W.3: Minimum 1.8V N-channel gate length >= 0.15 um;
  INTE L43067 L43067 -lt 0.15 -output region -abut lt 90;
}
AND Oxide Oxide_thk L24975;
AND L24975 Pimp L93098;
EDGE_BOOLEAN -inside Poly L93098 L61684;

RULE POLY.W.4 {
  CAPTION POLY.W.4: Minimum 1.8V P-channel gate length >= 0.15 um;
  INTE L61684 L61684 -lt 0.15 -output region -abut lt 90;
}
EDGE_BOOLEAN -outside Poly Oxide L90757;

RULE POLY.W.5 {
  CAPTION POLY.W.5: Minimum Poly interconnect width >= 0.045 um;
  INTE L90757 L90757 -lt 0.045 -output region -abut lt 90;
}
EDGE_BOOLEAN -inside Poly Resdum L6655;

RULE POLY.SP.1 {
  CAPTION POLY.SP.1: Minimum Poly resistor space >= 0.3 um;
  EXTE L6655 L6655 -lt 0.3 -output region -abut lt 90;
}

RULE POLY.SP.2 {
  CAPTION POLY.SP.2: Minimum Poly gate space >= 0.06 um;
  EXTE L19486 L19486 -lt 0.06 -output region -abut lt 90;
}

RULE POLY.SP.3 {
  CAPTION POLY.SP.3: Minimum Poly interconnect space >= 0.06 um;
  EXTE L90757 L90757 -lt 0.06 -output region -abut lt 90;
}
EDGE_BOOLEAN -inside Poly L24975 L87956;

```



```

RULE POLY.SP.4 {
  CAPTION POLY.SP.4: Minimum gate space in thick active >= 0.20 um;
  EXTE L87956 L87956 -lt 0.2 -output region -abut lt 90;
}
AND Nimp gate L2756;

RULE POLY.E.1 {
  CAPTION POLY.E.1: Minimum N-channel gate extension beyond Active Area >= 0.1 um;
  SELECT -cut L2756 Poly L71009;
  NOT L71009 Poly;
  ENC L2756 Poly -lt 0.1 -output region -singular -abut ltgt 0 90 -metric opposite;
}
AND Pimp gate L6170;

RULE POLY.E.2 {
  CAPTION POLY.E.2: Minimum P-channel gate extension beyond Active Area >= 0.1 um;
  SELECT -cut L6170 Poly L74509;
  NOT L74509 Poly;
  ENC L6170 Poly -lt 0.1 -output region -singular -abut ltgt 0 90 -metric opposite;
}

RULE POLY.SE.1_POLY.SE.2 {
  CAPTION POLY.SE.1_POLY.SE.2: Minimum Poly interconnect to related Active Area space >= 0.05
um;
  EXTE Oxide Poly -lt 0.05 -output region -singular -abut lt 90;
}

RULE POLY.E.3 {
  CAPTION POLY.E.3: Minimum Active Area (source/drain) to gate enclosure >= 0.1 um;
  ENC Poly Oxide -lt 0.1 -output region -singular -abut lt 90;
}
ANGLE Poly -ltgt 0 90 L92308;

RULE POLY.W.6 {
  CAPTION POLY.W.6: Minimum bent Poly width >= 0.1 um;
  INTE L92308 L92308 -lt 0.1 -output region -abut lt 90;
}

RULE POLY.SP.5 {
  CAPTION POLY.SP.5: Minimum bent Poly space >= 0.1 um;
  EXTE L92308 L92308 -lt 0.1 -output region -abut lt 90;
}

RULE POLY.X.1 {
  CAPTION POLY.X.1: Poly gate cannot have bends;
  EDGE_EXPAND L19486 -outside_by 0.001 -corner_fill L60979;
  VERTEX L60979 -gt 4;
}

RULE POLY.X.2 {
  CAPTION POLY.X.2: Poly resistor cannot have bends;
  EDGE_EXPAND L6655 -outside_by 0.001 -corner_fill L45735;
  VERTEX L45735 -gt 4;
}

```

```
RULE POLY.SE.3 {  
    CAPTION POLY.SE.3: Maximum Poly segment length (width < 0.14) between two contacts >= 12.0  
    um;  
    COPY rule_POLY_SE_3;  
}
```

```
RULE POLY.A.1 {  
    CAPTION POLY.A.1: Minimum area for Poly interconnect >= 0.02 um;  
    AREA Poly -lt 0.02;  
}  
HOLES Poly L5639;  
NOT L5639 Poly L42202;
```

```
RULE POLY.EA.1 {  
    CAPTION POLY.EA.1: Minimum enclosed area for Poly interconnect >= 0.05 um;  
    AREA L42202 -lt 0.05;  
}
```

```
RULE POLYR.E.1 {  
    CAPTION POLYR.E.1: Minimum Salicide Block to Poly resistor enclosure >= 0.14 um;  
    ENC poly_in_res SiProt -lt 0.14 -output region -singular -abut lt 90;  
}
```

```
RULE POLYR.E.2 {  
    CAPTION POLYR.E.2: Minimum N+ Implant to Poly used in resistor enclosure >= 0.07 um;  
    SELECT -cut poly_in_res Nimp L51116;  
    NOT L51116 Nimp;  
    ENC poly_in_res Nimp -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE POLYR.E.3 {  
    CAPTION POLYR.E.3: Minimum P+ Implant to Poly used in resistor enclosure >= 0.07 um;  
    SELECT -cut poly_in_res Pimp L10698;  
    NOT L10698 Pimp;  
    ENC poly_in_res Pimp -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE POLYR.SE.2 {  
    CAPTION POLYR.SE.2: Minimum Poly resistor to other Implant spacing >= 0.15 um;  
    SELECT -cut Nimp poly_in_res L9602;  
    SELECT -cut poly_in_res Nimp L14036;  
    AND L9602 L14036;  
    EXTE Nimp poly_in_res -lt 0.15 -output region -singular -abut lt 90;  
}
```

```
RULE POLYR.SE.2_2 {  
    CAPTION POLYR.SE.2: Minimum Poly resistor to other Implant spacing >= 0.15 um;  
    EXTE Nzvt poly_in_res -lt 0.15 -output region -singular -abut lt 90 -inside_also;  
}
```

```
RULE POLYR.SE.2_3 {  
    CAPTION POLYR.SE.2: Minimum Poly resistor to other Implant spacing >= 0.15 um;  
    SELECT -cut Pimp poly_in_res L89340;  
    SELECT -cut poly_in_res Pimp L54454;  
    AND L89340 L54454;
```

```

    EXTE Pimp poly_in_res -lt 0.15 -output region -singular -abut lt 90;
}
NOT poly_in_res L13121 L83018;

RULE POLYR.X.1 {
    CAPTION POLYR.X.1: Poly resistors must have N+ or P+ Implant;
    COPY L83018;
}

RULE NIMP.W.1 {
    CAPTION NIMP.W.1: Minimum N+ Implant width >= 0.12 um;
    INTE Nimp Nimp -lt 0.12 -output region -singular -abut lt 90;
}

RULE NIMP.SP.1 {
    CAPTION NIMP.SP.1: Minimum N+ Implant space >= 0.12 um;
    EXTE Nimp Nimp -lt 0.12 -output region -singular -abut lt 90;
}
NOT Oxide Nwell L53776;

RULE NIMP.E.1 {
    CAPTION NIMP.E.1: Minimum N+ Implant to Active Area enclosure >= 0.07 um;
    ENC L53776 Nimp -lt 0.07 -output region -singular -abut lt 90;
}

RULE NIMP.O.1 {
    CAPTION NIMP.O.1: Minimum N+ Implant to Active Area overlap >= 0.08 um;
    INTE Nimp Oxide -lt 0.08 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -outside Nimp Oxide L27059;
AND Nwell Pimp L85193;
EDGE_BOOLEAN -inside Oxide L85193 L43250;

RULE NIMP.SE.1 {
    CAPTION NIMP.SE.1: Minimum N+ Implant to P+ Active Area (inside Nwell) spacing >= 0.08 um;
    EDGE_EXPAND L27059 -inside_by 0.001 L79769;
    EDGE_EXPAND L43250 -inside_by 0.001 L98970;
    AND L79769 L98970;
    EXTE L27059 L43250 -lt 0.08 -output region -abut lt 90;
}
AND Nwell Oxide L25620;

RULE NIMP.E.2 {
    CAPTION NIMP.E.2: Minimum N+ Implant to Active Area (Nwell tie) enclosure >= 0.01 um;
    ENC L25620 Nimp -lt 0.01 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -inside Nimp Oxide L83184;

RULE NIMP.E.3 {
    CAPTION NIMP.E.3: Minimum N+ Implant to gate side enclosure >= 0.1 um;
    ENC L19486 L83184 -lt 0.1 -output region -abut lt 90;
}
EDGE_BOOLEAN -inside Oxide Poly L60508;

RULE NIMP.E.4 {

```

```

CAPTION NIMP.E.4: Minimum N+ Implant to gate (endcap) enclosure >= 0.1 um;
EDGE_EXPAND L60508 -inside_by 0.001 L23899;
EDGE_EXPAND Nimp -outside_by 0.001 L50221;
AND L23899 L50221;
ENC L60508 Nimp -lt 0.1 -output region -abut lt 90;
}
OR Nwell Oxide L45216;
EDGE_BOOLEAN -outside Nimp L45216 L10142;
NOT Pimp Nwell L62533;
EDGE_BOOLEAN -inside Oxide L62533 L10493;

RULE NIMP.SE.2 {
  CAPTION NIMP.SE.2: Minimum N+ Implant to P+ Active Area (substrate tie) spacing >= 0.02 um;
  EDGE_EXPAND L10142 -inside_by 0.001 L99192;
  EDGE_EXPAND L10493 -inside_by 0.001 L37895;
  AND L99192 L37895;
  EXTE L10142 L10493 -lt 0.02 -output region -abut lt 90;
}

RULE NIMP.A.1 {
  CAPTION NIMP.A.1: Minimum area for N+ Implant >= 0.018 um;
  AREA Nimp -lt 0.018;
}
HOLES Nimp L70965;
NOT L70965 Nimp L89538;

RULE NIMP.EA.1 {
  CAPTION NIMP.EA.1: Minimum N+ Implant ring enclosed area >= 0.04 um;
  AREA L89538 -lt 0.04;
}

RULE NIMP.SE.3 {
  CAPTION NIMP.SE.3: Minimum N+ Implant to P+ gate side (butted Implant) spacing >= 0.1 um;
  EDGE_EXPAND L83184 -inside_by 0.001 L5098;
  EDGE_EXPAND L81773 -inside_by 0.001 L8050;
  AND L5098 L8050;
  EXTE L83184 L81773 -lt 0.1 -output region -abut lt 90;
}
AND Nimp Pimp L25045;

RULE NIMP.X.1 {
  CAPTION NIMP.X.1: Nimp is NOT allowed over Pimp;
  COPY L25045;
}

RULE PIMP.W.1 {
  CAPTION PIMP.W.1: Minimum P+ Implant width >= 0.12 um;
  INTE Pimp Pimp -lt 0.12 -output region -singular -abut lt 90;
}

RULE PIMP.SP.1 {
  CAPTION PIMP.SP.1: Minimum P+ Implant space >= 0.12 um;
  EXTE Pimp Pimp -lt 0.12 -output region -singular -abut lt 90;
}

```

```

RULE PIMP.E.1 {
  CAPTION PIMP.E.1: Minimum P+ Implant to Active Area enclosure >= 0.07 um;
  ENC L25620 Pimp -lt 0.07 -output region -singular -abut lt 90;
}

RULE PIMP.O.1 {
  CAPTION PIMP.O.1: Minimum P+ Implant to Active Area overlap >= 0.08 um;
  INTE Oxide Pimp -lt 0.08 -output region -singular -abut lt 90;
}
NOT Nimp Nwell L89543;
EDGE_BOOLEAN -inside Oxide L89543 L66103;
EDGE_BOOLEAN -outside Pimp Oxide L54069;

RULE PIMP.SE.1 {
  CAPTION PIMP.SE.1: Minimum P+ Implant to N+ Active Area (outside Nwell) spacing >= 0.08 um;
  EDGE_EXPAND L66103 -inside_by 0.001 L94348;
  EDGE_EXPAND L54069 -inside_by 0.001 L46412;
  AND L94348 L46412;
  EXTE L66103 L54069 -lt 0.08 -output region -abut lt 90;
}

RULE PIMP.E.2 {
  CAPTION PIMP.E.2: Minimum P+ Implant to Active Area (substrate tie) enclosure >= 0.01 um;
  ENC L53776 Pimp -lt 0.01 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -inside Pimp Oxide L56174;

RULE PIMP.E.3 {
  CAPTION PIMP.E.3: Minimum P+ Implant to gate side enclosure >= 0.1 um;
  ENC L19486 L56174 -lt 0.1 -output region -abut lt 90;
}

RULE PIMP.E.4 {
  CAPTION PIMP.E.4: Minimum P+ Implant to gate (endcap) enclosure >= 0.1 um;
  EDGE_EXPAND L60508 -inside_by 0.001 L23900;
  EDGE_EXPAND Pimp -outside_by 0.001 L95503;
  AND L23900 L95503;
  ENC L60508 Pimp -lt 0.1 -output region -abut lt 90;
}
AND Nimp Nwell L3421;
EDGE_BOOLEAN -inside Oxide L3421 L34725;
NOT Nwell Oxide L90512;
EDGE_BOOLEAN -inside Pimp L90512 L56230;

RULE PIMP.SE.2 {
  CAPTION PIMP.SE.2: Minimum P+ Implant to N+ Active Area (Nwell tie) spacing >= 0.02 um;
  EDGE_EXPAND L34725 -inside_by 0.001 L61105;
  EDGE_EXPAND L56230 -inside_by 0.001 L39162;
  AND L61105 L39162;
  EXTE L34725 L56230 -lt 0.02 -output region -abut lt 90;
}

RULE PIMP.A.1 {
  CAPTION PIMP.A.1: Minimum area for P+ Implant >= 0.018 um;
  AREA Pimp -lt 0.018;
}

```

```
}  
HOLES Pimp L11383;  
NOT L11383 Pimp L81747;
```

```
RULE PIMP.EA.1 {  
    CAPTION PIMP.EA.1: Minimum P+ Implant ring enclosed area >= 0.04 um;  
    AREA L81747 -lt 0.04;  
}
```

```
RULE PIMP.SE.3 {  
    CAPTION PIMP.SE.3: Minimum P+ Implant to N+ gate side (butted Implant) spacing >= 0.1 um;  
    EDGE_EXPAND L56174 -inside_by 0.001 L46213;  
    EDGE_EXPAND L78161 -inside_by 0.001 L68035;  
    AND L46213 L68035;  
    EXTE L56174 L78161 -lt 0.1 -output region -abut lt 90;  
}
```

```
RULE CONT.W.1 {  
    CAPTION CONT.W.1: Maximum and minimum Contact width/length == 0.06 um;  
    RECT_CHK -not Cont -eq 0.06 -by -eq 0.06;  
}
```

```
RULE CONT.SP.1 {  
    CAPTION CONT.SP.1: Minimum Contact to Contact spacing >= 0.06 um;  
    EXTE Cont Cont -lt 0.06 -output region -singular -abut lt 90;  
}
```

```
RULE CONT.SP.2 {  
    CAPTION CONT.SP.2: Space to three adjacent Contacts ( < 0.10um apart) >= 0.08 um;  
    EXTE cont_cluster_lt_pt1 cont_cluster_lt_pt1 -lt 0.08 -output region -singular -abut lt 90;  
}  
AND Cont Oxide L32388;
```

```
RULE CONT.SE.1 {  
    CAPTION CONT.SE.1: Minimum Contact on Active Area to gate spacing >= 0.05 um;  
    EDGE_EXPAND L32388 -inside_by 0.001 L20276;  
    EDGE_EXPAND L19486 -inside_by 0.001 L24867;  
    AND L20276 L24867;  
    EXTE L32388 L19486 -lt 0.05 -output region -abut lt 90;  
}  
AND Cont L24975 L78798;
```

```
RULE CONT.SE.2 {  
    CAPTION CONT.SE.2: Minimum Contact on 1.8V Active Area to gate spacing >= 0.06 um;  
    EDGE_EXPAND L78798 -inside_by 0.001 L33581;  
    EDGE_EXPAND L87956 -inside_by 0.001 L42957;  
    AND L33581 L42957;  
    EXTE L78798 L87956 -lt 0.06 -output region -abut lt 90;  
}
```

```
RULE CONT.SE.3 {  
    CAPTION CONT.SE.3: Minimum gate Contact on Active Area spacing >= 0.06 um;  
    EDGE_EXPAND cont_poly -inside_by 0.001 L39381;  
    EDGE_EXPAND L60508 -inside_by 0.001 L23901;  
    AND L39381 L23901;
```

```
    EXTE cont_poly L60508 -lt 0.06 -output region -abut lt 90;
}
AND Oxide_thk Poly L99140;
EDGE_BOOLEAN -inside Oxide L99140 L85777;
```

```
RULE CONT.SE.4 {
    CAPTION CONT.SE.4: Minimum 1.8V gate Contact on Active Area spacing >= 0.07 um;
    EDGE_EXPAND cont_poly -inside_by 0.001 L39382;
    EDGE_EXPAND L85777 -inside_by 0.001 L26514;
    AND L39382 L26514;
    EXTE cont_poly L85777 -lt 0.07 -output region -abut lt 90;
}
```

```
RULE CONT.E.1 {
    CAPTION CONT.E.1: Minimum Active Area to Contact enclosure >= 0.03 um;
    SELECT -cut Cont Oxide L47450;
    NOT L47450 Oxide;
    ENC Cont Oxide -lt 0.03 -output region -singular -abut lt 90;
}
```

```
RULE CONT.E.2 {
    CAPTION CONT.E.2: Minimum Poly to Contact enclosure >= 0.02 um;
    SELECT -cut Cont Poly L67661;
    NOT L67661 Poly;
    ENC Cont Poly -lt 0.02 -output region -singular -abut lt 90;
}
```

```
RULE CONT.E.3 {
    CAPTION CONT.E.3: Minimum Poly to Contact enclosure on at least two opposite sides >= 0.03 um;
    GROW cont_poly -left 0.03 -right 0.03 L95731;
    SELECT -inside L95731 Poly L76668;
    NOT cont_poly L76668 L39551;
    GROW L39551 -top 0.03 -bottom 0.03 L13020;
    SELECT -inside L13020 Poly L30287;
    NOT L39551 L30287;
}
```

```
RULE CONT.E.4 {
    CAPTION CONT.E.4: Minimum N+/P+ Implant on Active Area to Contact enclosure >= 0.03 um;
    EDGE_EXPAND L32388 -inside_by 0.001 L20277;
    EDGE_EXPAND L83184 -outside_by 0.001 L63483;
    AND L20277 L63483;
    ENC L32388 L83184 -lt 0.03 -output region -abut lt 90;
}
```

```
RULE CONT.E.4_2 {
    CAPTION CONT.E.4: Minimum N+/P+ Implant on Active Area to Contact enclosure >= 0.03 um;
    EDGE_EXPAND L32388 -inside_by 0.001 L20278;
    EDGE_EXPAND L56174 -outside_by 0.001 L40010;
    AND L20278 L40010;
    ENC L32388 L56174 -lt 0.03 -output region -abut lt 90;
}
AND Cont gate L54224;
```

```
RULE CONT.X.1 {
```

```

    CAPTION CONT.X.1: Cont on gate is NOT allowed;
    COPY L54224;
}
EDGE_BOOLEAN -inside Nimp L32388 L8409;

RULE CONT.X.2 {
    CAPTION CONT.X.2: Nimp edge is NOT allowed on Oxide Cont;
    EDGE_LENGTH L8409 -ge 0.005;
}
EDGE_BOOLEAN -inside Pimp L32388 L72987;

RULE CONT.X.2_2 {
    CAPTION CONT.X.2: Pimp edge is NOT allowed on Oxide Cont;
    EDGE_LENGTH L72987 -ge 0.005;
}
NOT Cont L32232 L775;

RULE CONT.X.3 {
    CAPTION CONT.X.3: CONT must be covered by Oxide or Poly;
    COPY L775;
}

RULE SIPROT.W.1 {
    CAPTION SIPROT.W.1: Minimum Salicide Block width >= 0.22 um;
    INTE SiProt SiProt -lt 0.22 -output region -singular -abut lt 90;
}

RULE SIPROT.SP.1 {
    CAPTION SIPROT.SP.1: Minimum Salicide Block space >= 0.22 um;
    EXTE SiProt SiProt -lt 0.22 -output region -singular -abut lt 90;
}

RULE SIPROT.SE.1 {
    CAPTION SIPROT.SE.1: Minimum Salicide Block to Contact spacing >= 0.12 um;
    SELECT -cut Cont SiProt L30884;
    SELECT -cut SiProt Cont L89298;
    AND L30884 L89298;
    EXTE Cont SiProt -lt 0.12 -output region -singular -abut lt 90;
}

RULE SIPROT.SE.2 {
    CAPTION SIPROT.SE.2: Minimum Salicide Block to unrelated Active Area spacing >= 0.12 um;
    EXTE Oxide SiProt -lt 0.12 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -inside SiProt Oxide L6065;

RULE SIPROT.SE.3 {
    CAPTION SIPROT.SE.3: Minimum Salicide Block to gate spacing >= 0.22 um;
    EDGE_EXPAND L19486 -inside_by 0.001 L24868;
    EDGE_EXPAND L6065 -inside_by 0.001 L87969;
    AND L24868 L87969;
    EXTE L19486 L6065 -lt 0.22 -output region -abut lt 90;
}

RULE SIPROT.E.2 {

```



```

    CAPTION SIPROT.E.2: Minimum Active Area to Salicide Block enclosure >= 0.12 um;
    ENC SiProt Oxide -lt 0.12 -output region -singular -abut lt 90;
}
EDGE_BOOLEAN -outside Oxide Resdum L9687;

RULE SIPROT.E.1 {
    CAPTION SIPROT.E.1: Minimum Salicide Block to Active Area enclosure >= 0.12 um;
    ENC L9687 SiProt -lt 0.12 -output region -abut lt 90;
}

RULE SIPROT.E.3 {
    CAPTION SIPROT.E.3: Minimum Salicide Block to Poly (on field) enclosure >= 0.14 um;
    ENC L90757 SiProt -lt 0.14 -output region -abut lt 90;
}

RULE SIPROT.A.1 {
    CAPTION SIPROT.A.1: Minimum Salicide Block area >= 0.6 um;
    AREA SiProt -lt 0.6;
}

RULE SIPROT.SE.4 {
    CAPTION SIPROT.SE.4: Minimum Salicide Block to Poly (on field) spacing >= 0.18 um;
    EXTE L90757 SiProt -lt 0.18 -output region -abut lt 90;
}
HOLES SiProt L24522;
NOT L24522 SiProt L65079;

RULE SIPROT.EA.1 {
    CAPTION SIPROT.EA.1: Minimum Salicide Block enclosed area >= 0.6 um;
    AREA L65079 -lt 0.6;
}

RULE METAL2.E.1_METAL2.E.2 {
    CAPTION METAL2.E.1_METAL2.E.2: Metal2 Enc 0.005 & 0.03;
    RECT_ENC Via1 metal2_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;
}

RULE METAL3.E.1_METAL3.E.2 {
    CAPTION METAL3.E.1_METAL3.E.2: Metal3 Enc 0.005 & 0.03;
    RECT_ENC Via2 metal3_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;
}

RULE METAL4.E.1_METAL4.E.2 {
    CAPTION METAL4.E.1_METAL4.E.2: Metal4 Enc 0.005 & 0.03;
    RECT_ENC Via3 metal4_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;
}

RULE METAL5.E.1_METAL5.E.2 {
    CAPTION METAL5.E.1_METAL5.E.2: Metal5 Enc 0.005 & 0.03;
    RECT_ENC Via4 metal5_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;
}

RULE METAL6.E.1_METAL6.E.2 {
    CAPTION METAL6.E.1_METAL6.E.2: Metal6 Enc 0.005 & 0.03;
    RECT_ENC Via5 metal6_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;
}

```

}

```
RULE METAL7.E.1_METAL7.E.2 {  
  CAPTION METAL7.E.1_METAL7.E.2: Metal7 Enc 0.005 & 0.03;  
  RECT_ENC Via6 metal7_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;  
}
```

```
RULE METAL8.E.1_METAL8.E.2 {  
  CAPTION METAL8.E.1_METAL8.E.2: Metal8 Enc 0.005 & 0.03;  
  RECT_ENC Via7 metal8_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;  
}
```

```
RULE METAL9.E.1_METAL9.E.2 {  
  CAPTION METAL9.E.1_METAL9.E.2: Metal9 Enc 0.005 & 0.03;  
  RECT_ENC Via8 metal9_conn -outside_also -abut -ltgt 0 90 -good 0.005 0.03 0.005 0.03;  
}
```

```
RULE METAL10.E.1_METAL10.E.2 {  
  CAPTION METAL10.E.1_METAL10.E.2: Metal10 Enc 0.005 & 0.03;  
  RECT_ENC Via9 metal10_conn -outside_also -abut -ltgt 0 90 -good 0.03 0.005 0.03 0.005;  
}
```

```
RULE METAL11.E.1_METAL11.E.2 {  
  CAPTION METAL11.E.1_METAL11.E.2: Metal11 Enc 0.005 & 0.03;  
  RECT_ENC Via10 metal11_conn -outside_also -abut -ltgt 0 90 -good 0.03 0.005 0.03 0.005;  
}
```

```
RULE METAL1.E.1_METAL1.E.2 {  
  CAPTION METAL1.E.1_METAL1.E.2: Metal1 Enc 0 & 0.03;  
  RECT_ENC Cont metal1_conn -outside_also -abut -ltgt 0 90 -good 0 0.03 0 0.03;  
}
```

```
RULE METAL1.W.1 {  
  CAPTION METAL1.W.1: Metal1 width must be >= 0.06 um;  
  INTE metal1_conn metal1_conn -lt 0.06 -output region -singular -abut lt 90;  
}
```

```
RULE METAL2.W.1 {  
  CAPTION METAL2.W.1: Metal2 width must be >= 0.08 um;  
  INTE metal2_conn metal2_conn -lt 0.08 -output region -singular -abut lt 90;  
}
```

```
RULE METAL3.W.1 {  
  CAPTION METAL3.W.1: Metal3 width must be >= 0.08 um;  
  INTE metal3_conn metal3_conn -lt 0.08 -output region -singular -abut lt 90;  
}
```

```
RULE METAL4.W.1 {  
  CAPTION METAL4.W.1: Metal4 width must be >= 0.08 um;  
  INTE metal4_conn metal4_conn -lt 0.08 -output region -singular -abut lt 90;  
}
```

```
RULE METAL5.W.1 {  
  CAPTION METAL5.W.1: Metal5 width must be >= 0.08 um;  
  INTE metal5_conn metal5_conn -lt 0.08 -output region -singular -abut lt 90;
```

}

RULE METAL6.W.1 {

CAPTION METAL6.W.1: Metal6 width must be ≥ 0.08 um;

INTE metal6_conn metal6_conn -lt 0.08 -output region -singular -abut lt 90;

}

RULE METAL7.W.1 {

CAPTION METAL7.W.1: Metal7 width must be ≥ 0.08 um;

INTE metal7_conn metal7_conn -lt 0.08 -output region -singular -abut lt 90;

}

RULE METAL8.W.1 {

CAPTION METAL8.W.1: Metal8 width must be ≥ 0.08 um;

INTE metal8_conn metal8_conn -lt 0.08 -output region -singular -abut lt 90;

}

RULE METAL9.W.1 {

CAPTION METAL9.W.1: Metal9 width must be ≥ 0.08 um;

INTE metal9_conn metal9_conn -lt 0.08 -output region -singular -abut lt 90;

}

RULE METAL10.W.1 {

CAPTION METAL10.W.1: Metal10 width must be ≥ 0.22 um;

INTE Metal10 Metal10 -lt 0.22 -output region -singular -abut lt 90;

}

RULE METAL11.W.1 {

CAPTION METAL11.W.1: Metal11 width must be ≥ 0.22 um;

INTE Metal11 Metal11 -lt 0.22 -output region -singular -abut lt 90;

}

OR Bondpad cont_array_zone L15026;

OR L15026 via1_array_zone L40879;

NOT metal1_conn L40879 L78366;

RULE METAL1.W.2 {

CAPTION METAL1.W.2: Metal1 width must be ≤ 6.0 um;

SIZE L78366 -by -3 L84065;

SIZE L84065 -by 3;

}

OR Bondpad via1_array_zone L23007;

OR L23007 via2_array_zone L10068;

NOT metal2_conn L10068 L97076;

RULE METAL2.W.2 {

CAPTION METAL2.W.2: Metal2 width must be ≤ 6.0 um;

SIZE L97076 -by -3 L69472;

SIZE L69472 -by 3;

}

OR Bondpad via2_array_zone L40288;

OR L40288 via3_array_zone L78285;

NOT metal3_conn L78285 L75504;

RULE METAL3.W.2 {

CAPTION METAL3.W.2: Metal3 width must be ≤ 6.0 um;

```

    SIZE L75504 -by -3 L76330;
    SIZE L76330 -by 3;
}
OR Bondpad via3_array_zone L57569;
OR L57569 via4_array_zone L91858;
NOT metal4_conn L91858 L16678;

RULE METAL4.W.2 {
    CAPTION METAL4.W.2: Metal4 width must be <= 6.0 um;
    SIZE L16678 -by -3 L43487;
    SIZE L43487 -by 3;
}
OR Bondpad via4_array_zone L74850;
OR L74850 via5_array_zone L46863;
NOT metal5_conn L46863 L45047;

RULE METAL5.W.2 {
    CAPTION METAL5.W.2: Metal5 width must be <= 6.0 um;
    SIZE L45047 -by -3 L74591;
    SIZE L74591 -by 3;
}
OR Bondpad via5_array_zone L92131;
OR L92131 via6_array_zone L90960;
NOT metal6_conn L90960 L81857;

RULE METAL6.W.2 {
    CAPTION METAL6.W.2: Metal6 width must be <= 6.0 um;
    SIZE L81857 -by -3 L37488;
    SIZE L37488 -by 3;
}
OR Bondpad via6_array_zone L9413;
OR L9413 via7_array_zone L97204;
NOT metal7_conn L97204 L80478;

RULE METAL7.W.2 {
    CAPTION METAL7.W.2: Metal7 width must be <= 6.0 um;
    SIZE L80478 -by -3 L14284;
    SIZE L14284 -by 3;
}
OR Bondpad via7_array_zone L26693;
OR L26693 via8_array_zone L18300;
NOT metal8_conn L18300 L20051;

RULE METAL8.W.2 {
    CAPTION METAL8.W.2: Metal8 width must be <= 6.0 um;
    SIZE L20051 -by -3 L30749;
    SIZE L30749 -by 3;
}
NOT Metal9 L9413 L30808;

RULE METAL9.W.2 {
    CAPTION METAL9.W.2: Metal9 width must be <= 6.0 um;
    SIZE L30808 -by -3 L67342;
    SIZE L67342 -by 3;
}

```

NOT Metal10 Bondpad L29449;

```
RULE METAL10.W.2 {  
  CAPTION METAL10.W.2: Metal10 width must be <= 6.0 um;  
  SIZE L29449 -by -3 L83679;  
  SIZE L83679 -by 3;  
}
```

NOT Metal11 Bondpad L25014;

```
RULE METAL11.W.2 {  
  CAPTION METAL11.W.2: Metal11 width must be <= 6.0 um;  
  SIZE L25014 -by -3 L48159;  
  SIZE L48159 -by 3;  
}
```

```
RULE METAL1.SP.1.1 {  
  CAPTION METAL1.SP.1.1: Metal1 to Metal1 spacing must be >= 0.06 um;  
  EXTE Metal1 Metal1 -lt 0.06 -output region -singular -abut lt 90;  
}
```

```
RULE METAL2.SP.1.1 {  
  CAPTION METAL2.SP.1.1: Metal2 to Metal2 spacing must be >= 0.07 um;  
  EXTE Metal2 Metal2 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL3.SP.1.1 {  
  CAPTION METAL3.SP.1.1: Metal3 to Metal3 spacing must be >= 0.07 um;  
  EXTE Metal3 Metal3 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL4.SP.1.1 {  
  CAPTION METAL4.SP.1.1: Metal4 to Metal4 spacing must be >= 0.07 um;  
  EXTE Metal4 Metal4 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL5.SP.1.1 {  
  CAPTION METAL5.SP.1.1: Metal5 to Metal5 spacing must be >= 0.07 um;  
  EXTE Metal5 Metal5 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL6.SP.1.1 {  
  CAPTION METAL6.SP.1.1: Metal6 to Metal6 spacing must be >= 0.07 um;  
  EXTE Metal6 Metal6 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL7.SP.1.1 {  
  CAPTION METAL7.SP.1.1: Metal7 to Metal7 spacing must be >= 0.07 um;  
  EXTE Metal7 Metal7 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL8.SP.1.1 {  
  CAPTION METAL8.SP.1.1: Metal8 to Metal8 spacing must be >= 0.07 um;  
  EXTE Metal8 Metal8 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL9.SP.1.1 {  
  CAPTION METAL9.SP.1.1: Metal9 to Metal9 spacing must be  $\geq 0.07$  um;  
  EXTE Metal9 Metal9 -lt 0.07 -output region -singular -abut lt 90;  
}
```

```
RULE METAL10.SP.1.1 {  
  CAPTION METAL10.SP.1.1: Metal10 to Metal10 spacing must be  $\geq 0.20$  um;  
  EXTE Metal10 Metal10 -lt 0.2 -output region -singular -abut lt 90;  
}
```

```
RULE METAL11.SP.1.1 {  
  CAPTION METAL11.SP.1.1: Metal11 to Metal11 spacing must be  $\geq 0.20$  um;  
  EXTE Metal11 Metal11 -lt 0.2 -output region -singular -abut lt 90;  
}  
SIZE Metal1 -by 0.05 -underover L78025;  
AND L78025 Metal1 L80731;  
SIZE Metal1 -by 0.375 -underover L83743;  
AND L83743 Metal1 L96114;  
NOT L80731 L96114 L94515;  
EDGE_BOOLEAN -coincident_only Metal1 L94515 L26590;
```

```
RULE METAL1.SP.1.2 {  
  CAPTION METAL1.SP.1.2: Metal1 to Metal1 spacing must be  $\geq 0.1$  um;  
  EXTE Metal1 L26590 -lt 0.1 -output positive2 -project gt 0.32 -abut ltgt 0 90 L92336;  
  EDGE_LENGTH L92336 -gt 0.32;  
}  
SIZE Metal2 -by 0.05 -underover L28938;  
AND L28938 Metal2 L45162;  
SIZE Metal2 -by 0.375 -underover L27454;  
AND L27454 Metal2 L41952;  
NOT L45162 L41952 L88928;  
EDGE_BOOLEAN -coincident_only Metal2 L88928 L16734;
```

```
RULE METAL2.SP.1.2 {  
  CAPTION METAL2.SP.1.2: Metal2 to Metal2 spacing must be  $\geq 0.15$  um;  
  EXTE Metal2 L16734 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L44095;  
  EDGE_LENGTH L44095 -gt 0.32;  
}  
SIZE Metal3 -by 0.05 -underover L87445;  
AND L87445 Metal3 L48135;  
SIZE Metal3 -by 0.375 -underover L28835;  
AND L28835 Metal3 L71931;  
NOT L48135 L71931 L32449;  
EDGE_BOOLEAN -coincident_only Metal3 L32449 L92508;
```

```
RULE METAL3.SP.1.2 {  
  CAPTION METAL3.SP.1.2: Metal3 to Metal3 spacing must be  $\geq 0.15$  um;  
  EXTE Metal3 L92508 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L85233;  
  EDGE_LENGTH L85233 -gt 0.32;  
}  
SIZE Metal4 -by 0.05 -underover L36532;  
AND L36532 Metal4 L66879;  
SIZE Metal4 -by 0.375 -underover L82172;  
AND L82172 Metal4 L22078;  
NOT L66879 L22078 L34070;
```

EDGE_BOOLEAN -coincident_only Metal4 L34070 L8631;

RULE METAL4.SP.1.2 {

CAPTION METAL4.SP.1.2: Metal4 to Metal4 spacing must be ≥ 0.15 um;

EXTE Metal4 L8631 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L86514;

EDGE_LENGTH L86514 -gt 0.32;

}

SIZE Metal5 -by 0.05 -underover L85619;

AND L85619 Metal5 L30416;

SIZE Metal5 -by 0.375 -underover L74118;

AND L74118 Metal5 L11050;

NOT L30416 L11050 L46846;

EDGE_BOOLEAN -coincident_only Metal5 L46846 L92408;

RULE METAL5.SP.1.2 {

CAPTION METAL5.SP.1.2: Metal5 to Metal5 spacing must be ≥ 0.15 um;

EXTE Metal5 L92408 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L52050;

EDGE_LENGTH L52050 -gt 0.32;

}

SIZE Metal6 -by 0.05 -underover L34706;

AND L34706 Metal6 L21866;

SIZE Metal6 -by 0.375 -underover L36890;

AND L36890 Metal6 L19194;

NOT L21866 L19194 L65954;

EDGE_BOOLEAN -coincident_only Metal6 L65954 L46312;

RULE METAL6.SP.1.2 {

CAPTION METAL6.SP.1.2: Metal6 to Metal6 spacing must be ≥ 0.15 um;

EXTE Metal6 L46312 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L49476;

EDGE_LENGTH L49476 -gt 0.32;

}

SIZE Metal7 -by 0.05 -underover L83793;

AND L83793 Metal7 L58397;

SIZE Metal7 -by 0.375 -underover L19399;

AND L19399 Metal7 L87240;

NOT L58397 L87240 L55084;

EDGE_BOOLEAN -coincident_only Metal7 L55084 L68054;

RULE METAL7.SP.1.2 {

CAPTION METAL7.SP.1.2: Metal7 to Metal7 spacing must be ≥ 0.15 um;

EXTE Metal7 L68054 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L9898;

EDGE_LENGTH L9898 -gt 0.32;

}

SIZE Metal8 -by 0.05 -underover L32880;

AND L32880 Metal8 L93885;

SIZE Metal8 -by 0.375 -underover L91608;

AND L91608 Metal8 L28110;

NOT L93885 L28110 L19170;

EDGE_BOOLEAN -coincident_only Metal8 L19170 L68287;

RULE METAL8.SP.1.2 {

CAPTION METAL8.SP.1.2: Metal8 to Metal8 spacing must be ≥ 0.15 um;

EXTE Metal8 L68287 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L72343;

EDGE_LENGTH L72343 -gt 0.32;

}

SIZE Metal9 -by 0.05 -underover L81967;
AND L81967 Metal9 L30348;
SIZE Metal9 -by 0.375 -underover L64681;
AND L64681 Metal9 L56196;
NOT L30348 L56196 L35366;
EDGE_BOOLEAN -coincident_only Metal9 L35366 L58899;

RULE METAL9.SP.1.2 {
 CAPTION METAL9.SP.1.2: Metal9 to Metal9 spacing must be ≥ 0.15 um;
 EXTE Metal9 L58899 -lt 0.15 -output positive2 -project gt 0.32 -abut ltgt 0 90 L86404;
 EDGE_LENGTH L86404 -gt 0.32;
}

SIZE Metal1 -by 0.75 -underover L43024;
AND L43024 Metal1 L55558;
NOT L96114 L55558 L18892;
EDGE_BOOLEAN -coincident_only Metal1 L18892 L92466;

RULE METAL1.SP.1.3 {
 CAPTION METAL1.SP.1.3: Metal1 to Metal1 spacing must be ≥ 0.25 um;
 EXTE Metal1 L92466 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L7339;
 EDGE_LENGTH L7339 -gt 0.75;
}

SIZE Metal2 -by 0.75 -underover L7889;
AND L7889 Metal2 L37818;
NOT L41952 L37818 L39659;
EDGE_BOOLEAN -coincident_only Metal2 L39659 L7337;

RULE METAL2.SP.1.3 {
 CAPTION METAL2.SP.1.3: Metal2 to Metal2 spacing must be ≥ 0.25 um;
 EXTE Metal2 L7337 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L71477;
 EDGE_LENGTH L71477 -gt 0.75;
}

SIZE Metal3 -by 0.75 -underover L58802;
AND L58802 Metal3 L52472;
NOT L71931 L52472 L1512;
EDGE_BOOLEAN -coincident_only Metal3 L1512 L44317;

RULE METAL3.SP.1.3 {
 CAPTION METAL3.SP.1.3: Metal3 to Metal3 spacing must be ≥ 0.25 um;
 EXTE Metal3 L44317 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L54105;
 EDGE_LENGTH L54105 -gt 0.75;
}

SIZE Metal4 -by 0.75 -underover L9715;
AND L9715 Metal4 L12872;
NOT L22078 L12872 L55060;
EDGE_BOOLEAN -coincident_only Metal4 L55060 L31829;

RULE METAL4.SP.1.3 {
 CAPTION METAL4.SP.1.3: Metal4 to Metal4 spacing must be ≥ 0.25 um;
 EXTE Metal4 L31829 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L99602;
 EDGE_LENGTH L99602 -gt 0.75;
}

SIZE Metal5 -by 0.75 -underover L60628;
AND L60628 Metal5 L77617;
NOT L11050 L77617 L72516;

EDGE_BOOLEAN -coincident_only Metal5 L72516 L40831;

```
RULE METAL5.SP.1.3 {
  CAPTION METAL5.SP.1.3: Metal5 to Metal5 spacing must be >= 0.25 um;
  EXTE Metal5 L40831 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L90470;
  EDGE_LENGTH L90470 -gt 0.75;
}
SIZE Metal6 -by 0.75 -underover L11541;
AND L11541 Metal6 L26144;
NOT L19194 L26144 L78596;
EDGE_BOOLEAN -coincident_only Metal6 L78596 L37136;
```

```
RULE METAL6.SP.1.3 {
  CAPTION METAL6.SP.1.3: Metal6 to Metal6 spacing must be >= 0.25 um;
  EXTE Metal6 L37136 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L61285;
  EDGE_LENGTH L61285 -gt 0.75;
}
SIZE Metal7 -by 0.75 -underover L62454;
AND L62454 Metal7 L88868;
NOT L87240 L88868 L60830;
EDGE_BOOLEAN -coincident_only Metal7 L60830 L85959;
```

```
RULE METAL7.SP.1.3 {
  CAPTION METAL7.SP.1.3: Metal7 to Metal7 spacing must be >= 0.25 um;
  EXTE Metal7 L85959 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L99702;
  EDGE_LENGTH L99702 -gt 0.75;
}
SIZE Metal8 -by 0.75 -underover L13367;
AND L13367 Metal8 L36226;
NOT L28110 L36226 L39676;
EDGE_BOOLEAN -coincident_only Metal8 L39676 L20140;
```

```
RULE METAL8.SP.1.3 {
  CAPTION METAL8.SP.1.3: Metal8 to Metal8 spacing must be >= 0.25 um;
  EXTE Metal8 L20140 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L19640;
  EDGE_LENGTH L19640 -gt 0.75;
}
SIZE Metal9 -by 0.75 -underover L64280;
AND L64280 Metal9 L99881;
NOT L56196 L99881 L53303;
EDGE_BOOLEAN -coincident_only Metal9 L53303 L71628;
```

```
RULE METAL9.SP.1.3 {
  CAPTION METAL9.SP.1.3: Metal9 to Metal9 spacing must be >= 0.25 um;
  EXTE Metal9 L71628 -lt 0.25 -output positive2 -project gt 0.75 -abut ltgt 0 90 L59222;
  EDGE_LENGTH L59222 -gt 0.75;
}
SIZE Metal10 -by 0.375 -underover L38977;
AND L38977 Metal10 L93129;
SIZE Metal10 -by 0.75 -underover L71634;
AND L71634 Metal10 L52704;
NOT L93129 L52704 L57101;
EDGE_BOOLEAN -coincident_only Metal10 L57101 L7292;
```

```
RULE METAL10.SP.1.2 {
```

```

    CAPTION METAL10.SP.1.2: Metal10 to Metal10 spacing must be >= 0.35 um;
    EXTE Metal10 L7292 -lt 0.35 -output positive2 -project gt 0.75 -abut ltgt 0 90 L77459;
    EDGE_LENGTH L77459 -gt 0.75;
}
SIZE Metal11 -by 0.375 -underover L17312;
AND L17312 Metal11 L44814;
SIZE Metal11 -by 0.75 -underover L20721;
AND L20721 Metal11 L43260;
NOT L44814 L43260 L89733;
EDGE_BOOLEAN -coincident_only Metal11 L89733 L39049;

RULE METAL11.SP.1.2 {
    CAPTION METAL11.SP.1.2: Metal11 to Metal11 spacing must be >= 0.35 um;
    EXTE Metal11 L39049 -lt 0.35 -output positive2 -project gt 0.75 -abut ltgt 0 90 L35461;
    EDGE_LENGTH L35461 -gt 0.75;
}
SIZE Metal1 -by 1.25 -underover L43476;
AND L43476 Metal1 L73369;
NOT L55558 L73369 L43371;
EDGE_BOOLEAN -coincident_only Metal1 L43371 L75726;

RULE METAL1.SP.1.4 {
    CAPTION METAL1.SP.1.4: Metal1 to Metal1 spacing must be >= 0.45 um;
    EXTE Metal1 L75726 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L53457;
    EDGE_LENGTH L53457 -gt 1.5;
}
SIZE Metal2 -by 1.25 -underover L92563;
AND L92563 Metal2 L48277;
NOT L37818 L48277 L43270;
EDGE_BOOLEAN -coincident_only Metal2 L43270 L66353;

RULE METAL2.SP.1.4 {
    CAPTION METAL2.SP.1.4: Metal2 to Metal2 spacing must be >= 0.45 um;
    EXTE Metal2 L66353 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L32322;
    EDGE_LENGTH L32322 -gt 1.5;
}
SIZE Metal3 -by 1.25 -underover L41650;
AND L41650 Metal3 L4005;
NOT L52472 L4005 L11104;
EDGE_BOOLEAN -coincident_only Metal3 L11104 L12663;

RULE METAL3.SP.1.4 {
    CAPTION METAL3.SP.1.4: Metal3 to Metal3 spacing must be >= 0.45 um;
    EXTE Metal3 L12663 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L69918;
    EDGE_LENGTH L69918 -gt 1.5;
}
SIZE Metal4 -by 1.25 -underover L90737;
AND L90737 Metal4 L40468;
NOT L12872 L40468 L11291;
EDGE_BOOLEAN -coincident_only Metal4 L11291 L43061;

RULE METAL4.SP.1.4 {
    CAPTION METAL4.SP.1.4: Metal4 to Metal4 spacing must be >= 0.45 um;
    EXTE Metal4 L43061 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L66245;
    EDGE_LENGTH L66245 -gt 1.5;
}

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}
SIZE Metal5 -by 1.25 -underover L39824;
AND L39824 Metal5 L52579;
NOT L77617 L52579 L38481;
EDGE_BOOLEAN -coincident_only Metal5 L38481 L24744;

RULE METAL5.SP.1.4 {
  CAPTION METAL5.SP.1.4: Metal5 to Metal5 spacing must be >= 0.45 um;
  EXTE Metal5 L24744 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L4189;
  EDGE_LENGTH L4189 -gt 1.5;
}
SIZE Metal6 -by 1.25 -underover L88911;
AND L88911 Metal6 L77671;
NOT L26144 L77671 L80918;
EDGE_BOOLEAN -coincident_only Metal6 L80918 L48345;

RULE METAL6.SP.1.4 {
  CAPTION METAL6.SP.1.4: Metal6 to Metal6 spacing must be >= 0.45 um;
  EXTE Metal6 L48345 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L35837;
  EDGE_LENGTH L35837 -gt 1.5;
}
SIZE Metal7 -by 1.25 -underover L37998;
AND L37998 Metal7 L64031;
NOT L88868 L64031 L93609;
EDGE_BOOLEAN -coincident_only Metal7 L93609 L28029;

RULE METAL7.SP.1.4 {
  CAPTION METAL7.SP.1.4: Metal7 to Metal7 spacing must be >= 0.45 um;
  EXTE Metal7 L28029 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L46531;
  EDGE_LENGTH L46531 -gt 1.5;
}
SIZE Metal8 -by 1.25 -underover L12915;
AND L12915 Metal8 L76392;
NOT L36226 L76392 L87475;
EDGE_BOOLEAN -coincident_only Metal8 L87475 L76240;

RULE METAL8.SP.1.4 {
  CAPTION METAL8.SP.1.4: Metal8 to Metal8 spacing must be >= 0.45 um;
  EXTE Metal8 L76240 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L86042;
  EDGE_LENGTH L86042 -gt 1.5;
}
SIZE Metal9 -by 1.25 -underover L63828;
AND L63828 Metal9 L75892;
NOT L99881 L75892 L25931;
EDGE_BOOLEAN -coincident_only Metal9 L25931 L76752;

RULE METAL9.SP.1.4 {
  CAPTION METAL9.SP.1.4: Metal9 to Metal9 spacing must be >= 0.45 um;
  EXTE Metal9 L76752 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L16228;
  EDGE_LENGTH L16228 -gt 1.5;
}
SIZE Metal10 -by 1.25 -underover L95210;
AND L95210 Metal10 L25976;
NOT L52704 L25976 L95146;
EDGE_BOOLEAN -coincident_only Metal10 L95146 L72662;

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RULE METAL10.SP.1.3 {
  CAPTION METAL10.SP.1.3: Metal10 to Metal10 spacing must be >= 0.45 um;
  EXTE Metal10 L72662 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L42715;
  EDGE_LENGTH L42715 -gt 1.5;
}
SIZE Metal11 -by 1.25 -underover L46123;
AND L46123 Metal11 L1804;
NOT L43260 L1804 L36293;
EDGE_BOOLEAN -coincident_only Metal11 L36293 L27453;

RULE METAL11.SP.1.3 {
  CAPTION METAL11.SP.1.3: Metal11 to Metal11 spacing must be >= 0.45 um;
  EXTE Metal11 L27453 -lt 0.45 -output positive2 -project gt 1.5 -abut ltgt 0 90 L24794;
  EDGE_LENGTH L24794 -gt 1.5;
}
SIZE Metal1 -by 1.75 -underover L8785;
AND L8785 Metal1 L82421;
NOT L73369 L82421 L65070;
EDGE_BOOLEAN -coincident_only Metal1 L65070 L71986;

RULE METAL1.SP.1.5 {
  CAPTION METAL1.SP.1.5: Metal1 to Metal1 spacing must be >= 0.75 um;
  EXTE Metal1 L71986 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L91954;
  EDGE_LENGTH L91954 -gt 2.5;
}
SIZE Metal2 -by 1.75 -underover L59698;
AND L59698 Metal2 L32739;
NOT L48277 L32739 L22851;
EDGE_BOOLEAN -coincident_only Metal2 L22851 L37481;

RULE METAL2.SP.1.5 {
  CAPTION METAL2.SP.1.5: Metal2 to Metal2 spacing must be >= 0.75 um;
  EXTE Metal2 L37481 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L38211;
  EDGE_LENGTH L38211 -gt 2.5;
}
SIZE Metal3 -by 1.75 -underover L10611;
AND L10611 Metal3 L7208;
NOT L4005 L7208 L93777;
EDGE_BOOLEAN -coincident_only Metal3 L93777 L66399;

RULE METAL3.SP.1.5 {
  CAPTION METAL3.SP.1.5: Metal3 to Metal3 spacing must be >= 0.75 um;
  EXTE Metal3 L66399 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L42694;
  EDGE_LENGTH L42694 -gt 2.5;
}
SIZE Metal4 -by 1.75 -underover L61524;
AND L61524 Metal4 L22220;
NOT L40468 L22220 L73961;
EDGE_BOOLEAN -coincident_only Metal4 L73961 L35719;

RULE METAL4.SP.1.5 {
  CAPTION METAL4.SP.1.5: Metal4 to Metal4 spacing must be >= 0.75 um;
  EXTE Metal4 L35719 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L34833;
  EDGE_LENGTH L34833 -gt 2.5;
}

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}
SIZE Metal5 -by 1.75 -underover L54859;
AND L54859 Metal5 L43948;
NOT L52579 L43948 L20041;
EDGE_BOOLEAN -coincident_only Metal5 L20041 L58927;

RULE METAL5.SP.1.5 {
  CAPTION METAL5.SP.1.5: Metal5 to Metal5 spacing must be >= 0.75 um;
  EXTE Metal5 L58927 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L75372;
  EDGE_LENGTH L75372 -gt 2.5;
}
SIZE Metal6 -by 1.75 -underover L3946;
AND L3946 Metal6 L93628;
NOT L77671 L93628 L10853;
EDGE_BOOLEAN -coincident_only Metal6 L10853 L13834;

RULE METAL6.SP.1.5 {
  CAPTION METAL6.SP.1.5: Metal6 to Metal6 spacing must be >= 0.75 um;
  EXTE Metal6 L13834 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L38425;
  EDGE_LENGTH L38425 -gt 2.5;
}
SIZE Metal7 -by 1.75 -underover L53033;
AND L53033 Metal7 L29665;
NOT L64031 L29665 L93425;
EDGE_BOOLEAN -coincident_only Metal7 L93425 L29893;

RULE METAL7.SP.1.5 {
  CAPTION METAL7.SP.1.5: Metal7 to Metal7 spacing must be >= 0.75 um;
  EXTE Metal7 L29893 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L54182;
  EDGE_LENGTH L54182 -gt 2.5;
}
SIZE Metal8 -by 1.75 -underover L2120;
AND L2120 Metal8 L20015;
NOT L76392 L20015 L44316;
EDGE_BOOLEAN -coincident_only Metal8 L44316 L91637;

RULE METAL8.SP.1.5 {
  CAPTION METAL8.SP.1.5: Metal8 to Metal8 spacing must be >= 0.75 um;
  EXTE Metal8 L91637 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L98640;
  EDGE_LENGTH L98640 -gt 2.5;
}
SIZE Metal9 -by 1.75 -underover L51207;
AND L51207 Metal9 L59080;
NOT L75892 L59080 L252;
EDGE_BOOLEAN -coincident_only Metal9 L252 L71211;

RULE METAL9.SP.1.5 {
  CAPTION METAL9.SP.1.5: Metal9 to Metal9 spacing must be >= 0.75 um;
  EXTE Metal9 L71211 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L51397;
  EDGE_LENGTH L51397 -gt 2.5;
}
SIZE Metal10 -by 1.75 -underover L19825;
AND L19825 Metal10 L56118;
NOT L25976 L56118 L299;
EDGE_BOOLEAN -coincident_only Metal10 L299 L48838;

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RULE METAL10.SP.1.4 {
  CAPTION METAL10.SP.1.4: Metal10 to Metal10 spacing must be >= 0.75 um;
  EXTE Metal10 L48838 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L71050;
  EDGE_LENGTH L71050 -gt 2.5;
}
SIZE Metal11 -by 1.75 -underover L68912;
AND L68912 Metal11 L83396;
NOT L1804 L83396 L54079;
EDGE_BOOLEAN -coincident_only Metal11 L54079 L12934;

RULE METAL11.SP.1.4 {
  CAPTION METAL11.SP.1.4: Metal11 to Metal11 spacing must be >= 0.75 um;
  EXTE Metal11 L12934 -lt 0.75 -output positive2 -project gt 2.5 -abut ltgt 0 90 L62441;
  EDGE_LENGTH L62441 -gt 2.5;
}
EDGE_BOOLEAN -coincident_only Metal1 L82421 L10627;

RULE METAL1.SP.1.6 {
  CAPTION METAL1.SP.1.6: Metal1 to Metal1 spacing must be >= 1.25 um;
  EXTE Metal1 L10627 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L79181;
  EDGE_LENGTH L79181 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal2 L32739 L14975;

RULE METAL2.SP.1.6 {
  CAPTION METAL2.SP.1.6: Metal2 to Metal2 spacing must be >= 1.25 um;
  EXTE Metal2 L14975 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L51652;
  EDGE_LENGTH L51652 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal3 L7208 L68479;

RULE METAL3.SP.1.6 {
  CAPTION METAL3.SP.1.6: Metal3 to Metal3 spacing must be >= 1.25 um;
  EXTE Metal3 L68479 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L76733;
  EDGE_LENGTH L76733 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal4 L22220 L89967;

RULE METAL4.SP.1.6 {
  CAPTION METAL4.SP.1.6: Metal4 to Metal4 spacing must be >= 1.25 um;
  EXTE Metal4 L89967 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L56711;
  EDGE_LENGTH L56711 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal5 L43948 L3998;

RULE METAL5.SP.1.6 {
  CAPTION METAL5.SP.1.6: Metal5 to Metal5 spacing must be >= 1.25 um;
  EXTE Metal5 L3998 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L66366;
  EDGE_LENGTH L66366 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal6 L93628 L38303;

RULE METAL6.SP.1.6 {
  CAPTION METAL6.SP.1.6: Metal6 to Metal6 spacing must be >= 1.25 um;

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    EXTE Metal6 L38303 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L69059;
    EDGE_LENGTH L69059 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal7 L29665 L13748;

RULE METAL7.SP.1.6 {
    CAPTION METAL7.SP.1.6: Metal7 to Metal7 spacing must be >= 1.25 um;
    EXTE Metal7 L13748 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L18364;
    EDGE_LENGTH L18364 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal8 L20015 L22547;

RULE METAL8.SP.1.6 {
    CAPTION METAL8.SP.1.6: Metal8 to Metal8 spacing must be >= 1.25 um;
    EXTE Metal8 L22547 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L27358;
    EDGE_LENGTH L27358 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal9 L59080 L95520;

RULE METAL9.SP.1.6 {
    CAPTION METAL9.SP.1.6: Metal9 to Metal9 spacing must be >= 1.25 um;
    EXTE Metal9 L95520 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L90432;
    EDGE_LENGTH L90432 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal10 L56118 L37045;

RULE METAL10.SP.1.5 {
    CAPTION METAL10.SP.1.5: Metal10 to Metal10 spacing must be >= 1.25 um;
    EXTE Metal10 L37045 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L62458;
    EDGE_LENGTH L62458 -gt 3.5;
}
EDGE_BOOLEAN -coincident_only Metal11 L83396 L56648;

RULE METAL11.SP.1.5 {
    CAPTION METAL11.SP.1.5: Metal11 to Metal11 spacing must be >= 1.25 um;
    EXTE Metal11 L56648 -lt 1.25 -output positive2 -project gt 3.5 -abut ltgt 0 90 L35557;
    EDGE_LENGTH L35557 -gt 3.5;
}
ANGLE Metal1 -ltgt 0 90 L79182;

RULE METAL1.L.1 {
    CAPTION METAL1.L.1: Metal1 non-90 degree segments must be >= 0.1 um;
    EDGE_LENGTH L79182 -lt 0.1;
}
ANGLE Metal2 -ltgt 0 90 L61902;

RULE METAL2.L.1 {
    CAPTION METAL2.L.1: Metal2 non-90 degree segments must be >= 0.1 um;
    EDGE_LENGTH L61902 -lt 0.1;
}
ANGLE Metal3 -ltgt 0 90 L44620;

RULE METAL3.L.1 {
    CAPTION METAL3.L.1: Metal3 non-90 degree segments must be >= 0.1 um;
    EDGE_LENGTH L44620 -lt 0.1;
}

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}
ANGLE Metal4 -ltgt 0 90 L27339;

RULE METAL4.L.1 {
  CAPTION METAL4.L.1: Metal4 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L27339 -lt 0.1;
}
ANGLE Metal5 -ltgt 0 90 L10058;

RULE METAL5.L.1 {
  CAPTION METAL5.L.1: Metal5 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L10058 -lt 0.1;
}
ANGLE Metal6 -ltgt 0 90 L92777;

RULE METAL6.L.1 {
  CAPTION METAL6.L.1: Metal6 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L92777 -lt 0.1;
}
ANGLE Metal7 -ltgt 0 90 L75496;

RULE METAL7.L.1 {
  CAPTION METAL7.L.1: Metal7 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L75496 -lt 0.1;
}
ANGLE Metal8 -ltgt 0 90 L9081;

RULE METAL8.L.1 {
  CAPTION METAL8.L.1: Metal8 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L9081 -lt 0.1;
}
ANGLE Metal9 -ltgt 0 90 L26362;

RULE METAL9.L.1 {
  CAPTION METAL9.L.1: Metal9 non-90 degree segments must be >= 0.1 um;
  EDGE_LENGTH L26362 -lt 0.1;
}

RULE METAL1.SP.2 {
  CAPTION METAL1.SP.2: Metal1 to bent Metal1 spacing must be >= 0.1 um;
  EXTE Metal1 L79182 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL1.W.3 {
  CAPTION METAL1.W.3: Bent Metal1 (45 degree angle) width must be >= 0.07;
  INTE L79182 L79182 -lt 0.07 -output region -abut lt 90;
}

RULE METAL2.SP.2 {
  CAPTION METAL2.SP.2: Metal2 to bent Metal2 spacing must be >= 0.1 um;
  EXTE Metal2 L61902 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL2.W.3 {
  CAPTION METAL2.W.3: Bent Metal2 (45 degree angle) width must be >= 0.09;

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    INTE L61902 L61902 -lt 0.09 -output region -abut lt 90;
}

RULE METAL3.SP.2 {
    CAPTION METAL3.SP.2: Metal3 to bent Metal3 spacing must be >= 0.1 um;
    EXTE Metal3 L44620 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL3.W.3 {
    CAPTION METAL3.W.3: Bent Metal3 (45 degree angle) width must be >= 0.09;
    INTE L44620 L44620 -lt 0.09 -output region -abut lt 90;
}

RULE METAL4.SP.2 {
    CAPTION METAL4.SP.2: Metal4 to bent Metal4 spacing must be >= 0.1 um;
    EXTE Metal4 L27339 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL4.W.3 {
    CAPTION METAL4.W.3: Bent Metal4 (45 degree angle) width must be >= 0.09;
    INTE L27339 L27339 -lt 0.09 -output region -abut lt 90;
}

RULE METAL5.SP.2 {
    CAPTION METAL5.SP.2: Metal5 to bent Metal5 spacing must be >= 0.1 um;
    EXTE Metal5 L10058 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL5.W.3 {
    CAPTION METAL5.W.3: Bent Metal5 (45 degree angle) width must be >= 0.09;
    INTE L10058 L10058 -lt 0.09 -output region -abut lt 90;
}

RULE METAL6.SP.2 {
    CAPTION METAL6.SP.2: Metal6 to bent Metal6 spacing must be >= 0.1 um;
    EXTE Metal6 L92777 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL6.W.3 {
    CAPTION METAL6.W.3: Bent Metal6 (45 degree angle) width must be >= 0.09;
    INTE L92777 L92777 -lt 0.09 -output region -abut lt 90;
}

RULE METAL7.SP.2 {
    CAPTION METAL7.SP.2: Metal7 to bent Metal7 spacing must be >= 0.1 um;
    EXTE Metal7 L75496 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL7.W.3 {
    CAPTION METAL7.W.3: Bent Metal7 (45 degree angle) width must be >= 0.09;
    INTE L75496 L75496 -lt 0.09 -output region -abut lt 90;
}

RULE METAL8.SP.2 {
    CAPTION METAL8.SP.2: Metal8 to bent Metal8 spacing must be >= 0.1 um;

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    EXTE Metal8 L9081 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL8.W.3 {
    CAPTION METAL8.W.3: Bent Metal8 (45 degree angle) width must be >= 0.09;
    INTE L9081 L9081 -lt 0.09 -output region -abut lt 90;
}

RULE METAL9.SP.2 {
    CAPTION METAL9.SP.2: Metal9 to bent Metal9 spacing must be >= 0.1 um;
    EXTE Metal9 L26362 -lt 0.1 -output region -abut ltgt 0 90;
}

RULE METAL9.W.3 {
    CAPTION METAL9.W.3: Bent Metal9 (45 degree angle) width must be >= 0.09;
    INTE L26362 L26362 -lt 0.09 -output region -abut lt 90;
}

RULE METAL1.SP.3 {
    CAPTION METAL1.SP.3: Min End Of Line Spacing >= 0.08;
    CONVEX_EDGE Metal1 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.09 met1_lw;
    EXTE met1_lw Metal1 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.025 met1_sp;
    EDGE_SELECT -inside met1_lw met1_sp met1Edge1;
    INTE met1Edge1 Metal1 -lt 0.1 -abut -eq 90 -intersecting only met1_q1;
    EDGE_LENGTH met1_q1 -ge 0.06 met1_q2;
    EDGE_EXPAND met1_q2 -inside_by 0.001 -extend_by 0.025 met1exp1;
    EDGE_EXPAND met1_q2 -inside_by 0.001 met1exp2;
    NOT met1exp1 met1exp2 met1Exp;
    SELECT -with_edge met1Exp met1_lw met1_lwEdg;
    OR met1_lwEdg met1exp2 met1_allEdg;
    EDGE_SELECT met1_allEdg met1_q2 met1_extEdg;
    EDGE_SELECT -not met1_extEdg met1_sp met1_last;
    EXTE met1_last Metal1 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

RULE METAL2.SP.3 {
    CAPTION METAL2.SP.3: Min End Of Line Spacing >= 0.08;
    CONVEX_EDGE Metal2 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met2_lw;
    EXTE met2_lw Metal2 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met2_sp;
    EDGE_SELECT -inside met2_lw met2_sp met2Edge1;
    INTE met2Edge1 Metal2 -lt 0.1 -abut -eq 90 -intersecting only met2_q1;
    EDGE_LENGTH met2_q1 -ge 0.07 met2_q2;
    EDGE_EXPAND met2_q2 -inside_by 0.001 -extend_by 0.035 met2exp1;
    EDGE_EXPAND met2_q2 -inside_by 0.001 met2exp2;
    NOT met2exp1 met2exp2 met2Exp;
    SELECT -with_edge met2Exp met2_lw met2_lwEdg;
    OR met2_lwEdg met2exp2 met2_allEdg;
    EDGE_SELECT met2_allEdg met2_q2 met2_extEdg;
    EDGE_SELECT -not met2_extEdg met2_sp met2_last;
    EXTE met2_last Metal2 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

RULE METAL3.SP.3 {
    CAPTION METAL3.SP.3: Min End Of Line Spacing >= 0.08;
    CONVEX_EDGE Metal3 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met3_lw;

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EXTE met3_lw Metal3 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met3_sp;
EDGE_SELECT -inside met3_lw met3_sp met3Edge1;
INTE met3Edge1 Metal3 -lt 0.1 -abut -eq 90 -intersecting only met3_q1;
EDGE_LENGTH met3_q1 -ge 0.07 met3_q2;
EDGE_EXPAND met3_q2 -inside_by 0.001 -extend_by 0.035 met3exp1;
EDGE_EXPAND met3_q2 -inside_by 0.001 met3exp2;
NOT met3exp1 met3exp2 met3Exp;
SELECT -with_edge met3Exp met3_lw met3_lwEdg;
OR met3_lwEdg met3exp2 met3_allEdg;
EDGE_SELECT met3_allEdg met3_q2 met3_extEdg;
EDGE_SELECT -not met3_extEdg met3_sp met3_last;
EXTE met3_last Metal3 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

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```

RULE METAL4.SP.3 {
  CAPTION METAL4.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal4 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met4_lw;
  EXTE met4_lw Metal4 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met4_sp;
  EDGE_SELECT -inside met4_lw met4_sp met4Edge1;
  INTE met4Edge1 Metal4 -lt 0.1 -abut -eq 90 -intersecting only met4_q1;
  EDGE_LENGTH met4_q1 -ge 0.07 met4_q2;
  EDGE_EXPAND met4_q2 -inside_by 0.001 -extend_by 0.035 met4exp1;
  EDGE_EXPAND met4_q2 -inside_by 0.001 met4exp2;
  NOT met4exp1 met4exp2 met4Exp;
  SELECT -with_edge met4Exp met4_lw met4_lwEdg;
  OR met4_lwEdg met4exp2 met4_allEdg;
  EDGE_SELECT met4_allEdg met4_q2 met4_extEdg;
  EDGE_SELECT -not met4_extEdg met4_sp met4_last;
  EXTE met4_last Metal4 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

```

```

RULE METAL5.SP.3 {
  CAPTION METAL5.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal5 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met5_lw;
  EXTE met5_lw Metal5 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met5_sp;
  EDGE_SELECT -inside met5_lw met5_sp met5Edge1;
  INTE met5Edge1 Metal5 -lt 0.1 -abut -eq 90 -intersecting only met5_q1;
  EDGE_LENGTH met5_q1 -ge 0.07 met5_q2;
  EDGE_EXPAND met5_q2 -inside_by 0.001 -extend_by 0.035 met5exp1;
  EDGE_EXPAND met5_q2 -inside_by 0.001 met5exp2;
  NOT met5exp1 met5exp2 met5Exp;
  SELECT -with_edge met5Exp met5_lw met5_lwEdg;
  OR met5_lwEdg met5exp2 met5_allEdg;
  EDGE_SELECT met5_allEdg met5_q2 met5_extEdg;
  EDGE_SELECT -not met5_extEdg met5_sp met5_last;
  EXTE met5_last Metal5 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

```

```

RULE METAL6.SP.3 {
  CAPTION METAL6.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal6 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met6_lw;
  EXTE met6_lw Metal6 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met6_sp;
  EDGE_SELECT -inside met6_lw met6_sp met6Edge1;
  INTE met6Edge1 Metal6 -lt 0.1 -abut -eq 90 -intersecting only met6_q1;
  EDGE_LENGTH met6_q1 -ge 0.07 met6_q2;

```

```

EDGE_EXPAND met6_q2 -inside_by 0.001 -extend_by 0.035 met6exp1;
EDGE_EXPAND met6_q2 -inside_by 0.001 met6exp2;
NOT met6exp1 met6exp2 met6Exp;
SELECT -with_edge met6Exp met6_lw met6_lwEdg;
OR met6_lwEdg met6exp2 met6_allEdg;
EDGE_SELECT met6_allEdg met6_q2 met6_extEdg;
EDGE_SELECT -not met6_extEdg met6_sp met6_last;
EXTE met6_last Metal6 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

```

```

RULE METAL7.SP.3 {
  CAPTION METAL7.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal7 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met7_lw;
  EXTE met7_lw Metal7 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met7_sp;
  EDGE_SELECT -inside met7_lw met7_sp met7Edge1;
  INTE met7Edge1 Metal7 -lt 0.1 -abut -eq 90 -intersecting only met7_q1;
  EDGE_LENGTH met7_q1 -ge 0.07 met7_q2;
  EDGE_EXPAND met7_q2 -inside_by 0.001 -extend_by 0.035 met7exp1;
  EDGE_EXPAND met7_q2 -inside_by 0.001 met7exp2;
  NOT met7exp1 met7exp2 met7Exp;
  SELECT -with_edge met7Exp met7_lw met7_lwEdg;
  OR met7_lwEdg met7exp2 met7_allEdg;
  EDGE_SELECT met7_allEdg met7_q2 met7_extEdg;
  EDGE_SELECT -not met7_extEdg met7_sp met7_last;
  EXTE met7_last Metal7 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

```

```

RULE METAL8.SP.3 {
  CAPTION METAL8.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal8 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met8_lw;
  EXTE met8_lw Metal8 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met8_sp;
  EDGE_SELECT -inside met8_lw met8_sp met8Edge1;
  INTE met8Edge1 Metal8 -lt 0.1 -abut -eq 90 -intersecting only met8_q1;
  EDGE_LENGTH met8_q1 -ge 0.07 met8_q2;
  EDGE_EXPAND met8_q2 -inside_by 0.001 -extend_by 0.035 met8exp1;
  EDGE_EXPAND met8_q2 -inside_by 0.001 met8exp2;
  NOT met8exp1 met8exp2 met8Exp;
  SELECT -with_edge met8Exp met8_lw met8_lwEdg;
  OR met8_lwEdg met8exp2 met8_allEdg;
  EDGE_SELECT met8_allEdg met8_q2 met8_extEdg;
  EDGE_SELECT -not met8_extEdg met8_sp met8_last;
  EXTE met8_last Metal8 -lt 0.08 -abut -lt 90 -metric opposite -output region;
}

```

```

RULE METAL9.SP.3 {
  CAPTION METAL9.SP.3: Min End Of Line Spacing >= 0.08;
  CONVEX_EDGE Metal9 -angle1 -eq 90 -angle2 -eq 90 -with_length -lt 0.1 met9_lw;
  EXTE met9_lw Metal9 -lt 0.08 -abut -lt 90 -metric opposite_extended 0.035 met9_sp;
  EDGE_SELECT -inside met9_lw met9_sp met9Edge1;
  INTE met9Edge1 Metal9 -lt 0.1 -abut -eq 90 -intersecting only met9_q1;
  EDGE_LENGTH met9_q1 -ge 0.07 met9_q2;
  EDGE_EXPAND met9_q2 -inside_by 0.001 -extend_by 0.035 met9exp1;
  EDGE_EXPAND met9_q2 -inside_by 0.001 met9exp2;
  NOT met9exp1 met9exp2 met9Exp;
  SELECT -with_edge met9Exp met9_lw met9_lwEdg;
}

```

```
OR met9_lwEdg met9exp2 met9_allEdg;  
EDGE_SELECT met9_allEdg met9_q2 met9_extEdg;  
EDGE_SELECT -not met9_extEdg met9_sp met9_last;  
EXTE met9_last Metal9 -lt 0.08 -abut -lt 90 -metric opposite -output region;  
}
```

```
RULE METAL1.A.1 {  
  CAPTION METAL1.A.1: Metal1 area must be >= 0.02 um;  
  AREA Metal1 -lt 0.02;  
}
```

```
RULE METAL2.A.1 {  
  CAPTION METAL2.A.1: Metal2 area must be >= 0.02 um;  
  AREA Metal2 -lt 0.02;  
}
```

```
RULE METAL3.A.1 {  
  CAPTION METAL3.A.1: Metal3 area must be >= 0.02 um;  
  AREA Metal3 -lt 0.02;  
}
```

```
RULE METAL4.A.1 {  
  CAPTION METAL4.A.1: Metal4 area must be >= 0.02 um;  
  AREA Metal4 -lt 0.02;  
}
```

```
RULE METAL5.A.1 {  
  CAPTION METAL5.A.1: Metal5 area must be >= 0.02 um;  
  AREA Metal5 -lt 0.02;  
}
```

```
RULE METAL6.A.1 {  
  CAPTION METAL6.A.1: Metal6 area must be >= 0.02 um;  
  AREA Metal6 -lt 0.02;  
}
```

```
RULE METAL7.A.1 {  
  CAPTION METAL7.A.1: Metal7 area must be >= 0.02 um;  
  AREA Metal7 -lt 0.02;  
}
```

```
RULE METAL8.A.1 {  
  CAPTION METAL8.A.1: Metal8 area must be >= 0.02 um;  
  AREA Metal8 -lt 0.02;  
}
```

```
RULE METAL9.A.1 {  
  CAPTION METAL9.A.1: Metal9 area must be >= 0.02 um;  
  AREA Metal9 -lt 0.02;  
}
```

```
RULE METAL10.A.1 {  
  CAPTION METAL10.A.1: Metal10 area must be >= 0.10 um;  
  AREA Metal10 -lt 0.1;  
}
```

```
RULE METAL11.A.1 {
  CAPTION METAL11.A.1: Metal11 area must be >= 0.10 um;
  AREA Metal11 -lt 0.1;
}
NOT L11511 Metal1 L70100;

RULE METAL1.EA.1 {
  CAPTION METAL1.EA.1: Metal1 enclosed area must be >= 0.05 um;
  AREA L70100 -lt 0.045;
}
NOT L11512 Metal2 L86860;

RULE METAL2.EA.1 {
  CAPTION METAL2.EA.1: Metal2 enclosed area must be >= 0.05 um;
  AREA L86860 -lt 0.055;
}
NOT L11513 Metal3 L76524;

RULE METAL3.EA.1 {
  CAPTION METAL3.EA.1: Metal3 enclosed area must be >= 0.05 um;
  AREA L76524 -lt 0.055;
}
NOT L11514 Metal4 L33812;

RULE METAL4.EA.1 {
  CAPTION METAL4.EA.1: Metal4 enclosed area must be >= 0.05 um;
  AREA L33812 -lt 0.055;
}
NOT L11515 Metal5 L23148;

RULE METAL5.EA.1 {
  CAPTION METAL5.EA.1: Metal5 enclosed area must be >= 0.05 um;
  AREA L23148 -lt 0.055;
}
NOT L11516 Metal6 L87188;

RULE METAL6.EA.1 {
  CAPTION METAL6.EA.1: Metal6 enclosed area must be >= 0.05 um;
  AREA L87188 -lt 0.055;
}
NOT L11517 Metal7 L69772;

RULE METAL7.EA.1 {
  CAPTION METAL7.EA.1: Metal7 enclosed area must be >= 0.05 um;
  AREA L69772 -lt 0.055;
}
NOT L11518 Metal8 L40565;

RULE METAL8.EA.1 {
  CAPTION METAL8.EA.1: Metal8 enclosed area must be >= 0.05 um;
  AREA L40565 -lt 0.055;
}
NOT L11519 Metal9 L50900;
```

```

RULE METAL9.EA.1 {
  CAPTION METAL9.EA.1: Metal9 enclosed area must be >= 0.05 um;
  AREA L50900 -lt 0.055;
}
NOT L77703 Metal10 L15903;

RULE METAL10.EA.1 {
  CAPTION METAL10.EA.1: Metal10 enclosed area must be >= 0.05 um;
  AREA L15903 -lt 0.11;
}
NOT L77702 Metal11 L38561;

RULE METAL11.EA.1 {
  CAPTION METAL11.EA.1: Metal11 enclosed area must be >= 0.05 um;
  AREA L38561 -lt 0.11;
}

RULE CMET.S.1 {
  CAPTION CMET.S.1: Minimum space of CapMetal >= 1.0 um;
  EXTE CapMetal CapMetal -lt 1 -output region -singular -abut lt 90;
}

RULE CMET.W.1 {
  CAPTION CMET.W.1: Minimum width of CapMetal >= 1.0 um;
  INTE CapMetal CapMetal -lt 1 -output region -singular -abut lt 90;
}

RULE CMET.E.1 {
  CAPTION CMET.E.1: Minimum Metal 1 overlap of Via 10 on CapMetal >= 0.05 um;
  SELECT -cut via10_cap Metal11 L49600;
  NOT L49600 Metal11;
  ENC via10_cap Metal11 -lt 0.05 -output region -singular -abut lt 90;
}

RULE CMET.E.2 {
  CAPTION CMET.E.2: Minimum CapMetal overlap of Via 10 >= 0.15 um;
  SELECT -cut via10_cap CapMetal L86172;
  NOT L86172 CapMetal;
  ENC via10_cap CapMetal -lt 0.15 -output region -singular -abut lt 90;
}

RULE CMET.E.4 {
  CAPTION CMET.E.4: Minimum Metal 10 overlap of CapMetal >= 0.2 um;
  SELECT -cut CapMetal Metal10 L87618;
  NOT L87618 Metal10;
  ENC CapMetal Metal10 -lt 0.2 -output region -singular -abut lt 90;
}

RULE CMET.E.3 {
  CAPTION CMET.E.3: Minimum CapMetal extension over Metal 11 >= 0.1 um;
  ENC Metal11 CapMetal -lt 0.1 -output region -singular -abut lt 90;
}

RULE VIA1.W.1 {
  CAPTION VIA1.W.1: Via1 shapes must be 0.07x0.07 rectangles;

```

```
RECT_CHK -not Via1 -eq 0.07 -by -eq 0.07;
}

RULE VIA1.SP.1 {
  CAPTION VIA1.SP.1: Via1 to Via1 spacing must be >= 0.07 um;
  EXTE Via1 Via1 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA2.W.1 {
  CAPTION VIA2.W.1: Via2 shapes must be 0.07x0.07 rectangles;
  RECT_CHK -not Via2 -eq 0.07 -by -eq 0.07;
}

RULE VIA2.SP.1 {
  CAPTION VIA2.SP.1: Via2 to Via2 spacing must be >= 0.07 um;
  EXTE Via2 Via2 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA3.W.1 {
  CAPTION VIA3.W.1: Via3 shapes must be 0.07x0.07 rectangles;
  RECT_CHK -not Via3 -eq 0.07 -by -eq 0.07;
}

RULE VIA3.SP.1 {
  CAPTION VIA3.SP.1: Via3 to Via3 spacing must be >= 0.07 um;
  EXTE Via3 Via3 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA4.W.1 {
  CAPTION VIA4.W.1: Via4 shapes must be 0.07x0.07 rectangles;
  RECT_CHK -not Via4 -eq 0.07 -by -eq 0.07;
}

RULE VIA4.SP.1 {
  CAPTION VIA4.SP.1: Via4 to Via4 spacing must be >= 0.07 um;
  EXTE Via4 Via4 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA5.W.1 {
  CAPTION VIA5.W.1: Via5 shapes must be 0.07x0.07 rectangles;
  RECT_CHK -not Via5 -eq 0.07 -by -eq 0.07;
}

RULE VIA5.SP.1 {
  CAPTION VIA5.SP.1: Via5 to Via5 spacing must be >= 0.07 um;
  EXTE Via5 Via5 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA6.W.1 {
  CAPTION VIA6.W.1: Via6 shapes must be 0.07x0.07 rectangles;
  RECT_CHK -not Via6 -eq 0.07 -by -eq 0.07;
}

RULE VIA6.SP.1 {
  CAPTION VIA6.SP.1: Via6 to Via6 spacing must be >= 0.07 um;
```



```

    EXTE Via6 Via6 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA7.W.1 {
    CAPTION VIA7.W.1: Via7 shapes must be 0.07x0.07 rectangles;
    RECT_CHK -not Via7 -eq 0.07 -by -eq 0.07;
}

RULE VIA7.SP.1 {
    CAPTION VIA7.SP.1: Via7 to Via7 spacing must be >= 0.07 um;
    EXTE Via7 Via7 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA8.W.1 {
    CAPTION VIA8.W.1: Via8 shapes must be 0.07x0.07 rectangles;
    RECT_CHK -not Via8 -eq 0.07 -by -eq 0.07;
}

RULE VIA8.SP.1 {
    CAPTION VIA8.SP.1: Via8 to Via8 spacing must be >= 0.07 um;
    EXTE Via8 Via8 -lt 0.07 -output region -singular -abut lt 90;
}

RULE VIA9.W.1 {
    CAPTION VIA9.W.1: Via9 shapes must be 0.18x0.18 rectangles;
    RECT_CHK -not Via9 -eq 0.18 -by -eq 0.18;
}

RULE VIA9.SP.1 {
    CAPTION VIA9.SP.1: Via9 to Via9 spacing must be >= 0.18 um;
    EXTE Via9 Via9 -lt 0.18 -output region -singular -abut lt 90;
}

RULE VIA10.W.1 {
    CAPTION VIA10.W.1: Via10 shapes must be 0.18x0.18 rectangles;
    RECT_CHK -not Via10 -eq 0.18 -by -eq 0.18;
}

RULE VIA10.SP.1 {
    CAPTION VIA10.SP.1: Via10 to Via10 spacing must be >= 0.18 um;
    EXTE Via10 Via10 -lt 0.18 -output region -singular -abut lt 90;
}

RULE VIA1.E.1 {
    CAPTION VIA1.E.1: Metal1 to Via1 enclosure must be >= 0.005 um;
    ENC Via1 metal1_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;
}
AND Via1 metal1_conn L48147;

RULE VIA1.E.2 {
    CAPTION VIA1.E.2: Metal1 to Via1 enclosure on opposite sides must be >= 0.03 um;
    GROW L48147 -left 0.03 -right 0.03 L79310;
    SELECT -inside L79310 metal1_conn L61312;
    NOT L48147 L61312 L97988;
    GROW L97988 -top 0.03 -bottom 0.03 L45492;
}

```

```
SELECT -inside L45492 metal1_conn L57692;  
NOT L97988 L57692;  
}
```

```
RULE VIA2.E.1 {  
  CAPTION VIA2.E.1: Metal2 to Via2 enclosure must be  $\geq 0.005$  um;  
  ENC Via2 metal2_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via2 metal2_conn L22003;
```

```
RULE VIA2.E.2 {  
  CAPTION VIA2.E.2: Metal2 to Via2 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L22003 -left 0.03 -right 0.03 L45579;  
  SELECT -inside L45579 metal2_conn L32443;  
  NOT L22003 L32443 L60436;  
  GROW L60436 -top 0.03 -bottom 0.03 L50898;  
  SELECT -inside L50898 metal2_conn L22027;  
  NOT L60436 L22027;  
}
```

```
RULE VIA3.E.1 {  
  CAPTION VIA3.E.1: Metal3 to Via3 enclosure must be  $\geq 0.005$  um;  
  ENC Via3 metal3_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via3 metal3_conn L95859;
```

```
RULE VIA3.E.2 {  
  CAPTION VIA3.E.2: Metal3 to Via3 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L95859 -left 0.03 -right 0.03 L62370;  
  SELECT -inside L62370 metal3_conn L42078;  
  NOT L95859 L42078 L54118;  
  GROW L54118 -top 0.03 -bottom 0.03 L54678;  
  SELECT -inside L54678 metal3_conn L95398;  
  NOT L54118 L95398;  
}
```

```
RULE VIA4.E.1 {  
  CAPTION VIA4.E.1: Metal4 to Via4 enclosure must be  $\geq 0.005$  um;  
  ENC Via4 metal4_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via4 metal4_conn L69715;
```

```
RULE VIA4.E.2 {  
  CAPTION VIA4.E.2: Metal4 to Via4 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L69715 -left 0.03 -right 0.03 L46022;  
  SELECT -inside L46022 metal4_conn L85893;  
  NOT L69715 L85893 L16336;  
  GROW L16336 -top 0.03 -bottom 0.03 L36674;  
  SELECT -inside L36674 metal4_conn L51171;  
  NOT L16336 L51171;  
}
```

```
RULE VIA5.E.1 {  
  CAPTION VIA5.E.1: Metal5 to Via5 enclosure must be  $\geq 0.005$  um;  
  ENC Via5 metal5_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;
```

```
}  
AND Via5 metal5_conn L43571;
```

```
RULE VIA5.E.2 {  
  CAPTION VIA5.E.2: Metal5 to Via5 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L43571 -left 0.03 -right 0.03 L64466;  
  SELECT -inside L64466 metal5_conn L24418;  
  NOT L43571 L24418 L89764;  
  GROW L89764 -top 0.03 -bottom 0.03 L18437;  
  SELECT -inside L18437 metal5_conn L20611;  
  NOT L89764 L20611;  
}
```

```
RULE VIA6.E.1 {  
  CAPTION VIA6.E.1: Metal6 to Via6 enclosure must be  $\geq 0.005$  um;  
  ENC Via6 metal6_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via6 metal6_conn L17427;
```

```
RULE VIA6.E.2 {  
  CAPTION VIA6.E.2: Metal6 to Via6 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L17427 -left 0.03 -right 0.03 L85740;  
  SELECT -inside L85740 metal6_conn L72383;  
  NOT L17427 L72383 L40141;  
  GROW L40141 -top 0.03 -bottom 0.03 L11011;  
  SELECT -inside L11011 metal6_conn L24165;  
  NOT L40141 L24165;  
}
```

```
RULE VIA7.E.1 {  
  CAPTION VIA7.E.1: Metal7 to Via7 enclosure must be  $\geq 0.005$  um;  
  ENC Via7 metal7_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via7 metal7_conn L76013;
```

```
RULE VIA7.E.2 {  
  CAPTION VIA7.E.2: Metal7 to Via7 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L76013 -left 0.03 -right 0.03 L9579;  
  SELECT -inside L9579 metal7_conn L77354;  
  NOT L76013 L77354 L90834;  
  GROW L90834 -top 0.03 -bottom 0.03 L33997;  
  SELECT -inside L33997 metal7_conn L99327;  
  NOT L90834 L99327;  
}
```

```
RULE VIA8.E.1 {  
  CAPTION VIA8.E.1: Metal8 to Via8 enclosure must be  $\geq 0.005$  um;  
  ENC Via8 metal8_conn -lt 0.005 -output region -singular -abut lt 90 -outside_also;  
}  
AND Via8 metal8_conn L2157;
```

```
RULE VIA8.E.2 {  
  CAPTION VIA8.E.2: Metal8 to Via8 enclosure on opposite sides must be  $\geq 0.03$  um;  
  GROW L2157 -left 0.03 -right 0.03 L82623;  
  SELECT -inside L82623 metal8_conn L55130;
```

```

NOT L2157 L55130 L10147;
GROW L10147 -top 0.03 -bottom 0.03 L58106;
SELECT -inside L58106 metal8_conn L29085;
NOT L10147 L29085;
}

RULE VIA9.E.1 {
  CAPTION VIA9.E.1: Metal9 to Via9 enclosure must be >= 0.015 um;
  ENC Via9 metal9_conn -lt 0.015 -output region -singular -abut lt 90 -outside_also;
}
AND Via9 metal9_conn L28301;

RULE VIA9.E.2 {
  CAPTION VIA9.E.2: Metal9 to Via9 enclosure on opposite sides must be >= 0.04 um;
  GROW L28301 -left 0.04 -right 0.04 L32306;
  SELECT -inside L32306 metal9_conn L19774;
  NOT L28301 L19774 L42543;
  GROW L42543 -top 0.04 -bottom 0.04 L24121;
  SELECT -inside L24121 metal9_conn L36362;
  NOT L42543 L36362;
}

RULE VIA10.E.1 {
  CAPTION VIA10.E.1: Metal10 to Via10 enclosure must be >= 0.015 um;
  ENC Via10 Metal10 -lt 0.015 -output region -singular -abut lt 90 -outside_also;
}
AND Metal10 Via10 L1578;

RULE VIA10.E.2 {
  CAPTION VIA10.E.2: Metal10 to Via10 enclosure on opposite sides must be >= 0.04 um;
  GROW L1578 -left 0.04 -right 0.04 L13315;
  SELECT -inside L13315 Metal10 L77898;
  NOT L1578 L77898 L22439;
  GROW L22439 -top 0.04 -bottom 0.04 L21067;
  SELECT -inside L21067 Metal10 L87079;
  NOT L22439 L87079;
}

RULE VIA1.E.3 {
  CAPTION VIA1.E.3: At least 2 Via1 must be used to join Metal1 and Metal2 when they are within
  3.0um of a metal plate (Metal1/Metal2) when the metal plate size is has width > 1.5 and length > 1.5;
  COPY rule_VIA1_E_3;
}

RULE VIA2.E.3 {
  CAPTION VIA2.E.3: At least 2 Via2 must be used to join Metal2 and Metal3 when they are within
  3.0um of a metal plate (Metal2/Metal3) when the metal plate size is has width > 1.5 and length > 1.5;
  COPY rule_VIA2_E_3;
}

RULE VIA3.E.3 {
  CAPTION VIA3.E.3: At least 2 Via3 must be used to join Metal3 and Metal4 when they are within
  3.0um of a metal plate (Metal3/Metal4) when the metal plate size is has width > 1.5 and length > 1.5;
  COPY rule_VIA3_E_3;
}

```

```
RULE VIA4.E.3 {  
    CAPTION VIA4.E.3: At least 2 Via4 must be used to join Metal4 and Metal5 when they are within  
    3.0um of a metal plate (Metal4/Metal5) when the metal plate size is has width > 1.5 and length > 1.5;  
    COPY rule_VIA4_E_3;  
}
```

```
RULE VIA5.E.3 {  
    CAPTION VIA5.E.3: At least 2 Via5 must be used to join Metal5 and Metal6 when they are within  
    3.0um of a metal plate (Metal5/Metal6) when the metal plate size is has width > 1.5 and length > 1.5;  
    COPY rule_VIA5_E_3;  
}
```

```
RULE VIA6.E.3 {  
    CAPTION VIA6.E.3: At least 2 Via6 must be used to join Metal6 and Metal7 when they are within  
    3.0um of a metal plate (Metal6/Metal7) when the metal plate size is has width > 1.5 and length > 1.5;  
    COPY rule_VIA6_E_3;  
}
```

```
RULE VIA7.E.3 {  
    CAPTION VIA7.E.3: At least 2 Via7 must be used to join Metal7 and Metal8 when they are within  
    3.0um of a metal plate (Metal7/Metal8) when the metal plate size is has width > 1.5 and length > 1.5;  
    COPY rule_VIA7_E_3;  
}
```

```
RULE VIA8.E.3 {  
    CAPTION VIA8.E.3: At least 2 Via8 must be used to join Metal8 and Metal9 when they are within  
    3.0um of a metal plate (Metal8/Metal9) when the metal plate size is has width > 1.5 and length > 1.5;  
    COPY rule_VIA8_E_3;  
}
```

```
RULE VIA1.X.1 {  
    CAPTION VIA1.X.1: Metal1 must connect to Metal2 with >= 2 Via1 spaced < 0.30 um or >= 4 Via1  
    spaced < 0.60 um;  
    COPY rule_VIA1_X_1;  
}
```

```
RULE VIA2.X.1 {  
    CAPTION VIA2.X.1: Metal2 must connect to Metal3 with >= 2 Via2 spaced < 0.30 um or >= 4 Via2  
    spaced < 0.60 um;  
    COPY rule_VIA2_X_1;  
}
```

```
RULE VIA3.X.1 {  
    CAPTION VIA3.X.1: Metal3 must connect to Metal4 with >= 2 Via3 spaced < 0.30 um or >= 4 Via3  
    spaced < 0.60 um;  
    COPY rule_VIA3_X_1;  
}
```

```
RULE VIA4.X.1 {  
    CAPTION VIA4.X.1: Metal4 must connect to Metal5 with >= 2 Via4 spaced < 0.30 um or >= 4 Via4  
    spaced < 0.60 um;  
    COPY rule_VIA4_X_1;  
}
```

```
RULE VIA5.X.1 {  
    CAPTION VIA5.X.1: Metal5 must connect to Metal6 with  $\geq 2$  Via5 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 4$  Via5  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA5_X_1;  
}
```

```
RULE VIA6.X.1 {  
    CAPTION VIA6.X.1: Metal6 must connect to Metal7 with  $\geq 2$  Via6 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 4$  Via6  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA6_X_1;  
}
```

```
RULE VIA7.X.1 {  
    CAPTION VIA7.X.1: Metal7 must connect to Metal8 with  $\geq 2$  Via7 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 4$  Via7  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA7_X_1;  
}
```

```
RULE VIA8.X.1 {  
    CAPTION VIA8.X.1: Metal8 must connect to Metal9 with  $\geq 2$  Via8 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 4$  Via8  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA8_X_1;  
}
```

```
RULE VIA1.X.2 {  
    CAPTION VIA1.X.2: Metal1 must connect to Metal2 with  $\geq 4$  Via1 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 9$  Via1  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA1_X_2;  
}
```

```
RULE VIA2.X.2 {  
    CAPTION VIA2.X.2: Metal2 must connect to Metal3 with  $\geq 4$  Via2 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 9$  Via2  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA2_X_2;  
}
```

```
RULE VIA3.X.2 {  
    CAPTION VIA3.X.2: Metal3 must connect to Metal4 with  $\geq 4$  Via3 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 9$  Via3  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA3_X_2;  
}
```

```
RULE VIA4.X.2 {  
    CAPTION VIA4.X.2: Metal4 must connect to Metal5 with  $\geq 4$  Via4 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 9$  Via4  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA4_X_2;  
}
```

```
RULE VIA5.X.2 {  
    CAPTION VIA5.X.2: Metal5 must connect to Metal6 with  $\geq 4$  Via5 spaced  $< 0.30\text{ }\mu\text{m}$  or  $\geq 9$  Via5  
    spaced  $< 0.60\text{ }\mu\text{m}$ ;  
    COPY rule_VIA5_X_2;  
}
```

```
RULE VIA6.X.2 {
```

CAPTION VIA6.X.2: Metal6 must connect to Metal7 with ≥ 4 Via6 spaced $< 0.30 \mu\text{m}$ or ≥ 9 Via6 spaced $< 0.60 \mu\text{m}$;

COPY rule_VIA6_X_2;
}

RULE VIA7.X.2 {

CAPTION VIA7.X.2: Metal7 must connect to Metal8 with ≥ 4 Via7 spaced $< 0.30 \mu\text{m}$ or ≥ 9 Via7 spaced $< 0.60 \mu\text{m}$;

COPY rule_VIA7_X_2;
}

RULE VIA8.X.2 {

CAPTION VIA8.X.2: Metal8 must connect to Metal9 with ≥ 4 Via8 spaced $< 0.30 \mu\text{m}$ or ≥ 9 Via8 spaced $< 0.60 \mu\text{m}$;

COPY rule_VIA8_X_2;
}

RULE VIAk.X.3_VIAk.X.4 {

CAPTION VIAk.X.3_VIAk.X.4: Metal1 through Metal6 stack must have two or more stacked Vias at all levels;

COPY rule_VIAk_X_3_X_4a;
}

RULE VIAk.X.3_VIAk.X.4_2 {

CAPTION VIAk.X.3_VIAk.X.4: Metal2 through Metal7 stack must have two or more stacked Vias at all levels;

COPY rule_VIAk_X_3_X_4b;
}

RULE VIAk.X.3_VIAk.X.4_3 {

CAPTION VIAk.X.3_VIAk.X.4: Metal3 through Metal8 stack must have two or more stacked Vias at all levels;

COPY rule_VIAk_X_3_X_4c;
}

RULE VIAk.X.3_VIAk.X.4_4 {

CAPTION VIAk.X.3_VIAk.X.4: Metal4 through Metal9 stack must have two or more stacked Vias at all levels;

COPY rule_VIAk_X_3_X_4d;
}

AND Nwell ntap L89122;

AND Nwell psd L19028;

SIZE L89122 -by 20 -inside_of Nwell -step 0.6 L97857;

RULE LATCHUP.1 {

CAPTION LATCHUP.1: The maximum distance from any point in a P+ source/drain Active Area to the nearest Nwell pick-up in the same Nwell $\geq 20.0 \mu\text{m}$;

NOT L19028 L97857;
}

NOT bulk Nwell L8219;

NOT ptap Nwell L47516;

OR NPNdummy Nwell L88683;

OR L88683 PNPdummy L29684;

NOT nsd L29684 L62163;

SIZE L47516 -by 20 -inside_of L8219 -step 0.21 L35547;

```

RULE LATCHUP.2 {
  CAPTION LATCHUP.2: The maximum distance from any point in a N+ source/drain Active Area to the
  nearest Psub pick-up in the same Psub >= 20.0 um;
  NOT L62163 L35547;
}

RULE LATCHUP.3 {
  CAPTION LATCHUP.3: Minimum I/O or ESD NMOS to PMOS spacing >= 10.0 um;
  SELECT -cut nmos_io_esd pmos_io_esd L53421;
  SELECT -cut pmos_io_esd nmos_io_esd L63347;
  AND L53421 L63347;
  EXTE nmos_io_esd pmos_io_esd -lt 10 -output region -singular -abut lt 90;
}

RULE LATCHUP.4 {
  CAPTION LATCHUP.4: Minimum I/O or ESD NMOS to PMOS spacing when not blocked by a double
  guardring >= 30.0 um;
  SELECT -cut nmos_io_esd pmos_io_esd L53422;
  SELECT -cut pmos_io_esd nmos_io_esd L63348;
  AND L53422 L63348;
  EXTE nmos_io_esd pmos_io_esd -lt 30 -output region -singular -abut lt 90 L51316;
  NOT L51316 ntap L35560;
  SELECT -interact L35560 nmos_io_esd L11845;
  SELECT -interact L11845 pmos_io_esd;
  NOT L51316 ptap L75978;
  SELECT -interact L75978 nmos_io_esd L83094;
  SELECT -interact L83094 pmos_io_esd;
}
AND ESDdummy Oxide L23388;
EDGE_BOOLEAN -inside Poly L23388 L23479;

RULE ESD.1 {
  CAPTION ESD.1: ESD gate width must be >= 10.0 um and <= 30.0 um;
  EDGE_LENGTH -not L23479 -lege 10 30;
}
AND ESDdummy rule_ESD_4_nmos L59531;

RULE ESD.4 {
  CAPTION ESD.4: N+ source should connect to Pad or Bulk;
  COPY L59531;
}
AND ESDdummy rule_ESD_4_pmos L99949;

RULE ESD.4_2 {
  CAPTION ESD.4: P+ source should connect to Pad or Nwell;
  COPY L99949;
}
AND ESDdummy rule_ESD_5 L90158;

RULE ESD.5 {
  CAPTION ESD.5: NMOS I/O and ESD devices must be inside P+ rings;
  COPY L90158;
}
AND ESDdummy rule_ESD_6 L90159;

```



```

RULE ESD.6 {
    CAPTION ESD.6: PMOS I/O and ESD devices must be inside N+ rings;
    COPY L90159;
}
AND ESDdummy rule_ESD_7_nmos L72078;

RULE ESD.7 {
    CAPTION ESD.7: P+ taps can NOT butt NMOS I/O and ESD devices;
    COPY L72078;
}
AND ESDdummy rule_ESD_7_pmos L12496;

RULE ESD.7_2 {
    CAPTION ESD.7: N+ taps can NOT butt PMOS I/O and ESD devices;
    COPY L12496;
}
AND ESDdummy rule_ESD_8_nmos L42927;

RULE ESD.8 {
    CAPTION ESD.8: N+ drains must be non-salicated (except Contact area);
    COPY L42927;
}
AND ESDdummy rule_ESD_8_pmos L83345;

RULE ESD.8_2 {
    CAPTION ESD.8: P+ drains must be non-salicated (except Contact area);
    COPY L83345;
}
EDGE_BOOLEAN -inside SiProt L23388 L9896;

RULE ESD.11 {
    CAPTION ESD.11: Minimum SiProt to Poly gate overlap in NMOS and PMOS drains >= 0.05 um;
    INTE L23479 L9896 -lt 0.05 -output region -abut lt 90;
}

RULE ESD.12 {
    CAPTION ESD.12: Minimum enclosure of SiProt edge to Poly gate edge in NMOS and PMOS drains
    >= 0.9 um;
    ENC L23479 L9896 -lt 0.9 -output region -abut lt 90;
}
AND ESDdummy SiProt L88738;

RULE ESD.13 {
    CAPTION ESD.13: Minimum SiProt to Oxide overlap in NMOS and PMOS I/O drains >= 0.9 um;
    INTE L23388 L88738 -lt 0.9 -output region -singular -abut lt 90;
}
AND ESDdummy Poly L23215;
EDGE_BOOLEAN -inside Oxide L23215 L43257;

RULE ESD.14 {
    CAPTION ESD.14: Exact gate length of NMOS and PMOS in I/O buffers and in Vdd to Vss ESD
    protection == 0.2 um;
    EDGE_LENGTH L43257 -ne 0.2;
}

```

AND Cont L23388 L43275;

RULE ESD.15 {

CAPTION ESD.15: Minimu Poly gate to Contact spacing in NMOS and PMOS in I/O buffers and in Vdd to Vss ESD protection $\geq 0.12 \mu\text{m}$;

EDGE_EXPAND L43275 -inside_by 0.001 L39241;

EDGE_EXPAND L23479 -inside_by 0.001 L64525;

AND L39241 L64525;

EXTE L43275 L23479 -lt 0.12 -output region -abut lt 90;

}

RULE BONDPAD.E.1 {

CAPTION BONDPAD.E.1: Metal1 to Bondpad enclosure must be $\geq 2.0 \mu\text{m}$;

SELECT -cut Bondpad bondpad_metal1_filled L93393;

NOT L93393 bondpad_metal1_filled;

ENC Bondpad bondpad_metal1_filled -lt 2 -output region -singular -abut lt 90;

}

RULE BONDPAD.SP.2 {

CAPTION BONDPAD.SP.2: Bondpad Metal1 to Metal1 spacing must be $\geq 3.0 \mu\text{m}$;

EXTE Metal1 bondpad_metal1_filled -lt 3 -output region -singular -abut lt 90;

}

RULE BONDPAD.E.1_2 {

CAPTION BONDPAD.E.1: Metal2 to Bondpad enclosure must be $\geq 2.0 \mu\text{m}$;

SELECT -cut Bondpad bondpad_metal2_filled L3728;

NOT L3728 bondpad_metal2_filled;

ENC Bondpad bondpad_metal2_filled -lt 2 -output region -singular -abut lt 90;

}

RULE BONDPAD.SP.2_2 {

CAPTION BONDPAD.SP.2: Bondpad Metal2 to Metal2 spacing must be $\geq 3.0 \mu\text{m}$;

EXTE Metal2 bondpad_metal2_filled -lt 3 -output region -singular -abut lt 90;

}

RULE BONDPAD.E.1_3 {

CAPTION BONDPAD.E.1: Metal3 to Bondpad enclosure must be $\geq 2.0 \mu\text{m}$;

SELECT -cut Bondpad bondpad_metal3_filled L53233;

NOT L53233 bondpad_metal3_filled;

ENC Bondpad bondpad_metal3_filled -lt 2 -output region -singular -abut lt 90;

}

RULE BONDPAD.SP.2_3 {

CAPTION BONDPAD.SP.2: Bondpad Metal3 to Metal3 spacing must be $\geq 3.0 \mu\text{m}$;

EXTE Metal3 bondpad_metal3_filled -lt 3 -output region -singular -abut lt 90;

}

RULE BONDPAD.E.1_4 {

CAPTION BONDPAD.E.1: Metal4 to Bondpad enclosure must be $\geq 2.0 \mu\text{m}$;

SELECT -cut Bondpad bondpad_metal4_filled L57102;

NOT L57102 bondpad_metal4_filled;

ENC Bondpad bondpad_metal4_filled -lt 2 -output region -singular -abut lt 90;

}

RULE BONDPAD.SP.2_4 {

```

    CAPTION BONDPAD.SP.2: Bondpad Metal4 to Metal4 spacing must be >= 3.0 um;
    EXTE Metal4 bondpad_metal4_filled -lt 3 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.1_5 {
    CAPTION BONDPAD.E.1: Metal5 to Bondpad enclosure must be >= 2.0 um;
    SELECT -cut Bondpad bondpad_metal5_filled L99859;
    NOT L99859 bondpad_metal5_filled;
    ENC Bondpad bondpad_metal5_filled -lt 2 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.2_5 {
    CAPTION BONDPAD.SP.2: Bondpad Metal5 to Metal5 spacing must be >= 3.0 um;
    EXTE Metal5 bondpad_metal5_filled -lt 3 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.1_6 {
    CAPTION BONDPAD.E.1: Metal6 to Bondpad enclosure must be >= 2.0 um;
    SELECT -cut Bondpad bondpad_metal6_filled L10476;
    NOT L10476 bondpad_metal6_filled;
    ENC Bondpad bondpad_metal6_filled -lt 2 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.2_6 {
    CAPTION BONDPAD.SP.2: Bondpad Metal6 to Metal6 spacing must be >= 3.0 um;
    EXTE Metal6 bondpad_metal6_filled -lt 3 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.1_7 {
    CAPTION BONDPAD.E.1: Metal7 to Bondpad enclosure must be >= 2.0 um;
    SELECT -cut Bondpad bondpad_metal7_filled L46485;
    NOT L46485 bondpad_metal7_filled;
    ENC Bondpad bondpad_metal7_filled -lt 2 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.2_7 {
    CAPTION BONDPAD.SP.2: Bondpad Metal7 to Metal7 spacing must be >= 3.0 um;
    EXTE Metal7 bondpad_metal7_filled -lt 3 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.1_8 {
    CAPTION BONDPAD.E.1: Metal8 to Bondpad enclosure must be >= 2.0 um;
    SELECT -cut Bondpad bondpad_metal8_filled L36150;
    NOT L36150 bondpad_metal8_filled;
    ENC Bondpad bondpad_metal8_filled -lt 2 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.2_8 {
    CAPTION BONDPAD.SP.2: Bondpad Metal8 to Metal8 spacing must be >= 3.0 um;
    EXTE Metal8 bondpad_metal8_filled -lt 3 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.1_9 {
    CAPTION BONDPAD.E.1: Metal9 to Bondpad enclosure must be >= 2.0 um;
    SELECT -cut Bondpad bondpad_metal9_filled L74185;

```

```
NOT L74185 bondpad_metal9_filled;  
ENC Bondpad bondpad_metal9_filled -lt 2 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.SP.2_9 {  
  CAPTION BONDPAD.SP.2: Bondpad Metal9 to Metal9 spacing must be >= 3.0 um;  
  EXTE Metal9 bondpad_metal9_filled -lt 3 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.1_10 {  
  CAPTION BONDPAD.E.1: Metal10 to Bondpad enclosure must be >= 2.0 um;  
  SELECT -cut Bondpad bondpad_metal10_filled L43841;  
  NOT L43841 bondpad_metal10_filled;  
  ENC Bondpad bondpad_metal10_filled -lt 2 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.SP.2_10 {  
  CAPTION BONDPAD.SP.2: Bondpad Metal10 to Metal10 spacing must be >= 3.0 um;  
  EXTE Metal10 bondpad_metal10_filled -lt 3 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.1_11 {  
  CAPTION BONDPAD.E.1: Metal11 to Bondpad enclosure must be >= 2.0 um;  
  SELECT -cut Bondpad bondpad_metal11_filled L13120;  
  NOT L13120 bondpad_metal11_filled;  
  ENC Bondpad bondpad_metal11_filled -lt 2 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.SP.2_11 {  
  CAPTION BONDPAD.SP.2: Bondpad Metal11 to Metal11 spacing must be >= 3.0 um;  
  EXTE Metal11 bondpad_metal11_filled -lt 3 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.B.1A {  
  CAPTION BONDPAD.B.1A: Bondpad Metal1 must have bevelled corners;  
  COPY rule_BONDPAD_B_1_m1;  
}
```

```
RULE BONDPAD.B.1A_2 {  
  CAPTION BONDPAD.B.1A: Bondpad Metal2 must have bevelled corners;  
  COPY rule_BONDPAD_B_1_m2;  
}
```

```
RULE BONDPAD.B.1A_3 {  
  CAPTION BONDPAD.B.1A: Bondpad Metal3 must have bevelled corners;  
  COPY rule_BONDPAD_B_1_m3;  
}
```

```
RULE BONDPAD.B.1A_4 {  
  CAPTION BONDPAD.B.1A: Bondpad Metal4 must have bevelled corners;  
  COPY rule_BONDPAD_B_1_m4;  
}
```

```
RULE BONDPAD.B.1A_5 {  
  CAPTION BONDPAD.B.1A: Bondpad Metal5 must have bevelled corners;
```

```

    COPY rule_BONDPAD_B_1_m5;
}

RULE BONDPAD.B.1A_6 {
    CAPTION BONDPAD.B.1A: Bondpad Metal6 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m6;
}

RULE BONDPAD.B.1A_7 {
    CAPTION BONDPAD.B.1A: Bondpad Metal7 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m7;
}

RULE BONDPAD.B.1A_8 {
    CAPTION BONDPAD.B.1A: Bondpad Metal8 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m8;
}

RULE BONDPAD.B.1A_9 {
    CAPTION BONDPAD.B.1A: Bondpad Metal9 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m9;
}

RULE BONDPAD.B.1A_10 {
    CAPTION BONDPAD.B.1A: Bondpad Metal10 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m10;
}

RULE BONDPAD.B.1A_11 {
    CAPTION BONDPAD.B.1A: Bondpad Metal11 must have bevelled corners;
    COPY rule_BONDPAD_B_1_m11;
}

RULE BONDPAD.W.1 {
    CAPTION BONDPAD.W.1: Bondpad width must be >= 45.0 um;
    SELECT -cut bondpad_sq bondpad_to_die_edge L38661;
    SELECT -cut bondpad_to_die_edge bondpad_sq L84099;
    AND L38661 L84099;
    EXTE bondpad_sq bondpad_to_die_edge -lt 5 -output positive1 -singular -abut lt 90 L54252;
    EDGE_LENGTH L54252 -lt 45;
}

RULE BONDPAD.SP.1 {
    CAPTION BONDPAD.SP.1: Bondpad to Bondpad spacing must be >= 8.0 um;
    EXTE Bondpad Bondpad -lt 8 -output region -singular -abut lt 90;
}

RULE BONDPAD.L.1 {
    CAPTION BONDPAD.L.1: Bondpad length must be >= 68.0 um;
    COPY rule_BONDPAD_L_1;
}
ANGLE bondpad_metal1 -ltgt 0 90 L43679;

RULE BONDPAD.B.1B {
    CAPTION BONDPAD.B.1B: Bondpad Metal1 beveled segments must be >= 1.8 um and <= 3.2 um;

```

```

EDGE_LENGTH -not L43679 -lege 1.8 3.2;
}
ANGLE bondpad_metal2 -ltgt 0 90 L26398;

RULE BONDPAD.B.1B_2 {
  CAPTION BONDPAD.B.1B: Bondpad Metal2 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L26398 -lege 1.8 3.2;
}
ANGLE bondpad_metal3 -ltgt 0 90 L9117;

RULE BONDPAD.B.1B_3 {
  CAPTION BONDPAD.B.1B: Bondpad Metal3 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L9117 -lege 1.8 3.2;
}
ANGLE bondpad_metal4 -ltgt 0 90 L91836;

RULE BONDPAD.B.1B_4 {
  CAPTION BONDPAD.B.1B: Bondpad Metal4 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L91836 -lege 1.8 3.2;
}
ANGLE bondpad_metal5 -ltgt 0 90 L74555;

RULE BONDPAD.B.1B_5 {
  CAPTION BONDPAD.B.1B: Bondpad Metal5 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L74555 -lege 1.8 3.2;
}
ANGLE bondpad_metal6 -ltgt 0 90 L57274;

RULE BONDPAD.B.1B_6 {
  CAPTION BONDPAD.B.1B: Bondpad Metal6 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L57274 -lege 1.8 3.2;
}
ANGLE bondpad_metal7 -ltgt 0 90 L39993;

RULE BONDPAD.B.1B_7 {
  CAPTION BONDPAD.B.1B: Bondpad Metal7 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L39993 -lege 1.8 3.2;
}
ANGLE bondpad_metal8 -ltgt 0 90 L22712;

RULE BONDPAD.B.1B_8 {
  CAPTION BONDPAD.B.1B: Bondpad Metal8 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L22712 -lege 1.8 3.2;
}
ANGLE bondpad_metal9 -ltgt 0 90 L5431;

RULE BONDPAD.B.1B_9 {
  CAPTION BONDPAD.B.1B: Bondpad Metal9 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L5431 -lege 1.8 3.2;
}
ANGLE bondpad_metal10 -ltgt 0 90 L35077;

RULE BONDPAD.B.1B_10 {
  CAPTION BONDPAD.B.1B: Bondpad Metal10 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L35077 -lege 1.8 3.2;
}

```

```

}
ANGLE bondpad_metal11 -ltgt 0 90 L52358;

RULE BONDPAD.B.1B_11 {
  CAPTION BONDPAD.B.1B: Bondpad Metal11 beveled segments must be >= 1.8 um and <= 3.2 um;
  EDGE_LENGTH -not L52358 -lege 1.8 3.2;
}
AND Via1 bondpad_metal1 L87123;

RULE BONDPAD.SP.3 {
  CAPTION BONDPAD.SP.3: Bondpad Via1 to Bondpad Via1 spacing must be >= 0.22 um;
  EXTE L87123 L87123 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via2 bondpad_metal2 L21299;

RULE BONDPAD.SP.3_2 {
  CAPTION BONDPAD.SP.3: Bondpad Via2 to Bondpad Via2 spacing must be >= 0.22 um;
  EXTE L21299 L21299 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via3 bondpad_metal3 L55475;

RULE BONDPAD.SP.3_3 {
  CAPTION BONDPAD.SP.3: Bondpad Via3 to Bondpad Via3 spacing must be >= 0.22 um;
  EXTE L55475 L55475 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via4 bondpad_metal4 L77645;

RULE BONDPAD.SP.3_4 {
  CAPTION BONDPAD.SP.3: Bondpad Via4 to Bondpad Via4 spacing must be >= 0.22 um;
  EXTE L77645 L77645 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via5 bondpad_metal5 L43469;

RULE BONDPAD.SP.3_5 {
  CAPTION BONDPAD.SP.3: Bondpad Via5 to Bondpad Via5 spacing must be >= 0.22 um;
  EXTE L43469 L43469 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via6 bondpad_metal6 L9293;

RULE BONDPAD.SP.3_6 {
  CAPTION BONDPAD.SP.3: Bondpad Via6 to Bondpad Via6 spacing must be >= 0.22 um;
  EXTE L9293 L9293 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via7 bondpad_metal7 L75117;

RULE BONDPAD.SP.4 {
  CAPTION BONDPAD.SP.4: Bondpad Via7 to Bondpad Via7 spacing must be >= 0.22 um;
  EXTE L75117 L75117 -lt 0.22 -output region -singular -abut lt 90;
}
AND Via8 bondpad_metal8 L40941;

RULE BONDPAD.SP.4_2 {
  CAPTION BONDPAD.SP.4: Bondpad Via8 to Bondpad Via8 spacing must be >= 0.22 um;
  EXTE L40941 L40941 -lt 0.22 -output region -singular -abut lt 90;
}

```

AND Via9 bondpad_metal9 L93235;

```
RULE BONDPAD.SP.4_3 {  
  CAPTION BONDPAD.SP.4: Bondpad Via9 to Bondpad Via9 spacing must be >= 0.54 um;  
  EXTE L93235 L93235 -lt 0.54 -output region -singular -abut lt 90;  
}  
AND Via10 bondpad_metal10 L88219;
```

```
RULE BONDPAD.SP.4_4 {  
  CAPTION BONDPAD.SP.4: Bondpad Via10 to Bondpad Via10 spacing must be >= 0.54 um;  
  EXTE L88219 L88219 -lt 0.54 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2 {  
  CAPTION BONDPAD.E.2: Bondpad Metal1 to Via1 enclosure must be >= 0.05 um;  
  SELECT -cut Via1 bondpad_metal1 L91026;  
  NOT L91026 bondpad_metal1;  
  ENC Via1 bondpad_metal1 -lt 0.05 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2_2 {  
  CAPTION BONDPAD.E.2: Bondpad Metal2 to Via2 enclosure must be >= 0.05 um;  
  SELECT -cut Via2 bondpad_metal2 L25201;  
  NOT L25201 bondpad_metal2;  
  ENC Via2 bondpad_metal2 -lt 0.05 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2_3 {  
  CAPTION BONDPAD.E.2: Bondpad Metal3 to Via3 enclosure must be >= 0.05 um;  
  SELECT -cut Via3 bondpad_metal3 L59377;  
  NOT L59377 bondpad_metal3;  
  ENC Via3 bondpad_metal3 -lt 0.05 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2_4 {  
  CAPTION BONDPAD.E.2: Bondpad Metal4 to Via4 enclosure must be >= 0.05 um;  
  SELECT -cut Via4 bondpad_metal4 L73743;  
  NOT L73743 bondpad_metal4;  
  ENC Via4 bondpad_metal4 -lt 0.05 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2_5 {  
  CAPTION BONDPAD.E.2: Bondpad Metal5 to Via5 enclosure must be >= 0.05 um;  
  SELECT -cut Via5 bondpad_metal5 L39567;  
  NOT L39567 bondpad_metal5;  
  ENC Via5 bondpad_metal5 -lt 0.05 -output region -singular -abut lt 90;  
}
```

```
RULE BONDPAD.E.2_6 {  
  CAPTION BONDPAD.E.2: Bondpad Metal6 to Via6 enclosure must be >= 0.05 um;  
  SELECT -cut Via6 bondpad_metal6 L5391;  
  NOT L5391 bondpad_metal6;  
  ENC Via6 bondpad_metal6 -lt 0.05 -output region -singular -abut lt 90;  
}
```



```

RULE BONDPAD.E.3 {
  CAPTION BONDPAD.E.3: Bondpad Metal7 to Via7 enclosure must be >= 0.05 um;
  SELECT -cut Via7 bondpad_metal7 L71215;
  NOT L71215 bondpad_metal7;
  ENC Via7 bondpad_metal7 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_2 {
  CAPTION BONDPAD.E.3: Bondpad Metal8 to Via8 enclosure must be >= 0.05 um;
  SELECT -cut Via8 bondpad_metal8 L62961;
  NOT L62961 bondpad_metal8;
  ENC Via8 bondpad_metal8 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_3 {
  CAPTION BONDPAD.E.3: Bondpad Metal9 to Via9 enclosure must be >= 0.09 um;
  SELECT -cut Via9 bondpad_metal9 L97137;
  NOT L97137 bondpad_metal9;
  ENC Via9 bondpad_metal9 -lt 0.09 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_4 {
  CAPTION BONDPAD.E.3: Bondpad Metal9 to Via10 enclosure must be >= 0.09 um;
  SELECT -cut Via10 bondpad_metal10 L75427;
  NOT L75427 bondpad_metal10;
  ENC Via10 bondpad_metal10 -lt 0.09 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.2_7 {
  CAPTION BONDPAD.E.2: Bondpad Metal2 to Via1 enclosure must be >= 0.05 um;
  SELECT -cut Via1 bondpad_metal2 L91024;
  NOT L91024 bondpad_metal2;
  ENC Via1 bondpad_metal2 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.2_8 {
  CAPTION BONDPAD.E.2: Bondpad Metal3 to Via2 enclosure must be >= 0.05 um;
  SELECT -cut Via2 bondpad_metal3 L25200;
  NOT L25200 bondpad_metal3;
  ENC Via2 bondpad_metal3 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.2_9 {
  CAPTION BONDPAD.E.2: Bondpad Metal4 to Via3 enclosure must be >= 0.05 um;
  SELECT -cut Via3 bondpad_metal4 L59376;
  NOT L59376 bondpad_metal4;
  ENC Via3 bondpad_metal4 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.2_10 {
  CAPTION BONDPAD.E.2: Bondpad Metal5 to Via4 enclosure must be >= 0.05 um;
  SELECT -cut Via4 bondpad_metal5 L73744;
  NOT L73744 bondpad_metal5;
  ENC Via4 bondpad_metal5 -lt 0.05 -output region -singular -abut lt 90;
}

```

```

RULE BONDPAD.E.2_11 {
  CAPTION BONDPAD.E.2: Bondpad Metal6 to Via5 enclosure must be >= 0.05 um;
  SELECT -cut Via5 bondpad_metal6 L39568;
  NOT L39568 bondpad_metal6;
  ENC Via5 bondpad_metal6 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.2_12 {
  CAPTION BONDPAD.E.2: Bondpad Metal7 to Via6 enclosure must be >= 0.05 um;
  SELECT -cut Via6 bondpad_metal7 L5392;
  NOT L5392 bondpad_metal7;
  ENC Via6 bondpad_metal7 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_5 {
  CAPTION BONDPAD.E.3: Bondpad Metal8 to Via7 enclosure must be >= 0.05 um;
  SELECT -cut Via7 bondpad_metal8 L71216;
  NOT L71216 bondpad_metal8;
  ENC Via7 bondpad_metal8 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_6 {
  CAPTION BONDPAD.E.3: Bondpad Metal9 to Via8 enclosure must be >= 0.05 um;
  SELECT -cut Via8 bondpad_metal9 L62960;
  NOT L62960 bondpad_metal9;
  ENC Via8 bondpad_metal9 -lt 0.05 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_7 {
  CAPTION BONDPAD.E.3: Bondpad Metal10 to Via9 enclosure must be >= 0.09 um;
  SELECT -cut Via9 bondpad_metal10 L25033;
  NOT L25033 bondpad_metal10;
  ENC Via9 bondpad_metal10 -lt 0.09 -output region -singular -abut lt 90;
}

RULE BONDPAD.E.3_8 {
  CAPTION BONDPAD.E.3: Bondpad Metal11 to Via10 enclosure must be >= 0.09 um;
  SELECT -cut Via10 bondpad_metal11 L75426;
  NOT L75426 bondpad_metal11;
  ENC Via10 bondpad_metal11 -lt 0.09 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.5 {
  CAPTION BONDPAD.SP.5: Bondpad Metal1 slot to Bondpad Metal1 slot spacing must be == 1.50;
  COPY rule_BONDPAD_SP_5_metal1;
}

RULE BONDPAD.SP.5_2 {
  CAPTION BONDPAD.SP.5: Bondpad Metal2 slot to Bondpad Metal2 slot spacing must be == 1.50;
  COPY rule_BONDPAD_SP_5_metal2;
}

RULE BONDPAD.SP.5_3 {
  CAPTION BONDPAD.SP.5: Bondpad Metal3 slot to Bondpad Metal3 slot spacing must be == 1.50;

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```

    COPY rule_BONDPAD_SP_5_metal3;
}

RULE BONDPAD.SP.5_4 {
    CAPTION BONDPAD.SP.5: Bondpad Metal4 slot to Bondpad Metal4 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal4;
}

RULE BONDPAD.SP.5_5 {
    CAPTION BONDPAD.SP.5: Bondpad Metal5 slot to Bondpad Metal5 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal5;
}

RULE BONDPAD.SP.5_6 {
    CAPTION BONDPAD.SP.5: Bondpad Metal6 slot to Bondpad Metal6 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal6;
}

RULE BONDPAD.SP.5_7 {
    CAPTION BONDPAD.SP.5: Bondpad Metal7 slot to Bondpad Metal7 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal7;
}

RULE BONDPAD.SP.5_8 {
    CAPTION BONDPAD.SP.5: Bondpad Metal8 slot to Bondpad Metal8 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal8;
}

RULE BONDPAD.SP.5_9 {
    CAPTION BONDPAD.SP.5: Bondpad Metal9 slot to Bondpad Metal9 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal9;
}

RULE BONDPAD.SP.5_10 {
    CAPTION BONDPAD.SP.5: Bondpad Metal10 slot to Bondpad Metal10 slot spacing must be == 1.50;
    COPY rule_BONDPAD_SP_5_metal10;
}

RULE BONDPAD.W.4 {
    CAPTION BONDPAD.W.4: Bondpad Metal1 slot width must be == 1.00;
    COPY rule_BONDPAD_W_4_metal1;
}

RULE BONDPAD.W.4_2 {
    CAPTION BONDPAD.W.4: Bondpad Metal2 slot width must be == 1.00;
    COPY rule_BONDPAD_W_4_metal2;
}

RULE BONDPAD.W.4_3 {
    CAPTION BONDPAD.W.4: Bondpad Metal3 slot width must be == 1.00;
    COPY rule_BONDPAD_W_4_metal3;
}

RULE BONDPAD.W.4_4 {
    CAPTION BONDPAD.W.4: Bondpad Metal4 slot width must be == 1.00;

```

```
COPY rule_BONDPAD_W_4_metal4;
}

RULE BONDPAD.W.4_5 {
  CAPTION BONDPAD.W.4: Bondpad Metal5 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal5;
}

RULE BONDPAD.W.4_6 {
  CAPTION BONDPAD.W.4: Bondpad Metal6 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal6;
}

RULE BONDPAD.W.4_7 {
  CAPTION BONDPAD.W.4: Bondpad Metal7 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal7;
}

RULE BONDPAD.W.4_8 {
  CAPTION BONDPAD.W.4: Bondpad Metal8 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal8;
}

RULE BONDPAD.W.4_9 {
  CAPTION BONDPAD.W.4: Bondpad Metal9 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal9;
}

RULE BONDPAD.W.4_10 {
  CAPTION BONDPAD.W.4: Bondpad Metal10 slot width must be == 1.00;
  COPY rule_BONDPAD_W_4_metal10;
}

RULE BONDPAD.W.5 {
  CAPTION BONDPAD.W.5: Bondpad Metal1 outside Metal1 ring width must be == 5.00;
  COPY rule_BONDPAD_W_5_metal1;
}

RULE BONDPAD.W.5_2 {
  CAPTION BONDPAD.W.5: Bondpad Metal2 outside Metal2 ring width must be == 5.00;
  COPY rule_BONDPAD_W_5_metal2;
}

RULE BONDPAD.W.5_3 {
  CAPTION BONDPAD.W.5: Bondpad Metal3 outside Metal3 ring width must be == 5.00;
  COPY rule_BONDPAD_W_5_metal3;
}

RULE BONDPAD.W.5_4 {
  CAPTION BONDPAD.W.5: Bondpad Metal4 outside Metal4 ring width must be == 5.00;
  COPY rule_BONDPAD_W_5_metal4;
}

RULE BONDPAD.W.5_5 {
  CAPTION BONDPAD.W.5: Bondpad Metal5 outside Metal5 ring width must be == 5.00;
```

```

    COPY rule_BONDPAD_W_5_metal5;
}

RULE BONDPAD.W.5_6 {
    CAPTION BONDPAD.W.5: Bondpad Metal6 outside Metal6 ring width must be == 5.00;
    COPY rule_BONDPAD_W_5_metal6;
}

RULE BONDPAD.W.5_7 {
    CAPTION BONDPAD.W.5: Bondpad Metal7 outside Metal7 ring width must be == 5.00;
    COPY rule_BONDPAD_W_5_metal7;
}

RULE BONDPAD.W.5_8 {
    CAPTION BONDPAD.W.5: Bondpad Metal8 outside Metal8 ring width must be == 5.00;
    COPY rule_BONDPAD_W_5_metal8;
}

RULE BONDPAD.W.5_9 {
    CAPTION BONDPAD.W.5: Bondpad Metal9 outside Metal9 ring width must be == 5.00;
    COPY rule_BONDPAD_W_5_metal9;
}

RULE BONDPAD.W.5_10 {
    CAPTION BONDPAD.W.5: Bondpad Metal10 outside Metal10 ring width must be == 5.00;
    COPY rule_BONDPAD_W_5_metal10;
}

RULE BONDPAD.SP.6 {
    CAPTION BONDPAD.SP.6: Bondpad Metal1 to Bondpad Metal1 spacing across first slot must be >=
1.00 um and <= 3.50 um;
    INTE bondpad_metal1_slot_on_edge bondpad_metal1_slot_on_edge -lt 1 -output region -singular
-abut lt 90;
    SIZE bondpad_metal1_slot_on_edge -by -1.75 L41647;
    SIZE L41647 -by 1.75;
}

RULE BONDPAD.SP.6_2 {
    CAPTION BONDPAD.SP.6: Bondpad Metal2 to Bondpad Metal2 spacing across first slot must be >=
1.00 um and <= 3.50 um;
    INTE bondpad_metal2_slot_on_edge bondpad_metal2_slot_on_edge -lt 1 -output region -singular
-abut lt 90;
    SIZE bondpad_metal2_slot_on_edge -by -1.75 L34894;
    SIZE L34894 -by 1.75;
}

RULE BONDPAD.SP.6_3 {
    CAPTION BONDPAD.SP.6: Bondpad Metal3 to Bondpad Metal3 spacing across first slot must be >=
1.00 um and <= 3.50 um;
    INTE bondpad_metal3_slot_on_edge bondpad_metal3_slot_on_edge -lt 1 -output region -singular
-abut lt 90;
    SIZE bondpad_metal3_slot_on_edge -by -1.75 L28141;
    SIZE L28141 -by 1.75;
}

```

```
RULE BONDPAD.SP.6_4 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal4 to Bondpad Metal4 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal4_slot_on_edge bondpad_metal4_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal4_slot_on_edge -by -1.75 L21388;  
    SIZE L21388 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_5 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal5 to Bondpad Metal5 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal5_slot_on_edge bondpad_metal5_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal5_slot_on_edge -by -1.75 L14635;  
    SIZE L14635 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_6 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal6 to Bondpad Metal6 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal6_slot_on_edge bondpad_metal6_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal6_slot_on_edge -by -1.75 L7882;  
    SIZE L7882 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_7 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal7 to Bondpad Metal7 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal7_slot_on_edge bondpad_metal7_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal7_slot_on_edge -by -1.75 L1129;  
    SIZE L1129 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_8 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal8 to Bondpad Metal8 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal8_slot_on_edge bondpad_metal8_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal8_slot_on_edge -by -1.75 L94385;  
    SIZE L94385 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_9 {  
    CAPTION BONDPAD.SP.6: Bondpad Metal9 to Bondpad Metal9 spacing across first slot must be >=  
    1.00 um and <= 3.50 um;  
    INTE bondpad_metal9_slot_on_edge bondpad_metal9_slot_on_edge -lt 1 -output region -singular  
    -abut lt 90;  
    SIZE bondpad_metal9_slot_on_edge -by -1.75 L87623;  
    SIZE L87623 -by 1.75;  
}
```

```
RULE BONDPAD.SP.6_10 {
```

```

    CAPTION BONDPAD.SP.6: Bondpad Metal10 to Bondpad Metal10 spacing across first slot must be >=
1.00 um and <= 3.50 um;
    INTE bondpad_metal10_slot_on_edge bondpad_metal10_slot_on_edge -lt 1 -output region -singular
-abut lt 90;
    SIZE bondpad_metal10_slot_on_edge -by -1.75 L96079;
    SIZE L96079 -by 1.75;
}

RULE BONDPAD.SP.7 {
    CAPTION BONDPAD.SP.7: Bondpad Via1 array to Bondpad Via1 array spacing must be >= 1.1 um;
    EXTE bondpad_via1_array bondpad_via1_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_2 {
    CAPTION BONDPAD.SP.7: Bondpad Via2 array to Bondpad Via2 array spacing must be >= 1.1 um;
    EXTE bondpad_via2_array bondpad_via2_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_3 {
    CAPTION BONDPAD.SP.7: Bondpad Via3 array to Bondpad Via3 array spacing must be >= 1.1 um;
    EXTE bondpad_via3_array bondpad_via3_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_4 {
    CAPTION BONDPAD.SP.7: Bondpad Via4 array to Bondpad Via4 array spacing must be >= 1.1 um;
    EXTE bondpad_via4_array bondpad_via4_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_5 {
    CAPTION BONDPAD.SP.7: Bondpad Via5 array to Bondpad Via5 array spacing must be >= 1.1 um;
    EXTE bondpad_via5_array bondpad_via5_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_6 {
    CAPTION BONDPAD.SP.7: Bondpad Via6 array to Bondpad Via6 array spacing must be >= 1.1 um;
    EXTE bondpad_via6_array bondpad_via6_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_7 {
    CAPTION BONDPAD.SP.7: Bondpad Via7 array to Bondpad Via7 array spacing must be >= 1.1 um;
    EXTE bondpad_via7_array bondpad_via7_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_8 {
    CAPTION BONDPAD.SP.7: Bondpad Via8 array to Bondpad Via8 array spacing must be >= 1.1 um;
    EXTE bondpad_via8_array bondpad_via8_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_9 {
    CAPTION BONDPAD.SP.7: Bondpad Via9 array to Bondpad Via9 array spacing must be >= 1.1 um;
    EXTE bondpad_via9_array bondpad_via9_array -lt 1.1 -output region -singular -abut lt 90;
}

RULE BONDPAD.SP.7_10 {
    CAPTION BONDPAD.SP.7: Bondpad Via10 array to Bondpad Via10 array spacing must be >= 1.1

```

```
um;  
  EXTE bondpad_via10_array bondpad_via10_array -lt 1.1 -output region -singular -abut lt 90;  
}  
EDGE_BOOLEAN -inside oxide_in_res resdum_sz L84129;
```

```
RULE OXIDER.W.1.1 {  
  CAPTION OXIDER.W.1.1: Minimum Active Resistor width >= 0.1 um;  
  INTE L84129 L84129 -lt 0.1 -output region -abut lt 90;  
}  
EDGE_BOOLEAN -inside poly_in_res resdum_sz L11022;
```

```
RULE POLYR.W.1.1 {  
  CAPTION POLYR.W.1.1: Minimum Poly resistor width >= 0.1 um;  
  INTE L11022 L11022 -lt 0.1 -output region -abut lt 90;  
}
```

```
#####  
checkout license ...
```

```
#####  
This mode requires 1 primary license.  
Checking out SoftShare license Phys_Ver_Sys_DRC_XL 21.1 Qty: 1 ... succeeded (1s).
```

```
#####  
Optimizing Rules ...
```

```
#####  
Two 'SIZE' operations at line 1345 in file
```

```
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1346 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1357 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1358 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1369 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1370 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1381 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1382 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1393 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1394 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1405 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1406 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```

```
Two 'SIZE' operations at line 1417 in file  
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line  
1418 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul  
are converted into two 'SIZE' operations, and one operation with -underover option.
```


are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7699 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7700 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7709 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7710 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7719 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7720 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7729 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7730 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7739 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7740 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7749 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7750 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7759 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7760 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7769 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7770 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7779 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7780 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Two 'SIZE' operations at line 7789 in file

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul and at line 7790 in file /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvIDRC.rul are merged into one 'SIZE' operation with -underover option.

Time: cpu=0.72/0.72 real=0.77/0.77 Memory: 9.41/9.53/10.04 peak=10.04

#####

Loading Layout Data ...

#####

Parsing Layer Mapping File inv.lmap ...

GDSII Input Summary

Date: Sun Apr 21 00:28:36 2024

GDSII file:

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/inv.gds

GDSII size: 4096

GDSII version: 5.0
 GDSII library name: testINV
 Last Modified: 0:24:36 4/21/2024
 Last Accessed: 0:28:35 4/21/2024
 data base unit in user units : 0.0005
 physical size of data base unit : 5e-10
 magnification: 1

loading cell M1_PO_CDNS_1 ...
 loading cell nmos1v_CDNS_2 ...
 loading cell pmos1v_CDNS_3 ...
 loading cell inv ...
 Time: cpu=0.01/0.73 real=0.01/0.78 Memory: 17.45/17.70/17.70 peak=17.70

Cell Summary:

CELL	INSTANCE	GEOMETRY	LABELS	HREF	FREF
M1_PO_CDNS_1	0	3	0 1	1	
nmos1v_CDNS_2	0	19	0 1	1	
pmos1v_CDNS_3	0	20	0 1	1	
inv	3	12 3	1 1		

TOTAL CELL = 4; INSTANCE = 3; GEOMETRY = 54; LABEL = 3

Layer Summary:

LAYER	ID	HPN	HTC	FPN	FTC
Bondpad	1000	0	0	0	0
CapMetal	1001	0	0	0	0
Cont	1002	9	0	9	0
ESDdummy	1003	0	0	0	0
INDdummy	1004	0	0	0	0
M1Resdum	1005	0	0	0	0
M2Resdum	1006	0	0	0	0
M3Resdum	1007	0	0	0	0
M4Resdum	1008	0	0	0	0
M5Resdum	1009	0	0	0	0
M6Resdum	1010	0	0	0	0
M7Resdum	1011	0	0	0	0
M8Resdum	1012	0	0	0	0
M9Resdum	1013	0	0	0	0
M10Resdum	1014	0	0	0	0
M11Resdum	1015	0	0	0	0
Metal1	1016	16	0	16	0
Metal2	1017	0	0	0	0
Metal3	1018	0	0	0	0
Metal4	1019	0	0	0	0
Metal5	1020	0	0	0	0
Metal6	1021	0	0	0	0
Metal7	1022	0	0	0	0
Metal8	1023	0	0	0	0
Metal9	1024	0	0	0	0

Metal10	1025	0	0	0	0
Metal11	1026	0	0	0	0
NPNdummy	1027	0	0	0	0
Nburied	1028	0	0	0	0
Nhvt	1029	0	0	0	0
Nimp	1030	3	0	3	0
Nlvt	1031	0	0	0	0
Nwell	1032	1	0	1	0
Nzvt	1033	0	0	0	0
Oxide	1034	8	0	8	0
Oxide_thk	1035	0	0	0	0
PNPdummy	1036	0	0	0	0
Phvt	1037	0	0	0	0
Pimp	1038	3	0	3	0
Plvt	1039	0	0	0	0
Poly	1040	14	0	14	0
Psub	1041	0	0	0	0
ResWdum	1042	0	0	0	0
Resdum	1043	0	0	0	0
SiProt	1044	0	0	0	0
Via1	1045	0	0	0	0
Via2	1046	0	0	0	0
Via3	1047	0	0	0	0
Via4	1048	0	0	0	0
Via5	1049	0	0	0	0
Via6	1050	0	0	0	0
Via7	1051	0	0	0	0
Via8	1052	0	0	0	0
Via9	1053	0	0	0	0
Via10	1054	0	0	0	0
metal1_conn_text	1055	0	3	0	3
metal2_conn_text	1056	0	0	0	0
metal3_conn_text	1057	0	0	0	0
metal4_conn_text	1058	0	0	0	0
metal5_conn_text	1059	0	0	0	0
metal6_conn_text	1060	0	0	0	0
metal7_conn_text	1061	0	0	0	0
metal8_conn_text	1062	0	0	0	0
metal9_conn_text	1063	0	0	0	0
metal10_conn_text	1064	0	0	0	0
metal11_conn_text	1065	0	0	0	0
poly_conn_text	1066	0	0	0	0

CHIP EXTENT: 160 -3430 2140 -230

Time: cpu=0.00/0.73 real=0.00/0.78 Memory: 17.48/17.70/17.70 peak=17.70

Ports ...

Texts For Connectivity ...

VSS (0.435, -1.685) 1055 inv

O (1.040, -0.910) 1055 inv
I (0.110, -0.915) 1055 inv

Texts For SELECT -LABEL ...

Texts For EXPAND_TEXT_ORIGIN ...

Texts For DFM_TEXT ...

Layer Summary(Texts For Connectivity):

LAYER	ID	TEXTS
metal1_conn_text	1055	3

Layer Summary(Texts For SELECT -LABEL):

LAYER	ID	TEXTS

Layer Summary(Texts For EXPAND_TEXT_ORIGIN):

LAYER	ID	TEXTS

Layer Summary(Texts For DFM_TEXT):

LAYER	ID	TEXTS

Preparing Hierarchical Database ...
#####

Constructing Hierarchical Database ...

=====
M1_PO_CDNS_1 is expanded.
nmos1v_CDNS_2 is expanded.
pmos1v_CDNS_3 is expanded.
Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 17.48/17.70/17.70 peak=17.70

REORGANIZE HIERARCHIES (1)...

Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 17.48/17.70/17.70 peak=17.70

REORGANIZE HIERARCHIES (2)...

Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 17.48/17.70/17.70 peak=17.70

Cell Summary:

CELL	INSTANCE	GEOMETRY	LABELS	HREF	FREF
inv	0	54	3	1	1

TOTAL CELL = 1; INSTANCE = 0; GEOMETRY = 54; LABEL = 3

Layer Summary:

LAYER	ID	HPN	HTC	FPN	FTC
Bondpad	1000	0	0	0	0
CapMetal	1001	0	0	0	0
Cont	1002	9	0	9	0
ESDdummy	1003	0	0	0	0
INDdummy	1004	0	0	0	0
M1Resdum	1005	0	0	0	0
M2Resdum	1006	0	0	0	0
M3Resdum	1007	0	0	0	0
M4Resdum	1008	0	0	0	0
M5Resdum	1009	0	0	0	0
M6Resdum	1010	0	0	0	0
M7Resdum	1011	0	0	0	0
M8Resdum	1012	0	0	0	0
M9Resdum	1013	0	0	0	0
M10Resdum	1014	0	0	0	0
M11Resdum	1015	0	0	0	0
Metal1	1016	16	0	16	0
Metal2	1017	0	0	0	0
Metal3	1018	0	0	0	0
Metal4	1019	0	0	0	0
Metal5	1020	0	0	0	0
Metal6	1021	0	0	0	0
Metal7	1022	0	0	0	0
Metal8	1023	0	0	0	0
Metal9	1024	0	0	0	0
Metal10	1025	0	0	0	0
Metal11	1026	0	0	0	0
NPNdummy	1027	0	0	0	0
Nburied	1028	0	0	0	0
Nhvt	1029	0	0	0	0
Nimp	1030	3	0	3	0
Nlvt	1031	0	0	0	0
Nwell	1032	1	0	1	0
Nzvt	1033	0	0	0	0
Oxide	1034	8	0	8	0
Oxide_thk	1035	0	0	0	0
PNPdummy	1036	0	0	0	0
Phvt	1037	0	0	0	0
Pimp	1038	3	0	3	0

Plvt	1039	0	0	0	0
Poly	1040	14	0	14	0
Psub	1041	0	0	0	0
ResWdum	1042	0	0	0	0
Resdum	1043	0	0	0	0
SiProt	1044	0	0	0	0
Via1	1045	0	0	0	0
Via2	1046	0	0	0	0
Via3	1047	0	0	0	0
Via4	1048	0	0	0	0
Via5	1049	0	0	0	0
Via6	1050	0	0	0	0
Via7	1051	0	0	0	0
Via8	1052	0	0	0	0
Via9	1053	0	0	0	0
Via10	1054	0	0	0	0
metal1_conn_text	1055	0	3	0	3
metal2_conn_text	1056	0	0	0	0
metal3_conn_text	1057	0	0	0	0
metal4_conn_text	1058	0	0	0	0
metal5_conn_text	1059	0	0	0	0
metal6_conn_text	1060	0	0	0	0
metal7_conn_text	1061	0	0	0	0
metal8_conn_text	1062	0	0	0	0
metal9_conn_text	1063	0	0	0	0
metal10_conn_text	1064	0	0	0	0
metal11_conn_text	1065	0	0	0	0
poly_conn_text	1066	0	0	0	0

Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 17.48/17.70/17.70 peak=17.70

Compacting Hierarchy Library ...

=====

Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 9.41/9.66/17.70 peak=17.70

Analyzing Cell Overlapings ...

=====

Time: cpu=0.00/0.73 real=0.00/0.79 Memory: 9.41/9.66/13.68 peak=17.70

Merge Layers ...

=====

Cont = OR Cont
generate layer Cont, TYP = P, HPN = 9, FPN = 9, HEN = 36, FEN = 36

Metal1 = OR Metal1
generate layer Metal1, TYP = P, HPN = 4, FPN = 4, HEN = 42, FEN = 42

Nimp = OR Nimp
generate layer Nimp, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16

Nwell = OR Nwell
generate layer Nwell, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Oxide = OR Oxide
generate layer Oxide, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16

Pimp = OR Pimp
generate layer Pimp, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16

Poly = OR Poly
generate layer Poly, TYP = P, HPN = 1, FPN = 1, HEN = 12, FEN = 12

Time: cpu=0.01/0.74 real=0.01/0.79 Memory: 9.41/9.66/13.68 peak=17.70

Time: cpu=0.00/0.74 real=0.00/0.79 Memory: 9.41/9.66/9.66 peak=17.70

Execute Operations ...
#####

operation group: 1/2080
bulk = EXTENT

=====
generate layer bulk, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/17.95 peak=17.95

operation group: 2/2080
offgrid_check:L262144 = layout_input -offgrid

=====
generate layer offgrid_check:L262144, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

Rule Check offgrid_check finished, 0 error(s) reported.
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 0.18% (1 out of 562) rule checks completed.

operation group: 3/2080
ortho_45_check:L262145 = layout_input -skew

=====
generate layer ortho_45_check:L262145, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

Rule Check ortho_45_check finished, 0 error(s) reported.
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 0.36% (2 out of 562) rule checks completed.

operation group: 4/2080

acute_check:L262146 = layout_input -acute

=====

generate layer acute_check:L262146, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

Rule Check acute_check finished, 0 error(s) reported.

Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 0.53% (3 out of 562) rule checks completed.

operation group: 5/2080

NZVT.X.4:L263198 = SELECT -interact Nzvt Oxide -gt 1

=====

generate layer NZVT.X.4:L263198, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.74 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

Rule Check NZVT.X.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 0.71% (4 out of 562) rule checks completed.

operation group: 6/2080

bondpad_sq = SIZE Bondpad -by 5 -underover

=====

generate layer bondpad_sq, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 7/2080

L31068 = AREA bulk -gt 100000

=====

layer L31068 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 8/2080

bondpad_to_die_edge = ENC Bondpad L31068 -lt 50 -metric opposite -para only -output region

=====

generate layer bondpad_to_die_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L31068

operation group: 9/2080

L23193 = EDGE_EXPAND bondpad_to_die_edge -outside_by 68

```
=====
generate layer L23193, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 10/2080

L45856 = OR L23193 bondpad_to_die_edge

```
=====
generate layer L45856, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L23193

operation group: 11/2080

BONDPAD.L.1:L264236 = SELECT -inside bondpad_sq L45856

```
=====
generate layer BONDPAD.L.1:L264236, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L45856

Rule Check BONDPAD.L.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 0.89% (5 out of 562) rule checks completed.

operation group: 12/2080

L90546 = HOLES Nwell

```
=====
generate layer L90546, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/13.68 peak=17.95
```

operation group: 13/2080

L90545 = NOT L90546 Nwell

```
=====
generate layer L90545, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L90546

operation group: 14/2080

NBL.X.1:L263020 = SELECT -outside Nburied L90545

```
=====
generate layer NBL.X.1:L263020, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

Rule Check NBL.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.07% (6 out of 562) rule checks completed.

operation group: 15/2080

L33971 = SELECT -interact Oxide Nzvt

=====

generate layer L33971, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 16/2080

L90685 = SIZE L33971 -by 0.16

=====

generate layer L90685, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L33971

operation group: 17/2080

NZVT.O.1:L263182 = XOR L90685 Nzvt

=====

generate layer NZVT.O.1:L263182, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L90685

Rule Check NZVT.O.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.25% (7 out of 562) rule checks completed.

operation group: 18/2080

L38712 = AND Metal1 Metal2

=====

generate layer L38712, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 19/2080

L46076 = AND L38712 Metal3

=====

generate layer L46076, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 20/2080
L40611 = AND L46076 Metal4

=====

generate layer L40611, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L46076

operation group: 21/2080
L40951 = AND L40611 Metal5

=====

generate layer L40951, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L40611

operation group: 22/2080
metal_1_6_stack = AND L40951 Metal6

=====

generate layer metal_1_6_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L40951

operation group: 23/2080
L90744 = AND Via1 Via2

=====

generate layer L90744, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 24/2080
L33864 = AND L90744 Via3

=====

generate layer L33864, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L90744

operation group: 25/2080
L30797 = AND L33864 Via4

=====

generate layer L30797, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L33864

operation group: 26/2080
via_1_5_stack = AND L30797 Via5

=====

```
generate layer via_1_5_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L30797
```

operation group: 27/2080

```
VIAk.X.3_VIAk.X.4:L264114 = SELECT -enclose metal_1_6_stack via_1_5_stack -eq 1
```

=====

```
generate layer VIAk.X.3_VIAk.X.4:L264114, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer metal_1_6_stack
```

```
delete layer via_1_5_stack
```

Rule Check VIAk.X.3_VIAk.X.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.42% (8 out of 562) rule checks completed.

operation group: 28/2080

```
L18248 = AND Metal2 Metal3
```

=====

```
generate layer L18248, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 29/2080

```
L79489 = AND L18248 Metal4
```

=====

```
generate layer L79489, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 30/2080

```
L42786 = AND L79489 Metal5
```

=====

```
generate layer L42786, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L79489
```

operation group: 31/2080

```
L29755 = AND L42786 Metal6
```

=====

```
generate layer L29755, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L42786
```

operation group: 32/2080
metal_2_7_stack = AND L29755 Metal7

=====

generate layer metal_2_7_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L29755

operation group: 33/2080
L19896 = AND Via2 Via3

=====

generate layer L19896, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 34/2080
L73372 = AND L19896 Via4

=====

generate layer L73372, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L19896

operation group: 35/2080
L56520 = AND L73372 Via5

=====

generate layer L56520, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L73372

operation group: 36/2080
via_2_6_stack = AND L56520 Via6

=====

generate layer via_2_6_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L56520

operation group: 37/2080
VIAk.X.3_VIAk.X.4_2:L264115 = SELECT -enclose metal_2_7_stack via_2_6_stack -eq 1

=====

generate layer VIAk.X.3_VIAk.X.4_2:L264115, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer metal_2_7_stack
delete layer via_2_6_stack

Rule Check VIAk.X.3_VIAk.X.4_2 finished, 0 error(s) reported.
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.60% (9 out of 562) rule checks completed.

operation group: 38/2080

L92088 = AND Metal3 Metal4

=====

generate layer L92088, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 39/2080

L76038 = AND L92088 Metal5

=====

generate layer L76038, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 40/2080

L74596 = AND L76038 Metal6

=====

generate layer L74596, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L76038

operation group: 41/2080

L15038 = AND L74596 Metal7

=====

generate layer L15038, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L74596

operation group: 42/2080

metal_3_8_stack = AND L15038 Metal8

=====

generate layer metal_3_8_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L15038

operation group: 43/2080

L49048 = AND Via3 Via4

=====

generate layer L49048, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 44/2080

L40741 = AND L49048 Via5

=====

generate layer L40741, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L49048

operation group: 45/2080

L13939 = AND L40741 Via6

=====

generate layer L13939, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L40741

operation group: 46/2080

via_3_7_stack = AND L13939 Via7

=====

generate layer via_3_7_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L13939

operation group: 47/2080

VIAk.X.3_VIAk.X.4_3:L264116 = SELECT -enclose metal_3_8_stack via_3_7_stack -eq 1

=====

generate layer VIAk.X.3_VIAk.X.4_3:L264116, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.80 Memory: 9.42/9.66/9.66 peak=17.95

delete layer metal_3_8_stack

delete layer via_3_7_stack

Rule Check VIAk.X.3_VIAk.X.4_3 finished, 0 error(s) reported.

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.78% (10 out of 562) rule checks completed.

operation group: 48/2080

L2424 = AND Metal4 Metal5

=====

generate layer L2424, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 49/2080

L13512 = AND L2424 Metal6

```
=====
generate layer L13512, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 50/2080

L29855 = AND L13512 Metal7

```
=====
generate layer L29855, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L13512

operation group: 51/2080

L78947 = AND L29855 Metal8

```
=====
generate layer L78947, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L29855

operation group: 52/2080

metal_4_9_stack = AND L78947 Metal9

```
=====
generate layer metal_4_9_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L78947

operation group: 53/2080

L78200 = AND Via4 Via5

```
=====
generate layer L78200, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 54/2080

L54054 = AND L78200 Via6

```
=====
generate layer L54054, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L78200

operation group: 55/2080

L29444 = AND L54054 Via7

```
=====
generate layer L29444, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L54054

operation group: 56/2080

via_4_8_stack = AND L29444 Via8

=====

generate layer via_4_8_stack, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L29444

operation group: 57/2080

VIAk.X.3_VIAk.X.4_4:L264117 = SELECT -enclose metal_4_9_stack via_4_8_stack -eq 1

=====

generate layer VIAk.X.3_VIAk.X.4_4:L264117, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

delete layer metal_4_9_stack

delete layer via_4_8_stack

Rule Check VIAk.X.3_VIAk.X.4_4 finished, 0 error(s) reported.

Time: cpu=0.00/0.75 real=0.00/0.81 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 1.96% (11 out of 562) rule checks completed.

operation group: 58/2080

L2596 = SIZE Cont -by 6 -inside_of Poly -step 0.2

=====

generate layer L2596, TYP = P, HPN = 1, FPN = 1, HEN = 12, FEN = 12

Time: cpu=0.01/0.76 real=0.01/0.81 Memory: 9.42/9.66/17.95 peak=17.95

operation group: 59/2080

L29188 = NOT Poly L2596

=====

generate layer L29188, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.81 Memory: 9.42/9.66/13.68 peak=17.95

operation group: 60/2080

L92413 = SELECT -touch L29188 L2596 -eq 2

=====

generate layer L92413, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L29188

delete layer L2596

operation group: 61/2080

L99542 = SIZE Poly -by 0.07 -underover

=====

layer L99542 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 62/2080

POLY.SE.3:L263235 = NOT L92413 L99542

=====

generate layer POLY.SE.3:L263235, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L92413

delete layer L99542

Rule Check POLY.SE.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 2.14% (12 out of 562) rule checks completed.

operation group: 63/2080

m1m2v1 = SELECT -enclose L38712 Via1

=====

generate layer m1m2v1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 64/2080

rule_VIA1_E_3_PLATE = SIZE L38712 -by 0.75 -underover

=====

generate layer rule_VIA1_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 65/2080

L12009 = EXTE m1m2v1 rule_VIA1_E_3_PLATE -le 3 -output region

=====

generate layer L12009, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 66/2080

L38948 = OR Metal1 Metal2

=====

layer L38948 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 67/2080

L73527 = AND L12009 L38948

=====

generate layer L73527, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L12009

delete layer L38948

operation group: 68/2080

L41560 = OR m1m2v1 rule_VIA1_E_3_PLATE

=====

generate layer L41560, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA1_E_3_PLATE

operation group: 69/2080

L36434 = EDGE_BOOLEAN L41560 L73527 -coincident_only -outside

=====

generate layer L36434, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 70/2080

L13878 = EDGE_EXPAND L36434 -inside_by 0.001

=====

generate layer L13878, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L36434

operation group: 71/2080

L93892 = SELECT -interact L41560 L13878

=====

generate layer L93892, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L41560

delete layer L13878

operation group: 72/2080

L17164 = SELECT -interact L73527 L93892 -gt 1

=====

generate layer L17164, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L73527

delete layer L93892

operation group: 73/2080

L70743 = EDGE_BOOLEAN L17164 m1m2v1 -coincident_only -outside

=====

generate layer L70743, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L17164

operation group: 74/2080

L54357 = EDGE_EXPAND L70743 -inside_by 0.001

=====

generate layer L54357, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L70743

operation group: 75/2080

via1_e_3 = SELECT -interact m1m2v1 L54357

=====

generate layer via1_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m1m2v1

delete layer L54357

operation group: 76/2080

L91113 = SELECT -enclose via1_e_3 Via1 -ge 2

=====

generate layer L91113, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 77/2080

VIA1.E.3:L264090 = SELECT -interact via1_e_3 L91113 -not

=====

generate layer VIA1.E.3:L264090, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via1_e_3

delete layer L91113

Rule Check VIA1.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 2.31% (13 out of 562) rule checks completed.

operation group: 78/2080

m2m3v2 = SELECT -enclose L18248 Via2

=====

generate layer m2m3v2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 79/2080

L18012 = OR Metal2 Metal3

=====

generate layer L18012, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 80/2080

rule_VIA2_E_3_PLATE = SIZE L18248 -by 0.75 -underover

=====

generate layer rule_VIA2_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 81/2080

L53957 = EXTE m2m3v2 rule_VIA2_E_3_PLATE -le 3 -output region

=====

generate layer L53957, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 82/2080

L40458 = AND L18012 L53957

=====

generate layer L40458, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L18012

delete layer L53957

operation group: 83/2080

L63548 = OR m2m3v2 rule_VIA2_E_3_PLATE

=====

generate layer L63548, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA2_E_3_PLATE

operation group: 84/2080

L12095 = EDGE_BOOLEAN L63548 L40458 -coincident_only -outside

=====

generate layer L12095, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 85/2080

L83875 = EDGE_EXPAND L12095 -inside_by 0.001

=====

generate layer L83875, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L12095

operation group: 86/2080

L56322 = SELECT -interact L63548 L83875

=====

generate layer L56322, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L63548
delete layer L83875

operation group: 87/2080

L10561 = SELECT -interact L40458 L56322 -gt 1

=====

generate layer L10561, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L40458
delete layer L56322

operation group: 88/2080

L1628 = EDGE_BOOLEAN L10561 m2m3v2 -coincident_only -outside

=====

generate layer L1628, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L10561

operation group: 89/2080

L50163 = EDGE_EXPAND L1628 -inside_by 0.001

=====

generate layer L50163, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L1628

operation group: 90/2080

via2_e_3 = SELECT -interact m2m3v2 L50163

=====

generate layer via2_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m2m3v2
delete layer L50163

operation group: 91/2080

L60617 = SELECT -enclose via2_e_3 Via2 -ge 2

=====

generate layer L60617, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 92/2080

VIA2.E.3:L264091 = SELECT -interact via2_e_3 L60617 -not

=====

generate layer VIA2.E.3:L264091, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via2_e_3
delete layer L60617

Rule Check VIA2.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 2.49% (14 out of 562) rule checks completed.

operation group: 93/2080

m3m4v3 = SELECT -enclose L92088 Via3

=====

generate layer m3m4v3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 94/2080

rule_VIA3_E_3_PLATE = SIZE L92088 -by 0.75 -underover

=====

generate layer rule_VIA3_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 95/2080

L71391 = EXTE m3m4v3 rule_VIA3_E_3_PLATE -le 3 -output region

=====

generate layer L71391, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 96/2080

L92324 = OR Metal3 Metal4

```
=====
generate layer L92324, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 97/2080

L35458 = AND L71391 L92324

```
=====
generate layer L35458, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L71391

delete layer L92324

operation group: 98/2080

L81760 = OR m3m4v3 rule_VIA3_E_3_PLATE

```
=====
generate layer L81760, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer rule_VIA3_E_3_PLATE

operation group: 99/2080

L58175 = EDGE_BOOLEAN L81760 L35458 -coincident_only -outside

```
=====
generate layer L58175, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 100/2080

L16740 = EDGE_EXPAND L58175 -inside_by 0.001

```
=====
generate layer L16740, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L58175

operation group: 101/2080

L86069 = SELECT -interact L81760 L16740

```
=====
generate layer L86069, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L81760

delete layer L16740

operation group: 102/2080

L92125 = SELECT -interact L35458 L86069 -gt 1

```

=====
generate layer L92125, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L35458
delete layer L86069

operation group: 103/2080
L84867 = EDGE_BOOLEAN L92125 m3m4v3 -coincident_only -outside
=====
generate layer L84867, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L92125

operation group: 104/2080
L70219 = EDGE_EXPAND L84867 -inside_by 0.001
=====
generate layer L70219, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L84867

operation group: 105/2080
via3_e_3 = SELECT -interact m3m4v3 L70219
=====
generate layer via3_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m3m4v3
delete layer L70219

operation group: 106/2080
L30121 = SELECT -enclose via3_e_3 Via3 -ge 2
=====
generate layer L30121, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 107/2080
VIA3.E.3:L264092 = SELECT -interact via3_e_3 L30121 -not
=====
generate layer VIA3.E.3:L264092, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.76 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via3_e_3
delete layer L30121

Rule Check VIA3.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

```

[INFO]: 2.67% (15 out of 562) rule checks completed.

operation group: 108/2080

m4m5v4 = SELECT -enclose L2424 Via4

```
=====
generate layer m4m5v4, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 109/2080

rule_VIA4_E_3_PLATE = SIZE L2424 -by 0.75 -underover

```
=====
generate layer rule_VIA4_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 110/2080

L29443 = EXTE m4m5v4 rule_VIA4_E_3_PLATE -le 3 -output region

```
=====
generate layer L29443, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 111/2080

L64636 = OR Metal4 Metal5

```
=====
generate layer L64636, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 112/2080

L17594 = AND L29443 L64636

```
=====
generate layer L17594, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L29443

delete layer L64636

operation group: 113/2080

L40228 = OR m4m5v4 rule_VIA4_E_3_PLATE

```
=====
generate layer L40228, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer rule_VIA4_E_3_PLATE

operation group: 114/2080

L70608 = EDGE_BOOLEAN L40228 L17594 -coincident_only -outside

=====

generate layer L70608, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 115/2080

L62883 = EDGE_EXPAND L70608 -inside_by 0.001

=====

generate layer L62883, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L70608

operation group: 116/2080

L29638 = SELECT -interact L40228 L62883

=====

generate layer L29638, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L40228

delete layer L62883

operation group: 117/2080

L74674 = SELECT -interact L17594 L29638 -gt 1

=====

generate layer L74674, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L17594

delete layer L29638

operation group: 118/2080

L16251 = EDGE_BOOLEAN L74674 m4m5v4 -coincident_only -outside

=====

generate layer L16251, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L74674

operation group: 119/2080

L86369 = EDGE_EXPAND L16251 -inside_by 0.001

=====

generate layer L86369, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16251

operation group: 120/2080

via4_e_3 = SELECT -interact m4m5v4 L86369

=====

generate layer via4_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m4m5v4

delete layer L86369

operation group: 121/2080

L67671 = SELECT -enclose via4_e_3 Via4 -ge 2

=====

generate layer L67671, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 122/2080

VIA4.E.3:L264093 = SELECT -interact via4_e_3 L67671 -not

=====

generate layer VIA4.E.3:L264093, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via4_e_3

delete layer L67671

Rule Check VIA4.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 2.85% (16 out of 562) rule checks completed.

operation group: 123/2080

L54536 = AND Metal5 Metal6

=====

generate layer L54536, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 124/2080

m5m6v5 = SELECT -enclose L54536 Via5

=====

generate layer m5m6v5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 125/2080

rule_VIA5_E_3_PLATE = SIZE L54536 -by 0.75 -underover

=====

generate layer rule_VIA5_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 126/2080

L12505 = EXTE m5m6v5 rule_VIA5_E_3_PLATE -le 3 -output region

=====

generate layer L12505, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 127/2080

L45700 = OR Metal5 Metal6

=====

generate layer L45700, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 128/2080

L31348 = AND L12505 L45700

=====

generate layer L31348, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L12505

delete layer L45700

operation group: 129/2080

L5080 = OR m5m6v5 rule_VIA5_E_3_PLATE

=====

generate layer L5080, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA5_E_3_PLATE

operation group: 130/2080

L93348 = EDGE_BOOLEAN L5080 L31348 -coincident_only -outside

=====

generate layer L93348, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 131/2080

L55531 = EDGE_EXPAND L93348 -inside_by 0.001

=====

generate layer L55531, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L93348

operation group: 132/2080

L72905 = SELECT -interact L5080 L55531

=====

generate layer L72905, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L5080

delete layer L55531

operation group: 133/2080

L33990 = SELECT -interact L31348 L72905 -gt 1

=====

generate layer L33990, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L31348

delete layer L72905

operation group: 134/2080

L17102 = EDGE_BOOLEAN L33990 m5m6v5 -coincident_only -outside

=====

generate layer L17102, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L33990

operation group: 135/2080

L75771 = EDGE_EXPAND L17102 -inside_by 0.001

=====

generate layer L75771, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L17102

operation group: 136/2080

via5_e_3 = SELECT -interact m5m6v5 L75771

=====

generate layer via5_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m5m6v5

delete layer L75771

operation group: 137/2080

L98167 = SELECT -enclose via5_e_3 Via5 -ge 2

=====

generate layer L98167, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 138/2080

VIA5.E.3:L264094 = SELECT -interact via5_e_3 L98167 -not

=====

generate layer VIA5.E.3:L264094, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via5_e_3

delete layer L98167

Rule Check VIA5.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.02% (17 out of 562) rule checks completed.

operation group: 139/2080

L55800 = AND Metal6 Metal7

=====

generate layer L55800, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 140/2080

m6m7v6 = SELECT -enclose L55800 Via6

=====

generate layer m6m7v6, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 141/2080

rule_VIA6_E_3_PLATE = SIZE L55800 -by 0.75 -underover

=====

generate layer rule_VIA6_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 142/2080

L54453 = EXTE m6m7v6 rule_VIA6_E_3_PLATE -le 3 -output region

=====

generate layer L54453, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 143/2080

L56036 = OR Metal6 Metal7

=====

generate layer L56036, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 144/2080

L71402 = AND L54453 L56036

=====

generate layer L71402, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L54453
delete layer L56036

operation group: 145/2080

L16908 = OR m6m7v6 rule_VIA6_E_3_PLATE

=====

generate layer L16908, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA6_E_3_PLATE

operation group: 146/2080

L88866 = EDGE_BOOLEAN L16908 L71402 -coincident_only -outside

=====

generate layer L88866, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 147/2080

L46224 = EDGE_EXPAND L88866 -inside_by 0.001

=====

generate layer L46224, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L88866

operation group: 148/2080

L70795 = SELECT -interact L16908 L46224

=====

generate layer L70795, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16908
delete layer L46224

operation group: 149/2080

L95392 = SELECT -interact L71402 L70795 -gt 1

=====

generate layer L95392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L71402
delete layer L70795

operation group: 150/2080

L33457 = EDGE_BOOLEAN L95392 m6m7v6 -coincident_only -outside

=====

generate layer L33457, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L95392

operation group: 151/2080

L32366 = EDGE_EXPAND L33457 -inside_by 0.001

=====

generate layer L32366, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L33457

operation group: 152/2080

via6_e_3 = SELECT -interact m6m7v6 L32366

=====

generate layer via6_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m6m7v6
delete layer L32366

operation group: 153/2080

L28663 = SELECT -enclose via6_e_3 Via6 -ge 2

=====

generate layer L28663, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 154/2080

VIA6.E.3:L264095 = SELECT -interact via6_e_3 L28663 -not

=====

generate layer VIA6.E.3:L264095, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via6_e_3
delete layer L28663

Rule Check VIA6.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.20% (18 out of 562) rule checks completed.

operation group: 155/2080

L1160 = AND Metal7 Metal8

```
=====
generate layer L1160, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 156/2080

m7m8v7 = SELECT -enclose L1160 Via7

```
=====
generate layer m7m8v7, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 157/2080

L924 = OR Metal7 Metal8

```
=====
generate layer L924, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 158/2080

rule_VIA7_E_3_PLATE = SIZE L1160 -by 0.75 -underover

```
=====
generate layer rule_VIA7_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 159/2080

L96401 = EXTE m7m8v7 rule_VIA7_E_3_PLATE -le 3 -output region

```
=====
generate layer L96401, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 160/2080

L5972 = AND L924 L96401

```
=====
generate layer L5972, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L924

delete layer L96401

operation group: 161/2080

L28400 = OR m7m8v7 rule_VIA7_E_3_PLATE

```
=====
generate layer L28400, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA7_E_3_PLATE

operation group: 162/2080

L87131 = EDGE_BOOLEAN L28400 L5972 -coincident_only -outside

=====

generate layer L87131, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 163/2080

L59624 = EDGE_EXPAND L87131 -inside_by 0.001

=====

generate layer L59624, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L87131

operation group: 164/2080

L20027 = SELECT -interact L28400 L59624

=====

generate layer L20027, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L28400
delete layer L59624

operation group: 165/2080

L26193 = SELECT -interact L5972 L20027 -gt 1

=====

generate layer L26193, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L5972
delete layer L20027

operation group: 166/2080

L50045 = EDGE_BOOLEAN L26193 m7m8v7 -coincident_only -outside

=====

generate layer L50045, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L26193

operation group: 167/2080

L84206 = EDGE_EXPAND L50045 -inside_by 0.001

=====

generate layer L84206, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L50045

operation group: 168/2080

via7_e_3 = SELECT -interact m7m8v7 L84206

=====

generate layer via7_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m7m8v7
delete layer L84206

operation group: 169/2080

L59159 = SELECT -enclose via7_e_3 Via7 -ge 2

=====

generate layer L59159, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 170/2080

VIA7.E.3:L264096 = SELECT -interact via7_e_3 L59159 -not

=====

generate layer VIA7.E.3:L264096, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer via7_e_3
delete layer L59159

Rule Check VIA7.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.38% (19 out of 562) rule checks completed.

operation group: 171/2080

L9176 = AND Metal8 Metal9

=====

generate layer L9176, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 172/2080

m8m9v8 = SELECT -enclose L9176 Via8

=====

generate layer m8m9v8, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 173/2080

rule_VIA8_E_3_PLATE = SIZE L9176 -by 0.75 -underover

=====

generate layer rule_VIA8_E_3_PLATE, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 174/2080

L28947 = EXTE m8m9v8 rule_VIA8_E_3_PLATE -le 3 -output region

=====

generate layer L28947, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 175/2080

L9412 = OR Metal8 Metal9

=====

generate layer L9412, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 176/2080

L74245 = AND L28947 L9412

=====

generate layer L74245, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L28947

delete layer L9412

operation group: 177/2080

L93588 = OR m8m9v8 rule_VIA8_E_3_PLATE

=====

generate layer L93588, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer rule_VIA8_E_3_PLATE

operation group: 178/2080

L81251 = EDGE_BOOLEAN L93588 L74245 -coincident_only -outside

=====

generate layer L81251, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 179/2080

L34227 = EDGE_EXPAND L81251 -inside_by 0.001

=====

generate layer L34227, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L81251

operation group: 180/2080

L85158 = SELECT -interact L93588 L34227

=====

generate layer L85158, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L93588
delete layer L34227

operation group: 181/2080

L89061 = SELECT -interact L74245 L85158 -gt 1

=====

generate layer L89061, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.82 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L74245
delete layer L85158

operation group: 182/2080

L37117 = EDGE_BOOLEAN L89061 m8m9v8 -coincident_only -outside

=====

generate layer L37117, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L89061

operation group: 183/2080

L64149 = EDGE_EXPAND L37117 -inside_by 0.001

=====

generate layer L64149, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L37117

operation group: 184/2080

via8_e_3 = SELECT -interact m8m9v8 L64149

=====

generate layer via8_e_3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer m8m9v8
delete layer L64149

operation group: 185/2080

L89655 = SELECT -enclose via8_e_3 Via8 -ge 2

```
=====
generate layer L89655, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 186/2080

VIA8.E.3:L264097 = SELECT -interact via8_e_3 L89655 -not

```
=====
generate layer VIA8.E.3:L264097, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer via8_e_3

delete layer L89655

Rule Check VIA8.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.56% (20 out of 562) rule checks completed.

operation group: 187/2080

L11511 = HOLES Metal1

```
=====
generate layer L11511, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/13.68 peak=17.95
```

operation group: 188/2080

L94375 = OR L11511 Metal1

```
=====
layer L94375 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 189/2080

L83147 = SELECT -enclose L94375 Bondpad

```
=====
generate layer L83147, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 190/2080

L11659 = SIZE L83147 -by 25 -underover

```
=====
generate layer L11659, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L83147

operation group: 191/2080

L22419 = AND L11659 L94375

=====

generate layer L22419, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L11659
delete layer L94375

operation group: 192/2080

bondpad_metal1_filled = SELECT -enclose L22419 Bondpad

=====

generate layer bondpad_metal1_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 193/2080

bondpad_metal1 = AND Metal1 bondpad_metal1_filled

=====

generate layer bondpad_metal1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 194/2080

L16219 = HOLES bondpad_metal1

=====

generate layer L16219, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 195/2080

bondpad_metal1_slot = NOT L16219 bondpad_metal1

=====

generate layer bondpad_metal1_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16219

operation group: 196/2080

L74117 = INTE bondpad_metal1_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L74117, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 197/2080

L74117b = NOT bondpad_metal1_slot L74117

=====

generate layer L74117b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L74117

operation group: 198/2080

L51557 = EXTE bondpad_metal1_slot -le 2.5 -metric opposite -para only -notch not -output region

L97067 = EXTE bondpad_metal1_slot -le 10 -metric opposite -para only -notch not -output region

```
=====
generate layer L51557, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L97067, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 199/2080

bondpad_metal1_slot_on_edge = SELECT -touch bondpad_metal1_slot L51557 -eq 1

```
=====
generate layer bondpad_metal1_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L51557

operation group: 200/2080

BONDPAD.SP.5:L264339 = NOT L74117b bondpad_metal1_slot_on_edge

```
=====
generate layer BONDPAD.SP.5:L264339, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L74117b

Rule Check BONDPAD.SP.5 finished, 0 error(s) reported.

Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.74% (21 out of 562) rule checks completed.

operation group: 201/2080

L23896a = EXTE bondpad_metal1_slot -le 2.5 -metric opposite -para only -output region

L23896b = EXTE bondpad_metal1_slot -eq 1 -metric opposite -para only -output region

```
=====
generate layer L23896a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L23896b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 202/2080

BONDPAD.W.4:L264349 = NOT L23896a L23896b

```
=====
generate layer BONDPAD.W.4:L264349, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L23896a
delete layer L23896b

Rule Check BOND PAD.W.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 3.91% (22 out of 562) rule checks completed.

operation group: 203/2080
L11512 = HOLES Metal2

=====

generate layer L11512, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.77 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 204/2080
L94376 = OR L11512 Metal2

=====

generate layer L94376, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 205/2080
L28684 = SELECT -enclose L94376 Bondpad

=====

generate layer L28684, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 206/2080
L91294 = SIZE L28684 -by 25 -underover

=====

generate layer L91294, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L28684

operation group: 207/2080
L29447 = AND L91294 L94376

=====

generate layer L29447, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L91294
delete layer L94376

operation group: 208/2080
bondpad_metal2_filled = SELECT -enclose L29447 Bondpad

```
=====
generate layer bondpad_metal2_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 209/2080
bondpad_metal2 = AND Metal2 bondpad_metal2_filled
```

```
=====
generate layer bondpad_metal2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 210/2080
L16220 = HOLES bondpad_metal2
```

```
=====
generate layer L16220, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 211/2080
bondpad_metal2_slot = NOT L16220 bondpad_metal2
```

```
=====
generate layer bondpad_metal2_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L16220
```

```
operation group: 212/2080
L56836 = INTE bondpad_metal2_slot -eq 1.5 -metric opposite -para only -output region
```

```
=====
generate layer L56836, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 213/2080
L56836b = NOT bondpad_metal2_slot L56836
```

```
=====
generate layer L56836b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L56836
```

```
operation group: 214/2080
L34276 = EXTE bondpad_metal2_slot -le 2.5 -metric opposite -para only -output region
L41177b = EXTE bondpad_metal2_slot -eq 1 -metric opposite -para only -output region
```

```
=====
generate layer L34276, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L41177b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 215/2080

bondpad_metal2_slot_on_edge = SELECT -touch bondpad_metal2_slot L34276 -eq 1

=====

generate layer bondpad_metal2_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 216/2080

BONDPAD.SP.5_2:L264340 = NOT L56836b bondpad_metal2_slot_on_edge

=====

generate layer BONDPAD.SP.5_2:L264340, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L56836b

Rule Check BONDPAD.SP.5_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 4.09% (23 out of 562) rule checks completed.

operation group: 217/2080

BONDPAD.W.4_2:L264350 = NOT L34276 L41177b

=====

generate layer BONDPAD.W.4_2:L264350, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L34276

delete layer L41177b

Rule Check BONDPAD.W.4_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 4.27% (24 out of 562) rule checks completed.

operation group: 218/2080

L11513 = HOLES Metal3

=====

generate layer L11513, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 219/2080

L94377 = OR L11513 Metal3

=====

generate layer L94377, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 220/2080

L25779 = SELECT -enclose L94377 Bondpad

=====

generate layer L25779, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 221/2080

L57208 = SIZE L25779 -by 25 -underover

=====

generate layer L57208, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L25779

operation group: 222/2080

L38857 = AND L57208 L94377

=====

generate layer L38857, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L57208

delete layer L94377

operation group: 223/2080

bondpad_metal3_filled = SELECT -enclose L38857 Bondpad

=====

generate layer bondpad_metal3_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 224/2080

bondpad_metal3 = AND Metal3 bondpad_metal3_filled

=====

generate layer bondpad_metal3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 225/2080

L16221 = HOLES bondpad_metal3

=====

generate layer L16221, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 226/2080

```
bondpad_metal3_slot = NOT L16221 bondpad_metal3
=====
generate layer bondpad_metal3_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16221
```

```
operation group: 227/2080
L39555 = INTE bondpad_metal3_slot -eq 1.5 -metric opposite -para only -output region
=====
generate layer L39555, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 228/2080
L39555b = NOT bondpad_metal3_slot L39555
=====
generate layer L39555b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L39555
```

```
operation group: 229/2080
L16995 = EXTE bondpad_metal3_slot -le 2.5 -metric opposite -para only -notch not -output region
L64215 = EXTE bondpad_metal3_slot -le 10 -metric opposite -para only -notch not -output region
=====
generate layer L16995, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L64215, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 230/2080
bondpad_metal3_slot_on_edge = SELECT -touch bondpad_metal3_slot L16995 -eq 1
=====
generate layer bondpad_metal3_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16995
```

```
operation group: 231/2080
BONDPAD.SP.5_3:L264341 = NOT L39555b bondpad_metal3_slot_on_edge
=====
generate layer BONDPAD.SP.5_3:L264341, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L39555b
```

```
Rule Check BONDPAD.SP.5_3 finished, 0 error(s) reported.
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

[INFO]: 4.45% (25 out of 562) rule checks completed.

operation group: 232/2080

L58458a = EXTE bondpad_metal3_slot -le 2.5 -metric opposite -para only -output region

L58458b = EXTE bondpad_metal3_slot -eq 1 -metric opposite -para only -output region

```
=====
generate layer L58458a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L58458b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 233/2080

BONDPAD.W.4_3:L264351 = NOT L58458a L58458b

```
=====
generate layer BONDPAD.W.4_3:L264351, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L58458a

delete layer L58458b

Rule Check BONDPAD.W.4_3 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 4.63% (26 out of 562) rule checks completed.

operation group: 234/2080

L11514 = HOLES Metal4

```
=====
generate layer L11514, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 235/2080

L94378 = OR L11514 Metal4

```
=====
generate layer L94378, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 236/2080

L87054 = SELECT -enclose L94378 Bondpad

```
=====
generate layer L87054, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 237/2080

L10974 = SIZE L87054 -by 25 -underover

```
=====
generate layer L10974, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L87054

operation group: 238/2080

L74553 = AND L10974 L94378

```
=====
generate layer L74553, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L10974

delete layer L94378

operation group: 239/2080

bondpad_metal4_filled = SELECT -enclose L74553 Bondpad

```
=====
generate layer bondpad_metal4_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 240/2080

bondpad_metal4 = AND Metal4 bondpad_metal4_filled

```
=====
generate layer bondpad_metal4, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 241/2080

L16222 = HOLES bondpad_metal4

```
=====
generate layer L16222, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 242/2080

bondpad_metal4_slot = NOT L16222 bondpad_metal4

```
=====
generate layer bondpad_metal4_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L16222

operation group: 243/2080

L22274 = INTE bondpad_metal4_slot -eq 1.5 -metric opposite -para only -output region

```
=====
generate layer L22274, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 244/2080

L22274b = NOT bondpad_metal2_slot L22274

=====

generate layer L22274b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L22274

operation group: 245/2080

L99714 = EXTE bondpad_metal4_slot -le 2.5 -metric opposite -para only -notch not -output region
L61208 = EXTE bondpad_metal4_slot -le 10 -metric opposite -para only -notch not -output region

=====

generate layer L99714, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L61208, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 246/2080

bondpad_metal4_slot_on_edge = SELECT -touch bondpad_metal4_slot L99714 -eq 1

=====

generate layer bondpad_metal4_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L99714

operation group: 247/2080

BONDPAD.SP.5_4:L264342 = NOT L22274b bondpad_metal4_slot_on_edge

=====

generate layer BONDPAD.SP.5_4:L264342, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L22274b

Rule Check BONDPAD.SP.5_4 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 4.80% (27 out of 562) rule checks completed.

operation group: 248/2080

L75739a = EXTE bondpad_metal4_slot -le 2.5 -metric opposite -para only -output region
L75739b = EXTE bondpad_metal4_slot -eq 1 -metric opposite -para only -output region

=====

generate layer L75739a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L75739b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 249/2080

BONDPAD.W.4_4:L264352 = NOT L75739a L75739b

=====

generate layer BONDPAD.W.4_4:L264352, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L75739a

delete layer L75739b

Rule Check BONDPAD.W.4_4 finished, 0 error(s) reported.
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 4.98% (28 out of 562) rule checks completed.

operation group: 250/2080

L11515 = HOLES Metal5

=====

generate layer L11515, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 251/2080

L94379 = OR L11515 Metal5

=====

generate layer L94379, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 252/2080

L67409 = SELECT -enclose L94379 Bondpad

=====

generate layer L67409, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 253/2080

L60622 = SIZE L67409 -by 25 -underover

=====

generate layer L60622, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L67409

operation group: 254/2080

L45717 = AND L60622 L94379

=====

generate layer L45717, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L60622
delete layer L94379

operation group: 255/2080

bondpad_metal5_filled = SELECT -enclose L45717 Bondpad

=====

generate layer bondpad_metal5_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 256/2080

bondpad_metal5 = AND Metal5 bondpad_metal5_filled

=====

generate layer bondpad_metal5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 257/2080

L16223 = HOLES bondpad_metal5

=====

generate layer L16223, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 258/2080

bondpad_metal5_slot = NOT L16223 bondpad_metal5

=====

generate layer bondpad_metal5_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16223

operation group: 259/2080

L4993 = INTE bondpad_metal5_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L4993, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 260/2080

L4993b = NOT bondpad_metal5_slot L4993

=====

generate layer L4993b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L4993

operation group: 261/2080

L82433 = EXTE bondpad_metal5_slot -le 2.5 -metric opposite -para only -notch not -output region

L58201 = EXTE bondpad_metal5_slot -le 10 -metric opposite -para only -notch not -output region

=====

generate layer L82433, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

generate layer L58201, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 262/2080

bondpad_metal5_slot_on_edge = SELECT -touch bondpad_metal5_slot L82433 -eq 1

=====

generate layer bondpad_metal5_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L82433

operation group: 263/2080

BONDPAD.SP.5_5:L264343 = NOT L4993b bondpad_metal5_slot_on_edge

=====

generate layer BONDPAD.SP.5_5:L264343, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L4993b

Rule Check BONDPAD.SP.5_5 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 5.16% (29 out of 562) rule checks completed.

operation group: 264/2080

L93020a = EXTE bondpad_metal5_slot -le 2.5 -metric opposite -para only -output region

L93020b = EXTE bondpad_metal5_slot -eq 1 -metric opposite -para only -output region

=====

generate layer L93020a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

generate layer L93020b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 265/2080

BONDPAD.W.4_5:L264353 = NOT L93020a L93020b

=====

generate layer BONDPAD.W.4_5:L264353, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L93020a

delete layer L93020b

Rule Check BONDPAD.W.4_5 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 5.34% (30 out of 562) rule checks completed.

operation group: 266/2080
L11516 = HOLES Metal6

=====

generate layer L11516, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 267/2080
L94380 = OR L11516 Metal6

=====

generate layer L94380, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.83 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 268/2080
L59931 = SELECT -enclose L94380 Bondpad

=====

generate layer L59931, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 269/2080
L61125 = SIZE L59931 -by 25 -underover

=====

generate layer L61125, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L59931

operation group: 270/2080
L25614 = AND L61125 L94380

=====

generate layer L25614, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L61125
delete layer L94380

operation group: 271/2080
bondpad_metal6_filled = SELECT -enclose L25614 Bondpad

=====

generate layer bondpad_metal6_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 272/2080

bondpad_metal6 = AND Metal6 bondpad_metal6_filled

=====

generate layer bondpad_metal6, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 273/2080

L16224 = HOLES bondpad_metal6

=====

generate layer L16224, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 274/2080

bondpad_metal6_slot = NOT L16224 bondpad_metal6

=====

generate layer bondpad_metal6_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L16224

operation group: 275/2080

L87712 = INTE bondpad_metal6_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L87712, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 276/2080

L87712b = NOT bondpad_metal6_slot L87712

=====

generate layer L87712b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L87712

operation group: 277/2080

L65152 = EXTE bondpad_metal6_slot -le 2.5 -metric opposite -para only -notch not -output region

L55194 = EXTE bondpad_metal6_slot -le 10 -metric opposite -para only -notch not -output region

=====

generate layer L65152, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L55194, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 278/2080

```
bondpad_metal6_slot_on_edge = SELECT -touch bondpad_metal6_slot L65152 -eq 1
=====
generate layer bondpad_metal6_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L65152
```

```
operation group: 279/2080
BONDPAD.SP.5_6:L264344 = NOT L87712b bondpad_metal6_slot_on_edge
=====
generate layer BONDPAD.SP.5_6:L264344, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L87712b
```

```
Rule Check BONDPAD.SP.5_6 finished, 0 error(s) reported.
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

[INFO]: 5.52% (31 out of 562) rule checks completed.

```
operation group: 280/2080
L10301a = EXTE bondpad_metal6_slot -le 2.5 -metric opposite -para only -output region
L10301b = EXTE bondpad_metal6_slot -eq 1 -metric opposite -para only -output region
=====
generate layer L10301a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L10301b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 281/2080
BONDPAD.W.4_6:L264354 = NOT L10301a L10301b
=====
generate layer BONDPAD.W.4_6:L264354, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L10301a
delete layer L10301b
```

```
Rule Check BONDPAD.W.4_6 finished, 0 error(s) reported.
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

[INFO]: 5.69% (32 out of 562) rule checks completed.

```
operation group: 282/2080
L11517 = HOLES Metal7
=====
generate layer L11517, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```


operation group: 283/2080

L94381 = OR L11517 Metal7

```
=====
generate layer L94381, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 284/2080

L52902 = SELECT -enclose L94381 Bondpad

```
=====
generate layer L52902, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 285/2080

L96368 = SIZE L52902 -by 25 -underover

```
=====
generate layer L96368, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L52902

operation group: 286/2080

L79426 = AND L94381 L96368

```
=====
generate layer L79426, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

delete layer L94381

delete layer L96368

operation group: 287/2080

bondpad_metal7_filled = SELECT -enclose L79426 Bondpad

```
=====
generate layer bondpad_metal7_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 288/2080

bondpad_metal7 = AND Metal7 bondpad_metal7_filled

```
=====
generate layer bondpad_metal7, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

operation group: 289/2080

L16225 = HOLES bondpad_metal7

```
=====
generate layer L16225, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 290/2080
bondpad_metal7_slot = NOT L16225 bondpad_metal7
```

```
=====
generate layer bondpad_metal7_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L16225
```

```
operation group: 291/2080
L70431 = INTE bondpad_metal7_slot -eq 1.5 -metric opposite -para only -output region
```

```
=====
generate layer L70431, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 292/2080
L70431b = NOT bondpad_metal7_slot L70431
```

```
=====
generate layer L70431b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L70431
```

```
operation group: 293/2080
L47871 = EXTE bondpad_metal7_slot -le 2.5 -metric opposite -para only -notch not -output region
L52187 = EXTE bondpad_metal7_slot -le 10 -metric opposite -para only -notch not -output region
```

```
=====
generate layer L47871, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L52187, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
operation group: 294/2080
bondpad_metal7_slot_on_edge = SELECT -touch bondpad_metal7_slot L47871 -eq 1
```

```
=====
generate layer bondpad_metal7_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95
```

```
delete layer L47871
```

```
operation group: 295/2080
BONDPAD.SP.5_7:L264345 = NOT L70431b bondpad_metal7_slot_on_edge
```

```
=====
generate layer BONDPAD.SP.5_7:L264345, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L70431b

Rule Check BONDPAD.SP.5_7 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

[INFO]: 5.87% (33 out of 562) rule checks completed.

operation group: 296/2080

L27582a = EXTE bondpad_metal7_slot -le 2.5 -metric opposite -para only -output region

L27582b = EXTE bondpad_metal7_slot -eq 1 -metric opposite -para only -output region

=====

generate layer L27582a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

generate layer L27582b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

operation group: 297/2080

BONDPAD.W.4_7:L264355 = NOT L27582a L27582b

=====

generate layer BONDPAD.W.4_7:L264355, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.42/9.66/9.66 peak=17.95

delete layer L27582a

delete layer L27582b

Rule Check BONDPAD.W.4_7 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 6.05% (34 out of 562) rule checks completed.

operation group: 298/2080

L11518 = HOLES Metal8

=====

generate layer L11518, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 299/2080

L94382 = OR L11518 Metal8

=====

generate layer L94382, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 300/2080

L1561 = SELECT -enclose L94382 Bondpad

```

=====
generate layer L1561, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 301/2080
L79037 = SIZE L1561 -by 25 -underover
=====
generate layer L79037, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L1561

operation group: 302/2080
L79063 = AND L79037 L94382
=====
generate layer L79063, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79037
delete layer L94382

operation group: 303/2080
bondpad_metal8_filled = SELECT -enclose L79063 Bondpad
=====
generate layer bondpad_metal8_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 304/2080
bondpad_metal8 = AND Metal8 bondpad_metal8_filled
=====
generate layer bondpad_metal8, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 305/2080
L16226 = HOLES bondpad_metal8
=====
generate layer L16226, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 306/2080
bondpad_metal8_slot = NOT L16226 bondpad_metal8
=====
generate layer bondpad_metal8_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

```

delete layer L16226

operation group: 307/2080

L53150 = INTE bondpad_metal8_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L53150, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 308/2080

L53150b = NOT bondpad_metal8_slot L53150

=====

generate layer L53150b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L53150

operation group: 309/2080

L30590 = EXTE bondpad_metal8_slot -le 2.5 -metric opposite -para only -notch not -output region

L49180 = EXTE bondpad_metal8_slot -le 10 -metric opposite -para only -notch not -output region

=====

generate layer L30590, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

generate layer L49180, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 310/2080

bondpad_metal8_slot_on_edge = SELECT -touch bondpad_metal8_slot L30590 -eq 1

=====

generate layer bondpad_metal8_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L30590

operation group: 311/2080

BONDPAD.SP.5_8:L264346 = NOT L53150b bondpad_metal8_slot_on_edge

=====

generate layer BONDPAD.SP.5_8:L264346, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L53150b

Rule Check BONDPAD.SP.5_8 finished, 0 error(s) reported.

Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 6.23% (35 out of 562) rule checks completed.

operation group: 312/2080

L44863a = EXTE bondpad_metal8_slot -le 2.5 -metric opposite -para only -output region
L44863b = EXTE bondpad_metal8_slot -eq 1 -metric opposite -para only -output region

```
=====
generate layer L44863a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L44863b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 313/2080
BONDPAD.W.4_8:L264356 = NOT L44863a L44863b

```
=====
generate layer BONDPAD.W.4_8:L264356, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L44863a
delete layer L44863b

Rule Check BONDPAD.W.4_8 finished, 0 error(s) reported.
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 6.41% (36 out of 562) rule checks completed.

operation group: 314/2080
L11519 = HOLES Metal9

```
=====
generate layer L11519, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 315/2080
L94383 = OR L11519 Metal9

```
=====
generate layer L94383, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 316/2080
L11272 = SELECT -enclose L94383 Bondpad

```
=====
generate layer L11272, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 317/2080
L32833 = SIZE L11272 -by 25 -underover

```
=====
generate layer L32833, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L11272

operation group: 318/2080

L91025 = AND L32833 L94383

=====

generate layer L91025, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L32833
delete layer L94383

operation group: 319/2080

bondpad_metal9_filled = SELECT -enclose L91025 Bondpad

=====

generate layer bondpad_metal9_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 320/2080

bondpad_metal9 = AND Metal9 bondpad_metal9_filled

=====

generate layer bondpad_metal9, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.78 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 321/2080

L16227 = HOLES bondpad_metal9

=====

generate layer L16227, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 322/2080

bondpad_metal9_slot = NOT L16227 bondpad_metal9

=====

generate layer bondpad_metal9_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L16227

operation group: 323/2080

L35869 = INTE bondpad_metal9_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L35869, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 324/2080

L35869b = NOT bondpad_metal9_slot L35869

```
=====
generate layer L35869b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L35869

operation group: 325/2080

L13309 = EXTE bondpad_metal9_slot -le 2.5 -metric opposite -para only -notch not -output region
L46173 = EXTE bondpad_metal9_slot -le 10 -metric opposite -para only -notch not -output region

```
=====
generate layer L13309, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L46173, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 326/2080

bondpad_metal9_slot_on_edge = SELECT -touch bondpad_metal9_slot L13309 -eq 1

```
=====
generate layer bondpad_metal9_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L13309

operation group: 327/2080

BONDPAD.SP.5_9:L264347 = NOT L35869b bondpad_metal9_slot_on_edge

```
=====
generate layer BONDPAD.SP.5_9:L264347, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L35869b

Rule Check BONDPAD.SP.5_9 finished, 0 error(s) reported.

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 6.58% (37 out of 562) rule checks completed.

operation group: 328/2080

L62144a = EXTE bondpad_metal9_slot -le 2.5 -metric opposite -para only -output region
L62144b = EXTE bondpad_metal9_slot -eq 1 -metric opposite -para only -output region

```
=====
generate layer L62144a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L62144b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 329/2080

BONDPAD.W.4_9:L264357 = NOT L62144a L62144b

generate layer BONDPAD.W.4_9:L264357, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L62144a
delete layer L62144b

Rule Check BONDPAD.W.4_9 finished, 0 error(s) reported.
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 6.76% (38 out of 562) rule checks completed.

operation group: 330/2080
L77703 = HOLES Metal10

=====

generate layer L77703, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 331/2080
L58377 = OR L77703 Metal10

=====

generate layer L58377, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 332/2080
L17125 = SELECT -enclose L58377 Bondpad

=====

generate layer L17125, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 333/2080
L33952 = SIZE L17125 -by 25 -underover

=====

generate layer L33952, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17125

operation group: 334/2080
L66545 = AND L33952 L58377

=====

generate layer L66545, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L33952
delete layer L58377

operation group: 335/2080

bondpad_metal10_filled = SELECT -enclose L66545 Bondpad

=====

generate layer bondpad_metal10_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 336/2080

bondpad_metal10 = AND Metal10 bondpad_metal10_filled

=====

generate layer bondpad_metal10, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 337/2080

L35415 = HOLES bondpad_metal10

=====

generate layer L35415, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 338/2080

bondpad_metal10_slot = NOT L35415 bondpad_metal10

=====

generate layer bondpad_metal10_slot, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L35415

operation group: 339/2080

L36875 = INTE bondpad_metal10_slot -eq 1.5 -metric opposite -para only -output region

=====

generate layer L36875, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 340/2080

L36875b = NOT bondpad_metal10_slot L36875

=====

generate layer L36875b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L36875

operation group: 341/2080

L59435 = EXTE bondpad_metal10_slot -le 2.5 -metric opposite -para only -notch not -output region

L97563 = EXTE bondpad_metal10_slot -le 10 -metric opposite -para only -notch not -output region

=====

```
generate layer L59435, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L97563, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 342/2080

```
bondpad_metal10_slot_on_edge = SELECT -touch bondpad_metal10_slot L59435 -eq 1
=====
generate layer bondpad_metal10_slot_on_edge, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L59435
```

operation group: 343/2080

```
BONDPAD.SP.5_10:L264348 = NOT L36875b bondpad_metal10_slot_on_edge
=====
generate layer BONDPAD.SP.5_10:L264348, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L36875b
```

```
Rule Check BONDPAD.SP.5_10 finished, 0 error(s) reported.
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

[INFO]: 6.94% (39 out of 562) rule checks completed.

operation group: 344/2080

```
L69464a = EXTE bondpad_metal10_slot -le 2.5 -metric opposite -para only -output region
L69464b = EXTE bondpad_metal10_slot -eq 1 -metric opposite -para only -output region
=====
generate layer L69464a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L69464b, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 345/2080

```
BONDPAD.W.4_10:L264358 = NOT L69464a L69464b
=====
generate layer BONDPAD.W.4_10:L264358, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L69464a
delete layer L69464b
```

```
Rule Check BONDPAD.W.4_10 finished, 0 error(s) reported.
Time: cpu=0.00/0.79 real=0.00/0.84 Memory: 9.43/9.66/9.66 peak=17.95
```

[INFO]: 7.12% (40 out of 562) rule checks completed.

operation group: 346/2080

L25906 = SIZE Cont -by 6 -inside_of Oxide -step 0.1

=====

generate layer L25906, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.01/0.79 real=0.01/0.85 Memory: 9.43/9.66/17.70 peak=17.95

operation group: 347/2080

L94579 = NOT Oxide L25906

=====

generate layer L94579, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/13.68 peak=17.95

operation group: 348/2080

L39287 = SIZE Oxide -by 0.09 -underover

=====

layer L39287 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 349/2080

L30786 = NOT Oxide L39287

=====

layer L30786 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L39287

operation group: 350/2080

L83634 = SELECT -interact L94579 L30786

=====

generate layer L83634, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L94579

delete layer L30786

operation group: 351/2080

OXIDE.L.1_OXIDE.L.2:L263115 = SELECT -touch L83634 L25906

=====

generate layer OXIDE.L.1_OXIDE.L.2:L263115, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L83634

delete layer L25906

Rule Check OXIDE.L.1_OXIDE.L.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 7.30% (41 out of 562) rule checks completed.

operation group: 352/2080

L95323 = SIZE bondpad_metal1_filled -by -5

=====

generate layer L95323, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 353/2080

L90795 = SIZE L95323 -by 20 -underover

=====

generate layer L90795, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L95323

operation group: 354/2080

L19940 = EDGE_EXPAND L90795 -outside_by 5

=====

generate layer L19940, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L90795

operation group: 355/2080

L52936 = OR L97067 bondpad_metal1_slot

=====

generate layer L52936, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L97067

operation group: 356/2080

L47599 = NOT bondpad_metal1_filled L52936

=====

generate layer L47599, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L52936

operation group: 357/2080

L53804 = INTE L47599 -eq 5 -metric opposite -para only -output region

=====

generate layer L53804, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L47599

operation group: 358/2080

BONDPAD.W.5:L264359 = SELECT -outside L19940 L53804

=====

generate layer BONDPAD.W.5:L264359, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L19940
delete layer L53804

Rule Check BONDPAD.W.5 finished, 0 error(s) reported.
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 7.47% (42 out of 562) rule checks completed.

operation group: 359/2080

L36698 = SIZE bondpad_metal2_filled -by -5

=====

generate layer L36698, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 360/2080

L3707 = SIZE L36698 -by 20 -underover

=====

generate layer L3707, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L36698

operation group: 361/2080

L74735 = EDGE_EXPAND L3707 -outside_by 5

=====

generate layer L74735, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L3707

operation group: 362/2080

L74 = EXTE bondpad_metal2_slot -le 10 -metric opposite -para only -notch not -output region

=====

generate layer L74, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 363/2080

L81007 = OR L74 bondpad_metal2_slot

```
=====
generate layer L81007, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L74

operation group: 364/2080

L35857 = NOT bondpad_metal2_filled L81007

```
=====
generate layer L35857, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L81007

operation group: 365/2080

L45326 = INTE L35857 -eq 5 -metric opposite -para only -output region

```
=====
generate layer L45326, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L35857

operation group: 366/2080

BONDPAD.W.5_2:L264360 = SELECT -outside L74735 L45326

```
=====
generate layer BONDPAD.W.5_2:L264360, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L74735

delete layer L45326

Rule Check BONDPAD.W.5_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 7.65% (43 out of 562) rule checks completed.

operation group: 367/2080

L21927 = SIZE bondpad_metal3_filled -by -5

```
=====
generate layer L21927, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 368/2080

L31022 = SIZE L21927 -by 20 -underover

```
=====
generate layer L31022, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L21927

operation group: 369/2080

L77926 = EDGE_EXPAND L31022 -outside_by 5

=====

generate layer L77926, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L31022

operation group: 370/2080

L98923 = OR L64215 bondpad_metal3_slot

=====

generate layer L98923, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L64215

operation group: 371/2080

L56717 = NOT bondpad_metal3_filled L98923

=====

generate layer L56717, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L98923

operation group: 372/2080

L53462 = INTE L56717 -eq 5 -metric opposite -para only -output region

=====

generate layer L53462, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L56717

operation group: 373/2080

BONDPAD.W.5_3:L264361 = SELECT -outside L77926 L53462

=====

generate layer BONDPAD.W.5_3:L264361, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.79 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L77926

delete layer L53462

Rule Check BONDPAD.W.5_3 finished, 0 error(s) reported.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 7.83% (44 out of 562) rule checks completed.

operation group: 374/2080

L80552 = SIZE bondpad_metal4_filled -by -5

```
=====
generate layer L80552, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 375/2080

L95699 = SIZE L80552 -by 20 -underover

```
=====
generate layer L95699, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L80552

operation group: 376/2080

L27426 = EDGE_EXPAND L95699 -outside_by 5

```
=====
generate layer L27426, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L95699

operation group: 377/2080

L90065 = OR L61208 bondpad_metal4_slot

```
=====
generate layer L90065, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L61208

operation group: 378/2080

L61675 = NOT bondpad_metal4_filled L90065

```
=====
generate layer L61675, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L90065

operation group: 379/2080

L23149 = INTE L61675 -eq 5 -metric opposite -para only -output region

```
=====
generate layer L23149, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L61675

operation group: 380/2080

BONDPAD.W.5_4:L264362 = SELECT -outside L27426 L23149

```
=====
generate layer BONDPAD.W.5_4:L264362, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L27426
delete layer L23149
```

```
Rule Check BONDPAD.W.5_4 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

[INFO]: 8.01% (45 out of 562) rule checks completed.

```
operation group: 381/2080
L39177 = SIZE bondpad_metal5_filled -by -5
```

```
=====
generate layer L39177, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

```
operation group: 382/2080
L21314 = SIZE L39177 -by 20 -underover
```

```
=====
generate layer L21314, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L39177
```

```
operation group: 383/2080
L61825 = EDGE_EXPAND L21314 -outside_by 5
```

```
=====
generate layer L61825, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L21314
```

```
operation group: 384/2080
L24897 = OR L58201 bondpad_metal5_slot
```

```
=====
generate layer L24897, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L58201
```

```
operation group: 385/2080
L91512 = NOT bondpad_metal5_filled L24897
```

```
=====
generate layer L91512, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L24897

operation group: 386/2080

L26632 = INTE L91512 -eq 5 -metric opposite -para only -output region

=====

generate layer L26632, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91512

operation group: 387/2080

BONDPAD.W.5_5:L264363 = SELECT -outside L61825 L26632

=====

generate layer BONDPAD.W.5_5:L264363, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L61825

delete layer L26632

Rule Check BONDPAD.W.5_5 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 8.19% (46 out of 562) rule checks completed.

operation group: 388/2080

L97802 = SIZE bondpad_metal6_filled -by -5

=====

generate layer L97802, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 389/2080

L15441 = SIZE L97802 -by 20 -underover

=====

generate layer L15441, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L97802

operation group: 390/2080

L19957 = EDGE_EXPAND L15441 -outside_by 5

=====

generate layer L19957, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L15441

operation group: 391/2080

L74852 = OR L55194 bondpad_metal6_slot

```
=====
generate layer L74852, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L55194

operation group: 392/2080

L77773 = NOT bondpad_metal6_filled L74852

```
=====
generate layer L77773, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L74852

operation group: 393/2080

L17229 = INTE L77773 -eq 5 -metric opposite -para only -output region

```
=====
generate layer L17229, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L77773

operation group: 394/2080

BONDPAD.W.5_6:L264364 = SELECT -outside L19957 L17229

```
=====
generate layer BONDPAD.W.5_6:L264364, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L19957

delete layer L17229

Rule Check BONDPAD.W.5_6 finished, 0 error(s) reported.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 8.36% (47 out of 562) rule checks completed.

operation group: 395/2080

L10869 = SIZE bondpad_metal7_filled -by -5

```
=====
generate layer L10869, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 396/2080

L5615 = SIZE L10869 -by 20 -underover

```
=====
generate layer L5615, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L10869

operation group: 397/2080

L24363 = EDGE_EXPAND L5615 -outside_by 5

=====

generate layer L24363, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L5615

operation group: 398/2080

L83586 = OR L52187 bondpad_metal7_slot

=====

generate layer L83586, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L52187

operation group: 399/2080

L20526 = NOT bondpad_metal7_filled L83586

=====

generate layer L20526, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L83586

operation group: 400/2080

L2261 = INTE L20526 -eq 5 -metric opposite -para only -output region

=====

generate layer L2261, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L20526

operation group: 401/2080

BONDPAD.W.5_7:L264365 = SELECT -outside L24363 L2261

=====

generate layer BONDPAD.W.5_7:L264365, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L24363

delete layer L2261

Rule Check BONDPAD.W.5_7 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 8.54% (48 out of 562) rule checks completed.

operation group: 402/2080

L52244 = SIZE bondpad_metal8_filled -by -5

=====

generate layer L52244, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 403/2080

L85496 = SIZE L52244 -by 20 -underover

=====

generate layer L85496, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L52244

operation group: 404/2080

L3964 = EDGE_EXPAND L85496 -outside_by 5

=====

generate layer L3964, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L85496

operation group: 405/2080

L18418 = OR L49180 bondpad_metal8_slot

=====

generate layer L18418, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L49180

operation group: 406/2080

L11829 = NOT bondpad_metal8_filled L18418

=====

generate layer L11829, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L18418

operation group: 407/2080

L12231 = INTE L11829 -eq 5 -metric opposite -para only -output region

=====

generate layer L12231, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L11829

operation group: 408/2080

BONDPAD.W.5_8:L264366 = SELECT -outside L3964 L12231

=====

generate layer BONDPAD.W.5_8:L264366, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L3964
delete layer L12231

Rule Check BONDPAD.W.5_8 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 8.72% (49 out of 562) rule checks completed.

operation group: 409/2080

L93619 = SIZE bondpad_metal9_filled -by -5

=====

generate layer L93619, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 410/2080

L53065 = SIZE L93619 -by 20 -underover

=====

generate layer L53065, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L93619

operation group: 411/2080

L79015 = EDGE_EXPAND L53065 -outside_by 5

=====

generate layer L79015, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L53065

operation group: 412/2080

L9560 = OR L46173 bondpad_metal9_slot

=====

generate layer L9560, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L46173

operation group: 413/2080

L46654 = NOT bondpad_metal9_filled L9560

=====

generate layer L46654, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L9560

operation group: 414/2080

L54989 = INTE L46654 -eq 5 -metric opposite -para only -output region

=====

generate layer L54989, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L46654

operation group: 415/2080

BONDPAD.W.5_9:L264367 = SELECT -outside L79015 L54989

=====

generate layer BONDPAD.W.5_9:L264367, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79015

delete layer L54989

Rule Check BONDPAD.W.5_9 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 8.90% (50 out of 562) rule checks completed.

operation group: 416/2080

L22427 = SIZE bondpad_metal10_filled -by -5

=====

generate layer L22427, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 417/2080

L40524 = SIZE L22427 -by 20 -underover

=====

generate layer L40524, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L22427

operation group: 418/2080

L22723 = EDGE_EXPAND L40524 -outside_by 5

=====

generate layer L22723, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L40524

operation group: 419/2080

L62913 = OR L97563 bondpad_metal10_slot

=====

generate layer L62913, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L97563

operation group: 420/2080

L90437 = NOT bondpad_metal10_filled L62913

=====

generate layer L90437, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L62913

operation group: 421/2080

L45819 = INTE L90437 -eq 5 -metric opposite -para only -output region

=====

generate layer L45819, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L90437

operation group: 422/2080

BONDPAD.W.5_10:L264368 = SELECT -outside L22723 L45819

=====

generate layer BONDPAD.W.5_10:L264368, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L22723

delete layer L45819

Rule Check BONDPAD.W.5_10 finished, 0 error(s) reported.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.07% (51 out of 562) rule checks completed.

operation group: 423/2080

L12142 = SIZE Metal2 -by 0.2 -underover

=====

generate layer L12142, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 424/2080

L82991 = SIZE Metal1 -by 0.2 -underover

=====

layer L82991 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 425/2080

L21748 = OR L12142 L82991

=====

layer L21748 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L82991

operation group: 426/2080

via1_x_1 = AND L21748 Via1

=====

generate layer via1_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L21748

operation group: 427/2080

L8074 = SELECT -enclose L38712 via1_x_1

=====

generate layer L8074, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 428/2080

L91947 = SIZE via1_x_1 -by 0.15

=====

generate layer L91947, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 429/2080

L45832 = AND L38712 L91947

=====

generate layer L45832, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91947

operation group: 430/2080

L70080 = SELECT -enclose L45832 via1_x_1 -gt 1

=====

generate layer L70080, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L45832

operation group: 431/2080

L96413 = SELECT -outside L8074 L70080

=====

generate layer L96413, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L8074

delete layer L70080

operation group: 432/2080

L91890 = SIZE via1_x_1 -by 0.3

=====

generate layer L91890, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 433/2080

L45019 = AND L38712 L91890

=====

generate layer L45019, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91890

operation group: 434/2080

L53699 = SELECT -enclose L45019 via1_x_1 -gt 3

=====

generate layer L53699, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L45019

delete layer via1_x_1

operation group: 435/2080

L53828 = SELECT -outside L96413 L53699

=====

generate layer L53828, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L96413

delete layer L53699

operation group: 436/2080

L12235 = SIZE Metal2 -by 0.5 -underover

=====

generate layer L12235, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 437/2080

L83084 = SIZE Metal1 -by 0.5 -underover

layer L83084 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.80 real=0.00/0.85 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 438/2080

L4033 = OR L12235 L83084

layer L4033 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L83084

operation group: 439/2080

via1_x_2 = AND L4033 Via1

generate layer via1_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L4033

operation group: 440/2080

L8073 = SELECT -enclose L38712 via1_x_2

generate layer L8073, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 441/2080

L62796 = SIZE via1_x_2 -by 0.15

generate layer L62796, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 442/2080

L3292 = AND L38712 L62796

generate layer L3292, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L62796

operation group: 443/2080

L84071 = SELECT -enclose L3292 via1_x_2 -gt 3

generate layer L84071, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L3292

operation group: 444/2080

L71267 = SELECT -outside L8073 L84071

=====

generate layer L71267, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L8073

delete layer L84071

operation group: 445/2080

L62739 = SIZE via1_x_2 -by 0.3

=====

generate layer L62739, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 446/2080

L3109 = AND L38712 L62739

=====

generate layer L3109, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L38712

delete layer L62739

operation group: 447/2080

L29299 = SELECT -enclose L3109 via1_x_2 -gt 8

=====

generate layer L29299, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L3109

delete layer via1_x_2

operation group: 448/2080

rule_VIA1_X_2 = SELECT -outside L71267 L29299

=====

generate layer rule_VIA1_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L71267

delete layer L29299

operation group: 449/2080

VIA1.X.1:L264098 = NOT L53828 rule_VIA1_X_2

=====

generate layer VIA1.X.1:L264098, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L53828

Rule Check VIA1.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.25% (52 out of 562) rule checks completed.

operation group: 450/2080
L41293 = SIZE Metal3 -by 0.2 -underover

=====

generate layer L41293, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 451/2080
L52348 = OR L12142 L41293

=====

generate layer L52348, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L12142

operation group: 452/2080
via2_x_1 = AND L52348 Via2

=====

generate layer via2_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L52348

operation group: 453/2080
L18587 = SELECT -enclose L18248 via2_x_1

=====

generate layer L18587, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 454/2080
L61844 = SIZE via2_x_1 -by 0.15

=====

generate layer L61844, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 455/2080

L7717 = AND L18248 L61844

=====

generate layer L7717, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L61844

operation group: 456/2080

L38181 = SELECT -enclose L7717 via2_x_1 -gt 1

=====

generate layer L38181, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L7717

operation group: 457/2080

L67613 = SELECT -outside L18587 L38181

=====

generate layer L67613, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L18587

delete layer L38181

operation group: 458/2080

L61901 = SIZE via2_x_1 -by 0.3

=====

generate layer L61901, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 459/2080

L8551 = AND L18248 L61901

=====

generate layer L8551, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L61901

operation group: 460/2080

L51226 = SELECT -enclose L8551 via2_x_1 -gt 3

=====

generate layer L51226, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L8551

delete layer via2_x_1

operation group: 461/2080

L36344 = SELECT -outside L67613 L51226

=====

generate layer L36344, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L67613

delete layer L51226

operation group: 462/2080

L41386 = SIZE Metal3 -by 0.5 -underover

=====

generate layer L41386, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 463/2080

L53252 = OR L12235 L41386

=====

generate layer L53252, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L12235

operation group: 464/2080

via2_x_2 = AND L53252 Via2

=====

generate layer via2_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L53252

operation group: 465/2080

L18588 = SELECT -enclose L18248 via2_x_2

=====

generate layer L18588, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 466/2080

L90995 = SIZE via2_x_2 -by 0.15

=====

generate layer L90995, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 467/2080

L49606 = AND L18248 L90995


```
=====
generate layer L49606, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L90995
```

```
operation group: 468/2080
```

```
L66271 = SELECT -enclose L49606 via2_x_2 -gt 3
```

```
=====
generate layer L66271, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L49606
```

```
operation group: 469/2080
```

```
L89859 = SELECT -outside L18588 L66271
```

```
=====
generate layer L89859, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L18588
```

```
delete layer L66271
```

```
operation group: 470/2080
```

```
L91052 = SIZE via2_x_2 -by 0.3
```

```
=====
generate layer L91052, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
operation group: 471/2080
```

```
L70621 = AND L18248 L91052
```

```
=====
generate layer L70621, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L18248
```

```
delete layer L91052
```

```
operation group: 472/2080
```

```
L66389 = SELECT -enclose L70621 via2_x_2 -gt 8
```

```
=====
generate layer L66389, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L70621
```

```
delete layer via2_x_2
```

```
operation group: 473/2080
```

rule_VIA2_X_2 = SELECT -outside L89859 L66389

=====

generate layer rule_VIA2_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L89859
delete layer L66389

operation group: 474/2080

VIA2.X.1:L264099 = NOT L36344 rule_VIA2_X_2

=====

generate layer VIA2.X.1:L264099, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L36344

Rule Check VIA2.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.43% (53 out of 562) rule checks completed.

operation group: 475/2080

L70444 = SIZE Metal4 -by 0.2 -underover

=====

generate layer L70444, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 476/2080

L48815 = OR L41293 L70444

=====

generate layer L48815, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L41293

operation group: 477/2080

via3_x_1 = AND L48815 Via3

=====

generate layer via3_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L48815

operation group: 478/2080

L45132 = SELECT -enclose L92088 via3_x_1

=====

generate layer L45132, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 479/2080

L48339 = SIZE via3_x_1 -by 0.15

=====

generate layer L48339, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 480/2080

L32665 = AND L48339 L92088

=====

generate layer L32665, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L48339

operation group: 481/2080

L4930 = SELECT -enclose L32665 via3_x_1 -gt 1

=====

generate layer L4930, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L32665

operation group: 482/2080

L84908 = SELECT -outside L45132 L4930

=====

generate layer L84908, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L45132

delete layer L4930

operation group: 483/2080

L48396 = SIZE via3_x_1 -by 0.3

=====

generate layer L48396, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 484/2080

L44066 = AND L48396 L92088

=====

generate layer L44066, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L48396

operation group: 485/2080

L42854 = SELECT -enclose L44066 via3_x_1 -gt 3

=====

generate layer L42854, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L44066

delete layer via3_x_1

operation group: 486/2080

L59033 = SELECT -outside L84908 L42854

=====

generate layer L59033, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L84908

delete layer L42854

operation group: 487/2080

L70537 = SIZE Metal4 -by 0.5 -underover

=====

generate layer L70537, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 488/2080

L87119 = OR L41386 L70537

=====

generate layer L87119, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L41386

operation group: 489/2080

via3_x_2 = AND L87119 Via3

=====

generate layer via3_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L87119

operation group: 490/2080

L45131 = SELECT -enclose L92088 via3_x_2

=====

generate layer L45131, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 491/2080

L77490 = SIZE via3_x_2 -by 0.15

```
=====
generate layer L77490, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 492/2080

L64637 = AND L77490 L92088

```
=====
generate layer L64637, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L77490

operation group: 493/2080

L11835 = SELECT -enclose L64637 via3_x_2 -gt 3

```
=====
generate layer L11835, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L64637

operation group: 494/2080

L17874 = SELECT -outside L45131 L11835

```
=====
generate layer L17874, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L45131

delete layer L11835

operation group: 495/2080

L77547 = SIZE via3_x_2 -by 0.3

```
=====
generate layer L77547, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 496/2080

L97334 = AND L77547 L92088

```
=====
generate layer L97334, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L77547

delete layer L92088

operation group: 497/2080

L31676 = SELECT -enclose L97334 via3_x_2 -gt 8

=====

generate layer L31676, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L97334
delete layer via3_x_2

operation group: 498/2080
rule_VIA3_X_2 = SELECT -outside L17874 L31676

=====

generate layer rule_VIA3_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17874
delete layer L31676

operation group: 499/2080
VIA3.X.1:L264100 = NOT L59033 rule_VIA3_X_2

=====

generate layer VIA3.X.1:L264100, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L59033

Rule Check VIA3.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.61% (54 out of 562) rule checks completed.

operation group: 500/2080
L99595 = SIZE Metal5 -by 0.2 -underover

=====

generate layer L99595, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 501/2080
L18361 = OR L70444 L99595

=====

generate layer L18361, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L70444

operation group: 502/2080
via4_x_1 = AND L18361 Via4

=====

generate layer via4_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L18361

operation group: 503/2080

L91762 = SELECT -enclose L2424 via4_x_1

=====

generate layer L91762, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 504/2080

L34834 = SIZE via4_x_1 -by 0.15

=====

generate layer L34834, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 505/2080

L60517 = AND L2424 L34834

=====

generate layer L60517, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L34834

operation group: 506/2080

L96440 = SELECT -enclose L60517 via4_x_1 -gt 1

=====

generate layer L96440, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L60517

operation group: 507/2080

L31171 = SELECT -outside L91762 L96440

=====

generate layer L31171, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91762

delete layer L96440

operation group: 508/2080

L34891 = SIZE via4_x_1 -by 0.3

=====

generate layer L34891, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 509/2080

L60700 = AND L2424 L34891

=====

generate layer L60700, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L34891

operation group: 510/2080

L80442 = SELECT -enclose L60700 via4_x_1 -gt 3

=====

generate layer L80442, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L60700

delete layer via4_x_1

operation group: 511/2080

L53778 = SELECT -outside L31171 L80442

=====

generate layer L53778, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L31171

delete layer L80442

operation group: 512/2080

L99688 = SIZE Metal5 -by 0.5 -underover

=====

generate layer L99688, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 513/2080

L43335 = OR L70537 L99688

=====

generate layer L43335, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L70537

operation group: 514/2080

via4_x_2 = AND L43335 Via4

=====

generate layer via4_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L43335

operation group: 515/2080

L91763 = SELECT -enclose L2424 via4_x_2

=====

generate layer L91763, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 516/2080

L63985 = SIZE via4_x_2 -by 0.15

=====

generate layer L63985, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 517/2080

L2406 = AND L2424 L63985

=====

generate layer L2406, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L63985

operation group: 518/2080

L1562 = SELECT -enclose L2406 via4_x_2 -gt 3

=====

generate layer L1562, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L2406

operation group: 519/2080

L98807 = SELECT -outside L91763 L1562

=====

generate layer L98807, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91763

delete layer L1562

operation group: 520/2080

L64042 = SIZE via4_x_2 -by 0.3

=====

generate layer L64042, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 521/2080

L23421 = AND L2424 L64042

```
=====
generate layer L23421, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.80 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L2424
delete layer L64042
```

operation group: 522/2080
L65761 = SELECT -enclose L23421 via4_x_2 -gt 8

```
=====
generate layer L65761, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L23421
delete layer via4_x_2
```

operation group: 523/2080
rule_VIA4_X_2 = SELECT -outside L98807 L65761

```
=====
generate layer rule_VIA4_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L98807
delete layer L65761
```

operation group: 524/2080
VIA4.X.1:L264101 = NOT L53778 rule_VIA4_X_2

```
=====
generate layer VIA4.X.1:L264101, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L53778
```

Rule Check VIA4.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.79% (55 out of 562) rule checks completed.

operation group: 525/2080
L28746 = SIZE Metal6 -by 0.2 -underover

```
=====
generate layer L28746, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 526/2080
L91359 = OR L28746 L99595

generate layer L91359, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L99595

operation group: 527/2080

via5_x_1 = AND L91359 Via5

=====

generate layer via5_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L91359

operation group: 528/2080

L74092 = SELECT -enclose L54536 via5_x_1

=====

generate layer L74092, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 529/2080

L21329 = SIZE via5_x_1 -by 0.15

=====

generate layer L21329, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 530/2080

L17835 = AND L21329 L54536

=====

generate layer L17835, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L21329

operation group: 531/2080

L62342 = SELECT -enclose L17835 via5_x_1 -gt 1

=====

generate layer L62342, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17835

operation group: 532/2080

L75634 = SELECT -outside L74092 L62342

=====

generate layer L75634, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L74092
delete layer L62342

operation group: 533/2080

L21386 = SIZE via5_x_1 -by 0.3

=====

generate layer L21386, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 534/2080

L6434 = AND L21386 L54536

=====

generate layer L6434, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L21386

operation group: 535/2080

L39709 = SELECT -enclose L6434 via5_x_1 -gt 3

=====

generate layer L39709, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L6434
delete layer via5_x_1

operation group: 536/2080

L46534 = SELECT -outside L75634 L39709

=====

generate layer L46534, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L75634
delete layer L39709

operation group: 537/2080

L28839 = SIZE Metal6 -by 0.5 -underover

=====

generate layer L28839, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 538/2080

L14241 = OR L28839 L99688

=====

generate layer L14241, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L99688

operation group: 539/2080

via5_x_2 = AND L14241 Via5

=====

generate layer via5_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L14241

operation group: 540/2080

L74091 = SELECT -enclose L54536 via5_x_2

=====

generate layer L74091, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 541/2080

L50480 = SIZE via5_x_2 -by 0.15

=====

generate layer L50480, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 542/2080

L47841 = AND L50480 L54536

=====

generate layer L47841, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L50480

operation group: 543/2080

L17351 = SELECT -enclose L47841 via5_x_2 -gt 3

=====

generate layer L17351, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L47841

operation group: 544/2080

L12707 = SELECT -outside L74091 L17351

=====

generate layer L12707, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L74091

delete layer L17351

operation group: 545/2080

L50537 = SIZE via5_x_2 -by 0.3

```
=====
generate layer L50537, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 546/2080

L53166 = AND L50537 L54536

```
=====
generate layer L53166, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L50537

delete layer L54536

operation group: 547/2080

L35999 = SELECT -enclose L53166 via5_x_2 -gt 8

```
=====
generate layer L35999, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L53166

delete layer via5_x_2

operation group: 548/2080

rule_VIA5_X_2 = SELECT -outside L12707 L35999

```
=====
generate layer rule_VIA5_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L12707

delete layer L35999

operation group: 549/2080

VIA5.X.1:L264102 = NOT L46534 rule_VIA5_X_2

```
=====
generate layer VIA5.X.1:L264102, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L46534

Rule Check VIA5.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 9.96% (56 out of 562) rule checks completed.

operation group: 550/2080

L57897 = SIZE Metal7 -by 0.2 -underover

```
=====
generate layer L57897, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 551/2080

L42140 = OR L28746 L57897

```
=====
generate layer L42140, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L28746

operation group: 552/2080

via6_x_1 = AND L42140 Via6

```
=====
generate layer via6_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L42140

operation group: 553/2080

L62390 = SELECT -enclose L55800 via6_x_1

```
=====
generate layer L62390, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 554/2080

L7824 = SIZE via6_x_1 -by 0.15

```
=====
generate layer L7824, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 555/2080

L86972 = AND L55800 L7824

```
=====
generate layer L86972, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L7824

operation group: 556/2080

L41787 = SELECT -enclose L86972 via6_x_1 -gt 1

```
=====
generate layer L41787, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L86972

operation group: 557/2080

L89680 = SELECT -outside L62390 L41787

=====

generate layer L89680, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L62390
delete layer L41787

operation group: 558/2080

L7881 = SIZE via6_x_1 -by 0.3

=====

generate layer L7881, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 559/2080

L86789 = AND L55800 L7881

=====

generate layer L86789, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L7881

operation group: 560/2080

L25793 = SELECT -enclose L86789 via6_x_1 -gt 3

=====

generate layer L25793, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L86789
delete layer via6_x_1

operation group: 561/2080

L95770 = SELECT -outside L89680 L25793

=====

generate layer L95770, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L89680
delete layer L25793

operation group: 562/2080

L57990 = SIZE Metal7 -by 0.5 -underover

=====

generate layer L57990, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 563/2080

L63481 = OR L28839 L57990

=====

generate layer L63481, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L28839

operation group: 564/2080

via6_x_2 = AND L63481 Via6

=====

generate layer via6_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L63481

operation group: 565/2080

L62391 = SELECT -enclose L55800 via6_x_2

=====

generate layer L62391, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 566/2080

L36975 = SIZE via6_x_2 -by 0.15

=====

generate layer L36975, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 567/2080

L17051 = AND L36975 L55800

=====

generate layer L17051, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L36975

operation group: 568/2080

L59980 = SELECT -enclose L17051 via6_x_2 -gt 3

=====

generate layer L59980, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17051

operation group: 569/2080

L15581 = SELECT -outside L62391 L59980

=====

generate layer L15581, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L62391

delete layer L59980

operation group: 570/2080

L37032 = SIZE via6_x_2 -by 0.3

=====

generate layer L37032, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 571/2080

L93212 = AND L37032 L55800

=====

generate layer L93212, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L37032

delete layer L55800

operation group: 572/2080

L40196 = SELECT -enclose L93212 via6_x_2 -gt 8

=====

generate layer L40196, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L93212

delete layer via6_x_2

operation group: 573/2080

rule_VIA6_X_2 = SELECT -outside L15581 L40196

=====

generate layer rule_VIA6_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L15581

delete layer L40196

operation group: 574/2080

VIA6.X.1:L264103 = NOT L95770 rule_VIA6_X_2

=====

generate layer VIA6.X.1:L264103, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L95770

Rule Check VIA6.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 10.14% (57 out of 562) rule checks completed.

operation group: 575/2080

L87048 = SIZE Metal8 -by 0.2 -underover

=====

generate layer L87048, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 576/2080

L79204 = OR L57897 L87048

=====

generate layer L79204, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L57897

operation group: 577/2080

via7_x_1 = AND L79204 Via7

=====

generate layer via7_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79204

operation group: 578/2080

L66945 = SELECT -enclose L1160 via7_x_1

=====

generate layer L66945, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 579/2080

L94319 = SIZE via7_x_1 -by 0.15

=====

generate layer L94319, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 580/2080

L35945 = AND L1160 L94319

=====

generate layer L35945, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L94319

operation group: 581/2080

L71964 = SELECT -enclose L35945 via7_x_1 -gt 1

=====

generate layer L71964, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L35945

operation group: 582/2080

L14328 = SELECT -outside L66945 L71964

=====

generate layer L14328, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L66945

delete layer L71964

operation group: 583/2080

L94384 = SIZE via7_x_1 -by 0.3

=====

generate layer L94384, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 584/2080

L35733 = AND L1160 L94384

=====

generate layer L35733, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L94384

operation group: 585/2080

L32987 = SELECT -enclose L35733 via7_x_1 -gt 3

=====

generate layer L32987, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L35733

delete layer via7_x_1

operation group: 586/2080

L70360 = SELECT -outside L14328 L32987

=====

generate layer L70360, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L14328
delete layer L32987

operation group: 587/2080

L87141 = SIZE Metal8 -by 0.5 -underover

=====

generate layer L87141, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 588/2080

L96196 = OR L57990 L87141

=====

generate layer L96196, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L57990

operation group: 589/2080

via7_x_2 = AND L96196 Via7

=====

generate layer via7_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L96196

operation group: 590/2080

L66944 = SELECT -enclose L1160 via7_x_2

=====

generate layer L66944, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 591/2080

L23470 = SIZE via7_x_2 -by 0.15

=====

generate layer L23470, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 592/2080

L29245 = AND L1160 L23470

=====

generate layer L29245, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L23470

operation group: 593/2080

L94577 = SELECT -enclose L29245 via7_x_2 -gt 3

=====

generate layer L94577, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.86 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L29245

operation group: 594/2080

L75238 = SELECT -outside L66944 L94577

=====

generate layer L75238, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L66944

delete layer L94577

operation group: 595/2080

L23527 = SIZE via7_x_2 -by 0.3

=====

generate layer L23527, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 596/2080

L28432 = AND L1160 L23527

=====

generate layer L28432, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L1160

delete layer L23527

operation group: 597/2080

L32727 = SELECT -enclose L28432 via7_x_2 -gt 8

=====

generate layer L32727, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L28432

delete layer via7_x_2

operation group: 598/2080

rule_VIA7_X_2 = SELECT -outside L75238 L32727

=====

generate layer rule_VIA7_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L75238
delete layer L32727

operation group: 599/2080

VIA7.X.1:L264104 = NOT L70360 rule_VIA7_X_2

=====

generate layer VIA7.X.1:L264104, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L70360

Rule Check VIA7.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 10.32% (58 out of 562) rule checks completed.

operation group: 600/2080

L16199 = SIZE Metal9 -by 0.2 -underover

=====

generate layer L16199, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 601/2080

L19700 = OR L16199 L87048

=====

generate layer L19700, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L16199
delete layer L87048

operation group: 602/2080

via8_x_1 = AND L19700 Via8

=====

generate layer via8_x_1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L19700

operation group: 603/2080

L34723 = SELECT -enclose L9176 via8_x_1

=====

generate layer L34723, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 604/2080

L80814 = SIZE via8_x_1 -by 0.15

```
=====
generate layer L80814, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 605/2080

L4547 = AND L80814 L9176

```
=====
generate layer L4547, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L80814

operation group: 606/2080

L11363 = SELECT -enclose L4547 via8_x_1 -gt 1

```
=====
generate layer L11363, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L4547

operation group: 607/2080

L58690 = SELECT -outside L34723 L11363

```
=====
generate layer L58690, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L34723

delete layer L11363

operation group: 608/2080

L80871 = SIZE via8_x_1 -by 0.3

```
=====
generate layer L80871, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

operation group: 609/2080

L79078 = AND L80871 L9176

```
=====
generate layer L79078, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L80871

operation group: 610/2080

L32204 = SELECT -enclose L79078 via8_x_1 -gt 3

generate layer L32204, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79078
delete layer via8_x_1

operation group: 611/2080
L17966 = SELECT -outside L58690 L32204

=====

generate layer L17966, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L58690
delete layer L32204

operation group: 612/2080
L16292 = SIZE Metal9 -by 0.5 -underover

=====

generate layer L16292, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 613/2080
L2708 = OR L16292 L87141

=====

generate layer L2708, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L16292
delete layer L87141

operation group: 614/2080
via8_x_2 = AND L2708 Via8

=====

generate layer via8_x_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L2708

operation group: 615/2080
L34724 = SELECT -enclose L9176 via8_x_2

=====

generate layer L34724, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 616/2080
L9965 = SIZE via8_x_2 -by 0.15

=====

generate layer L9965, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 617/2080
L72731 = AND L9176 L9965

=====

generate layer L72731, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L9965

operation group: 618/2080
L85854 = SELECT -enclose L72731 via8_x_2 -gt 3

=====

generate layer L85854, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L72731

operation group: 619/2080
L59769 = SELECT -outside L34724 L85854

=====

generate layer L59769, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L34724
delete layer L85854

operation group: 620/2080
L10022 = SIZE via8_x_2 -by 0.3

=====

generate layer L10022, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

operation group: 621/2080
L98961 = AND L10022 L9176

=====

generate layer L98961, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L10022
delete layer L9176

operation group: 622/2080
L27934 = SELECT -enclose L98961 via8_x_2 -gt 8

=====

generate layer L27934, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L98961
delete layer via8_x_2

operation group: 623/2080

rule_VIA8_X_2 = SELECT -outside L59769 L27934

=====

generate layer rule_VIA8_X_2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L59769
delete layer L27934

operation group: 624/2080

VIA8.X.1:L264105 = NOT L17966 rule_VIA8_X_2

=====

generate layer VIA8.X.1:L264105, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17966

Rule Check VIA8.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 10.50% (59 out of 562) rule checks completed.

operation group: 625/2080

L75346 = EXTE bondpad_metal1_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L75346, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L22419

operation group: 626/2080

L78279 = NOT bondpad_metal1_filled L75346

=====

generate layer L78279, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L75346

operation group: 627/2080

BONDPAD.B.1A:L264219 = VERTEX L78279 -lt 8

=====

generate layer BONDPAD.B.1A:L264219, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L78279

Rule Check BONDPAD.B.1A finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 10.68% (60 out of 562) rule checks completed.

operation group: 628/2080

L76463 = EXTE bondpad_metal2_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L76463, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L29447

operation group: 629/2080

L6397 = NOT bondpad_metal2_filled L76463

=====

generate layer L6397, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L76463

operation group: 630/2080

BONDPAD.B.1A_2:L264220 = VERTEX L6397 -lt 8

=====

generate layer BONDPAD.B.1A_2:L264220, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L6397

Rule Check BONDPAD.B.1A_2 finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 10.85% (61 out of 562) rule checks completed.

operation group: 631/2080

L28272 = EXTE bondpad_metal3_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L28272, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L38857

operation group: 632/2080

L85497 = NOT bondpad_metal3_filled L28272

=====

generate layer L85497, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L28272

operation group: 633/2080

BONDPAD.B.1A_3:L264221 = VERTEX L85497 -lt 8

=====

generate layer BONDPAD.B.1A_3:L264221, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L85497

Rule Check BONDPAD.B.1A_3 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 11.03% (62 out of 562) rule checks completed.

operation group: 634/2080

L87215 = EXTE bondpad_metal4_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L87215, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L74553

operation group: 635/2080

L48458 = NOT bondpad_metal4_filled L87215

=====

generate layer L48458, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L87215

operation group: 636/2080

BONDPAD.B.1A_4:L264222 = VERTEX L48458 -lt 8

=====

generate layer BONDPAD.B.1A_4:L264222, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L48458

Rule Check BONDPAD.B.1A_4 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 11.21% (63 out of 562) rule checks completed.

operation group: 637/2080

L64594 = EXTE bondpad_metal5_filled -le 40 -metric opposite -para only -notch not -output region

```
=====
generate layer L64594, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L45717
```

```
operation group: 638/2080
```

```
L314 = NOT bondpad_metal5_filled L64594
```

```
=====
generate layer L314, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L64594
```

```
operation group: 639/2080
```

```
BONDPAD.B.1A_5:L264223 = VERTEX L314 -lt 8
```

```
=====
generate layer BONDPAD.B.1A_5:L264223, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L314
```

```
Rule Check BONDPAD.B.1A_5 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
[INFO]: 11.39% (64 out of 562) rule checks completed.
```

```
operation group: 640/2080
```

```
L50893 = EXTE bondpad_metal6_filled -le 40 -metric opposite -para only -notch not -output region
```

```
=====
generate layer L50893, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L25614
```

```
operation group: 641/2080
```

```
L11692 = NOT bondpad_metal6_filled L50893
```

```
=====
generate layer L11692, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

```
delete layer L50893
```

```
operation group: 642/2080
```

```
BONDPAD.B.1A_6:L264224 = VERTEX L11692 -lt 8
```

```
=====
generate layer BONDPAD.B.1A_6:L264224, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95
```

delete layer L11692

Rule Check BONDPAD.B.1A_6 finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 11.57% (65 out of 562) rule checks completed.

operation group: 643/2080

L99084 = EXTE bondpad_metal7_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L99084, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79426

operation group: 644/2080

L17986 = NOT bondpad_metal7_filled L99084

=====

generate layer L17986, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L99084

operation group: 645/2080

BONDPAD.B.1A_7:L264225 = VERTEX L17986 -lt 8

=====

generate layer BONDPAD.B.1A_7:L264225, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L17986

Rule Check BONDPAD.B.1A_7 finished, 0 error(s) reported.
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

[INFO]: 11.74% (66 out of 562) rule checks completed.

operation group: 646/2080

L52725 = EXTE bondpad_metal8_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L52725, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L79063

operation group: 647/2080

L93580 = NOT bondpad_metal8_filled L52725

=====

generate layer L93580, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L52725

operation group: 648/2080

BONDPAD.B.1A_8:L264226 = VERTEX L93580 -lt 8

=====

generate layer BONDPAD.B.1A_8:L264226, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.43/9.66/9.66 peak=17.95

delete layer L93580

Rule Check BONDPAD.B.1A_8 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 11.92% (67 out of 562) rule checks completed.

operation group: 649/2080

L62762 = EXTE bondpad_metal9_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L62762, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L91025

operation group: 650/2080

L81871 = NOT bondpad_metal9_filled L62762

=====

generate layer L81871, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L62762

operation group: 651/2080

BONDPAD.B.1A_9:L264227 = VERTEX L81871 -lt 8

=====

generate layer BONDPAD.B.1A_9:L264227, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L81871

Rule Check BONDPAD.B.1A_9 finished, 0 error(s) reported.

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 12.10% (68 out of 562) rule checks completed.

operation group: 652/2080

L10594 = EXTE bondpad_metal10_filled -le 40 -metric opposite -para only -notch not -output region

=====

```
generate layer L10594, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

```
delete layer L66545
```

operation group: 653/2080

```
L9655 = NOT bondpad_metal10_filled L10594
```

=====

```
generate layer L9655, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

```
delete layer L10594
```

operation group: 654/2080

```
BONDPAD.B.1A_10:L264228 = VERTEX L9655 -lt 8
```

=====

```
generate layer BONDPAD.B.1A_10:L264228, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

```
delete layer L9655
```

```
Rule Check BONDPAD.B.1A_10 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

[INFO]: 12.28% (69 out of 562) rule checks completed.

operation group: 655/2080

```
L77702 = HOLES Metal11
```

=====

```
generate layer L77702, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 656/2080

```
L58378 = OR L77702 Metal11
```

=====

```
generate layer L58378, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 657/2080

```
L37338 = SELECT -enclose L58378 Bondpad
```

=====

```
generate layer L37338, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 658/2080

L51450 = SIZE L37338 -by 25 -underover

=====

generate layer L51450, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L37338

operation group: 659/2080

L85739 = AND L51450 L58378

=====

generate layer L85739, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L51450

delete layer L58378

operation group: 660/2080

bondpad_metal11_filled = SELECT -enclose L85739 Bondpad

=====

generate layer bondpad_metal11_filled, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.81 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 661/2080

L58785 = EXTE bondpad_metal11_filled -le 40 -metric opposite -para only -notch not -output region

=====

generate layer L58785, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L85739

operation group: 662/2080

L71528 = NOT bondpad_metal11_filled L58785

=====

generate layer L71528, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L58785

operation group: 663/2080

BONDPAD.B.1A_11:L264229 = VERTEX L71528 -lt 8

=====

generate layer BONDPAD.B.1A_11:L264229, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L71528

Rule Check BONDPAD.B.1A_11 finished, 0 error(s) reported.

Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 12.46% (70 out of 562) rule checks completed.

operation group: 664/2080
pactive = AND Oxide Pimp

=====

generate layer pactive, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 665/2080
pdiff = NOT pactive Poly

=====

generate layer pdiff, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 666/2080
pdiff_conn = NOT pdiff Resdum

=====

generate layer pdiff_conn, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer pdiff

operation group: 667/2080
L61994 = NOT pdiff_conn Nwell

=====

generate layer L61994, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 668/2080
ptap = NOT L61994 PNPdummy

=====

generate layer ptap, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.82 real=0.00/0.87 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L61994

operation group: 669/2080
soft_check_3:L262962 = SELECT -interact ptap pdiff_conn -not

=====

generate layer soft_check_3:L262962, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check soft_check_3 finished, 0 error(s) reported.

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 12.63% (71 out of 562) rule checks completed.

operation group: 670/2080

nb_tap = AND Nburied Nwell

=====

generate layer nb_tap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 671/2080

L14174 = NOT bulk nb_tap

=====

generate layer L14174, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 672/2080

L86601 = SIZE Psub -by -0.001

=====

generate layer L86601, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 673/2080

L7495 = NOT Psub L86601

=====

generate layer L7495, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L86601

operation group: 674/2080

psubstrate = NOT L14174 L7495

=====

generate layer psubstrate, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L14174

delete layer L7495

operation group: 675/2080

soft_check_6:L262966 = SELECT -interact psubstrate ptap -not

=====

generate layer soft_check_6:L262966, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check soft_check_6 finished, 0 error(s) reported.
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 12.81% (72 out of 562) rule checks completed.

operation group: 676/2080
nactive = AND Nimp Oxide

=====

generate layer nactive, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 677/2080
poly_conn = NOT Poly Resdum

=====

generate layer poly_conn, TYP = P, HPN = 1, FPN = 1, HEN = 12, FEN = 12
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 678/2080
ndiff = NOT nactive poly_conn

=====

generate layer ndiff, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 679/2080
ndiff_conn = NOT ndiff Resdum

=====

generate layer ndiff_conn, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

delete layer ndiff

operation group: 680/2080
L74405 = AND Nwell ndiff_conn

=====

generate layer L74405, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 681/2080
L28555 = AND NPNdummy Psub

=====

generate layer L28555, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

delete layer Psub

operation group: 682/2080

ntap = NOT L74405 L28555

=====

generate layer ntap, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.82 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L74405

delete layer L28555

operation group: 683/2080

soft_check_9:L262970 = SELECT -interact ntap ndiff_conn -not

=====

generate layer soft_check_9:L262970, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check soft_check_9 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 12.99% (73 out of 562) rule checks completed.

operation group: 684/2080

nwell_conn = NOT Nwell ResWdum

=====

generate layer nwell_conn, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 685/2080

soft_check_12:L262974 = SELECT -interact nwell_conn ntap -not

=====

generate layer soft_check_12:L262974, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check soft_check_12 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 13.17% (74 out of 562) rule checks completed.

operation group: 686/2080

soft_check_15:L262978 = SELECT -interact nb_tap nwell_conn -not

=====

generate layer soft_check_15:L262978, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check soft_check_15 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 13.35% (75 out of 562) rule checks completed.

operation group: 687/2080

soft_check_18:L262982 = SELECT -interact Nburied nb_tap -not

=====

generate layer soft_check_18:L262982, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check soft_check_18 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 13.52% (76 out of 562) rule checks completed.

operation group: 688/2080

NBL.W.1:L263007 = INTE Nburied -lt 0.8 -output region -single_point -abut lt 90

=====

generate layer NBL.W.1:L263007, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NBL.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 13.70% (77 out of 562) rule checks completed.

operation group: 689/2080

NBL.E.1:L99284 = SELECT -cut Nwell Nburied

=====

generate layer NBL.E.1:L99284, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 690/2080

NBL.E.1:L263009 = NOT NBL.E.1:L99284 Nburied

=====

generate layer NBL.E.1:L263009, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 691/2080

NBL.E.1:L263010 = ENC Nwell Nburied -lt 0.2 -output region -single_point -abut lt 90

=====

generate layer NBL.E.1:L263010, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NBL.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 13.88% (78 out of 562) rule checks completed.

operation group: 692/2080

NBL.SP.1:L263011 = EXTE Nburied -lt 2 -output region -single_point -abut lt 90

=====

generate layer NBL.SP.1:L263011, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NBL.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.88 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.06% (79 out of 562) rule checks completed.

operation group: 693/2080

NBL.SE.1:L27316 = SELECT -cut Nburied Nwell

=====

generate layer NBL.SE.1:L27316, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 694/2080

NBL.SE.1:L263014 = AND NBL.SE.1:L27316 NBL.E.1:L99284

=====

generate layer NBL.SE.1:L263014, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NBL.SE.1:L27316
delete layer NBL.E.1:L99284

operation group: 695/2080

NBL.SE.1:L263015 = EXTE Nburied Nwell -lt 2.2 -output region -single_point -abut lt 90

=====

generate layer NBL.SE.1:L263015, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NBL.SE.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.23% (80 out of 562) rule checks completed.

operation group: 696/2080

NBL.SE.2:L70415 = SELECT -cut Nburied Oxide

=====

generate layer NBL.SE.2:L70415, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 697/2080

NBL.SE.2:L80783 = SELECT -cut Oxide Nburied

=====

generate layer NBL.SE.2:L80783, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 698/2080

NBL.SE.2:L263018 = AND NBL.SE.2:L70415 NBL.SE.2:L80783

=====

generate layer NBL.SE.2:L263018, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NBL.SE.2:L70415

delete layer NBL.SE.2:L80783

operation group: 699/2080

NBL.SE.2:L263019 = EXTE Nburied Oxide -lt 1.2 -output region -single_point -abut lt 90

=====

generate layer NBL.SE.2:L263019, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NBL.SE.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.41% (81 out of 562) rule checks completed.

operation group: 700/2080

L76974 = AND Nburied Pimp

=====

generate layer L76974, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 701/2080

L50485 = AND L76974 Oxide

=====

generate layer L50485, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L76974

operation group: 702/2080

L92339 = AND L90545 Nburied

=====

generate layer L92339, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 703/2080

NBL.SE.3:L68349 = SELECT -cut L50485 L92339

=====

generate layer NBL.SE.3:L68349, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 704/2080

NBL.SE.3:L263025 = NOT NBL.SE.3:L68349 L92339

=====

generate layer NBL.SE.3:L263025, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NBL.SE.3:L68349

operation group: 705/2080

NBL.SE.3:L263026 = ENC L50485 L92339 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer NBL.SE.3:L263026, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L50485

Rule Check NBL.SE.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.59% (82 out of 562) rule checks completed.

operation group: 706/2080

L17392 = AND Nburied Nimp

=====

generate layer L17392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 707/2080

L18556 = AND L17392 Oxide

generate layer L18556, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L17392

operation group: 708/2080

NBL.SE.4:L15286 = SELECT -cut L18556 L92339

=====

generate layer NBL.SE.4:L15286, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 709/2080

NBL.SE.4:L263030 = NOT NBL.SE.4:L15286 L92339

=====

generate layer NBL.SE.4:L263030, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NBL.SE.4:L15286

operation group: 710/2080

NBL.SE.4:L263031 = ENC L18556 L92339 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer NBL.SE.4:L263031, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L18556

delete layer L92339

Rule Check NBL.SE.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.77% (83 out of 562) rule checks completed.

operation group: 711/2080

nwellres = AND Nwell ResWdum

=====

generate layer nwellres, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 712/2080

NW.SP.2:L84526 = SELECT -cut nwell_conn nwellres

=====

generate layer NW.SP.2:L84526, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 713/2080

NW.SP.2:L68740 = SELECT -cut nwellres nwell_conn

=====

generate layer NW.SP.2:L68740, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 714/2080

NW.SP.2:L263035 = AND NW.SP.2:L84526 NW.SP.2:L68740

=====

generate layer NW.SP.2:L263035, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SP.2:L84526

delete layer NW.SP.2:L68740

operation group: 715/2080

NW.SP.2:L263036 = EXTE nwell_conn nwellres -lt 0.6 -output region -single_point -abut ltgt 0 90

=====

generate layer NW.SP.2:L263036, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NW.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 14.95% (84 out of 562) rule checks completed.

operation group: 716/2080

NW.SP.2_2:L263037 = EXTE nwellres -lt 0.6 -output region -single_point -abut lt 90

=====

generate layer NW.SP.2_2:L263037, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

delete layer nwellres

Rule Check NW.SP.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 15.12% (85 out of 562) rule checks completed.

operation group: 717/2080

NW.W.1:L263038 = INTE Nwell -lt 0.3 -output region -single_point -abut lt 90

=====

generate layer NW.W.1:L263038, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check NW.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.83 real=0.00/0.89 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 15.30% (86 out of 562) rule checks completed.

operation group: 718/2080

NW.SE.2:L37621 = SELECT -cut Nwell pactive

=====

generate layer NW.SE.2:L37621, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.84 real=0.00/0.89 Memory: 9.44/9.66/17.70 peak=17.95

operation group: 719/2080

NW.SE.2:L46539 = SELECT -cut pactive Nwell

=====

generate layer NW.SE.2:L46539, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/17.70 peak=17.95

operation group: 720/2080

NW.SE.2:L263042 = AND NW.SE.2:L37621 NW.SE.2:L46539

=====

generate layer NW.SE.2:L263042, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.2:L37621

operation group: 721/2080

NW.SE.2:L263043 = EXTE Nwell pactive -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer NW.SE.2:L263043, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check NW.SE.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 15.48% (87 out of 562) rule checks completed.

operation group: 722/2080

L60860 = SELECT -outside Nwell Oxide -not

=====

layer L60860 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 723/2080

nwell_in_od_res = SELECT -outside L60860 ResWdum -not

```

=====
generate layer nwell_in_od_res, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L60860
delete layer ResWdum

operation group: 724/2080
L66724 = NOT Nwell nwell_in_od_res
=====
generate layer L66724, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.84 real=0.00/0.90 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 725/2080
NW.SE.1:L71704 = SELECT -cut L66724 nactive
=====
generate layer NW.SE.1:L71704, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.85 real=0.00/0.90 Memory: 9.44/9.66/17.70 peak=17.95

operation group: 726/2080
NW.SE.1:L46976 = SELECT -cut nactive L66724
=====
generate layer NW.SE.1:L46976, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/17.70 peak=17.95

operation group: 727/2080
NW.SE.1:L263047 = AND NW.SE.1:L71704 NW.SE.1:L46976
=====
generate layer NW.SE.1:L263047, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.1:L71704
delete layer NW.SE.1:L46976

operation group: 728/2080
NW.SE.1:L263048 = EXTE L66724 nactive -lt 0.16 -output region -single_point -abut lt 90
=====
generate layer NW.SE.1:L263048, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check NW.SE.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 15.66% (88 out of 562) rule checks completed.

```

operation group: 729/2080

L512 = AND Nimp Oxide_thk

```
=====
generate layer L512, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 730/2080

L40980 = AND L512 Oxide

```
=====
generate layer L40980, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 731/2080

NW.SE.3:L98636 = SELECT -cut Nwell L40980

```
=====
generate layer NW.SE.3:L98636, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 732/2080

NW.SE.3:L92116 = SELECT -cut L40980 Nwell

```
=====
generate layer NW.SE.3:L92116, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

operation group: 733/2080

NW.SE.3:L263053 = AND NW.SE.3:L98636 NW.SE.3:L92116

```
=====
generate layer NW.SE.3:L263053, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

delete layer NW.SE.3:L98636

operation group: 734/2080

NW.SE.3:L263054 = EXTE Nwell L40980 -lt 0.24 -output region -single_point -abut lt 90

```
=====
generate layer NW.SE.3:L263054, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95
```

Rule Check NW.SE.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 15.84% (89 out of 562) rule checks completed.

operation group: 735/2080

L4884 = AND Oxide_thk Pimp

=====

generate layer L4884, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 736/2080

L13412 = AND L4884 Oxide

=====

generate layer L13412, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 737/2080

NW.SE.4:L84846 = SELECT -cut Nwell L13412

=====

generate layer NW.SE.4:L84846, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 738/2080

NW.SE.4:L38518 = SELECT -cut L13412 Nwell

=====

generate layer NW.SE.4:L38518, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 739/2080

NW.SE.4:L263059 = AND NW.SE.4:L84846 NW.SE.4:L38518

=====

generate layer NW.SE.4:L263059, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.4:L84846

operation group: 740/2080

NW.SE.4:L263060 = EXTE Nwell L13412 -lt 0.24 -output region -single_point -abut lt 90

=====

generate layer NW.SE.4:L263060, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NW.SE.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.01% (90 out of 562) rule checks completed.

operation group: 741/2080

L72408 = NOT Nimp nwell_in_od_res

=====

generate layer L72408, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 742/2080

L48097 = AND L72408 Oxide

=====

generate layer L48097, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.85 real=0.00/0.91 Memory: 9.44/9.66/13.68 peak=17.95

delete layer L72408

operation group: 743/2080

NW.E.1:L87416 = SELECT -cut L48097 L66724

=====

generate layer NW.E.1:L87416, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.91 Memory: 9.44/9.66/17.70 peak=17.95

operation group: 744/2080

NW.E.1:L263064 = NOT NW.E.1:L87416 L66724

=====

generate layer NW.E.1:L263064, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.E.1:L87416

operation group: 745/2080

NW.E.1:L263065 = ENC L48097 L66724 -lt 0.06 -output region -single_point -abut lt 90

=====

generate layer NW.E.1:L263065, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.91 Memory: 9.44/9.66/17.70 peak=17.95

delete layer L48097

delete layer L66724

Rule Check NW.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.19% (91 out of 562) rule checks completed.

operation group: 746/2080

NW.E.2:L263067 = NOT NW.SE.2:L46539 Nwell

=====

generate layer NW.E.2:L263067, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.91 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.2:L46539

operation group: 747/2080

NW.E.2:L263068 = ENC pactive Nwell -lt 0.06 -output region -single_point -abut lt 90

=====

generate layer NW.E.2:L263068, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check NW.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.37% (92 out of 562) rule checks completed.

operation group: 748/2080

NW.E.3:L263070 = NOT NW.SE.3:L92116 Nwell

=====

generate layer NW.E.3:L263070, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.3:L92116

operation group: 749/2080

NW.E.3:L263071 = ENC L40980 Nwell -lt 0.24 -output region -single_point -abut lt 90

=====

generate layer NW.E.3:L263071, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NW.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.55% (93 out of 562) rule checks completed.

operation group: 750/2080

NW.E.4:L263073 = NOT NW.SE.4:L38518 Nwell

=====

generate layer NW.E.4:L263073, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NW.SE.4:L38518

operation group: 751/2080

NW.E.4:L263074 = ENC L13412 Nwell -lt 0.24 -output region -single_point -abut lt 90

=====

generate layer NW.E.4:L263074, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NW.E.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.73% (94 out of 562) rule checks completed.

operation group: 752/2080

NW.A.1:L263075 = AREA Nwell -lt 0.18

=====

generate layer NW.A.1:L263075, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NW.A.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 16.90% (95 out of 562) rule checks completed.

operation group: 753/2080

NW.EA.1:L263076 = AREA L90545 -lt 0.18

=====

generate layer NW.EA.1:L263076, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L90545

Rule Check NW.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.08% (96 out of 562) rule checks completed.

operation group: 754/2080

NWR.SE.1:L263077 = EXTE SiProt nwell_in_od_res -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer NWR.SE.1:L263077, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NWR.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.26% (97 out of 562) rule checks completed.

operation group: 755/2080

NWR.E.1:L263078 = ENC nwell_in_od_res Oxide -lt 0.6 -output region -single_point -abut lt 90

=====

generate layer NWR.E.1:L263078, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NWR.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.44% (98 out of 562) rule checks completed.

operation group: 756/2080
NWR.E.2:L61306 = SELECT -cut Cont nwell_in_od_res

=====

generate layer NWR.E.2:L61306, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 757/2080
NWR.E.2:L263080 = NOT NWR.E.2:L61306 nwell_in_od_res

=====

generate layer NWR.E.2:L263080, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer NWR.E.2:L61306

operation group: 758/2080
NWR.E.2:L263081 = ENC Cont nwell_in_od_res -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer NWR.E.2:L263081, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

Rule Check NWR.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.62% (99 out of 562) rule checks completed.

operation group: 759/2080
NWR.X.1:L263083 = AND Oxide_thk nwell_in_od_res

=====

generate layer NWR.X.1:L263083, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer nwell_in_od_res

Rule Check NWR.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.79% (100 out of 562) rule checks completed.

operation group: 760/2080

L26283 = EDGE_BOOLEAN Nimp Nwell -inside

=====

layer L26283 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 761/2080

L62966 = EDGE_BOOLEAN SiProt Nwell -inside

=====

generate layer L62966, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

operation group: 762/2080

NWR.O.1:L263086 = INTE L26283 L62966 -lt 0.22 -output region -abut lt 90

=====

generate layer NWR.O.1:L263086, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L26283

delete layer L62966

Rule Check NWR.O.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 17.97% (101 out of 562) rule checks completed.

operation group: 763/2080

OXIDE.W.1:L263087 = INTE Oxide -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer OXIDE.W.1:L263087, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/17.70 peak=17.95

Rule Check OXIDE.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

[INFO]: 18.15% (102 out of 562) rule checks completed.

operation group: 764/2080

L30789 = AND Nimp Poly

=====

generate layer L30789, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/13.68 peak=17.95

operation group: 765/2080

L71851 = NOT L30789 Oxide_thk

=====

generate layer L71851, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.86 real=0.00/0.92 Memory: 9.44/9.66/9.66 peak=17.95

delete layer L30789

operation group: 766/2080

L7166 = EDGE_BOOLEAN Oxide L71851 -inside

=====

generate layer L7166, TYP = E, HPN = 2, FPN = 2, HEN = 2, FEN = 2
Time: cpu=0.00/0.87 real=0.00/0.92 Memory: 9.44/9.53/17.87 peak=17.95

delete layer L71851

operation group: 767/2080

OXIDE.W.2.1.1:L263091 = INTE L7166 -lt 0.12 -output region -abut lt 90

=====

generate layer OXIDE.W.2.1.1:L263091, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.53/17.57 peak=17.95

delete layer L7166

Rule Check OXIDE.W.2.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 18.33% (103 out of 562) rule checks completed.

operation group: 768/2080

L94841 = AND L512 Poly

=====

generate layer L94841, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L512

operation group: 769/2080

L43550 = EDGE_BOOLEAN Oxide L94841 -inside

=====

generate layer L43550, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L94841

operation group: 770/2080

OXIDE.W.2.1.2:L263094 = INTE L43550 -lt 0.32 -output region -abut lt 90

=====

generate layer OXIDE.W.2.1.2:L263094, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L43550

Rule Check OXIDE.W.2.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 18.51% (104 out of 562) rule checks completed.

operation group: 771/2080
L78137 = AND Pimp Poly

=====

generate layer L78137, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/13.61 peak=17.95

operation group: 772/2080
L6254 = NOT L78137 Oxide_thk

=====

generate layer L6254, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L78137

operation group: 773/2080
L47177 = EDGE_BOOLEAN Oxide L6254 -inside

=====

generate layer L47177, TYP = E, HPN = 2, FPN = 2, HEN = 2, FEN = 2
Time: cpu=0.00/0.87 real=0.00/0.93 Memory: 9.44/9.53/17.87 peak=17.95

delete layer L6254

operation group: 774/2080
OXIDE.W.2.2.1:L263098 = INTE L47177 -lt 0.12 -output region -abut lt 90

=====

generate layer OXIDE.W.2.2.1:L263098, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.53/17.57 peak=17.95

delete layer L47177

Rule Check OXIDE.W.2.2.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 18.68% (105 out of 562) rule checks completed.

operation group: 775/2080

L54679 = AND L4884 Poly

```
=====
generate layer L54679, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95
```

delete layer L4884

operation group: 776/2080

L47645 = EDGE_BOOLEAN Oxide L54679 -inside

```
=====
generate layer L47645, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95
```

delete layer L54679

operation group: 777/2080

OXIDE.W.2.2.2:L263101 = INTE L47645 -lt 0.32 -output region -abut lt 90

```
=====
generate layer OXIDE.W.2.2.2:L263101, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95
```

delete layer L47645

Rule Check OXIDE.W.2.2.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 18.86% (106 out of 562) rule checks completed.

operation group: 778/2080

L19535 = ANGLE Oxide -ltgt 0 90

```
=====
generate layer L19535, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95
```

operation group: 779/2080

OXIDE.W.3:L263103 = INTE L19535 -lt 0.06 -output region -abut lt 90

```
=====
generate layer OXIDE.W.3:L263103, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95
```

Rule Check OXIDE.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.88 real=0.00/0.93 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.04% (107 out of 562) rule checks completed.

operation group: 780/2080

OXIDE.SP.1:L263104 = EXTE nactive -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer OXIDE.SP.1:L263104, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.59/17.63 peak=17.95
```

Rule Check OXIDE.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.22% (108 out of 562) rule checks completed.

operation group: 781/2080
OXIDE.SP.2:L263105 = EXTE pactive -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer OXIDE.SP.2:L263105, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.59/17.63 peak=17.95
```

Rule Check OXIDE.SP.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.40% (109 out of 562) rule checks completed.

operation group: 782/2080
L95182 = EDGE_BOOLEAN Oxide Nimp -inside
=====

```
generate layer L95182, TYP = E, HPN = 8, FPN = 8, HEN = 8, FEN = 8
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.53/17.87 peak=17.95
```

operation group: 783/2080
L54764 = EDGE_BOOLEAN Oxide Pimp -inside
=====

```
generate layer L54764, TYP = E, HPN = 8, FPN = 8, HEN = 8, FEN = 8
Time: cpu=0.00/0.88 real=0.00/0.94 Memory: 9.44/9.53/17.87 peak=17.95
```

operation group: 784/2080
OXIDE.SP.3:L263108 = EXTE L95182 L54764 -lt 0.1 -output region -abut ltgt 0 90
=====

```
generate layer OXIDE.SP.3:L263108, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.53/17.57 peak=17.95
```

```
delete layer L95182
delete layer L54764
```

Rule Check OXIDE.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.57% (110 out of 562) rule checks completed.

operation group: 785/2080

OXIDE.SE.1:L263109 = EXTE Oxide Oxide_thk -lt 0.18 -output region -single_point -abut lt 90

=====

generate layer OXIDE.SE.1:L263109, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDE.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.75% (111 out of 562) rule checks completed.

operation group: 786/2080

OXIDE.SP.4:L263110 = EXTE Oxide L19535 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer OXIDE.SP.4:L263110, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L19535

Rule Check OXIDE.SP.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.94 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 19.93% (112 out of 562) rule checks completed.

operation group: 787/2080

OXIDE.A.1:L263111 = AREA Oxide -lt 0.035

=====

generate layer OXIDE.A.1:L263111, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/13.61 peak=17.95

Rule Check OXIDE.A.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 20.11% (113 out of 562) rule checks completed.

operation group: 788/2080

L33644 = HOLES Oxide

=====

generate layer L33644, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/13.61 peak=17.95

operation group: 789/2080

L65624 = NOT L33644 Oxide

=====

generate layer L65624, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L33644

operation group: 790/2080

OXIDE.EA.1:L263114 = AREA L65624 -lt 0.04

=====

generate layer OXIDE.EA.1:L263114, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L65624

Rule Check OXIDE.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 20.28% (114 out of 562) rule checks completed.

operation group: 791/2080

L23048 = OR Nimp SiProt Pimp Nzvt

=====

generate layer L23048, TYP = P, HPN = 4, FPN = 4, HEN = 32, FEN = 32

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/13.61 peak=17.95

operation group: 792/2080

OXIDE.X.1:L263120 = NOT Oxide L23048

=====

generate layer OXIDE.X.1:L263120, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/13.61 peak=17.95

delete layer L23048

Rule Check OXIDE.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 20.46% (115 out of 562) rule checks completed.

operation group: 793/2080

L36999 = SELECT -cut Oxide Resdum

=====

generate layer L36999, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 794/2080
oxide_in_res = SELECT -cut L36999 SiProt

=====

generate layer oxide_in_res, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L36999

operation group: 795/2080
OXIDER.SE.2:L10785 = SELECT -cut Nimp oxide_in_res

=====

generate layer OXIDER.SE.2:L10785, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 796/2080
OXIDER.SE.2:L93677 = SELECT -cut oxide_in_res Nimp

=====

generate layer OXIDER.SE.2:L93677, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 797/2080
OXIDER.SE.2:L263123 = AND OXIDER.SE.2:L10785 OXIDER.SE.2:L93677

=====

generate layer OXIDER.SE.2:L263123, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer OXIDER.SE.2:L10785
delete layer OXIDER.SE.2:L93677

operation group: 798/2080
OXIDER.SE.2:L263124 = EXTE Nimp oxide_in_res -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer OXIDER.SE.2:L263124, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDER.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 20.64% (116 out of 562) rule checks completed.

operation group: 799/2080
OXIDER.SE.2_2:L8609 = SELECT -cut Pimp oxide_in_res

=====

generate layer OXIDER.SE.2_2:L8609, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 800/2080

OXIDER.SE.2_2:L34095 = SELECT -cut oxide_in_res Pimp

=====

generate layer OXIDER.SE.2_2:L34095, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 801/2080

OXIDER.SE.2_2:L263127 = AND OXIDER.SE.2_2:L8609 OXIDER.SE.2_2:L34095

=====

generate layer OXIDER.SE.2_2:L263127, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer OXIDER.SE.2_2:L8609

delete layer OXIDER.SE.2_2:L34095

operation group: 802/2080

OXIDER.SE.2_2:L263128 = EXTE Pimp oxide_in_res -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer OXIDER.SE.2_2:L263128, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDER.SE.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 20.82% (117 out of 562) rule checks completed.

operation group: 803/2080

OXIDER.E.1:L263129 = ENC oxide_in_res SiProt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer OXIDER.E.1:L263129, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDER.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.00% (118 out of 562) rule checks completed.

operation group: 804/2080

L13121 = OR Nimp Pimp

=====

layer L13121 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 805/2080

OXIDER.X.1:L263132 = NOT oxide_in_res L13121

=====

generate layer OXIDER.X.1:L263132, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDER.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.17% (119 out of 562) rule checks completed.

operation group: 806/2080

OXIDETHK.W.1:L263133 = INTE Oxide_thk -lt 0.35 -output region -single_point -abut lt 90

=====

generate layer OXIDETHK.W.1:L263133, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDETHK.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.35% (120 out of 562) rule checks completed.

operation group: 807/2080

OXIDETHK.SP.1:L263134 = EXTE Oxide_thk -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer OXIDETHK.SP.1:L263134, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDETHK.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.53% (121 out of 562) rule checks completed.

operation group: 808/2080

L59527 = ANGLE Oxide_thk -ltgt 0 90

=====

generate layer L59527, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 809/2080

OXIDETHK.SP.2:L263136 = EXTE Oxide_thk L59527 -lt 0.32 -output region -abut ltgt 0 90

=====

generate layer OXIDETHK.SP.2:L263136, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L59527

Rule Check OXIDETHK.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.71% (122 out of 562) rule checks completed.

operation group: 810/2080

OXIDETHK.SE.1:L263137 = EXTE L40980 -lt 0.1 -output region -single_point -abut lt 90

=====

generate layer OXIDETHK.SE.1:L263137, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDETHK.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 21.89% (123 out of 562) rule checks completed.

operation group: 811/2080

OXIDETHK.SE.2:L263138 = EXTE L13412 -lt 0.1 -output region -single_point -abut lt 90

=====

generate layer OXIDETHK.SE.2:L263138, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDETHK.SE.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.89 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 22.06% (124 out of 562) rule checks completed.

operation group: 812/2080

OXIDETHK.SE.3:L263139 = EXTE L40980 L13412 -lt 0.12 -output region -single_point -abut ltgt 0 90

=====

generate layer OXIDETHK.SE.3:L263139, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L40980

delete layer L13412

Rule Check OXIDETHK.SE.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 22.24% (125 out of 562) rule checks completed.

operation group: 813/2080

OXIDETHK.E.1:L263140 = ENC Oxide Oxide_thk -lt 0.16 -output region -single_point -abut lt 90

=====

generate layer OXIDETHK.E.1:L263140, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

Rule Check OXIDETHK.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 22.42% (126 out of 562) rule checks completed.

operation group: 814/2080

L2679 = EDGE_BOOLEAN Oxide_thk Oxide -inside

=====

generate layer L2679, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 815/2080

OXIDETHK.SE.5:L63662 = EDGE_EXPAND L2679 -inside_by 0.001

=====

generate layer OXIDETHK.SE.5:L63662, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.95 Memory: 9.44/9.59/9.59 peak=17.95

operation group: 816/2080

L19486 = EDGE_BOOLEAN Poly Oxide -inside

L90757 = EDGE_BOOLEAN Poly Oxide -outside

=====

generate layer L19486, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4

generate layer L90757, TYP = E, HPN = 16, FPN = 16, HEN = 16, FEN = 16

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.53/17.87 peak=17.95

operation group: 817/2080

OXIDETHK.SE.5:L24866 = EDGE_EXPAND L19486 -inside_by 0.001

=====

generate layer OXIDETHK.SE.5:L24866, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.53/13.55 peak=17.95

operation group: 818/2080

OXIDETHK.SE.5:L263145 = AND OXIDETHK.SE.5:L63662 OXIDETHK.SE.5:L24866

=====

generate layer OXIDETHK.SE.5:L263145, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.53/9.53 peak=17.95

delete layer OXIDETHK.SE.5:L63662

operation group: 819/2080

OXIDETHK.SE.5:L263146 = EXTE L2679 L19486 -lt 0.18 -output region -abut lt 90

=====

generate layer OXIDETHK.SE.5:L263146, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.53/9.53 peak=17.95

Rule Check OXIDETHK.SE.5 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.59/9.59 peak=17.95

[INFO]: 22.60% (127 out of 562) rule checks completed.

operation group: 820/2080

OXIDETHK.E.2:L263147 = ENC L19486 L2679 -lt 0.18 -output region -abut lt 90

=====

generate layer OXIDETHK.E.2:L263147, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.44/9.59/9.59 peak=17.95

delete layer L2679

Rule Check OXIDETHK.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 22.78% (128 out of 562) rule checks completed.

operation group: 821/2080

NHVT.W.1:L263148 = INTE Nhvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NHVT.W.1:L263148, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NHVT.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 22.95% (129 out of 562) rule checks completed.

operation group: 822/2080

NHVT.SP.1:L263149 = EXTE Nhvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NHVT.SP.1:L263149, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NHVT.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 23.13% (130 out of 562) rule checks completed.

operation group: 823/2080

NHVT.X.2:L263151 = AND Nhvt Nwell

=====

generate layer NHVT.X.2:L263151, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NHVT.X.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 23.31% (131 out of 562) rule checks completed.

operation group: 824/2080

NHVT.X.3:L263153 = AND Nhvt pactive

=====

generate layer NHVT.X.3:L263153, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NHVT.X.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 23.49% (132 out of 562) rule checks completed.

operation group: 825/2080

NHVT.X.4:L263155 = AND Nhvt Nzvt

=====

generate layer NHVT.X.4:L263155, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Nhvt

Rule Check NHVT.X.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 23.67% (133 out of 562) rule checks completed.

operation group: 826/2080

PHVT.W.1:L263156 = INTE Phvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PHVT.W.1:L263156, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PHVT.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 23.84% (134 out of 562) rule checks completed.

operation group: 827/2080

PHVT.SP.1:L263157 = EXTE Phvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PHVT.SP.1:L263157, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PHVT.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.02% (135 out of 562) rule checks completed.

operation group: 828/2080

PHVT.X.2:L263159 = NOT Phvt Nwell

=====

generate layer PHVT.X.2:L263159, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PHVT.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.20% (136 out of 562) rule checks completed.

operation group: 829/2080

PHVT.X.3:L263161 = AND Phvt nactive

=====

generate layer PHVT.X.3:L263161, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PHVT.X.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.38% (137 out of 562) rule checks completed.

operation group: 830/2080

PHVT.X.4:L263163 = AND Nzvt Phvt

=====

generate layer PHVT.X.4:L263163, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Phvt

Rule Check PHVT.X.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.56% (138 out of 562) rule checks completed.

operation group: 831/2080

NLVT.W.1:L263164 = INTE Nlvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NLVT.W.1:L263164, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NLVT.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.73% (139 out of 562) rule checks completed.

operation group: 832/2080

NLVT.SP.1:L263165 = EXTE Nlvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NLVT.SP.1:L263165, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NLVT.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 24.91% (140 out of 562) rule checks completed.

operation group: 833/2080

NLVT.X.2:L263167 = AND Nlvt Nwell

=====

generate layer NLVT.X.2:L263167, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NLVT.X.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.09% (141 out of 562) rule checks completed.

operation group: 834/2080

NLVT.X.3:L263169 = AND Nlvt pactive

=====

generate layer NLVT.X.3:L263169, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NLVT.X.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.27% (142 out of 562) rule checks completed.

operation group: 835/2080

NLVT.X.4:L263171 = AND Nlvt Nzvt

=====

generate layer NLVT.X.4:L263171, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Nlvt

Rule Check NLVT.X.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.44% (143 out of 562) rule checks completed.

operation group: 836/2080

PLVT.W.1:L263172 = INTE Plvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PLVT.W.1:L263172, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PLVT.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.62% (144 out of 562) rule checks completed.

operation group: 837/2080

PLVT.SP.1:L263173 = EXTE Plvt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PLVT.SP.1:L263173, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PLVT.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.80% (145 out of 562) rule checks completed.

operation group: 838/2080

PLVT.X.2:L263175 = NOT Plvt Nwell

=====

generate layer PLVT.X.2:L263175, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PLVT.X.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 25.98% (146 out of 562) rule checks completed.

operation group: 839/2080

PLVT.X.3:L263177 = AND Plvt nactive

=====

generate layer PLVT.X.3:L263177, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PLVT.X.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 26.16% (147 out of 562) rule checks completed.

operation group: 840/2080

PLVT.X.4:L263179 = AND Nzvt Plvt

=====

generate layer PLVT.X.4:L263179, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Plvt

Rule Check PLVT.X.4 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 26.33% (148 out of 562) rule checks completed.

operation group: 841/2080

NZVT.W.1:L263180 = INTE Nzvt -lt 0.35 -output region -single_point -abut lt 90

=====

generate layer NZVT.W.1:L263180, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NZVT.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 26.51% (149 out of 562) rule checks completed.

operation group: 842/2080

NZVT.SP.1:L263181 = EXTE Nzvt -lt 0.3 -output region -single_point -abut lt 90

=====

generate layer NZVT.SP.1:L263181, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NZVT.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 26.69% (150 out of 562) rule checks completed.

operation group: 843/2080

NZVT.SE.1:L17075 = SELECT -cut Nzvt Oxide

=====

generate layer NZVT.SE.1:L17075, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 844/2080

NZVT.SE.1:L53744 = SELECT -cut Oxide Nzvt

=====

generate layer NZVT.SE.1:L53744, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 845/2080

NZVT.SE.1:L263185 = AND NZVT.SE.1:L17075 NZVT.SE.1:L53744

=====

generate layer NZVT.SE.1:L263185, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer NZVT.SE.1:L17075

delete layer NZVT.SE.1:L53744

operation group: 846/2080

NZVT.SE.1:L263186 = EXTE Nzvt Oxide -lt 0.18 -output region -single_point -abut lt 90

=====

generate layer NZVT.SE.1:L263186, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check NZVT.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 26.87% (151 out of 562) rule checks completed.

operation group: 847/2080

NZVT.SE.2:L263187 = EXTE Nwell Nzvt -lt 0.6 -output region -single_point -abut lt 90 -inside_also

=====

```
generate layer NZVT.SE.2:L263187, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

```
Rule Check NZVT.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

[INFO]: 27.05% (152 out of 562) rule checks completed.

```
operation group: 848/2080
L62764 = AND Nzvt Oxide
```

=====

```
generate layer L62764, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

```
operation group: 849/2080
NZVT.E.1:L263189 = ENC L62764 Poly -lt 0.1 -output region -single_point -abut lt 90
```

=====

```
generate layer NZVT.E.1:L263189, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.90 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

```
Rule Check NZVT.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

[INFO]: 27.22% (153 out of 562) rule checks completed.

```
operation group: 850/2080
L55408 = EDGE_BOOLEAN Poly L62764 -inside
```

=====

```
generate layer L55408, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer L62764
```

```
operation group: 851/2080
NZVT.L.1:L263191 = INTE L55408 -lt 0.3 -output region -abut lt 90
```

=====

```
generate layer NZVT.L.1:L263191, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer L55408
```

```
Rule Check NZVT.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95
```


[INFO]: 27.40% (154 out of 562) rule checks completed.

operation group: 852/2080
L50553 = AND Nzvt Poly

=====

generate layer L50553, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 853/2080
L27452 = EDGE_BOOLEAN Oxide L50553 -inside

=====

generate layer L27452, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L50553

operation group: 854/2080
NZVT.W.2:L263194 = INTE L27452 -lt 0.5 -output region -abut lt 90

=====

generate layer NZVT.W.2:L263194, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L27452

Rule Check NZVT.W.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 27.58% (155 out of 562) rule checks completed.

operation group: 855/2080
L44809 = AND Nzvt Pimp

=====

generate layer L44809, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 856/2080
NZVT.X.3:L263197 = AND L44809 Oxide

=====

generate layer NZVT.X.3:L263197, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L44809

Rule Check NZVT.X.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.91 real=0.00/0.96 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 27.76% (156 out of 562) rule checks completed.

operation group: 857/2080

L78161 = EDGE_BOOLEAN Poly nactive -inside

```
=====
generate layer L78161, TYP = E, HPN = 2, FPN = 2, HEN = 2, FEN = 2
Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.53/17.87 peak=17.95
```

operation group: 858/2080

POLY.W.1:L263200 = INTE L78161 -lt 0.045 -output region -abut lt 90

```
=====
generate layer POLY.W.1:L263200, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.53/17.57 peak=17.95
```

Rule Check POLY.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 27.94% (157 out of 562) rule checks completed.

operation group: 859/2080

L81773 = EDGE_BOOLEAN Poly pactive -inside

```
=====
generate layer L81773, TYP = E, HPN = 2, FPN = 2, HEN = 2, FEN = 2
Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.53/17.87 peak=17.95
```

delete layer pactive

operation group: 860/2080

POLY.W.2:L263202 = INTE L81773 -lt 0.045 -output region -abut lt 90

```
=====
generate layer POLY.W.2:L263202, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.53/17.57 peak=17.95
```

Rule Check POLY.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 28.11% (158 out of 562) rule checks completed.

operation group: 861/2080

L29500 = AND Oxide_thk nactive

```
=====
generate layer L29500, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95
```

delete layer nactive

operation group: 862/2080

L43067 = EDGE_BOOLEAN Poly L29500 -inside

=====

generate layer L43067, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.91 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L29500

operation group: 863/2080

POLY.W.3:L263205 = INTE L43067 -lt 0.15 -output region -abut lt 90

=====

generate layer POLY.W.3:L263205, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L43067

Rule Check POLY.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 28.29% (159 out of 562) rule checks completed.

operation group: 864/2080

L24975 = AND Oxide Oxide_thk

=====

generate layer L24975, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 865/2080

L93098 = AND L24975 Pimp

=====

generate layer L93098, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 866/2080

L61684 = EDGE_BOOLEAN Poly L93098 -inside

=====

generate layer L61684, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L93098

operation group: 867/2080

POLY.W.4:L263209 = INTE L61684 -lt 0.15 -output region -abut lt 90

=====

generate layer POLY.W.4:L263209, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L61684

Rule Check POLY.W.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.97 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 28.47% (160 out of 562) rule checks completed.

operation group: 868/2080

POLY.W.5:L263211 = INTE L90757 -lt 0.045 -output region -abut lt 90

=====

generate layer POLY.W.5:L263211, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check POLY.W.5 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 28.65% (161 out of 562) rule checks completed.

operation group: 869/2080

L6655 = EDGE_BOOLEAN Poly Resdum -inside

=====

generate layer L6655, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 870/2080

POLY.SP.1:L263213 = EXTE L6655 -lt 0.3 -output region -abut lt 90

=====

generate layer POLY.SP.1:L263213, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLY.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 28.83% (162 out of 562) rule checks completed.

operation group: 871/2080

POLY.SP.2:L263214 = EXTE L19486 -lt 0.06 -output region -abut lt 90

=====

generate layer POLY.SP.2:L263214, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check POLY.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.00% (163 out of 562) rule checks completed.

operation group: 872/2080

POLY.SP.3:L263215 = EXTE L90757 -lt 0.06 -output region -abut lt 90

=====

generate layer POLY.SP.3:L263215, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check POLY.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.18% (164 out of 562) rule checks completed.

operation group: 873/2080

L87956 = EDGE_BOOLEAN Poly L24975 -inside

=====

generate layer L87956, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 874/2080

POLY.SP.4:L263217 = EXTE L87956 -lt 0.2 -output region -abut lt 90

=====

generate layer POLY.SP.4:L263217, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLY.SP.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.36% (165 out of 562) rule checks completed.

operation group: 875/2080

gate = AND Oxide Poly

=====

generate layer gate, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 876/2080

L2756 = AND Nimp gate

=====

generate layer L2756, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 877/2080

POLY.E.1:L71009 = SELECT -cut L2756 Poly

=====

generate layer POLY.E.1:L71009, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 878/2080

POLY.E.1:L263220 = NOT POLY.E.1:L71009 Poly

=====

generate layer POLY.E.1:L263220, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.92 real=0.00/0.98 Memory: 9.47/9.59/9.59 peak=17.95

delete layer POLY.E.1:L71009

operation group: 879/2080

POLY.E.1:L263221 = ENC L2756 Poly -lt 0.1 -output region -single_point -abut ltgt 0 90 -metric
opposite

=====

generate layer POLY.E.1:L263221, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.93 real=0.00/0.99 Memory: 9.47/9.59/17.63 peak=17.95

delete layer L2756

Rule Check POLY.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.93 real=0.00/0.99 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.54% (166 out of 562) rule checks completed.

operation group: 880/2080

L6170 = AND Pimp gate

=====

generate layer L6170, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.93 real=0.00/0.99 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 881/2080

POLY.E.2:L74509 = SELECT -cut L6170 Poly

=====

generate layer POLY.E.2:L74509, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.93 real=0.00/0.99 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 882/2080

POLY.E.2:L263224 = NOT POLY.E.2:L74509 Poly

=====

generate layer POLY.E.2:L263224, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.93 real=0.00/0.99 Memory: 9.47/9.59/9.59 peak=17.95

delete layer POLY.E.2:L74509

operation group: 883/2080

POLY.E.2:L263225 = ENC L6170 Poly -lt 0.1 -output region -single_point -abut ltgt 0 90 -metric
opposite

=====

generate layer POLY.E.2:L263225, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/17.63 peak=17.95

delete layer L6170

Rule Check POLY.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.72% (167 out of 562) rule checks completed.

operation group: 884/2080

POLY.SE.1_POLY.SE.2:L263226 = EXTE Oxide Poly -lt 0.05 -output region -single_point -abut lt 90
=====

generate layer POLY.SE.1_POLY.SE.2:L263226, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check POLY.SE.1_POLY.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 29.89% (168 out of 562) rule checks completed.

operation group: 885/2080

POLY.E.3:L263227 = ENC Poly Oxide -lt 0.1 -output region -single_point -abut lt 90
=====

generate layer POLY.E.3:L263227, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check POLY.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.07% (169 out of 562) rule checks completed.

operation group: 886/2080

L92308 = ANGLE Poly -ltgt 0 90
=====

generate layer L92308, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 887/2080

POLY.W.6:L263229 = INTE L92308 -lt 0.1 -output region -abut lt 90

=====

generate layer POLY.W.6:L263229, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLY.W.6 finished, 0 error(s) reported.

Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.25% (170 out of 562) rule checks completed.

operation group: 888/2080

POLY.SP.5:L263230 = EXTE L92308 -lt 0.1 -output region -abut lt 90

=====

generate layer POLY.SP.5:L263230, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L92308

Rule Check POLY.SP.5 finished, 0 error(s) reported.

Time: cpu=0.00/0.94 real=0.00/1.00 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.43% (171 out of 562) rule checks completed.

operation group: 889/2080

POLY.X.1:L60979 = EDGE_EXPAND L19486 -outside_by 0.001 -corner_fill

=====

generate layer POLY.X.1:L60979, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16

Time: cpu=0.00/0.95 real=0.00/1.00 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 890/2080

POLY.X.1:L263232 = VERTEX POLY.X.1:L60979 -gt 4

=====

generate layer POLY.X.1:L263232, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/13.61 peak=17.95

delete layer POLY.X.1:L60979

Rule Check POLY.X.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.60% (172 out of 562) rule checks completed.

operation group: 891/2080

POLY.X.2:L45735 = EDGE_EXPAND L6655 -outside_by 0.001 -corner_fill

=====

generate layer POLY.X.2:L45735, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L6655

operation group: 892/2080

POLY.X.2:L263234 = VERTEX POLY.X.2:L45735 -gt 4

=====

generate layer POLY.X.2:L263234, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer POLY.X.2:L45735

Rule Check POLY.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.78% (173 out of 562) rule checks completed.

operation group: 893/2080

POLY.A.1:L263236 = AREA Poly -lt 0.02

=====

generate layer POLY.A.1:L263236, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check POLY.A.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 30.96% (174 out of 562) rule checks completed.

operation group: 894/2080

L5639 = HOLES Poly

=====

generate layer L5639, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 895/2080

L42202 = NOT L5639 Poly

=====

generate layer L42202, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L5639

operation group: 896/2080

POLY.EA.1:L263239 = AREA L42202 -lt 0.05

=====

generate layer POLY.EA.1:L263239, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L42202

Rule Check POLY.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 31.14% (175 out of 562) rule checks completed.

operation group: 897/2080

L80658 = SELECT -cut Poly Resdum

=====

generate layer L80658, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 898/2080

poly_in_res = SELECT -cut L80658 SiProt

=====

generate layer poly_in_res, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L80658

operation group: 899/2080

POLYR.E.1:L263240 = ENC poly_in_res SiProt -lt 0.14 -output region -single_point -abut lt 90

=====

generate layer POLYR.E.1:L263240, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLYR.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 31.32% (176 out of 562) rule checks completed.

operation group: 900/2080

POLYR.E.2:L51116 = SELECT -cut poly_in_res Nimp

=====

generate layer POLYR.E.2:L51116, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 901/2080

POLYR.E.2:L263242 = NOT POLYR.E.2:L51116 Nimp

=====

generate layer POLYR.E.2:L263242, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 902/2080

POLYR.E.2:L263243 = ENC poly_in_res Nimp -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer POLYR.E.2:L263243, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLYR.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 31.49% (177 out of 562) rule checks completed.

operation group: 903/2080

POLYR.E.3:L10698 = SELECT -cut poly_in_res Pimp

=====

generate layer POLYR.E.3:L10698, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 904/2080

POLYR.E.3:L263245 = NOT POLYR.E.3:L10698 Pimp

=====

generate layer POLYR.E.3:L263245, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 905/2080

POLYR.E.3:L263246 = ENC poly_in_res Pimp -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer POLYR.E.3:L263246, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLYR.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 31.67% (178 out of 562) rule checks completed.

operation group: 906/2080

POLYR.SE.2:L9602 = SELECT -cut Nimp poly_in_res

=====

generate layer POLYR.SE.2:L9602, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 907/2080

POLYR.SE.2:L263249 = AND POLYR.SE.2:L9602 POLYR.E.2:L51116

=====

generate layer POLYR.SE.2:L263249, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer POLYR.SE.2:L9602

delete layer POLYR.E.2:L51116

operation group: 908/2080

POLYR.SE.2:L263250 = EXTE Nimp poly_in_res -lt 0.15 -output region -single_point -abut lt 90

=====

generate layer POLYR.SE.2:L263250, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLYR.SE.2 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 31.85% (179 out of 562) rule checks completed.

operation group: 909/2080

POLYR.SE.2_2:L263251 = EXTE Nzvt poly_in_res -lt 0.15 -output region -single_point -abut lt 90
-inside_also

=====

generate layer POLYR.SE.2_2:L263251, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Nzvt

Rule Check POLYR.SE.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.03% (180 out of 562) rule checks completed.

operation group: 910/2080

POLYR.SE.2_3:L89340 = SELECT -cut Pimp poly_in_res

=====

generate layer POLYR.SE.2_3:L89340, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 911/2080

POLYR.SE.2_3:L263254 = AND POLYR.SE.2_3:L89340 POLYR.E.3:L10698

generate layer POLYR.SE.2_3:L263254, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer POLYR.SE.2_3:L89340
delete layer POLYR.E.3:L10698

operation group: 912/2080

POLYR.SE.2_3:L263255 = EXTE Pimp poly_in_res -lt 0.15 -output region -single_point -abut lt 90

=====

generate layer POLYR.SE.2_3:L263255, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check POLYR.SE.2_3 finished, 0 error(s) reported.
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.21% (181 out of 562) rule checks completed.

operation group: 913/2080

POLYR.X.1:L263257 = NOT poly_in_res L13121

=====

generate layer POLYR.X.1:L263257, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L13121

Rule Check POLYR.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.38% (182 out of 562) rule checks completed.

operation group: 914/2080

NIMP.W.1:L263258 = INTE Nimp -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NIMP.W.1:L263258, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check NIMP.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.56% (183 out of 562) rule checks completed.

operation group: 915/2080

NIMP.SP.1:L263259 = EXTE Nimp -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer NIMP.SP.1:L263259, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check NIMP.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.95 real=0.00/1.01 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.74% (184 out of 562) rule checks completed.

operation group: 916/2080
L53776 = NOT Oxide Nwell

=====

generate layer L53776, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.96 real=0.00/1.01 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 917/2080
NIMP.E.1:L263261 = ENC L53776 Nimp -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer NIMP.E.1:L263261, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check NIMP.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 32.92% (185 out of 562) rule checks completed.

operation group: 918/2080
NIMP.O.1:L263262 = INTE Nimp Oxide -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer NIMP.O.1:L263262, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check NIMP.O.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.10% (186 out of 562) rule checks completed.

operation group: 919/2080
L27059 = EDGE_BOOLEAN Nimp Oxide -outside
L83184 = EDGE_BOOLEAN Nimp Oxide -inside

=====

generate layer L27059, TYP = E, HPN = 16, FPN = 16, HEN = 16, FEN = 16
generate layer L83184, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.53/17.87 peak=17.95

operation group: 920/2080

NIMP.SE.1:L79769 = EDGE_EXPAND L27059 -inside_by 0.001

=====

generate layer NIMP.SE.1:L79769, TYP = P, HPN = 5, FPN = 5, HEN = 40, FEN = 40
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 921/2080

L85193 = AND Nwell Pimp

=====

generate layer L85193, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 922/2080

L43250 = EDGE_BOOLEAN Oxide L85193 -inside

=====

generate layer L43250, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.53/17.87 peak=17.95

delete layer L85193

operation group: 923/2080

NIMP.SE.1:L98970 = EDGE_EXPAND L43250 -inside_by 0.001

=====

generate layer NIMP.SE.1:L98970, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8
Time: cpu=0.00/0.96 real=0.00/1.02 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 924/2080

NIMP.SE.1:L263268 = AND NIMP.SE.1:L79769 NIMP.SE.1:L98970

=====

generate layer NIMP.SE.1:L263268, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.97 real=0.00/1.02 Memory: 9.47/9.55/13.57 peak=17.95

delete layer NIMP.SE.1:L79769

delete layer NIMP.SE.1:L98970

operation group: 925/2080

NIMP.SE.1:L263269 = EXTE L27059 L43250 -lt 0.08 -output region -abut lt 90

=====

generate layer NIMP.SE.1:L263269, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.55/17.59 peak=17.95

delete layer L27059

delete layer L43250

Rule Check NIMP.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.27% (187 out of 562) rule checks completed.

operation group: 926/2080

L25620 = AND Nwell Oxide

```
=====
generate layer L25620, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/13.61 peak=17.95
```

operation group: 927/2080

NIMP.E.2:L263271 = ENC L25620 Nimp -lt 0.01 -output region -single_point -abut lt 90

```
=====
generate layer NIMP.E.2:L263271, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/17.63 peak=17.95
```

Rule Check NIMP.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.45% (188 out of 562) rule checks completed.

operation group: 928/2080

NIMP.E.3:L263273 = ENC L19486 L83184 -lt 0.1 -output region -abut lt 90

```
=====
generate layer NIMP.E.3:L263273, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check NIMP.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.63% (189 out of 562) rule checks completed.

operation group: 929/2080

L60508 = EDGE_BOOLEAN Oxide Poly -inside

```
=====
generate layer L60508, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.53/17.87 peak=17.95
```

operation group: 930/2080

NIMP.E.4:L23899 = EDGE_EXPAND L60508 -inside_by 0.001

```
=====
generate layer NIMP.E.4:L23899, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.55/13.57 peak=17.95
```


operation group: 931/2080

NIMP.E.4:L50221 = EDGE_EXPAND Nimp -outside_by 0.001

=====

generate layer NIMP.E.4:L50221, TYP = P, HPN = 12, FPN = 12, HEN = 56, FEN = 56
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 932/2080

NIMP.E.4:L263277 = AND NIMP.E.4:L23899 NIMP.E.4:L50221

=====

generate layer NIMP.E.4:L263277, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.97 real=0.00/1.03 Memory: 9.47/9.55/13.57 peak=17.95

delete layer NIMP.E.4:L50221

operation group: 933/2080

NIMP.E.4:L263278 = ENC L60508 Nimp -lt 0.1 -output region -abut lt 90

=====

generate layer NIMP.E.4:L263278, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/17.59 peak=17.95

Rule Check NIMP.E.4 finished, 0 error(s) reported.

Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.81% (190 out of 562) rule checks completed.

operation group: 934/2080

L45216 = OR Nwell Oxide

=====

generate layer L45216, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 935/2080

L10142 = EDGE_BOOLEAN Nimp L45216 -outside

=====

generate layer L10142, TYP = E, HPN = 12, FPN = 12, HEN = 12, FEN = 12
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.53/17.87 peak=17.95

delete layer L45216

operation group: 936/2080

NIMP.SE.2:L99192 = EDGE_EXPAND L10142 -inside_by 0.001

=====

generate layer NIMP.SE.2:L99192, TYP = P, HPN = 4, FPN = 4, HEN = 32, FEN = 32
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 937/2080
L62533 = NOT Pimp Nwell

=====

generate layer L62533, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 938/2080
L10493 = EDGE_BOOLEAN Oxide L62533 -inside

=====

generate layer L10493, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.53/17.87 peak=17.95

delete layer L62533

operation group: 939/2080
NIMP.SE.2:L37895 = EDGE_EXPAND L10493 -inside_by 0.001

=====

generate layer NIMP.SE.2:L37895, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 940/2080
NIMP.SE.2:L263285 = AND NIMP.SE.2:L99192 NIMP.SE.2:L37895

=====

generate layer NIMP.SE.2:L263285, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/13.57 peak=17.95

delete layer NIMP.SE.2:L99192
delete layer NIMP.SE.2:L37895

operation group: 941/2080
NIMP.SE.2:L263286 = EXTE L10142 L10493 -lt 0.02 -output region -abut lt 90

=====

generate layer NIMP.SE.2:L263286, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.55/17.59 peak=17.95

delete layer L10142
delete layer L10493

Rule Check NIMP.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/0.98 real=0.00/1.04 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 33.99% (191 out of 562) rule checks completed.

operation group: 942/2080
NIMP.A.1:L263287 = AREA Nimp -lt 0.018

=====

generate layer NIMP.A.1:L263287, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.04 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check NIMP.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.99 real=0.00/1.04 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 34.16% (192 out of 562) rule checks completed.

operation group: 943/2080
L70965 = HOLES Nimp

=====

generate layer L70965, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 944/2080
L89538 = NOT L70965 Nimp

=====

generate layer L89538, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L70965

operation group: 945/2080
NIMP.EA.1:L263290 = AREA L89538 -lt 0.04

=====

generate layer NIMP.EA.1:L263290, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L89538

Rule Check NIMP.EA.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 34.34% (193 out of 562) rule checks completed.

operation group: 946/2080
NIMP.SE.3:L5098 = EDGE_EXPAND L83184 -inside_by 0.001

=====

generate layer NIMP.SE.3:L5098, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 947/2080
NIMP.SE.3:L8050 = EDGE_EXPAND L81773 -inside_by 0.001

=====

layer NIMP.SE.3:L8050 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 948/2080

NIMP.SE.3:L263293 = AND NIMP.SE.3:L5098 NIMP.SE.3:L8050

=====

generate layer NIMP.SE.3:L263293, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

delete layer NIMP.SE.3:L5098
delete layer NIMP.SE.3:L8050

operation group: 949/2080

NIMP.SE.3:L263294 = EXTE L83184 L81773 -lt 0.1 -output region -abut lt 90

=====

generate layer NIMP.SE.3:L263294, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L81773

Rule Check NIMP.SE.3 finished, 0 error(s) reported.
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 34.52% (194 out of 562) rule checks completed.

operation group: 950/2080

NIMP.X.1:L263296 = AND Nimp Pimp

=====

generate layer NIMP.X.1:L263296, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check NIMP.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 34.70% (195 out of 562) rule checks completed.

operation group: 951/2080

PIMP.W.1:L263297 = INTE Pimp -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PIMP.W.1:L263297, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check PIMP.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 34.88% (196 out of 562) rule checks completed.

operation group: 952/2080

PIMP.SP.1:L263298 = EXTE Pimp -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer PIMP.SP.1:L263298, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check PIMP.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.05% (197 out of 562) rule checks completed.

operation group: 953/2080

PIMP.E.1:L263299 = ENC L25620 Pimp -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer PIMP.E.1:L263299, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/17.63 peak=17.95

delete layer L25620

Rule Check PIMP.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.23% (198 out of 562) rule checks completed.

operation group: 954/2080

PIMP.O.1:L263300 = INTE Oxide Pimp -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer PIMP.O.1:L263300, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check PIMP.O.1 finished, 0 error(s) reported.

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.41% (199 out of 562) rule checks completed.

operation group: 955/2080

L89543 = NOT Nimp Nwell

=====

generate layer L89543, TYP = P, HPN = 1, FPN = 1, HEN = 12, FEN = 12

Time: cpu=0.00/0.99 real=0.00/1.05 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 956/2080

L66103 = EDGE_BOOLEAN Oxide L89543 -inside

```
=====
generate layer L66103, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4
Time: cpu=0.00/1.00 real=0.00/1.05 Memory: 9.47/9.53/17.87 peak=17.95
```

delete layer L89543

operation group: 957/2080

PIMP.SE.1:L94348 = EDGE_EXPAND L66103 -inside_by 0.001

```
=====
generate layer PIMP.SE.1:L94348, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.55/13.57 peak=17.95
```

operation group: 958/2080

L54069 = EDGE_BOOLEAN Pimp Oxide -outside

L56174 = EDGE_BOOLEAN Pimp Oxide -inside

```
=====
generate layer L54069, TYP = E, HPN = 16, FPN = 16, HEN = 16, FEN = 16
generate layer L56174, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.53/17.87 peak=17.95
```

operation group: 959/2080

PIMP.SE.1:L46412 = EDGE_EXPAND L54069 -inside_by 0.001

```
=====
generate layer PIMP.SE.1:L46412, TYP = P, HPN = 5, FPN = 5, HEN = 40, FEN = 40
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.55/13.57 peak=17.95
```

operation group: 960/2080

PIMP.SE.1:L263306 = AND PIMP.SE.1:L94348 PIMP.SE.1:L46412

```
=====
generate layer PIMP.SE.1:L263306, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.55/13.57 peak=17.95
```

delete layer PIMP.SE.1:L94348

delete layer PIMP.SE.1:L46412

operation group: 961/2080

PIMP.SE.1:L263307 = EXTE L66103 L54069 -lt 0.08 -output region -abut lt 90

```
=====
generate layer PIMP.SE.1:L263307, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.55/17.59 peak=17.95
```

delete layer L66103

delete layer L54069

Rule Check PIMP.SE.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.59% (200 out of 562) rule checks completed.

operation group: 962/2080

PIMP.E.2:L263308 = ENC L53776 Pimp -lt 0.01 -output region -single_point -abut lt 90

=====

generate layer PIMP.E.2:L263308, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.59/17.63 peak=17.95

delete layer L53776

Rule Check PIMP.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.77% (201 out of 562) rule checks completed.

operation group: 963/2080

PIMP.E.3:L263310 = ENC L19486 L56174 -lt 0.1 -output region -abut lt 90

=====

generate layer PIMP.E.3:L263310, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check PIMP.E.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.00 real=0.00/1.06 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 35.94% (202 out of 562) rule checks completed.

operation group: 964/2080

PIMP.E.4:L95503 = EDGE_EXPAND Pimp -outside_by 0.001

=====

generate layer PIMP.E.4:L95503, TYP = P, HPN = 12, FPN = 12, HEN = 56, FEN = 56
Time: cpu=0.00/1.01 real=0.00/1.06 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 965/2080

PIMP.E.4:L263313 = AND NIMP.E.4:L23899 PIMP.E.4:L95503

=====

generate layer PIMP.E.4:L263313, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.01 real=0.00/1.06 Memory: 9.47/9.59/13.61 peak=17.95

delete layer PIMP.E.4:L95503

operation group: 966/2080

PIMP.E.4:L263314 = ENC L60508 Pimp -lt 0.1 -output region -abut lt 90

=====

generate layer PIMP.E.4:L263314, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check PIMP.E.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 36.12% (203 out of 562) rule checks completed.

operation group: 967/2080

L3421 = AND Nimp Nwell

=====

generate layer L3421, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 968/2080

L34725 = EDGE_BOOLEAN Oxide L3421 -inside

=====

generate layer L34725, TYP = E, HPN = 4, FPN = 4, HEN = 4, FEN = 4

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.53/17.87 peak=17.95

delete layer L3421

operation group: 969/2080

PIMP.SE.2:L61105 = EDGE_EXPAND L34725 -inside_by 0.001

=====

generate layer PIMP.SE.2:L61105, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 970/2080

L90512 = NOT Nwell Oxide

=====

generate layer L90512, TYP = P, HPN = 1, FPN = 1, HEN = 12, FEN = 12

Time: cpu=0.00/1.01 real=0.00/1.07 Memory: 9.47/9.55/17.59 peak=17.95

operation group: 971/2080

L56230 = EDGE_BOOLEAN Pimp L90512 -inside

=====

generate layer L56230, TYP = E, HPN = 5, FPN = 5, HEN = 5, FEN = 5

Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.53/17.87 peak=17.95

delete layer L90512

operation group: 972/2080

PIMP.SE.2:L39162 = EDGE_EXPAND L56230 -inside_by 0.001

=====

generate layer PIMP.SE.2:L39162, TYP = P, HPN = 3, FPN = 3, HEN = 16, FEN = 16
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.55/13.57 peak=17.95

operation group: 973/2080

PIMP.SE.2:L263321 = AND PIMP.SE.2:L61105 PIMP.SE.2:L39162

=====

generate layer PIMP.SE.2:L263321, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.55/13.57 peak=17.95

delete layer PIMP.SE.2:L61105
delete layer PIMP.SE.2:L39162

operation group: 974/2080

PIMP.SE.2:L263322 = EXTE L34725 L56230 -lt 0.02 -output region -abut lt 90

=====

generate layer PIMP.SE.2:L263322, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.55/17.59 peak=17.95

delete layer L34725
delete layer L56230

Rule Check PIMP.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 36.30% (204 out of 562) rule checks completed.

operation group: 975/2080

PIMP.A.1:L263323 = AREA Pimp -lt 0.018

=====

generate layer PIMP.A.1:L263323, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check PIMP.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 36.48% (205 out of 562) rule checks completed.

operation group: 976/2080

L11383 = HOLES Pimp

=====

generate layer L11383, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 977/2080

L81747 = NOT L11383 Pimp

```
=====
generate layer L81747, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer L11383
```

```
operation group: 978/2080
```

```
PIMP.EA.1:L263326 = AREA L81747 -lt 0.04
```

```
=====
generate layer PIMP.EA.1:L263326, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer L81747
```

```
Rule Check PIMP.EA.1 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
[INFO]: 36.65% (206 out of 562) rule checks completed.
```

```
operation group: 979/2080
```

```
PIMP.SE.3:L46213 = EDGE_EXPAND L56174 -inside_by 0.001
```

```
=====
generate layer PIMP.SE.3:L46213, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
operation group: 980/2080
```

```
PIMP.SE.3:L68035 = EDGE_EXPAND L78161 -inside_by 0.001
```

```
=====
layer PIMP.SE.3:L68035 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
operation group: 981/2080
```

```
PIMP.SE.3:L263329 = AND PIMP.SE.3:L46213 PIMP.SE.3:L68035
```

```
=====
generate layer PIMP.SE.3:L263329, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer PIMP.SE.3:L46213
```

```
delete layer PIMP.SE.3:L68035
```

```
operation group: 982/2080
```

```
PIMP.SE.3:L263330 = EXTE L56174 L78161 -lt 0.1 -output region -abut lt 90
```

```
=====
generate layer PIMP.SE.3:L263330, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95
```

```
delete layer L78161
```

Rule Check PIMP.SE.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 36.83% (207 out of 562) rule checks completed.

operation group: 983/2080

CONT.W.1:L263331 = RECT_CHK Cont -eq 0.06 -not -by eq 0.06

=====

generate layer CONT.W.1:L263331, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check CONT.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.01% (208 out of 562) rule checks completed.

operation group: 984/2080

CONT.SP.1:L263332 = EXTE Cont -lt 0.06 -output region -single_point -abut lt 90

=====

generate layer CONT.SP.1:L263332, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check CONT.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.19% (209 out of 562) rule checks completed.

operation group: 985/2080

cont_cluster_lt_pt1 = SELECT -with_neighbor Cont -ge 3 -space lt 0.1

=====

generate layer cont_cluster_lt_pt1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 986/2080

CONT.SP.2:L263333 = EXTE cont_cluster_lt_pt1 -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer CONT.SP.2:L263333, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

delete layer cont_cluster_lt_pt1

Rule Check CONT.SP.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.37% (210 out of 562) rule checks completed.

operation group: 987/2080
L32388 = AND Cont Oxide

=====

generate layer L32388, TYP = P, HPN = 8, FPN = 8, HEN = 32, FEN = 32
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 988/2080
CONT.SE.1:L20276 = EDGE_EXPAND L32388 -inside_by 0.001

=====

generate layer CONT.SE.1:L20276, TYP = P, HPN = 8, FPN = 8, HEN = 64, FEN = 64
Time: cpu=0.00/1.02 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 989/2080
CONT.SE.1:L263337 = AND CONT.SE.1:L20276 OXIDETHK.SE.5:L24866

=====

generate layer CONT.SE.1:L263337, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.08 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 990/2080
CONT.SE.1:L263338 = EXTE L32388 L19486 -lt 0.05 -output region -abut lt 90

=====

generate layer CONT.SE.1:L263338, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check CONT.SE.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.54% (211 out of 562) rule checks completed.

operation group: 991/2080
L78798 = AND Cont L24975

=====

generate layer L78798, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L24975

operation group: 992/2080
CONT.SE.2:L33581 = EDGE_EXPAND L78798 -inside_by 0.001

=====

generate layer CONT.SE.2:L33581, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 993/2080

CONT.SE.2:L42957 = EDGE_EXPAND L87956 -inside_by 0.001

=====

generate layer CONT.SE.2:L42957, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 994/2080

CONT.SE.2:L263342 = AND CONT.SE.2:L33581 CONT.SE.2:L42957

=====

generate layer CONT.SE.2:L263342, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.SE.2:L33581

delete layer CONT.SE.2:L42957

operation group: 995/2080

CONT.SE.2:L263343 = EXTE L78798 L87956 -lt 0.06 -output region -abut lt 90

=====

generate layer CONT.SE.2:L263343, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L78798

delete layer L87956

Rule Check CONT.SE.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.72% (212 out of 562) rule checks completed.

operation group: 996/2080

cont_poly = AND Cont Poly

=====

generate layer cont_poly, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 997/2080

CONT.SE.3:L39381 = EDGE_EXPAND cont_poly -inside_by 0.001

=====

generate layer CONT.SE.3:L39381, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 998/2080

CONT.SE.3:L263346 = AND CONT.SE.3:L39381 NIMP.E.4:L23899

=====

generate layer CONT.SE.3:L263346, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/13.61 peak=17.95

delete layer NIMP.E.4:L23899

operation group: 999/2080

CONT.SE.3:L263347 = EXTE cont_poly L60508 -lt 0.06 -output region -abut lt 90

=====

generate layer CONT.SE.3:L263347, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/17.63 peak=17.95

delete layer L60508

Rule Check CONT.SE.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 37.90% (213 out of 562) rule checks completed.

operation group: 1000/2080

L99140 = AND Oxide_thk Poly

=====

generate layer L99140, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer Oxide_thk

operation group: 1001/2080

L85777 = EDGE_BOOLEAN Oxide L99140 -inside

=====

generate layer L85777, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L99140

operation group: 1002/2080

CONT.SE.4:L26514 = EDGE_EXPAND L85777 -inside_by 0.001

=====

generate layer CONT.SE.4:L26514, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1003/2080

CONT.SE.4:L263352 = AND CONT.SE.3:L39381 CONT.SE.4:L26514

=====

generate layer CONT.SE.4:L263352, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.SE.3:L39381
delete layer CONT.SE.4:L26514

operation group: 1004/2080

CONT.SE.4:L263353 = EXTE cont_poly L85777 -lt 0.07 -output region -abut lt 90

=====

generate layer CONT.SE.4:L263353, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L85777

Rule Check CONT.SE.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.08% (214 out of 562) rule checks completed.

operation group: 1005/2080

CONT.E.1:L47450 = SELECT -cut Cont Oxide

=====

generate layer CONT.E.1:L47450, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 1006/2080

CONT.E.1:L263355 = NOT CONT.E.1:L47450 Oxide

=====

generate layer CONT.E.1:L263355, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.E.1:L47450

operation group: 1007/2080

CONT.E.1:L263356 = ENC Cont Oxide -lt 0.03 -output region -single_point -abut lt 90

=====

generate layer CONT.E.1:L263356, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check CONT.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.26% (215 out of 562) rule checks completed.

operation group: 1008/2080

CONT.E.2:L67661 = SELECT -cut Cont Poly

=====

generate layer CONT.E.2:L67661, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 1009/2080

CONT.E.2:L263358 = NOT CONT.E.2:L67661 Poly

=====

generate layer CONT.E.2:L263358, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.03 real=0.00/1.09 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.E.2:L67661

operation group: 1010/2080

CONT.E.2:L263359 = ENC Cont Poly -lt 0.02 -output region -single_point -abut lt 90

=====

generate layer CONT.E.2:L263359, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check CONT.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.43% (216 out of 562) rule checks completed.

operation group: 1011/2080

CONT.E.3:L95731 = GROW cont_poly -left 0.03 -right 0.03

=====

generate layer CONT.E.3:L95731, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 1012/2080

CONT.E.3:L76668 = SELECT -inside CONT.E.3:L95731 Poly

=====

generate layer CONT.E.3:L76668, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/13.61 peak=17.95

delete layer CONT.E.3:L95731

operation group: 1013/2080

CONT.E.3:L39551 = NOT cont_poly CONT.E.3:L76668

=====

generate layer CONT.E.3:L39551, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.E.3:L76668

operation group: 1014/2080

CONT.E.3:L13020 = GROW CONT.E.3:L39551 -top 0.03 -bottom 0.03

=====

generate layer CONT.E.3:L13020, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/13.61 peak=17.95

operation group: 1015/2080

CONT.E.3:L30287 = SELECT -inside CONT.E.3:L13020 Poly

=====

generate layer CONT.E.3:L30287, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/13.61 peak=17.95

delete layer CONT.E.3:L13020

operation group: 1016/2080

CONT.E.3:L263365 = NOT CONT.E.3:L39551 CONT.E.3:L30287

=====

generate layer CONT.E.3:L263365, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.E.3:L39551

delete layer CONT.E.3:L30287

Rule Check CONT.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.61% (217 out of 562) rule checks completed.

operation group: 1017/2080

CONT.E.4:L63483 = EDGE_EXPAND L83184 -outside_by 0.001

=====

generate layer CONT.E.4:L63483, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1018/2080

CONT.E.4:L263368 = AND CONT.SE.1:L20276 CONT.E.4:L63483

=====

generate layer CONT.E.4:L263368, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.E.4:L63483

operation group: 1019/2080

CONT.E.4:L263369 = ENC L32388 L83184 -lt 0.03 -output region -abut lt 90

=====

generate layer CONT.E.4:L263369, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L83184

Rule Check CONT.E.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.79% (218 out of 562) rule checks completed.

operation group: 1020/2080

CONT.E.4_2:L40010 = EDGE_EXPAND L56174 -outside_by 0.001

=====

generate layer CONT.E.4_2:L40010, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1021/2080

CONT.E.4_2:L263372 = AND CONT.SE.1:L20276 CONT.E.4_2:L40010

=====

generate layer CONT.E.4_2:L263372, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer CONT.SE.1:L20276
delete layer CONT.E.4_2:L40010

operation group: 1022/2080

CONT.E.4_2:L263373 = ENC L32388 L56174 -lt 0.03 -output region -abut lt 90

=====

generate layer CONT.E.4_2:L263373, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L56174

Rule Check CONT.E.4_2 finished, 0 error(s) reported.
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 38.97% (219 out of 562) rule checks completed.

operation group: 1023/2080

CONT.X.1:L263375 = AND Cont gate

=====

generate layer CONT.X.1:L263375, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/13.61 peak=17.95

delete layer gate

Rule Check CONT.X.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 39.15% (220 out of 562) rule checks completed.

operation group: 1024/2080

L8409 = EDGE_BOOLEAN Nimp L32388 -inside

=====

generate layer L8409, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.53/17.87 peak=17.95

delete layer Nimp

operation group: 1025/2080

CONT.X.2:L263377 = EDGE_LENGTH L8409 -ge 0.005

=====

generate layer CONT.X.2:L263377, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.53/9.53 peak=17.95

delete layer L8409

Rule Check CONT.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.04 real=0.00/1.10 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 39.32% (221 out of 562) rule checks completed.

operation group: 1026/2080

L72987 = EDGE_BOOLEAN Pimp L32388 -inside

=====

generate layer L72987, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.53/17.87 peak=17.95

delete layer Pimp

delete layer L32388

operation group: 1027/2080

CONT.X.2_2:L263379 = EDGE_LENGTH L72987 -ge 0.005

=====

generate layer CONT.X.2_2:L263379, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.53/9.53 peak=17.95

delete layer L72987

Rule Check CONT.X.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 39.50% (222 out of 562) rule checks completed.

operation group: 1028/2080

L32232 = OR Oxide Poly

=====

generate layer L32232, TYP = P, HPN = 3, FPN = 3, HEN = 36, FEN = 36

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/17.63 peak=17.95

operation group: 1029/2080

CONT.X.3:L263381 = NOT Cont L32232

=====

generate layer CONT.X.3:L263381, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/13.61 peak=17.95

Rule Check CONT.X.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 39.68% (223 out of 562) rule checks completed.

operation group: 1030/2080

SIPROT.W.1:L263382 = INTE SiProt -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer SIPROT.W.1:L263382, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 39.86% (224 out of 562) rule checks completed.

operation group: 1031/2080

SIPROT.SP.1:L263383 = EXTE SiProt -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer SIPROT.SP.1:L263383, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.04% (225 out of 562) rule checks completed.

operation group: 1032/2080

SIPROT.SE.1:L30884 = SELECT -cut Cont SiProt

=====

generate layer SIPROT.SE.1:L30884, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1033/2080

SIPROT.SE.1:L89298 = SELECT -cut SiProt Cont

=====

generate layer SIPROT.SE.1:L89298, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1034/2080

SIPROT.SE.1:L263386 = AND SIPROT.SE.1:L30884 SIPROT.SE.1:L89298

=====

generate layer SIPROT.SE.1:L263386, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer SIPROT.SE.1:L30884
delete layer SIPROT.SE.1:L89298

operation group: 1035/2080

SIPROT.SE.1:L263387 = EXTE Cont SiProt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer SIPROT.SE.1:L263387, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.SE.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.21% (226 out of 562) rule checks completed.

operation group: 1036/2080

SIPROT.SE.2:L263388 = EXTE Oxide SiProt -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer SIPROT.SE.2:L263388, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.SE.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.39% (227 out of 562) rule checks completed.

operation group: 1037/2080

L6065 = EDGE_BOOLEAN SiProt Oxide -inside

=====

generate layer L6065, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1038/2080

SIPROT.SE.3:L87969 = EDGE_EXPAND L6065 -inside_by 0.001

=====

generate layer SIPROT.SE.3:L87969, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1039/2080

SIPROT.SE.3:L263392 = AND OXIDETHK.SE.5:L24866 SIPROT.SE.3:L87969

=====

generate layer SIPROT.SE.3:L263392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer OXIDETHK.SE.5:L24866
delete layer SIPROT.SE.3:L87969

operation group: 1040/2080

SIPROT.SE.3:L263393 = EXTE L19486 L6065 -lt 0.22 -output region -abut lt 90

=====

generate layer SIPROT.SE.3:L263393, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L19486
delete layer L6065

Rule Check SIPROT.SE.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.57% (228 out of 562) rule checks completed.

operation group: 1041/2080

SIPROT.E.2:L263394 = ENC SiProt Oxide -lt 0.12 -output region -single_point -abut lt 90

=====

generate layer SIPROT.E.2:L263394, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.75% (229 out of 562) rule checks completed.

operation group: 1042/2080

L9687 = EDGE_BOOLEAN Oxide Resdum -outside

=====

layer L9687 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

operation group: 1043/2080

SIPROT.E.1:L263396 = ENC L9687 SiProt -lt 0.12 -output region -abut lt 90

=====

generate layer SIPROT.E.1:L263396, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L9687

Rule Check SIPROT.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 40.93% (230 out of 562) rule checks completed.

operation group: 1044/2080

SIPROT.E.3:L263397 = ENC L90757 SiProt -lt 0.14 -output region -abut lt 90

=====

generate layer SIPROT.E.3:L263397, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.10% (231 out of 562) rule checks completed.

operation group: 1045/2080

SIPROT.A.1:L263398 = AREA SiProt -lt 0.6

=====

generate layer SIPROT.A.1:L263398, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check SIPROT.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.28% (232 out of 562) rule checks completed.

operation group: 1046/2080

SIPROT.SE.4:L263399 = EXTE L90757 SiProt -lt 0.18 -output region -abut lt 90

=====

generate layer SIPROT.SE.4:L263399, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L90757

Rule Check SIPROT.SE.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.46% (233 out of 562) rule checks completed.

operation group: 1047/2080

L24522 = HOLES SiProt

```
=====
generate layer L24522, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

operation group: 1048/2080

L65079 = NOT L24522 SiProt

```
=====
generate layer L65079, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

delete layer L24522

operation group: 1049/2080

SIPROT.EA.1:L263402 = AREA L65079 -lt 0.6

```
=====
generate layer SIPROT.EA.1:L263402, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

delete layer L65079

Rule Check SIPROT.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.64% (234 out of 562) rule checks completed.

operation group: 1050/2080

metal2_conn = NOT Metal2 M2Resdum

```
=====
generate layer metal2_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

delete layer M2Resdum

operation group: 1051/2080

METAL2.E.1_METAL2.E.2:L263403 = RECT_ENC Via1 metal2_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

```
=====
generate layer METAL2.E.1_METAL2.E.2:L263403, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check METAL2.E.1_METAL2.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.81% (235 out of 562) rule checks completed.

operation group: 1052/2080
metal3_conn = NOT Metal3 M3Resdum

=====

generate layer metal3_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M3Resdum

operation group: 1053/2080
METAL3.E.1_METAL3.E.2:L263404 = RECT_ENC Via2 metal3_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL3.E.1_METAL3.E.2:L263404, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL3.E.1_METAL3.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 41.99% (236 out of 562) rule checks completed.

operation group: 1054/2080
metal4_conn = NOT Metal4 M4Resdum

=====

generate layer metal4_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M4Resdum

operation group: 1055/2080
METAL4.E.1_METAL4.E.2:L263405 = RECT_ENC Via3 metal4_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL4.E.1_METAL4.E.2:L263405, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL4.E.1_METAL4.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 42.17% (237 out of 562) rule checks completed.

operation group: 1056/2080
metal5_conn = NOT Metal5 M5Resdum

=====

generate layer metal5_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M5Resdum

operation group: 1057/2080

METAL5.E.1_METAL5.E.2:L263406 = RECT_ENC Via4 metal5_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL5.E.1_METAL5.E.2:L263406, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL5.E.1_METAL5.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 42.35% (238 out of 562) rule checks completed.

operation group: 1058/2080

metal6_conn = NOT Metal6 M6Resdum

=====

generate layer metal6_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M6Resdum

operation group: 1059/2080

METAL6.E.1_METAL6.E.2:L263407 = RECT_ENC Via5 metal6_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL6.E.1_METAL6.E.2:L263407, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL6.E.1_METAL6.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 42.53% (239 out of 562) rule checks completed.

operation group: 1060/2080

metal7_conn = NOT Metal7 M7Resdum

=====

generate layer metal7_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M7Resdum

operation group: 1061/2080

METAL7.E.1_METAL7.E.2:L263408 = RECT_ENC Via6 metal7_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL7.E.1_METAL7.E.2:L263408, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL7.E.1_METAL7.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 42.70% (240 out of 562) rule checks completed.

operation group: 1062/2080
metal8_conn = NOT Metal8 M8Resdum

=====

generate layer metal8_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M8Resdum

operation group: 1063/2080
METAL8.E.1_METAL8.E.2:L263409 = RECT_ENC Via7 metal8_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL8.E.1_METAL8.E.2:L263409, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL8.E.1_METAL8.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 42.88% (241 out of 562) rule checks completed.

operation group: 1064/2080
metal9_conn = NOT Metal9 M9Resdum

=====

generate layer metal9_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M9Resdum

operation group: 1065/2080
METAL9.E.1_METAL9.E.2:L263410 = RECT_ENC Via8 metal9_conn -outside_also -abut ltgt 0 90
-good 0.005 0.03 0.005 0.03

=====

generate layer METAL9.E.1_METAL9.E.2:L263410, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL9.E.1_METAL9.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.06% (242 out of 562) rule checks completed.

operation group: 1066/2080

L17074 = OR INDdummy M10Resdum

=====

generate layer L17074, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M10Resdum

operation group: 1067/2080

metal10_conn = NOT Metal10 L17074

=====

generate layer metal10_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L17074

operation group: 1068/2080

METAL10.E.1_METAL10.E.2:L263411 = RECT_ENC Via9 metal10_conn -outside_also -abut ltgt 0 90
-good 0.03 0.005 0.03 0.005

=====

generate layer METAL10.E.1_METAL10.E.2:L263411, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL10.E.1_METAL10.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.24% (243 out of 562) rule checks completed.

operation group: 1069/2080

L86607 = OR INDdummy M11Resdum

=====

generate layer L86607, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer INDdummy
delete layer M11Resdum

operation group: 1070/2080

metal11_conn = NOT Metal11 L86607

=====

generate layer metal11_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer L86607

operation group: 1071/2080

METAL11.E.1_METAL11.E.2:L263412 = RECT_ENC Via10 metal11_conn -outside_also -abut ltgt 0 90
-good 0.03 0.005 0.03 0.005

=====

generate layer METAL11.E.1_METAL11.E.2:L263412, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL11.E.1_METAL11.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.42% (244 out of 562) rule checks completed.

operation group: 1072/2080

metal1_conn = NOT Metal1 M1Resdum

=====

generate layer metal1_conn, TYP = P, HPN = 4, FPN = 4, HEN = 42, FEN = 42
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

delete layer M1Resdum

operation group: 1073/2080

METAL1.E.1_METAL1.E.2:L263413 = RECT_ENC Cont metal1_conn -outside_also -abut ltgt 0 90
-good 0 0.03 0 0.03

=====

generate layer METAL1.E.1_METAL1.E.2:L263413, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check METAL1.E.1_METAL1.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.59% (245 out of 562) rule checks completed.

operation group: 1074/2080

METAL1.W.1:L263414 = INTE metal1_conn -lt 0.06 -output region -single_point -abut lt 90

=====

generate layer METAL1.W.1:L263414, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/17.63 peak=17.95

Rule Check METAL1.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.77% (246 out of 562) rule checks completed.

operation group: 1075/2080

METAL2.W.1:L263415 = INTE metal2_conn -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer METAL2.W.1:L263415, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check METAL2.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 43.95% (247 out of 562) rule checks completed.

operation group: 1076/2080
METAL3.W.1:L263416 = INTE metal3_conn -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer METAL3.W.1:L263416, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check METAL3.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 44.13% (248 out of 562) rule checks completed.

operation group: 1077/2080
METAL4.W.1:L263417 = INTE metal4_conn -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer METAL4.W.1:L263417, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check METAL4.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 44.31% (249 out of 562) rule checks completed.

operation group: 1078/2080
METAL5.W.1:L263418 = INTE metal5_conn -lt 0.08 -output region -single_point -abut lt 90
=====

```
generate layer METAL5.W.1:L263418, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95
```

Rule Check METAL5.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

[INFO]: 44.48% (250 out of 562) rule checks completed.

operation group: 1079/2080

METAL6.W.1:L263419 = INTE metal6_conn -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer METAL6.W.1:L263419, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.47/9.59/9.59 peak=17.95

Rule Check METAL6.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 44.66% (251 out of 562) rule checks completed.

operation group: 1080/2080

METAL7.W.1:L263420 = INTE metal7_conn -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer METAL7.W.1:L263420, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL7.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 44.84% (252 out of 562) rule checks completed.

operation group: 1081/2080

METAL8.W.1:L263421 = INTE metal8_conn -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer METAL8.W.1:L263421, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL8.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.02% (253 out of 562) rule checks completed.

operation group: 1082/2080

METAL9.W.1:L263422 = INTE metal9_conn -lt 0.08 -output region -single_point -abut lt 90

=====

generate layer METAL9.W.1:L263422, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL9.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.20% (254 out of 562) rule checks completed.

operation group: 1083/2080

METAL10.W.1:L263423 = INTE Metal10 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer METAL10.W.1:L263423, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL10.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.37% (255 out of 562) rule checks completed.

operation group: 1084/2080

METAL11.W.1:L263424 = INTE Metal11 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer METAL11.W.1:L263424, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.05 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL11.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.55% (256 out of 562) rule checks completed.

operation group: 1085/2080

L17980 = SIZE Via1 -by 0.11

=====

generate layer L17980, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1086/2080

L90952 = SIZE L17980 -by 0.499 -underover

=====

generate layer L90952, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L17980

operation group: 1087/2080

via1_array_zone = SIZE L90952 -by -0.11

=====

generate layer via1_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.11 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L90952

operation group: 1088/2080
L26410 = SIZE Cont -by 0.09

=====

generate layer L26410, TYP = P, HPN = 5, FPN = 5, HEN = 20, FEN = 20
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/13.71 peak=17.95

operation group: 1089/2080
L61819 = SIZE L26410 -by 0.409 -underover

=====

generate layer L61819, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/13.71 peak=17.95

delete layer L26410

operation group: 1090/2080
cont_array_zone = SIZE L61819 -by -0.09

=====

generate layer cont_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L61819

operation group: 1091/2080
L40879 = OR Bondpad via1_array_zone cont_array_zone

=====

generate layer L40879, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer cont_array_zone

operation group: 1092/2080
L78366 = NOT metal1_conn L40879

=====

generate layer L78366, TYP = P, HPN = 4, FPN = 4, HEN = 42, FEN = 42
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L40879

operation group: 1093/2080
METAL1.W.2:L263429 = SIZE L78366 -by 3 -underover

=====

generate layer METAL1.W.2:L263429, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/13.71 peak=17.95

delete layer L78366

Rule Check METAL1.W.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.73% (257 out of 562) rule checks completed.

operation group: 1094/2080

L47131 = SIZE Via2 -by 0.11

=====

generate layer L47131, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1095/2080

L42681 = SIZE L47131 -by 0.499 -underover

=====

generate layer L42681, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L47131

operation group: 1096/2080

via2_array_zone = SIZE L42681 -by -0.11

=====

generate layer via2_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L42681

operation group: 1097/2080

L10068 = OR Bondpad via2_array_zone via1_array_zone

=====

generate layer L10068, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via1_array_zone

operation group: 1098/2080

L97076 = NOT metal2_conn L10068

=====

generate layer L97076, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L10068

operation group: 1099/2080

METAL2.W.2:L263434 = SIZE L97076 -by 3 -underover

=====

generate layer METAL2.W.2:L263434, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L97076

Rule Check METAL2.W.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 45.91% (258 out of 562) rule checks completed.

operation group: 1100/2080
L76282 = SIZE Via3 -by 0.11

=====

generate layer L76282, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1101/2080
L64294 = SIZE L76282 -by 0.499 -underover

=====

generate layer L64294, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76282

operation group: 1102/2080
via3_array_zone = SIZE L64294 -by -0.11

=====

generate layer via3_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L64294

operation group: 1103/2080
L78285 = OR Bondpad via3_array_zone via2_array_zone

=====

generate layer L78285, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via2_array_zone

operation group: 1104/2080
L75504 = NOT metal3_conn L78285

=====

generate layer L75504, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L78285

operation group: 1105/2080
METAL3.W.2:L263439 = SIZE L75504 -by 3 -underover

=====

generate layer METAL3.W.2:L263439, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L75504

Rule Check METAL3.W.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 46.09% (259 out of 562) rule checks completed.

operation group: 1106/2080
L5433 = SIZE Via4 -by 0.11

=====

generate layer L5433, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1107/2080
L77470 = SIZE L5433 -by 0.499 -underover

=====

generate layer L77470, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L5433

operation group: 1108/2080
via4_array_zone = SIZE L77470 -by -0.11

=====

generate layer via4_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L77470

operation group: 1109/2080
L91858 = OR Bondpad via4_array_zone via3_array_zone

=====

generate layer L91858, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via3_array_zone

operation group: 1110/2080
L16678 = NOT metal4_conn L91858

=====

generate layer L16678, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L91858

operation group: 1111/2080

METAL4.W.2:L263444 = SIZE L16678 -by 3 -underover

=====

generate layer METAL4.W.2:L263444, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L16678

Rule Check METAL4.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 46.26% (260 out of 562) rule checks completed.

operation group: 1112/2080

L34584 = SIZE Via5 -by 0.11

=====

generate layer L34584, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1113/2080

L55171 = SIZE L34584 -by 0.499 -underover

=====

generate layer L55171, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L34584

operation group: 1114/2080

via5_array_zone = SIZE L55171 -by -0.11

=====

generate layer via5_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L55171

operation group: 1115/2080

L46863 = OR Bondpad via5_array_zone via4_array_zone

=====

generate layer L46863, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via4_array_zone

operation group: 1116/2080

L45047 = NOT metal5_conn L46863

=====

generate layer L45047, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L46863

operation group: 1117/2080

METAL5.W.2:L263449 = SIZE L45047 -by 3 -underover

=====

generate layer METAL5.W.2:L263449, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L45047

Rule Check METAL5.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 46.44% (261 out of 562) rule checks completed.

operation group: 1118/2080

L63735 = SIZE Via6 -by 0.11

=====

generate layer L63735, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1119/2080

L83479 = SIZE L63735 -by 0.499 -underover

=====

generate layer L83479, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L63735

operation group: 1120/2080

via6_array_zone = SIZE L83479 -by -0.11

=====

generate layer via6_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L83479

operation group: 1121/2080

L90960 = OR Bondpad via6_array_zone via5_array_zone

=====

generate layer L90960, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via5_array_zone

operation group: 1122/2080

L81857 = NOT metal6_conn L90960

=====

generate layer L81857, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L90960

operation group: 1123/2080

METAL6.W.2:L263454 = SIZE L81857 -by 3 -underover

=====

generate layer METAL6.W.2:L263454, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L81857

Rule Check METAL6.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 46.62% (262 out of 562) rule checks completed.

operation group: 1124/2080

L9413 = OR Bondpad via6_array_zone

=====

generate layer L9413, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer via6_array_zone

operation group: 1125/2080

L92886 = SIZE Via7 -by 0.11

=====

generate layer L92886, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1126/2080

L76842 = SIZE L92886 -by 0.499 -underover

=====

generate layer L76842, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L92886

operation group: 1127/2080

via7_array_zone = SIZE L76842 -by -0.11

=====

generate layer via7_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76842

operation group: 1128/2080

L97204 = OR L9413 via7_array_zone

=====

generate layer L97204, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1129/2080

L80478 = NOT metal7_conn L97204

=====

generate layer L80478, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L97204

operation group: 1130/2080

METAL7.W.2:L263459 = SIZE L80478 -by 3 -underover

=====

generate layer METAL7.W.2:L263459, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L80478

Rule Check METAL7.W.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 46.80% (263 out of 562) rule checks completed.

operation group: 1131/2080

L22037 = SIZE Via8 -by 0.11

=====

generate layer L22037, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1132/2080

L12415 = SIZE L22037 -by 0.499 -underover

=====

generate layer L12415, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22037

operation group: 1133/2080

via8_array_zone = SIZE L12415 -by -0.11


```
=====
generate layer via8_array_zone, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L12415
```

```
operation group: 1134/2080
```

```
L18300 = OR Bondpad via8_array_zone via7_array_zone
```

```
=====
generate layer L18300, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer via8_array_zone
```

```
delete layer via7_array_zone
```

```
operation group: 1135/2080
```

```
L20051 = NOT metal8_conn L18300
```

```
=====
generate layer L20051, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L18300
```

```
operation group: 1136/2080
```

```
METAL8.W.2:L263464 = SIZE L20051 -by 3 -underover
```

```
=====
generate layer METAL8.W.2:L263464, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L20051
```

```
Rule Check METAL8.W.2 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
[INFO]: 46.98% (264 out of 562) rule checks completed.
```

```
operation group: 1137/2080
```

```
L30808 = NOT Metal9 L9413
```

```
=====
generate layer L30808, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L9413
```

```
operation group: 1138/2080
```

```
METAL9.W.2:L263467 = SIZE L30808 -by 3 -underover
```

```
=====
generate layer METAL9.W.2:L263467, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L30808

Rule Check METAL9.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 47.15% (265 out of 562) rule checks completed.

operation group: 1139/2080

L29449 = NOT Metal10 Bondpad

=====

generate layer L29449, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1140/2080

METAL10.W.2:L263470 = SIZE L29449 -by 3 -underover

=====

generate layer METAL10.W.2:L263470, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L29449

Rule Check METAL10.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 47.33% (266 out of 562) rule checks completed.

operation group: 1141/2080

L25014 = NOT Metal11 Bondpad

=====

generate layer L25014, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1142/2080

METAL11.W.2:L263473 = SIZE L25014 -by 3 -underover

=====

generate layer METAL11.W.2:L263473, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L25014

Rule Check METAL11.W.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 47.51% (267 out of 562) rule checks completed.

operation group: 1143/2080

METAL1.SP.1.1:L263474 = EXTE Metal1 -lt 0.06 -output region -single_point -abut lt 90

=====

generate layer METAL1.SP.1.1:L263474, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/17.73 peak=17.95

Rule Check METAL1.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 47.69% (268 out of 562) rule checks completed.

operation group: 1144/2080

METAL2.SP.1.1:L263475 = EXTE Metal2 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL2.SP.1.1:L263475, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL2.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 47.86% (269 out of 562) rule checks completed.

operation group: 1145/2080

METAL3.SP.1.1:L263476 = EXTE Metal3 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL3.SP.1.1:L263476, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL3.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.04% (270 out of 562) rule checks completed.

operation group: 1146/2080

METAL4.SP.1.1:L263477 = EXTE Metal4 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL4.SP.1.1:L263477, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL4.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.22% (271 out of 562) rule checks completed.

operation group: 1147/2080

METAL5.SP.1.1:L263478 = EXTE Metal5 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL5.SP.1.1:L263478, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL5.SP.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.40% (272 out of 562) rule checks completed.

operation group: 1148/2080

METAL6.SP.1.1:L263479 = EXTE Metal6 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL6.SP.1.1:L263479, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL6.SP.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.58% (273 out of 562) rule checks completed.

operation group: 1149/2080

METAL7.SP.1.1:L263480 = EXTE Metal7 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL7.SP.1.1:L263480, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL7.SP.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.75% (274 out of 562) rule checks completed.

operation group: 1150/2080

METAL8.SP.1.1:L263481 = EXTE Metal8 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL8.SP.1.1:L263481, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL8.SP.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 48.93% (275 out of 562) rule checks completed.

operation group: 1151/2080

METAL9.SP.1.1:L263482 = EXTE Metal9 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer METAL9.SP.1.1:L263482, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL9.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 49.11% (276 out of 562) rule checks completed.

operation group: 1152/2080

METAL10.SP.1.1:L263483 = EXTE Metal10 -lt 0.2 -output region -single_point -abut lt 90

=====

generate layer METAL10.SP.1.1:L263483, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL10.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 49.29% (277 out of 562) rule checks completed.

operation group: 1153/2080

METAL11.SP.1.1:L263484 = EXTE Metal11 -lt 0.2 -output region -single_point -abut lt 90

=====

generate layer METAL11.SP.1.1:L263484, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL11.SP.1.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 49.47% (278 out of 562) rule checks completed.

operation group: 1154/2080

L78025 = SIZE Metal1 -by 0.05 -underover

=====

generate layer L78025, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/13.71 peak=17.95

operation group: 1155/2080

L80731 = AND L78025 Metal1

```
=====
generate layer L80731, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L78025
```

```
operation group: 1156/2080
L83743 = SIZE Metal1 -by 0.375 -underover
```

```
=====
generate layer L83743, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/13.71 peak=17.95
```

```
operation group: 1157/2080
L96114 = AND L83743 Metal1
```

```
=====
generate layer L96114, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L83743
```

```
operation group: 1158/2080
L94515 = NOT L80731 L96114
```

```
=====
generate layer L94515, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L80731
```

```
operation group: 1159/2080
L26590 = EDGE_BOOLEAN Metal1 L94515 -coincident_only
```

```
=====
generate layer L26590, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L94515
```

```
operation group: 1160/2080
METAL1.SP.1.2:L92336 = EXTE Metal1 L26590 -lt 0.1 -output positive2 -proj gt 0.32 -abut ltgt 0 90
```

```
=====
generate layer METAL1.SP.1.2:L92336, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L26590
```

```
operation group: 1161/2080
METAL1.SP.1.2:L263492 = EDGE_LENGTH METAL1.SP.1.2:L92336 -gt 0.32
```

```
=====
generate layer METAL1.SP.1.2:L263492, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.1.2:L92336

Rule Check METAL1.SP.1.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 49.64% (279 out of 562) rule checks completed.

operation group: 1162/2080

L28938 = SIZE Metal2 -by 0.05 -underover

=====

generate layer L28938, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1163/2080

L45162 = AND L28938 Metal2

=====

generate layer L45162, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L28938

operation group: 1164/2080

L27454 = SIZE Metal2 -by 0.375 -underover

=====

generate layer L27454, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1165/2080

L41952 = AND L27454 Metal2

=====

generate layer L41952, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L27454

operation group: 1166/2080

L88928 = NOT L45162 L41952

=====

generate layer L88928, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L45162

operation group: 1167/2080

L16734 = EDGE_BOOLEAN Metal2 L88928 -coincident_only

```
=====
generate layer L16734, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L88928

operation group: 1168/2080

METAL2.SP.1.2:L44095 = EXTE Metal2 L16734 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

```
=====
generate layer METAL2.SP.1.2:L44095, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L16734

operation group: 1169/2080

METAL2.SP.1.2:L263500 = EDGE_LENGTH METAL2.SP.1.2:L44095 -gt 0.32

```
=====
generate layer METAL2.SP.1.2:L263500, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL2.SP.1.2:L44095

Rule Check METAL2.SP.1.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 49.82% (280 out of 562) rule checks completed.

operation group: 1170/2080

L87445 = SIZE Metal3 -by 0.05 -underover

```
=====
generate layer L87445, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1171/2080

L48135 = AND L87445 Metal3

```
=====
generate layer L48135, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L87445

operation group: 1172/2080

L28835 = SIZE Metal3 -by 0.375 -underover

```
=====
generate layer L28835, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```


operation group: 1173/2080

L71931 = AND L28835 Metal3

=====

generate layer L71931, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L28835

operation group: 1174/2080

L32449 = NOT L48135 L71931

=====

generate layer L32449, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L48135

operation group: 1175/2080

L92508 = EDGE_BOOLEAN Metal3 L32449 -coincident_only

=====

generate layer L92508, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L32449

operation group: 1176/2080

METAL3.SP.1.2:L85233 = EXTE Metal3 L92508 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

=====

generate layer METAL3.SP.1.2:L85233, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L92508

operation group: 1177/2080

METAL3.SP.1.2:L263508 = EDGE_LENGTH METAL3.SP.1.2:L85233 -gt 0.32

=====

generate layer METAL3.SP.1.2:L263508, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.1.2:L85233

Rule Check METAL3.SP.1.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 50.00% (281 out of 562) rule checks completed.

operation group: 1178/2080

L36532 = SIZE Metal4 -by 0.05 -underover

```
=====
generate layer L36532, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
operation group: 1179/2080
L66879 = AND L36532 Metal4
```

```
=====
generate layer L66879, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L36532
```

```
operation group: 1180/2080
L82172 = SIZE Metal4 -by 0.375 -underover
```

```
=====
generate layer L82172, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
operation group: 1181/2080
L22078 = AND L82172 Metal4
```

```
=====
generate layer L22078, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L82172
```

```
operation group: 1182/2080
L34070 = NOT L66879 L22078
```

```
=====
generate layer L34070, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L66879
```

```
operation group: 1183/2080
L8631 = EDGE_BOOLEAN Metal4 L34070 -coincident_only
```

```
=====
generate layer L8631, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L34070
```

```
operation group: 1184/2080
METAL4.SP.1.2:L86514 = EXTE Metal4 L8631 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90
```

```
=====
generate layer METAL4.SP.1.2:L86514, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L8631

operation group: 1185/2080

METAL4.SP.1.2:L263516 = EDGE_LENGTH METAL4.SP.1.2:L86514 -gt 0.32

=====

generate layer METAL4.SP.1.2:L263516, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.1.2:L86514

Rule Check METAL4.SP.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 50.18% (282 out of 562) rule checks completed.

operation group: 1186/2080

L85619 = SIZE Metal5 -by 0.05 -underover

=====

generate layer L85619, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1187/2080

L30416 = AND L85619 Metal5

=====

generate layer L30416, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L85619

operation group: 1188/2080

L74118 = SIZE Metal5 -by 0.375 -underover

=====

generate layer L74118, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1189/2080

L11050 = AND L74118 Metal5

=====

generate layer L11050, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L74118

operation group: 1190/2080

L46846 = NOT L30416 L11050

```
=====
generate layer L46846, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L30416
```

```
operation group: 1191/2080
```

```
L92408 = EDGE_BOOLEAN Metal5 L46846 -coincident_only
```

```
=====
generate layer L92408, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L46846
```

```
operation group: 1192/2080
```

```
METAL5.SP.1.2:L52050 = EXTE Metal5 L92408 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90
```

```
=====
generate layer METAL5.SP.1.2:L52050, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L92408
```

```
operation group: 1193/2080
```

```
METAL5.SP.1.2:L263524 = EDGE_LENGTH METAL5.SP.1.2:L52050 -gt 0.32
```

```
=====
generate layer METAL5.SP.1.2:L263524, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL5.SP.1.2:L52050
```

```
Rule Check METAL5.SP.1.2 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
[INFO]: 50.36% (283 out of 562) rule checks completed.
```

```
operation group: 1194/2080
```

```
L34706 = SIZE Metal6 -by 0.05 -underover
```

```
=====
generate layer L34706, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
operation group: 1195/2080
```

```
L21866 = AND L34706 Metal6
```

```
=====
generate layer L21866, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L34706
```

operation group: 1196/2080

L36890 = SIZE Metal6 -by 0.375 -underover

=====

generate layer L36890, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.06 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1197/2080

L19194 = AND L36890 Metal6

=====

generate layer L19194, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L36890

operation group: 1198/2080

L65954 = NOT L21866 L19194

=====

generate layer L65954, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L21866

operation group: 1199/2080

L46312 = EDGE_BOOLEAN Metal6 L65954 -coincident_only

=====

generate layer L46312, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L65954

operation group: 1200/2080

METAL6.SP.1.2:L49476 = EXTE Metal6 L46312 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

=====

generate layer METAL6.SP.1.2:L49476, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L46312

operation group: 1201/2080

METAL6.SP.1.2:L263532 = EDGE_LENGTH METAL6.SP.1.2:L49476 -gt 0.32

=====

generate layer METAL6.SP.1.2:L263532, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.1.2:L49476

Rule Check METAL6.SP.1.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 50.53% (284 out of 562) rule checks completed.

operation group: 1202/2080

L83793 = SIZE Metal7 -by 0.05 -underover

=====

generate layer L83793, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1203/2080

L58397 = AND L83793 Metal7

=====

generate layer L58397, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L83793

operation group: 1204/2080

L19399 = SIZE Metal7 -by 0.375 -underover

=====

generate layer L19399, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1205/2080

L87240 = AND L19399 Metal7

=====

generate layer L87240, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L19399

operation group: 1206/2080

L55084 = NOT L58397 L87240

=====

generate layer L55084, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L58397

operation group: 1207/2080

L68054 = EDGE_BOOLEAN Metal7 L55084 -coincident_only

=====

generate layer L68054, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L55084

operation group: 1208/2080

METAL7.SP.1.2:L9898 = EXTE Metal7 L68054 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

=====

generate layer METAL7.SP.1.2:L9898, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.12 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L68054

operation group: 1209/2080

METAL7.SP.1.2:L263540 = EDGE_LENGTH METAL7.SP.1.2:L9898 -gt 0.32

=====

generate layer METAL7.SP.1.2:L263540, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.1.2:L9898

Rule Check METAL7.SP.1.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 50.71% (285 out of 562) rule checks completed.

operation group: 1210/2080

L32880 = SIZE Metal8 -by 0.05 -underover

=====

generate layer L32880, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1211/2080

L93885 = AND L32880 Metal8

=====

generate layer L93885, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L32880

operation group: 1212/2080

L91608 = SIZE Metal8 -by 0.375 -underover

=====

generate layer L91608, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1213/2080

L28110 = AND L91608 Metal8

=====

generate layer L28110, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L91608

operation group: 1214/2080

L19170 = NOT L93885 L28110

=====

generate layer L19170, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93885

operation group: 1215/2080

L68287 = EDGE_BOOLEAN Metal8 L19170 -coincident_only

=====

generate layer L68287, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L19170

operation group: 1216/2080

METAL8.SP.1.2:L72343 = EXTE Metal8 L68287 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

=====

generate layer METAL8.SP.1.2:L72343, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L68287

operation group: 1217/2080

METAL8.SP.1.2:L263548 = EDGE_LENGTH METAL8.SP.1.2:L72343 -gt 0.32

=====

generate layer METAL8.SP.1.2:L263548, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.1.2:L72343

Rule Check METAL8.SP.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 50.89% (286 out of 562) rule checks completed.

operation group: 1218/2080

L81967 = SIZE Metal9 -by 0.05 -underover

=====

generate layer L81967, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1219/2080
L30348 = AND L81967 Metal9

=====

generate layer L30348, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L81967

operation group: 1220/2080
L64681 = SIZE Metal9 -by 0.375 -underover

=====

generate layer L64681, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1221/2080
L56196 = AND L64681 Metal9

=====

generate layer L56196, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L64681

operation group: 1222/2080
L35366 = NOT L30348 L56196

=====

generate layer L35366, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L30348

operation group: 1223/2080
L58899 = EDGE_BOOLEAN Metal9 L35366 -coincident_only

=====

generate layer L58899, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L35366

operation group: 1224/2080
METAL9.SP.1.2:L86404 = EXTE Metal9 L58899 -lt 0.15 -output positive2 -proj gt 0.32 -abut ltgt 0 90

=====

generate layer METAL9.SP.1.2:L86404, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L58899

operation group: 1225/2080

METAL9.SP.1.2:L263556 = EDGE_LENGTH METAL9.SP.1.2:L86404 -gt 0.32
=====

```
generate layer METAL9.SP.1.2:L263556, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.1.2:L86404
```

Rule Check METAL9.SP.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.07% (287 out of 562) rule checks completed.

operation group: 1226/2080
L43024 = SIZE Metal1 -by 0.75 -underover

=====

```
generate layer L43024, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/13.71 peak=17.95
```

operation group: 1227/2080
L55558 = AND L43024 Metal1

=====

```
generate layer L55558, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L43024
```

operation group: 1228/2080
L18892 = NOT L96114 L55558

=====

```
generate layer L18892, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L96114
```

operation group: 1229/2080
L92466 = EDGE_BOOLEAN Metal1 L18892 -coincident_only

=====

```
generate layer L92466, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L18892
```

operation group: 1230/2080
METAL1.SP.1.3:L7339 = EXTE Metal1 L92466 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

```
generate layer METAL1.SP.1.3:L7339, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L92466

operation group: 1231/2080

METAL1.SP.1.3:L263562 = EDGE_LENGTH METAL1.SP.1.3:L7339 -gt 0.75

=====

generate layer METAL1.SP.1.3:L263562, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.1.3:L7339

Rule Check METAL1.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.25% (288 out of 562) rule checks completed.

operation group: 1232/2080

L7889 = SIZE Metal2 -by 0.75 -underover

=====

generate layer L7889, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1233/2080

L37818 = AND L7889 Metal2

=====

generate layer L37818, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L7889

operation group: 1234/2080

L39659 = NOT L41952 L37818

=====

generate layer L39659, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L41952

operation group: 1235/2080

L7337 = EDGE_BOOLEAN Metal2 L39659 -coincident_only

=====

generate layer L7337, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L39659

operation group: 1236/2080

METAL2.SP.1.3:L71477 = EXTE Metal2 L7337 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL2.SP.1.3:L71477, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L7337

operation group: 1237/2080

METAL2.SP.1.3:L263568 = EDGE_LENGTH METAL2.SP.1.3:L71477 -gt 0.75

=====

generate layer METAL2.SP.1.3:L263568, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.1.3:L71477

Rule Check METAL2.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.42% (289 out of 562) rule checks completed.

operation group: 1238/2080

L58802 = SIZE Metal3 -by 0.75 -underover

=====

generate layer L58802, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1239/2080

L52472 = AND L58802 Metal3

=====

generate layer L52472, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L58802

operation group: 1240/2080

L1512 = NOT L71931 L52472

=====

generate layer L1512, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L71931

operation group: 1241/2080

L44317 = EDGE_BOOLEAN Metal3 L1512 -coincident_only

=====

generate layer L44317, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L1512

operation group: 1242/2080

METAL3.SP.1.3:L54105 = EXTE Metal3 L44317 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL3.SP.1.3:L54105, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L44317

operation group: 1243/2080

METAL3.SP.1.3:L263574 = EDGE_LENGTH METAL3.SP.1.3:L54105 -gt 0.75

=====

generate layer METAL3.SP.1.3:L263574, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.1.3:L54105

Rule Check METAL3.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.60% (290 out of 562) rule checks completed.

operation group: 1244/2080

L9715 = SIZE Metal4 -by 0.75 -underover

=====

generate layer L9715, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1245/2080

L12872 = AND L9715 Metal4

=====

generate layer L12872, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L9715

operation group: 1246/2080

L55060 = NOT L22078 L12872

=====

generate layer L55060, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22078

operation group: 1247/2080

L31829 = EDGE_BOOLEAN Metal4 L55060 -coincident_only

=====

generate layer L31829, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L55060

operation group: 1248/2080

METAL4.SP.1.3:L99602 = EXTE Metal4 L31829 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL4.SP.1.3:L99602, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L31829

operation group: 1249/2080

METAL4.SP.1.3:L263580 = EDGE_LENGTH METAL4.SP.1.3:L99602 -gt 0.75

=====

generate layer METAL4.SP.1.3:L263580, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.1.3:L99602

Rule Check METAL4.SP.1.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.78% (291 out of 562) rule checks completed.

operation group: 1250/2080

L60628 = SIZE Metal5 -by 0.75 -underover

=====

generate layer L60628, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1251/2080

L77617 = AND L60628 Metal5

=====

generate layer L77617, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L60628

operation group: 1252/2080

L72516 = NOT L11050 L77617

=====

generate layer L72516, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11050

operation group: 1253/2080

L40831 = EDGE_BOOLEAN Metal5 L72516 -coincident_only

=====

generate layer L40831, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L72516

operation group: 1254/2080

METAL5.SP.1.3:L90470 = EXTE Metal5 L40831 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL5.SP.1.3:L90470, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L40831

operation group: 1255/2080

METAL5.SP.1.3:L263586 = EDGE_LENGTH METAL5.SP.1.3:L90470 -gt 0.75

=====

generate layer METAL5.SP.1.3:L263586, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.1.3:L90470

Rule Check METAL5.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 51.96% (292 out of 562) rule checks completed.

operation group: 1256/2080

L11541 = SIZE Metal6 -by 0.75 -underover

=====

generate layer L11541, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1257/2080

L26144 = AND L11541 Metal6

=====

generate layer L26144, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11541

operation group: 1258/2080

L78596 = NOT L19194 L26144

=====

generate layer L78596, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L19194

operation group: 1259/2080

L37136 = EDGE_BOOLEAN Metal6 L78596 -coincident_only

=====

generate layer L37136, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L78596

operation group: 1260/2080

METAL6.SP.1.3:L61285 = EXTE Metal6 L37136 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL6.SP.1.3:L61285, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L37136

operation group: 1261/2080

METAL6.SP.1.3:L263592 = EDGE_LENGTH METAL6.SP.1.3:L61285 -gt 0.75

=====

generate layer METAL6.SP.1.3:L263592, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.1.3:L61285

Rule Check METAL6.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 52.14% (293 out of 562) rule checks completed.

operation group: 1262/2080

L62454 = SIZE Metal7 -by 0.75 -underover

=====

generate layer L62454, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1263/2080

L88868 = AND L62454 Metal7

=====

generate layer L88868, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L62454

operation group: 1264/2080
L60830 = NOT L87240 L88868

=====

generate layer L60830, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L87240

operation group: 1265/2080
L85959 = EDGE_BOOLEAN Metal7 L60830 -coincident_only

=====

generate layer L85959, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L60830

operation group: 1266/2080
METAL7.SP.1.3:L99702 = EXTE Metal7 L85959 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL7.SP.1.3:L99702, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L85959

operation group: 1267/2080
METAL7.SP.1.3:L263598 = EDGE_LENGTH METAL7.SP.1.3:L99702 -gt 0.75

=====

generate layer METAL7.SP.1.3:L263598, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.1.3:L99702

Rule Check METAL7.SP.1.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 52.31% (294 out of 562) rule checks completed.

operation group: 1268/2080
L13367 = SIZE Metal8 -by 0.75 -underover

=====

generate layer L13367, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1269/2080
L36226 = AND L13367 Metal8

=====

generate layer L36226, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L13367

operation group: 1270/2080

L39676 = NOT L28110 L36226

=====

generate layer L39676, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L28110

operation group: 1271/2080

L20140 = EDGE_BOOLEAN Metal8 L39676 -coincident_only

=====

generate layer L20140, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L39676

operation group: 1272/2080

METAL8.SP.1.3:L19640 = EXTE Metal8 L20140 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL8.SP.1.3:L19640, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L20140

operation group: 1273/2080

METAL8.SP.1.3:L263604 = EDGE_LENGTH METAL8.SP.1.3:L19640 -gt 0.75

=====

generate layer METAL8.SP.1.3:L263604, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.1.3:L19640

Rule Check METAL8.SP.1.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 52.49% (295 out of 562) rule checks completed.

operation group: 1274/2080

L64280 = SIZE Metal9 -by 0.75 -underover

=====

generate layer L64280, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1275/2080

L99881 = AND L64280 Metal9

```
=====
generate layer L99881, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L64280

operation group: 1276/2080
L53303 = NOT L56196 L99881

```
=====
generate layer L53303, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L56196

operation group: 1277/2080
L71628 = EDGE_BOOLEAN Metal9 L53303 -coincident_only

```
=====
generate layer L71628, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L53303

operation group: 1278/2080
METAL9.SP.1.3:L59222 = EXTE Metal9 L71628 -lt 0.25 -output positive2 -proj gt 0.75 -abut ltgt 0 90

```
=====
generate layer METAL9.SP.1.3:L59222, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L71628

operation group: 1279/2080
METAL9.SP.1.3:L263610 = EDGE_LENGTH METAL9.SP.1.3:L59222 -gt 0.75

```
=====
generate layer METAL9.SP.1.3:L263610, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL9.SP.1.3:L59222

Rule Check METAL9.SP.1.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 52.67% (296 out of 562) rule checks completed.

operation group: 1280/2080
L38977 = SIZE Metal10 -by 0.375 -underover

```
=====
generate layer L38977, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1281/2080

L93129 = AND L38977 Metal10

=====

generate layer L93129, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L38977

operation group: 1282/2080

L71634 = SIZE Metal10 -by 0.75 -underover

=====

generate layer L71634, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1283/2080

L52704 = AND L71634 Metal10

=====

generate layer L52704, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L71634

operation group: 1284/2080

L57101 = NOT L93129 L52704

=====

generate layer L57101, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93129

operation group: 1285/2080

L7292 = EDGE_BOOLEAN Metal10 L57101 -coincident_only

=====

generate layer L7292, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L57101

operation group: 1286/2080

METAL10.SP.1.2:L77459 = EXTE Metal10 L7292 -lt 0.35 -output positive2 -proj gt 0.75 -abut ltgt 0 90

=====

generate layer METAL10.SP.1.2:L77459, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L7292

operation group: 1287/2080

METAL10.SP.1.2:L263618 = EDGE_LENGTH METAL10.SP.1.2:L77459 -gt 0.75

=====

generate layer METAL10.SP.1.2:L263618, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL10.SP.1.2:L77459

Rule Check METAL10.SP.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 52.85% (297 out of 562) rule checks completed.

operation group: 1288/2080

L17312 = SIZE Metal11 -by 0.375 -underover

=====

generate layer L17312, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1289/2080

L44814 = AND L17312 Metal11

=====

generate layer L44814, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L17312

operation group: 1290/2080

L20721 = SIZE Metal11 -by 0.75 -underover

=====

generate layer L20721, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1291/2080

L43260 = AND L20721 Metal11

=====

generate layer L43260, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L20721

operation group: 1292/2080

L89733 = NOT L44814 L43260

=====

generate layer L89733, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L44814

operation group: 1293/2080

L39049 = EDGE_BOOLEAN Metal11 L89733 -coincident_only

=====

generate layer L39049, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L89733

operation group: 1294/2080

METAL11.SP.1.2:L35461 = EXTE Metal11 L39049 -lt 0.35 -output positive2 -proj gt 0.75 -abut ltgt 0
90

=====

generate layer METAL11.SP.1.2:L35461, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L39049

operation group: 1295/2080

METAL11.SP.1.2:L263626 = EDGE_LENGTH METAL11.SP.1.2:L35461 -gt 0.75

=====

generate layer METAL11.SP.1.2:L263626, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL11.SP.1.2:L35461

Rule Check METAL11.SP.1.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.02% (298 out of 562) rule checks completed.

operation group: 1296/2080

L43476 = SIZE Metal1 -by 1.25 -underover

=====

generate layer L43476, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/13.71 peak=17.95

operation group: 1297/2080

L73369 = AND L43476 Metal1

=====

generate layer L73369, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43476

operation group: 1298/2080
L43371 = NOT L55558 L73369

=====

generate layer L43371, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L55558

operation group: 1299/2080
L75726 = EDGE_BOOLEAN Metal1 L43371 -coincident_only

=====

generate layer L75726, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43371

operation group: 1300/2080
METAL1.SP.1.4:L53457 = EXTE Metal1 L75726 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL1.SP.1.4:L53457, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L75726

operation group: 1301/2080
METAL1.SP.1.4:L263632 = EDGE_LENGTH METAL1.SP.1.4:L53457 -gt 1.5

=====

generate layer METAL1.SP.1.4:L263632, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.1.4:L53457

Rule Check METAL1.SP.1.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.20% (299 out of 562) rule checks completed.

operation group: 1302/2080
L92563 = SIZE Metal2 -by 1.25 -underover

=====

generate layer L92563, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1303/2080
L48277 = AND L92563 Metal2

=====

generate layer L48277, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L92563

operation group: 1304/2080

L43270 = NOT L37818 L48277

=====

generate layer L43270, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L37818

operation group: 1305/2080

L66353 = EDGE_BOOLEAN Metal2 L43270 -coincident_only

=====

generate layer L66353, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43270

operation group: 1306/2080

METAL2.SP.1.4:L32322 = EXTE Metal2 L66353 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL2.SP.1.4:L32322, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L66353

operation group: 1307/2080

METAL2.SP.1.4:L263638 = EDGE_LENGTH METAL2.SP.1.4:L32322 -gt 1.5

=====

generate layer METAL2.SP.1.4:L263638, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.1.4:L32322

Rule Check METAL2.SP.1.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.38% (300 out of 562) rule checks completed.

operation group: 1308/2080

L41650 = SIZE Metal3 -by 1.25 -underover

=====

generate layer L41650, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1309/2080

L4005 = AND L41650 Metal3

```
=====
generate layer L4005, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L41650

operation group: 1310/2080

L11104 = NOT L52472 L4005

```
=====
generate layer L11104, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L52472

operation group: 1311/2080

L12663 = EDGE_BOOLEAN Metal3 L11104 -coincident_only

```
=====
generate layer L12663, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L11104

operation group: 1312/2080

METAL3.SP.1.4:L69918 = EXTE Metal3 L12663 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

```
=====
generate layer METAL3.SP.1.4:L69918, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L12663

operation group: 1313/2080

METAL3.SP.1.4:L263644 = EDGE_LENGTH METAL3.SP.1.4:L69918 -gt 1.5

```
=====
generate layer METAL3.SP.1.4:L263644, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL3.SP.1.4:L69918

Rule Check METAL3.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.56% (301 out of 562) rule checks completed.

operation group: 1314/2080

L90737 = SIZE Metal4 -by 1.25 -underover

```
=====
generate layer L90737, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1315/2080

L40468 = AND L90737 Metal4

=====

generate layer L40468, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L90737

operation group: 1316/2080

L11291 = NOT L12872 L40468

=====

generate layer L11291, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L12872

operation group: 1317/2080

L43061 = EDGE_BOOLEAN Metal4 L11291 -coincident_only

=====

generate layer L43061, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11291

operation group: 1318/2080

METAL4.SP.1.4:L66245 = EXTE Metal4 L43061 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL4.SP.1.4:L66245, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43061

operation group: 1319/2080

METAL4.SP.1.4:L263650 = EDGE_LENGTH METAL4.SP.1.4:L66245 -gt 1.5

=====

generate layer METAL4.SP.1.4:L263650, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.1.4:L66245

Rule Check METAL4.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.74% (302 out of 562) rule checks completed.

operation group: 1320/2080

L39824 = SIZE Metal5 -by 1.25 -underover

```
=====
generate layer L39824, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1321/2080

L52579 = AND L39824 Metal5

```
=====
generate layer L52579, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L39824

operation group: 1322/2080

L38481 = NOT L77617 L52579

```
=====
generate layer L38481, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L77617

operation group: 1323/2080

L24744 = EDGE_BOOLEAN Metal5 L38481 -coincident_only

```
=====
generate layer L24744, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L38481

operation group: 1324/2080

METAL5.SP.1.4:L4189 = EXTE Metal5 L24744 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

```
=====
generate layer METAL5.SP.1.4:L4189, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L24744

operation group: 1325/2080

METAL5.SP.1.4:L263656 = EDGE_LENGTH METAL5.SP.1.4:L4189 -gt 1.5

```
=====
generate layer METAL5.SP.1.4:L263656, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL5.SP.1.4:L4189

Rule Check METAL5.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 53.91% (303 out of 562) rule checks completed.

operation group: 1326/2080

L88911 = SIZE Metal6 -by 1.25 -underover

=====

generate layer L88911, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1327/2080

L77671 = AND L88911 Metal6

=====

generate layer L77671, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L88911

operation group: 1328/2080

L80918 = NOT L26144 L77671

=====

generate layer L80918, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L26144

operation group: 1329/2080

L48345 = EDGE_BOOLEAN Metal6 L80918 -coincident_only

=====

generate layer L48345, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L80918

operation group: 1330/2080

METAL6.SP.1.4:L35837 = EXTE Metal6 L48345 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL6.SP.1.4:L35837, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L48345

operation group: 1331/2080

METAL6.SP.1.4:L263662 = EDGE_LENGTH METAL6.SP.1.4:L35837 -gt 1.5

=====

generate layer METAL6.SP.1.4:L263662, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.1.4:L35837

Rule Check METAL6.SP.1.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.09% (304 out of 562) rule checks completed.

operation group: 1332/2080

L37998 = SIZE Metal7 -by 1.25 -underover

=====

generate layer L37998, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1333/2080

L64031 = AND L37998 Metal7

=====

generate layer L64031, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L37998

operation group: 1334/2080

L93609 = NOT L88868 L64031

=====

generate layer L93609, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L88868

operation group: 1335/2080

L28029 = EDGE_BOOLEAN Metal7 L93609 -coincident_only

=====

generate layer L28029, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93609

operation group: 1336/2080

METAL7.SP.1.4:L46531 = EXTE Metal7 L28029 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL7.SP.1.4:L46531, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L28029

operation group: 1337/2080

METAL7.SP.1.4:L263668 = EDGE_LENGTH METAL7.SP.1.4:L46531 -gt 1.5

=====

generate layer METAL7.SP.1.4:L263668, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.1.4:L46531

Rule Check METAL7.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.27% (305 out of 562) rule checks completed.

operation group: 1338/2080

L12915 = SIZE Metal8 -by 1.25 -underover

=====

generate layer L12915, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1339/2080

L76392 = AND L12915 Metal8

=====

generate layer L76392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L12915

operation group: 1340/2080

L87475 = NOT L36226 L76392

=====

generate layer L87475, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L36226

operation group: 1341/2080

L76240 = EDGE_BOOLEAN Metal8 L87475 -coincident_only

=====

generate layer L76240, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L87475

operation group: 1342/2080

METAL8.SP.1.4:L86042 = EXTE Metal8 L76240 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL8.SP.1.4:L86042, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76240

operation group: 1343/2080

METAL8.SP.1.4:L263674 = EDGE_LENGTH METAL8.SP.1.4:L86042 -gt 1.5

=====

generate layer METAL8.SP.1.4:L263674, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.1.4:L86042

Rule Check METAL8.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.45% (306 out of 562) rule checks completed.

operation group: 1344/2080

L63828 = SIZE Metal9 -by 1.25 -underover

=====

generate layer L63828, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1345/2080

L75892 = AND L63828 Metal9

=====

generate layer L75892, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L63828

operation group: 1346/2080

L25931 = NOT L99881 L75892

=====

generate layer L25931, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L99881

operation group: 1347/2080

L76752 = EDGE_BOOLEAN Metal9 L25931 -coincident_only

=====

generate layer L76752, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L25931

operation group: 1348/2080

METAL9.SP.1.4:L16228 = EXTE Metal9 L76752 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL9.SP.1.4:L16228, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76752

operation group: 1349/2080

METAL9.SP.1.4:L263680 = EDGE_LENGTH METAL9.SP.1.4:L16228 -gt 1.5

=====

generate layer METAL9.SP.1.4:L263680, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL9.SP.1.4:L16228

Rule Check METAL9.SP.1.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.63% (307 out of 562) rule checks completed.

operation group: 1350/2080

L95210 = SIZE Metal10 -by 1.25 -underover

=====

generate layer L95210, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1351/2080

L25976 = AND L95210 Metal10

=====

generate layer L25976, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L95210

operation group: 1352/2080

L95146 = NOT L52704 L25976

=====

generate layer L95146, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L52704

operation group: 1353/2080

L72662 = EDGE_BOOLEAN Metal10 L95146 -coincident_only

=====

generate layer L72662, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L95146

operation group: 1354/2080

METAL10.SP.1.3:L42715 = EXTE Metal10 L72662 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90
=====

generate layer METAL10.SP.1.3:L42715, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L72662

operation group: 1355/2080
METAL10.SP.1.3:L263686 = EDGE_LENGTH METAL10.SP.1.3:L42715 -gt 1.5
=====

generate layer METAL10.SP.1.3:L263686, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL10.SP.1.3:L42715

Rule Check METAL10.SP.1.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.80% (308 out of 562) rule checks completed.

operation group: 1356/2080
L46123 = SIZE Metal11 -by 1.25 -underover
=====

generate layer L46123, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1357/2080
L1804 = AND L46123 Metal11
=====

generate layer L1804, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L46123

operation group: 1358/2080
L36293 = NOT L43260 L1804
=====

generate layer L36293, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43260

operation group: 1359/2080
L27453 = EDGE_BOOLEAN Metal11 L36293 -coincident_only
=====

generate layer L27453, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L36293

operation group: 1360/2080

METAL11.SP.1.3:L24794 = EXTE Metal11 L27453 -lt 0.45 -output positive2 -proj gt 1.5 -abut ltgt 0 90

=====

generate layer METAL11.SP.1.3:L24794, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L27453

operation group: 1361/2080

METAL11.SP.1.3:L263692 = EDGE_LENGTH METAL11.SP.1.3:L24794 -gt 1.5

=====

generate layer METAL11.SP.1.3:L263692, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL11.SP.1.3:L24794

Rule Check METAL11.SP.1.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 54.98% (309 out of 562) rule checks completed.

operation group: 1362/2080

L8785 = SIZE Metal1 -by 1.75 -underover

=====

generate layer L8785, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/13.71 peak=17.95

operation group: 1363/2080

L82421 = AND L8785 Metal1

=====

generate layer L82421, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L8785

operation group: 1364/2080

L65070 = NOT L73369 L82421

=====

generate layer L65070, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L73369

operation group: 1365/2080

L71986 = EDGE_BOOLEAN Metal1 L65070 -coincident_only

```
=====
generate layer L71986, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L65070

operation group: 1366/2080

METAL1.SP.1.5:L91954 = EXTE Metal1 L71986 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

```
=====
generate layer METAL1.SP.1.5:L91954, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L71986

operation group: 1367/2080

METAL1.SP.1.5:L263698 = EDGE_LENGTH METAL1.SP.1.5:L91954 -gt 2.5

```
=====
generate layer METAL1.SP.1.5:L263698, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL1.SP.1.5:L91954

Rule Check METAL1.SP.1.5 finished, 0 error(s) reported.

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 55.16% (310 out of 562) rule checks completed.

operation group: 1368/2080

L59698 = SIZE Metal2 -by 1.75 -underover

```
=====
generate layer L59698, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1369/2080

L32739 = AND L59698 Metal2

```
=====
generate layer L32739, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L59698

operation group: 1370/2080

L22851 = NOT L48277 L32739

```
=====
generate layer L22851, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L48277

operation group: 1371/2080

L37481 = EDGE_BOOLEAN Metal2 L22851 -coincident_only

=====

generate layer L37481, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22851

operation group: 1372/2080

METAL2.SP.1.5:L38211 = EXTE Metal2 L37481 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL2.SP.1.5:L38211, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L37481

operation group: 1373/2080

METAL2.SP.1.5:L263704 = EDGE_LENGTH METAL2.SP.1.5:L38211 -gt 2.5

=====

generate layer METAL2.SP.1.5:L263704, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.07 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.1.5:L38211

Rule Check METAL2.SP.1.5 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 55.34% (311 out of 562) rule checks completed.

operation group: 1374/2080

L10611 = SIZE Metal3 -by 1.75 -underover

=====

generate layer L10611, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1375/2080

L7208 = AND L10611 Metal3

=====

generate layer L7208, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L10611

operation group: 1376/2080

L93777 = NOT L4005 L7208

=====

generate layer L93777, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L4005

operation group: 1377/2080

L66399 = EDGE_BOOLEAN Metal3 L93777 -coincident_only

=====

generate layer L66399, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93777

operation group: 1378/2080

METAL3.SP.1.5:L42694 = EXTE Metal3 L66399 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL3.SP.1.5:L42694, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L66399

operation group: 1379/2080

METAL3.SP.1.5:L263710 = EDGE_LENGTH METAL3.SP.1.5:L42694 -gt 2.5

=====

generate layer METAL3.SP.1.5:L263710, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.1.5:L42694

Rule Check METAL3.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 55.52% (312 out of 562) rule checks completed.

operation group: 1380/2080

L61524 = SIZE Metal4 -by 1.75 -underover

=====

generate layer L61524, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1381/2080

L22220 = AND L61524 Metal4

=====

generate layer L22220, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L61524

operation group: 1382/2080

L73961 = NOT L40468 L22220

=====

generate layer L73961, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L40468

operation group: 1383/2080

L35719 = EDGE_BOOLEAN Metal4 L73961 -coincident_only

=====

generate layer L35719, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L73961

operation group: 1384/2080

METAL4.SP.1.5:L34833 = EXTE Metal4 L35719 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL4.SP.1.5:L34833, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.13 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L35719

operation group: 1385/2080

METAL4.SP.1.5:L263716 = EDGE_LENGTH METAL4.SP.1.5:L34833 -gt 2.5

=====

generate layer METAL4.SP.1.5:L263716, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.1.5:L34833

Rule Check METAL4.SP.1.5 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 55.69% (313 out of 562) rule checks completed.

operation group: 1386/2080

L54859 = SIZE Metal5 -by 1.75 -underover

=====

generate layer L54859, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1387/2080

L43948 = AND L54859 Metal5

=====

generate layer L43948, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L54859

operation group: 1388/2080

L20041 = NOT L52579 L43948

=====

generate layer L20041, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L52579

operation group: 1389/2080

L58927 = EDGE_BOOLEAN Metal5 L20041 -coincident_only

=====

generate layer L58927, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L20041

operation group: 1390/2080

METAL5.SP.1.5:L75372 = EXTE Metal5 L58927 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL5.SP.1.5:L75372, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L58927

operation group: 1391/2080

METAL5.SP.1.5:L263722 = EDGE_LENGTH METAL5.SP.1.5:L75372 -gt 2.5

=====

generate layer METAL5.SP.1.5:L263722, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.1.5:L75372

Rule Check METAL5.SP.1.5 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 55.87% (314 out of 562) rule checks completed.

operation group: 1392/2080

L3946 = SIZE Metal6 -by 1.75 -underover

=====

generate layer L3946, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1393/2080
L93628 = AND L3946 Metal6

=====

generate layer L93628, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L3946

operation group: 1394/2080
L10853 = NOT L77671 L93628

=====

generate layer L10853, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L77671

operation group: 1395/2080
L13834 = EDGE_BOOLEAN Metal6 L10853 -coincident_only

=====

generate layer L13834, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L10853

operation group: 1396/2080
METAL6.SP.1.5:L38425 = EXTE Metal6 L13834 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL6.SP.1.5:L38425, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L13834

operation group: 1397/2080
METAL6.SP.1.5:L263728 = EDGE_LENGTH METAL6.SP.1.5:L38425 -gt 2.5

=====

generate layer METAL6.SP.1.5:L263728, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.1.5:L38425

Rule Check METAL6.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.05% (315 out of 562) rule checks completed.

operation group: 1398/2080
L53033 = SIZE Metal7 -by 1.75 -underover

=====

generate layer L53033, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1399/2080

L29665 = AND L53033 Metal7

=====

generate layer L29665, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L53033

operation group: 1400/2080

L93425 = NOT L64031 L29665

=====

generate layer L93425, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L64031

operation group: 1401/2080

L29893 = EDGE_BOOLEAN Metal7 L93425 -coincident_only

=====

generate layer L29893, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93425

operation group: 1402/2080

METAL7.SP.1.5:L54182 = EXTE Metal7 L29893 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL7.SP.1.5:L54182, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L29893

operation group: 1403/2080

METAL7.SP.1.5:L263734 = EDGE_LENGTH METAL7.SP.1.5:L54182 -gt 2.5

=====

generate layer METAL7.SP.1.5:L263734, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.1.5:L54182

Rule Check METAL7.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.23% (316 out of 562) rule checks completed.

operation group: 1404/2080

L2120 = SIZE Metal8 -by 1.75 -underover

=====

generate layer L2120, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1405/2080

L20015 = AND L2120 Metal8

=====

generate layer L20015, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L2120

operation group: 1406/2080

L44316 = NOT L76392 L20015

=====

generate layer L44316, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76392

operation group: 1407/2080

L91637 = EDGE_BOOLEAN Metal8 L44316 -coincident_only

=====

generate layer L91637, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L44316

operation group: 1408/2080

METAL8.SP.1.5:L98640 = EXTE Metal8 L91637 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL8.SP.1.5:L98640, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L91637

operation group: 1409/2080

METAL8.SP.1.5:L263740 = EDGE_LENGTH METAL8.SP.1.5:L98640 -gt 2.5

=====

generate layer METAL8.SP.1.5:L263740, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.1.5:L98640

Rule Check METAL8.SP.1.5 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.41% (317 out of 562) rule checks completed.

operation group: 1410/2080

L51207 = SIZE Metal9 -by 1.75 -underover

=====

generate layer L51207, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1411/2080

L59080 = AND L51207 Metal9

=====

generate layer L59080, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L51207

operation group: 1412/2080

L252 = NOT L75892 L59080

=====

generate layer L252, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L75892

operation group: 1413/2080

L71211 = EDGE_BOOLEAN Metal9 L252 -coincident_only

=====

generate layer L71211, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L252

operation group: 1414/2080

METAL9.SP.1.5:L51397 = EXTE Metal9 L71211 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL9.SP.1.5:L51397, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L71211

operation group: 1415/2080

METAL9.SP.1.5:L263746 = EDGE_LENGTH METAL9.SP.1.5:L51397 -gt 2.5

=====

generate layer METAL9.SP.1.5:L263746, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL9.SP.1.5:L51397

Rule Check METAL9.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.58% (318 out of 562) rule checks completed.

operation group: 1416/2080
L19825 = SIZE Metal10 -by 1.75 -underover

=====

generate layer L19825, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1417/2080
L56118 = AND L19825 Metal10

=====

generate layer L56118, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L19825

operation group: 1418/2080
L299 = NOT L25976 L56118

=====

generate layer L299, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L25976

operation group: 1419/2080
L48838 = EDGE_BOOLEAN Metal10 L299 -coincident_only

=====

generate layer L48838, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L299

operation group: 1420/2080
METAL10.SP.1.4:L71050 = EXTE Metal10 L48838 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL10.SP.1.4:L71050, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L48838

operation group: 1421/2080
METAL10.SP.1.4:L263752 = EDGE_LENGTH METAL10.SP.1.4:L71050 -gt 2.5

=====

generate layer METAL10.SP.1.4:L263752, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL10.SP.1.4:L71050

Rule Check METAL10.SP.1.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.76% (319 out of 562) rule checks completed.

operation group: 1422/2080
L68912 = SIZE Metal11 -by 1.75 -underover

=====

generate layer L68912, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1423/2080
L83396 = AND L68912 Metal11

=====

generate layer L83396, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L68912

operation group: 1424/2080
L54079 = NOT L1804 L83396

=====

generate layer L54079, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L1804

operation group: 1425/2080
L12934 = EDGE_BOOLEAN Metal11 L54079 -coincident_only

=====

generate layer L12934, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L54079

operation group: 1426/2080
METAL11.SP.1.4:L62441 = EXTE Metal11 L12934 -lt 0.75 -output positive2 -proj gt 2.5 -abut ltgt 0 90

=====

generate layer METAL11.SP.1.4:L62441, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L12934

operation group: 1427/2080

METAL11.SP.1.4:L263758 = EDGE_LENGTH METAL11.SP.1.4:L62441 -gt 2.5

=====

generate layer METAL11.SP.1.4:L263758, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL11.SP.1.4:L62441

Rule Check METAL11.SP.1.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 56.94% (320 out of 562) rule checks completed.

operation group: 1428/2080

L10627 = EDGE_BOOLEAN Metal1 L82421 -coincident_only

=====

generate layer L10627, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L82421

operation group: 1429/2080

METAL1.SP.1.6:L79181 = EXTE Metal1 L10627 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL1.SP.1.6:L79181, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L10627

operation group: 1430/2080

METAL1.SP.1.6:L263761 = EDGE_LENGTH METAL1.SP.1.6:L79181 -gt 3.5

=====

generate layer METAL1.SP.1.6:L263761, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.1.6:L79181

Rule Check METAL1.SP.1.6 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 57.12% (321 out of 562) rule checks completed.

operation group: 1431/2080

L14975 = EDGE_BOOLEAN Metal2 L32739 -coincident_only

=====

generate layer L14975, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L32739

operation group: 1432/2080

METAL2.SP.1.6:L51652 = EXTE Metal2 L14975 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL2.SP.1.6:L51652, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L14975

operation group: 1433/2080

METAL2.SP.1.6:L263764 = EDGE_LENGTH METAL2.SP.1.6:L51652 -gt 3.5

=====

generate layer METAL2.SP.1.6:L263764, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.1.6:L51652

Rule Check METAL2.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 57.30% (322 out of 562) rule checks completed.

operation group: 1434/2080

L68479 = EDGE_BOOLEAN Metal3 L7208 -coincident_only

=====

generate layer L68479, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L7208

operation group: 1435/2080

METAL3.SP.1.6:L76733 = EXTE Metal3 L68479 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL3.SP.1.6:L76733, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L68479

operation group: 1436/2080

METAL3.SP.1.6:L263767 = EDGE_LENGTH METAL3.SP.1.6:L76733 -gt 3.5

=====

generate layer METAL3.SP.1.6:L263767, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.1.6:L76733

Rule Check METAL3.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 57.47% (323 out of 562) rule checks completed.

operation group: 1437/2080

L89967 = EDGE_BOOLEAN Metal4 L22220 -coincident_only

=====

generate layer L89967, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22220

operation group: 1438/2080

METAL4.SP.1.6:L56711 = EXTE Metal4 L89967 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL4.SP.1.6:L56711, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L89967

operation group: 1439/2080

METAL4.SP.1.6:L263770 = EDGE_LENGTH METAL4.SP.1.6:L56711 -gt 3.5

=====

generate layer METAL4.SP.1.6:L263770, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.1.6:L56711

Rule Check METAL4.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 57.65% (324 out of 562) rule checks completed.

operation group: 1440/2080

L3998 = EDGE_BOOLEAN Metal5 L43948 -coincident_only

=====

generate layer L3998, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43948

operation group: 1441/2080

METAL5.SP.1.6:L66366 = EXTE Metal5 L3998 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL5.SP.1.6:L66366, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L3998

operation group: 1442/2080

METAL5.SP.1.6:L263773 = EDGE_LENGTH METAL5.SP.1.6:L66366 -gt 3.5

=====

generate layer METAL5.SP.1.6:L263773, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.1.6:L66366

Rule Check METAL5.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 57.83% (325 out of 562) rule checks completed.

operation group: 1443/2080

L38303 = EDGE_BOOLEAN Metal6 L93628 -coincident_only

=====

generate layer L38303, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L93628

operation group: 1444/2080

METAL6.SP.1.6:L69059 = EXTE Metal6 L38303 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL6.SP.1.6:L69059, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L38303

operation group: 1445/2080

METAL6.SP.1.6:L263776 = EDGE_LENGTH METAL6.SP.1.6:L69059 -gt 3.5

=====

generate layer METAL6.SP.1.6:L263776, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.1.6:L69059

Rule Check METAL6.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.01% (326 out of 562) rule checks completed.

operation group: 1446/2080

L13748 = EDGE_BOOLEAN Metal7 L29665 -coincident_only

=====

generate layer L13748, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L29665

operation group: 1447/2080

METAL7.SP.1.6:L18364 = EXTE Metal7 L13748 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL7.SP.1.6:L18364, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L13748

operation group: 1448/2080

METAL7.SP.1.6:L263779 = EDGE_LENGTH METAL7.SP.1.6:L18364 -gt 3.5

=====

generate layer METAL7.SP.1.6:L263779, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.1.6:L18364

Rule Check METAL7.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.19% (327 out of 562) rule checks completed.

operation group: 1449/2080

L22547 = EDGE_BOOLEAN Metal8 L20015 -coincident_only

=====

generate layer L22547, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L20015

operation group: 1450/2080

METAL8.SP.1.6:L27358 = EXTE Metal8 L22547 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL8.SP.1.6:L27358, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22547

operation group: 1451/2080

METAL8.SP.1.6:L263782 = EDGE_LENGTH METAL8.SP.1.6:L27358 -gt 3.5

=====

generate layer METAL8.SP.1.6:L263782, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.1.6:L27358

Rule Check METAL8.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.36% (328 out of 562) rule checks completed.

operation group: 1452/2080

L95520 = EDGE_BOOLEAN Metal9 L59080 -coincident_only

=====

generate layer L95520, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L59080

operation group: 1453/2080

METAL9.SP.1.6:L90432 = EXTE Metal9 L95520 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL9.SP.1.6:L90432, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L95520

operation group: 1454/2080

METAL9.SP.1.6:L263785 = EDGE_LENGTH METAL9.SP.1.6:L90432 -gt 3.5

=====

generate layer METAL9.SP.1.6:L263785, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL9.SP.1.6:L90432

Rule Check METAL9.SP.1.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.54% (329 out of 562) rule checks completed.

operation group: 1455/2080

L37045 = EDGE_BOOLEAN Metal10 L56118 -coincident_only

=====

generate layer L37045, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L56118

operation group: 1456/2080

METAL10.SP.1.5:L62458 = EXTE Metal10 L37045 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL10.SP.1.5:L62458, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L37045

operation group: 1457/2080

METAL10.SP.1.5:L263788 = EDGE_LENGTH METAL10.SP.1.5:L62458 -gt 3.5

=====

generate layer METAL10.SP.1.5:L263788, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL10.SP.1.5:L62458

Rule Check METAL10.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.72% (330 out of 562) rule checks completed.

operation group: 1458/2080

L56648 = EDGE_BOOLEAN Metal11 L83396 -coincident_only

=====

generate layer L56648, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L83396

operation group: 1459/2080

METAL11.SP.1.5:L35557 = EXTE Metal11 L56648 -lt 1.25 -output positive2 -proj gt 3.5 -abut ltgt 0 90

=====

generate layer METAL11.SP.1.5:L35557, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L56648

operation group: 1460/2080

METAL11.SP.1.5:L263791 = EDGE_LENGTH METAL11.SP.1.5:L35557 -gt 3.5

=====

generate layer METAL11.SP.1.5:L263791, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL11.SP.1.5:L35557

Rule Check METAL11.SP.1.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 58.90% (331 out of 562) rule checks completed.

operation group: 1461/2080

L79182 = ANGLE Metal1 -ltgt 0 90

=====

generate layer L79182, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1462/2080

METAL1.L.1:L263793 = EDGE_LENGTH L79182 -lt 0.1

=====

generate layer METAL1.L.1:L263793, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL1.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.07% (332 out of 562) rule checks completed.

operation group: 1463/2080

L61902 = ANGLE Metal2 -ltgt 0 90

=====

generate layer L61902, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1464/2080

METAL2.L.1:L263795 = EDGE_LENGTH L61902 -lt 0.1

=====

generate layer METAL2.L.1:L263795, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL2.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.25% (333 out of 562) rule checks completed.

operation group: 1465/2080

L44620 = ANGLE Metal3 -ltgt 0 90

=====

generate layer L44620, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1466/2080

METAL3.L.1:L263797 = EDGE_LENGTH L44620 -lt 0.1

=====

generate layer METAL3.L.1:L263797, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL3.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.43% (334 out of 562) rule checks completed.

operation group: 1467/2080

L27339 = ANGLE Metal4 -ltgt 0 90

=====

generate layer L27339, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1468/2080

METAL4.L.1:L263799 = EDGE_LENGTH L27339 -lt 0.1

=====

generate layer METAL4.L.1:L263799, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL4.L.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.61% (335 out of 562) rule checks completed.

operation group: 1469/2080

L10058 = ANGLE Metal5 -ltgt 0 90

=====

generate layer L10058, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1470/2080

METAL5.L.1:L263801 = EDGE_LENGTH L10058 -lt 0.1

=====

generate layer METAL5.L.1:L263801, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL5.L.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.79% (336 out of 562) rule checks completed.

operation group: 1471/2080

L92777 = ANGLE Metal6 -ltgt 0 90

=====

generate layer L92777, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1472/2080

METAL6.L.1:L263803 = EDGE_LENGTH L92777 -lt 0.1

=====

generate layer METAL6.L.1:L263803, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL6.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 59.96% (337 out of 562) rule checks completed.

operation group: 1473/2080

L75496 = ANGLE Metal7 -ltgt 0 90

=====

generate layer L75496, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1474/2080

METAL7.L.1:L263805 = EDGE_LENGTH L75496 -lt 0.1

=====

generate layer METAL7.L.1:L263805, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL7.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 60.14% (338 out of 562) rule checks completed.

operation group: 1475/2080

L9081 = ANGLE Metal8 -ltgt 0 90

=====

generate layer L9081, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1476/2080

METAL8.L.1:L263807 = EDGE_LENGTH L9081 -lt 0.1

=====

generate layer METAL8.L.1:L263807, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL8.L.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 60.32% (339 out of 562) rule checks completed.

operation group: 1477/2080

L26362 = ANGLE Metal9 -ltgt 0 90

```
=====
generate layer L26362, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1478/2080

METAL9.L.1:L263809 = EDGE_LENGTH L26362 -lt 0.1

```
=====
generate layer METAL9.L.1:L263809, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

Rule Check METAL9.L.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 60.50% (340 out of 562) rule checks completed.

operation group: 1479/2080

METAL1.SP.2:L263810 = EXTE Metal1 L79182 -lt 0.1 -output region -abut ltgt 0 90

```
=====
generate layer METAL1.SP.2:L263810, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

Rule Check METAL1.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 60.68% (341 out of 562) rule checks completed.

operation group: 1480/2080

METAL1.W.3:L263811 = INTE L79182 -lt 0.07 -output region -abut lt 90

```
=====
generate layer METAL1.W.3:L263811, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L79182

Rule Check METAL1.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 60.85% (342 out of 562) rule checks completed.

operation group: 1481/2080

METAL2.SP.2:L263812 = EXTE Metal2 L61902 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL2.SP.2:L263812, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL2.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.03% (343 out of 562) rule checks completed.

operation group: 1482/2080

METAL2.W.3:L263813 = INTE L61902 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL2.W.3:L263813, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L61902

Rule Check METAL2.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.21% (344 out of 562) rule checks completed.

operation group: 1483/2080

METAL3.SP.2:L263814 = EXTE Metal3 L44620 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL3.SP.2:L263814, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL3.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.39% (345 out of 562) rule checks completed.

operation group: 1484/2080

METAL3.W.3:L263815 = INTE L44620 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL3.W.3:L263815, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L44620

Rule Check METAL3.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.57% (346 out of 562) rule checks completed.

operation group: 1485/2080

METAL4.SP.2:L263816 = EXTE Metal4 L27339 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL4.SP.2:L263816, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL4.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.74% (347 out of 562) rule checks completed.

operation group: 1486/2080

METAL4.W.3:L263817 = INTE L27339 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL4.W.3:L263817, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L27339

Rule Check METAL4.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 61.92% (348 out of 562) rule checks completed.

operation group: 1487/2080

METAL5.SP.2:L263818 = EXTE Metal5 L10058 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL5.SP.2:L263818, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL5.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.10% (349 out of 562) rule checks completed.

operation group: 1488/2080

METAL5.W.3:L263819 = INTE L10058 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL5.W.3:L263819, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L10058

Rule Check METAL5.W.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.28% (350 out of 562) rule checks completed.

operation group: 1489/2080

METAL6.SP.2:L263820 = EXTE Metal6 L92777 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL6.SP.2:L263820, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL6.SP.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.46% (351 out of 562) rule checks completed.

operation group: 1490/2080

METAL6.W.3:L263821 = INTE L92777 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL6.W.3:L263821, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L92777

Rule Check METAL6.W.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.63% (352 out of 562) rule checks completed.

operation group: 1491/2080

METAL7.SP.2:L263822 = EXTE Metal7 L75496 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL7.SP.2:L263822, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL7.SP.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.81% (353 out of 562) rule checks completed.

operation group: 1492/2080

METAL7.W.3:L263823 = INTE L75496 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL7.W.3:L263823, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L75496

Rule Check METAL7.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 62.99% (354 out of 562) rule checks completed.

operation group: 1493/2080

METAL8.SP.2:L263824 = EXTE Metal8 L9081 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL8.SP.2:L263824, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL8.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 63.17% (355 out of 562) rule checks completed.

operation group: 1494/2080

METAL8.W.3:L263825 = INTE L9081 -lt 0.09 -output region -abut lt 90

=====

generate layer METAL8.W.3:L263825, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L9081

Rule Check METAL8.W.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 63.35% (356 out of 562) rule checks completed.

operation group: 1495/2080

METAL9.SP.2:L263826 = EXTE Metal9 L26362 -lt 0.1 -output region -abut ltgt 0 90

=====

generate layer METAL9.SP.2:L263826, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL9.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 63.52% (357 out of 562) rule checks completed.

operation group: 1496/2080

METAL9.W.3:L263827 = INTE L26362 -lt 0.09 -output region -abut lt 90

```
=====
generate layer METAL9.W.3:L263827, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer L26362
```

```
Rule Check METAL9.W.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

```
[INFO]: 63.70% (358 out of 562) rule checks completed.
```

```
operation group: 1497/2080
METAL1.SP.3:met1_lw = CONVEX_EDGE Metal1 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.09
```

```
=====
generate layer METAL1.SP.3:met1_lw, TYP = E, HPN = 14, FPN = 14, HEN = 14, FEN = 14
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/13.96 peak=17.95
```

```
operation group: 1498/2080
METAL1.SP.3:met1_sp = EXTE METAL1.SP.3:met1_lw Metal1 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.025
```

```
=====
generate layer METAL1.SP.3:met1_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/17.73 peak=17.95
```

```
operation group: 1499/2080
METAL1.SP.3:met1Edge1 = EDGE_SELECT METAL1.SP.3:met1_lw METAL1.SP.3:met1_sp
-coincident_only -inside
```

```
=====
generate layer METAL1.SP.3:met1Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

```
operation group: 1500/2080
METAL1.SP.3:met1_q1 = INTE METAL1.SP.3:met1Edge1 Metal1 -lt 0.1 -abut eq 90 -intersecting only
```

```
=====
generate layer METAL1.SP.3:met1_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL1.SP.3:met1Edge1
```

```
operation group: 1501/2080
METAL1.SP.3:met1_q2 = EDGE_LENGTH METAL1.SP.3:met1_q1 -ge 0.06
```

```
=====
generate layer METAL1.SP.3:met1_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL1.SP.3:met1_q1
```

operation group: 1502/2080

METAL1.SP.3:met1exp1 = EDGE_EXPAND METAL1.SP.3:met1_q2 -inside_by 0.001 -extend_by 0.025

=====

generate layer METAL1.SP.3:met1exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1503/2080

METAL1.SP.3:met1exp2 = EDGE_EXPAND METAL1.SP.3:met1_q2 -inside_by 0.001

=====

generate layer METAL1.SP.3:met1exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1504/2080

METAL1.SP.3:met1Exp = NOT METAL1.SP.3:met1exp1 METAL1.SP.3:met1exp2

=====

generate layer METAL1.SP.3:met1Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1exp1

operation group: 1505/2080

METAL1.SP.3:met1_lwEdg = SELECT -with_edge METAL1.SP.3:met1Exp METAL1.SP.3:met1_lw

=====

generate layer METAL1.SP.3:met1_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1Exp
delete layer METAL1.SP.3:met1_lw

operation group: 1506/2080

METAL1.SP.3:met1_allEdg = OR METAL1.SP.3:met1_lwEdg METAL1.SP.3:met1exp2

=====

generate layer METAL1.SP.3:met1_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1_lwEdg
delete layer METAL1.SP.3:met1exp2

operation group: 1507/2080

METAL1.SP.3:met1_extEdg = EDGE_SELECT METAL1.SP.3:met1_allEdg METAL1.SP.3:met1_q2 -coincident_only

=====

generate layer METAL1.SP.3:met1_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1_allEdg
delete layer METAL1.SP.3:met1_q2

operation group: 1508/2080

METAL1.SP.3:met1_last = EDGE_SELECT METAL1.SP.3:met1_extEdg METAL1.SP.3:met1_sp
-coincident_only -not

=====

generate layer METAL1.SP.3:met1_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1_extEdg
delete layer METAL1.SP.3:met1_sp

operation group: 1509/2080

METAL1.SP.3:L263840 = EXTE METAL1.SP.3:met1_last Metal1 -lt 0.08 -abut lt 90 -metric opposite
-output region

=====

generate layer METAL1.SP.3:L263840, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL1.SP.3:met1_last

Rule Check METAL1.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 63.88% (359 out of 562) rule checks completed.

operation group: 1510/2080

METAL2.SP.3:met2_lw = CONVEX_EDGE Metal2 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL2.SP.3:met2_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1511/2080

METAL2.SP.3:met2_sp = EXTE METAL2.SP.3:met2_lw Metal2 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL2.SP.3:met2_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1512/2080

METAL2.SP.3:met2Edge1 = EDGE_SELECT METAL2.SP.3:met2_lw METAL2.SP.3:met2_sp
-coincident_only -inside

=====

generate layer METAL2.SP.3:met2Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1513/2080

METAL2.SP.3:met2_q1 = INTE METAL2.SP.3:met2Edge1 Metal2 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL2.SP.3:met2_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2Edge1

operation group: 1514/2080

METAL2.SP.3:met2_q2 = EDGE_LENGTH METAL2.SP.3:met2_q1 -ge 0.07

=====

generate layer METAL2.SP.3:met2_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2_q1

operation group: 1515/2080

METAL2.SP.3:met2exp1 = EDGE_EXPAND METAL2.SP.3:met2_q2 -inside_by 0.001 -extend_by 0.035

=====

generate layer METAL2.SP.3:met2exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1516/2080

METAL2.SP.3:met2exp2 = EDGE_EXPAND METAL2.SP.3:met2_q2 -inside_by 0.001

=====

generate layer METAL2.SP.3:met2exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1517/2080

METAL2.SP.3:met2Exp = NOT METAL2.SP.3:met2exp1 METAL2.SP.3:met2exp2

=====

generate layer METAL2.SP.3:met2Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2exp1

operation group: 1518/2080

METAL2.SP.3:met2_lwEdg = SELECT -with_edge METAL2.SP.3:met2Exp METAL2.SP.3:met2_lw

=====

generate layer METAL2.SP.3:met2_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2Exp

delete layer METAL2.SP.3:met2_lw

operation group: 1519/2080

METAL2.SP.3:met2_allEdg = OR METAL2.SP.3:met2_lwEdg METAL2.SP.3:met2exp2

=====

generate layer METAL2.SP.3:met2_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2_lwEdg

delete layer METAL2.SP.3:met2exp2

operation group: 1520/2080

METAL2.SP.3:met2_extEdg = EDGE_SELECT METAL2.SP.3:met2_allEdg METAL2.SP.3:met2_q2
-coincident_only

=====

generate layer METAL2.SP.3:met2_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2_allEdg

delete layer METAL2.SP.3:met2_q2

operation group: 1521/2080

METAL2.SP.3:met2_last = EDGE_SELECT METAL2.SP.3:met2_extEdg METAL2.SP.3:met2_sp
-coincident_only -not

=====

generate layer METAL2.SP.3:met2_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2_extEdg

delete layer METAL2.SP.3:met2_sp

operation group: 1522/2080

METAL2.SP.3:L263853 = EXTE METAL2.SP.3:met2_last Metal2 -lt 0.08 -abut It 90 -metric opposite
-output region

=====

generate layer METAL2.SP.3:L263853, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL2.SP.3:met2_last

Rule Check METAL2.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.06% (360 out of 562) rule checks completed.

operation group: 1523/2080

METAL3.SP.3:met3_lw = CONVEX_EDGE Metal3 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL3.SP.3:met3_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1524/2080

METAL3.SP.3:met3_sp = EXTE METAL3.SP.3:met3_lw Metal3 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL3.SP.3:met3_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1525/2080

METAL3.SP.3:met3Edge1 = EDGE_SELECT METAL3.SP.3:met3_lw METAL3.SP.3:met3_sp
-coincident_only -inside

=====

generate layer METAL3.SP.3:met3Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1526/2080

METAL3.SP.3:met3_q1 = INTE METAL3.SP.3:met3Edge1 Metal3 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL3.SP.3:met3_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3Edge1

operation group: 1527/2080

METAL3.SP.3:met3_q2 = EDGE_LENGTH METAL3.SP.3:met3_q1 -ge 0.07

=====

generate layer METAL3.SP.3:met3_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3_q1

operation group: 1528/2080

METAL3.SP.3:met3exp1 = EDGE_EXPAND METAL3.SP.3:met3_q2 -inside_by 0.001 -extend_by
0.035

=====

generate layer METAL3.SP.3:met3exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1529/2080

METAL3.SP.3:met3exp2 = EDGE_EXPAND METAL3.SP.3:met3_q2 -inside_by 0.001

=====

generate layer METAL3.SP.3:met3exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1530/2080

METAL3.SP.3:met3Exp = NOT METAL3.SP.3:met3exp1 METAL3.SP.3:met3exp2

=====

generate layer METAL3.SP.3:met3Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3exp1

operation group: 1531/2080

METAL3.SP.3:met3_lwEdg = SELECT -with_edge METAL3.SP.3:met3Exp METAL3.SP.3:met3_lw

=====

generate layer METAL3.SP.3:met3_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3Exp

delete layer METAL3.SP.3:met3_lw

operation group: 1532/2080

METAL3.SP.3:met3_allEdg = OR METAL3.SP.3:met3_lwEdg METAL3.SP.3:met3exp2

=====

generate layer METAL3.SP.3:met3_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3_lwEdg

delete layer METAL3.SP.3:met3exp2

operation group: 1533/2080

METAL3.SP.3:met3_extEdg = EDGE_SELECT METAL3.SP.3:met3_allEdg METAL3.SP.3:met3_q2
-coincident_only

=====

generate layer METAL3.SP.3:met3_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3_allEdg

delete layer METAL3.SP.3:met3_q2

operation group: 1534/2080

METAL3.SP.3:met3_last = EDGE_SELECT METAL3.SP.3:met3_extEdg METAL3.SP.3:met3_sp
-coincident_only -not

=====

generate layer METAL3.SP.3:met3_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3_extEdg

delete layer METAL3.SP.3:met3_sp

operation group: 1535/2080

METAL3.SP.3:L263866 = EXTE METAL3.SP.3:met3_last Metal3 -lt 0.08 -abut lt 90 -metric opposite
-output region

=====

generate layer METAL3.SP.3:L263866, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL3.SP.3:met3_last

Rule Check METAL3.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.23% (361 out of 562) rule checks completed.

operation group: 1536/2080

METAL4.SP.3:met4_lw = CONVEX_EDGE Metal4 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL4.SP.3:met4_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1537/2080

METAL4.SP.3:met4_sp = EXTE METAL4.SP.3:met4_lw Metal4 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL4.SP.3:met4_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1538/2080

METAL4.SP.3:met4Edge1 = EDGE_SELECT METAL4.SP.3:met4_lw METAL4.SP.3:met4_sp
-coincident_only -inside

=====

generate layer METAL4.SP.3:met4Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1539/2080

METAL4.SP.3:met4_q1 = INTE METAL4.SP.3:met4Edge1 Metal4 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL4.SP.3:met4_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4Edge1

operation group: 1540/2080

METAL4.SP.3:met4_q2 = EDGE_LENGTH METAL4.SP.3:met4_q1 -ge 0.07

=====

generate layer METAL4.SP.3:met4_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4_q1

operation group: 1541/2080

METAL4.SP.3:met4exp1 = EDGE_EXPAND METAL4.SP.3:met4_q2 -inside_by 0.001 -extend_by 0.035

=====

generate layer METAL4.SP.3:met4exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1542/2080

METAL4.SP.3:met4exp2 = EDGE_EXPAND METAL4.SP.3:met4_q2 -inside_by 0.001

=====

generate layer METAL4.SP.3:met4exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1543/2080

METAL4.SP.3:met4Exp = NOT METAL4.SP.3:met4exp1 METAL4.SP.3:met4exp2

=====

generate layer METAL4.SP.3:met4Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4exp1

operation group: 1544/2080

METAL4.SP.3:met4_lwEdg = SELECT -with_edge METAL4.SP.3:met4Exp METAL4.SP.3:met4_lw

=====

generate layer METAL4.SP.3:met4_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4Exp

delete layer METAL4.SP.3:met4_lw

operation group: 1545/2080

METAL4.SP.3:met4_allEdg = OR METAL4.SP.3:met4_lwEdg METAL4.SP.3:met4exp2

=====

generate layer METAL4.SP.3:met4_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4_lwEdg

delete layer METAL4.SP.3:met4exp2

operation group: 1546/2080

METAL4.SP.3:met4_extEdg = EDGE_SELECT METAL4.SP.3:met4_allEdg METAL4.SP.3:met4_q2 -coincident_only

=====

generate layer METAL4.SP.3:met4_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4_allEdg

delete layer METAL4.SP.3:met4_q2

operation group: 1547/2080

METAL4.SP.3:met4_last = EDGE_SELECT METAL4.SP.3:met4_extEdg METAL4.SP.3:met4_sp
-coincident_only -not

=====

generate layer METAL4.SP.3:met4_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4_extEdg
delete layer METAL4.SP.3:met4_sp

operation group: 1548/2080

METAL4.SP.3:L263879 = EXTE METAL4.SP.3:met4_last Metal4 -lt 0.08 -abut lt 90 -metric opposite
-output region

=====

generate layer METAL4.SP.3:L263879, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.08 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL4.SP.3:met4_last

Rule Check METAL4.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.41% (362 out of 562) rule checks completed.

operation group: 1549/2080

METAL5.SP.3:met5_lw = CONVEX_EDGE Metal5 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL5.SP.3:met5_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1550/2080

METAL5.SP.3:met5_sp = EXTE METAL5.SP.3:met5_lw Metal5 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL5.SP.3:met5_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1551/2080

METAL5.SP.3:met5Edge1 = EDGE_SELECT METAL5.SP.3:met5_lw METAL5.SP.3:met5_sp
-coincident_only -inside

=====

generate layer METAL5.SP.3:met5Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1552/2080

METAL5.SP.3:met5_q1 = INTE METAL5.SP.3:met5Edge1 Metal5 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL5.SP.3:met5_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5Edge1

operation group: 1553/2080

METAL5.SP.3:met5_q2 = EDGE_LENGTH METAL5.SP.3:met5_q1 -ge 0.07

=====

generate layer METAL5.SP.3:met5_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5_q1

operation group: 1554/2080

METAL5.SP.3:met5exp1 = EDGE_EXPAND METAL5.SP.3:met5_q2 -inside_by 0.001 -extend_by 0.035

=====

generate layer METAL5.SP.3:met5exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1555/2080

METAL5.SP.3:met5exp2 = EDGE_EXPAND METAL5.SP.3:met5_q2 -inside_by 0.001

=====

generate layer METAL5.SP.3:met5exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1556/2080

METAL5.SP.3:met5Exp = NOT METAL5.SP.3:met5exp1 METAL5.SP.3:met5exp2

=====

generate layer METAL5.SP.3:met5Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5exp1

operation group: 1557/2080

METAL5.SP.3:met5_lwEdg = SELECT -with_edge METAL5.SP.3:met5Exp METAL5.SP.3:met5_lw

=====

generate layer METAL5.SP.3:met5_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5Exp

delete layer METAL5.SP.3:met5_lw

operation group: 1558/2080

METAL5.SP.3:met5_allEdg = OR METAL5.SP.3:met5_lwEdg METAL5.SP.3:met5exp2

=====

generate layer METAL5.SP.3:met5_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5_lwEdg

delete layer METAL5.SP.3:met5exp2

operation group: 1559/2080

METAL5.SP.3:met5_extEdg = EDGE_SELECT METAL5.SP.3:met5_allEdg METAL5.SP.3:met5_q2
-coincident_only

=====

generate layer METAL5.SP.3:met5_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5_allEdg

delete layer METAL5.SP.3:met5_q2

operation group: 1560/2080

METAL5.SP.3:met5_last = EDGE_SELECT METAL5.SP.3:met5_extEdg METAL5.SP.3:met5_sp
-coincident_only -not

=====

generate layer METAL5.SP.3:met5_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.14 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5_extEdg

delete layer METAL5.SP.3:met5_sp

operation group: 1561/2080

METAL5.SP.3:L263892 = EXTE METAL5.SP.3:met5_last Metal5 -lt 0.08 -abut lt 90 -metric opposite
-output region

=====

generate layer METAL5.SP.3:L263892, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL5.SP.3:met5_last

Rule Check METAL5.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.59% (363 out of 562) rule checks completed.

operation group: 1562/2080

METAL6.SP.3:met6_lw = CONVEX_EDGE Metal6 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL6.SP.3:met6_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1563/2080

METAL6.SP.3:met6_sp = EXTE METAL6.SP.3:met6_lw Metal6 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL6.SP.3:met6_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1564/2080

METAL6.SP.3:met6Edge1 = EDGE_SELECT METAL6.SP.3:met6_lw METAL6.SP.3:met6_sp
-coincident_only -inside

=====

generate layer METAL6.SP.3:met6Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1565/2080

METAL6.SP.3:met6_q1 = INTE METAL6.SP.3:met6Edge1 Metal6 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL6.SP.3:met6_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.3:met6Edge1

operation group: 1566/2080

METAL6.SP.3:met6_q2 = EDGE_LENGTH METAL6.SP.3:met6_q1 -ge 0.07

=====

generate layer METAL6.SP.3:met6_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.3:met6_q1

operation group: 1567/2080

METAL6.SP.3:met6exp1 = EDGE_EXPAND METAL6.SP.3:met6_q2 -inside_by 0.001 -extend_by
0.035

=====

generate layer METAL6.SP.3:met6exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1568/2080

METAL6.SP.3:met6exp2 = EDGE_EXPAND METAL6.SP.3:met6_q2 -inside_by 0.001

=====

generate layer METAL6.SP.3:met6exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1569/2080

METAL6.SP.3:met6Exp = NOT METAL6.SP.3:met6exp1 METAL6.SP.3:met6exp2
=====

```
generate layer METAL6.SP.3:met6Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL6.SP.3:met6exp1

operation group: 1570/2080
METAL6.SP.3:met6_lwEdg = SELECT -with_edge METAL6.SP.3:met6Exp METAL6.SP.3:met6_lw
=====

```
generate layer METAL6.SP.3:met6_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL6.SP.3:met6Exp
delete layer METAL6.SP.3:met6_lw

operation group: 1571/2080
METAL6.SP.3:met6_allEdg = OR METAL6.SP.3:met6_lwEdg METAL6.SP.3:met6exp2
=====

```
generate layer METAL6.SP.3:met6_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL6.SP.3:met6_lwEdg
delete layer METAL6.SP.3:met6exp2

operation group: 1572/2080
METAL6.SP.3:met6_extEdg = EDGE_SELECT METAL6.SP.3:met6_allEdg METAL6.SP.3:met6_q2
-coincident_only
=====

```
generate layer METAL6.SP.3:met6_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL6.SP.3:met6_allEdg
delete layer METAL6.SP.3:met6_q2

operation group: 1573/2080
METAL6.SP.3:met6_last = EDGE_SELECT METAL6.SP.3:met6_extEdg METAL6.SP.3:met6_sp
-coincident_only -not
=====

```
generate layer METAL6.SP.3:met6_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL6.SP.3:met6_extEdg
delete layer METAL6.SP.3:met6_sp

operation group: 1574/2080
METAL6.SP.3:L263905 = EXTE METAL6.SP.3:met6_last Metal6 -lt 0.08 -abut lt 90 -metric opposite
-output region
=====

```
generate layer METAL6.SP.3:L263905, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
```

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL6.SP.3:met6_last

Rule Check METAL6.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.77% (364 out of 562) rule checks completed.

operation group: 1575/2080

METAL7.SP.3:met7_lw = CONVEX_EDGE Metal7 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL7.SP.3:met7_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1576/2080

METAL7.SP.3:met7_sp = EXTE METAL7.SP.3:met7_lw Metal7 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL7.SP.3:met7_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1577/2080

METAL7.SP.3:met7Edge1 = EDGE_SELECT METAL7.SP.3:met7_lw METAL7.SP.3:met7_sp
-coincident_only -inside

=====

generate layer METAL7.SP.3:met7Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1578/2080

METAL7.SP.3:met7_q1 = INTE METAL7.SP.3:met7Edge1 Metal7 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL7.SP.3:met7_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7Edge1

operation group: 1579/2080

METAL7.SP.3:met7_q2 = EDGE_LENGTH METAL7.SP.3:met7_q1 -ge 0.07

=====

generate layer METAL7.SP.3:met7_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7_q1

operation group: 1580/2080

METAL7.SP.3:met7exp1 = EDGE_EXPAND METAL7.SP.3:met7_q2 -inside_by 0.001 -extend_by 0.035

=====

generate layer METAL7.SP.3:met7exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1581/2080

METAL7.SP.3:met7exp2 = EDGE_EXPAND METAL7.SP.3:met7_q2 -inside_by 0.001

=====

generate layer METAL7.SP.3:met7exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1582/2080

METAL7.SP.3:met7Exp = NOT METAL7.SP.3:met7exp1 METAL7.SP.3:met7exp2

=====

generate layer METAL7.SP.3:met7Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7exp1

operation group: 1583/2080

METAL7.SP.3:met7_lwEdg = SELECT -with_edge METAL7.SP.3:met7Exp METAL7.SP.3:met7_lw

=====

generate layer METAL7.SP.3:met7_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7Exp

delete layer METAL7.SP.3:met7_lw

operation group: 1584/2080

METAL7.SP.3:met7_allEdg = OR METAL7.SP.3:met7_lwEdg METAL7.SP.3:met7exp2

=====

generate layer METAL7.SP.3:met7_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7_lwEdg

delete layer METAL7.SP.3:met7exp2

operation group: 1585/2080

METAL7.SP.3:met7_extEdg = EDGE_SELECT METAL7.SP.3:met7_allEdg METAL7.SP.3:met7_q2
-coincident_only

=====

generate layer METAL7.SP.3:met7_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7_allEdg

delete layer METAL7.SP.3:met7_q2

operation group: 1586/2080

METAL7.SP.3:met7_last = EDGE_SELECT METAL7.SP.3:met7_extEdg METAL7.SP.3:met7_sp
-coincident_only -not

=====

generate layer METAL7.SP.3:met7_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7_extEdg
delete layer METAL7.SP.3:met7_sp

operation group: 1587/2080

METAL7.SP.3:L263918 = EXTE METAL7.SP.3:met7_last Metal7 -lt 0.08 -abut lt 90 -metric opposite
-output region

=====

generate layer METAL7.SP.3:L263918, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL7.SP.3:met7_last

Rule Check METAL7.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 64.95% (365 out of 562) rule checks completed.

operation group: 1588/2080

METAL8.SP.3:met8_lw = CONVEX_EDGE Metal8 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1

=====

generate layer METAL8.SP.3:met8_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1589/2080

METAL8.SP.3:met8_sp = EXTE METAL8.SP.3:met8_lw Metal8 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL8.SP.3:met8_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1590/2080

METAL8.SP.3:met8Edge1 = EDGE_SELECT METAL8.SP.3:met8_lw METAL8.SP.3:met8_sp
-coincident_only -inside

=====

generate layer METAL8.SP.3:met8Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1591/2080

METAL8.SP.3:met8_q1 = INTE METAL8.SP.3:met8Edge1 Metal8 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL8.SP.3:met8_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.3:met8Edge1

operation group: 1592/2080

METAL8.SP.3:met8_q2 = EDGE_LENGTH METAL8.SP.3:met8_q1 -ge 0.07

=====

generate layer METAL8.SP.3:met8_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.3:met8_q1

operation group: 1593/2080

METAL8.SP.3:met8exp1 = EDGE_EXPAND METAL8.SP.3:met8_q2 -inside_by 0.001 -extend_by 0.035

=====

generate layer METAL8.SP.3:met8exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1594/2080

METAL8.SP.3:met8exp2 = EDGE_EXPAND METAL8.SP.3:met8_q2 -inside_by 0.001

=====

generate layer METAL8.SP.3:met8exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1595/2080

METAL8.SP.3:met8Exp = NOT METAL8.SP.3:met8exp1 METAL8.SP.3:met8exp2

=====

generate layer METAL8.SP.3:met8Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.3:met8exp1

operation group: 1596/2080

METAL8.SP.3:met8_lwEdg = SELECT -with_edge METAL8.SP.3:met8Exp METAL8.SP.3:met8_lw

=====

generate layer METAL8.SP.3:met8_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL8.SP.3:met8Exp

delete layer METAL8.SP.3:met8_lw

operation group: 1597/2080

METAL8.SP.3:met8_allEdg = OR METAL8.SP.3:met8_lwEdg METAL8.SP.3:met8exp2
=====

```
generate layer METAL8.SP.3:met8_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL8.SP.3:met8_lwEdg
delete layer METAL8.SP.3:met8exp2
```

operation group: 1598/2080

```
METAL8.SP.3:met8_extEdg = EDGE_SELECT METAL8.SP.3:met8_allEdg METAL8.SP.3:met8_q2
-coincident_only
```

=====

```
generate layer METAL8.SP.3:met8_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL8.SP.3:met8_allEdg
delete layer METAL8.SP.3:met8_q2
```

operation group: 1599/2080

```
METAL8.SP.3:met8_last = EDGE_SELECT METAL8.SP.3:met8_extEdg METAL8.SP.3:met8_sp
-coincident_only -not
```

=====

```
generate layer METAL8.SP.3:met8_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL8.SP.3:met8_extEdg
delete layer METAL8.SP.3:met8_sp
```

operation group: 1600/2080

```
METAL8.SP.3:L263931 = EXTE METAL8.SP.3:met8_last Metal8 -lt 0.08 -abut lt 90 -metric opposite
-output region
```

=====

```
generate layer METAL8.SP.3:L263931, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL8.SP.3:met8_last
```

```
Rule Check METAL8.SP.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

[INFO]: 65.12% (366 out of 562) rule checks completed.

operation group: 1601/2080

```
METAL9.SP.3:met9_lw = CONVEX_EDGE Metal9 -angle1 eq 90 -angle2 eq 90 -with_length lt 0.1
```

=====

```
generate layer METAL9.SP.3:met9_lw, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1602/2080

METAL9.SP.3:met9_sp = EXTE METAL9.SP.3:met9_lw Metal9 -lt 0.08 -abut lt 90 -metric
opposite_extended 0.035

=====

generate layer METAL9.SP.3:met9_sp, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1603/2080

METAL9.SP.3:met9Edge1 = EDGE_SELECT METAL9.SP.3:met9_lw METAL9.SP.3:met9_sp
-coincident_only -inside

=====

generate layer METAL9.SP.3:met9Edge1, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1604/2080

METAL9.SP.3:met9_q1 = INTE METAL9.SP.3:met9Edge1 Metal9 -lt 0.1 -abut eq 90 -intersecting only

=====

generate layer METAL9.SP.3:met9_q1, TYP = R, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL9.SP.3:met9Edge1

operation group: 1605/2080

METAL9.SP.3:met9_q2 = EDGE_LENGTH METAL9.SP.3:met9_q1 -ge 0.07

=====

generate layer METAL9.SP.3:met9_q2, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer METAL9.SP.3:met9_q1

operation group: 1606/2080

METAL9.SP.3:met9exp1 = EDGE_EXPAND METAL9.SP.3:met9_q2 -inside_by 0.001 -extend_by
0.035

=====

generate layer METAL9.SP.3:met9exp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1607/2080

METAL9.SP.3:met9exp2 = EDGE_EXPAND METAL9.SP.3:met9_q2 -inside_by 0.001

=====

generate layer METAL9.SP.3:met9exp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1608/2080

METAL9.SP.3:met9Exp = NOT METAL9.SP.3:met9exp1 METAL9.SP.3:met9exp2


```
=====
generate layer METAL9.SP.3:met9Exp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.3:met9exp1
```

```
operation group: 1609/2080
```

```
METAL9.SP.3:met9_lwEdg = SELECT -with_edge METAL9.SP.3:met9Exp METAL9.SP.3:met9_lw
```

```
=====
generate layer METAL9.SP.3:met9_lwEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.3:met9Exp
```

```
delete layer METAL9.SP.3:met9_lw
```

```
operation group: 1610/2080
```

```
METAL9.SP.3:met9_allEdg = OR METAL9.SP.3:met9_lwEdg METAL9.SP.3:met9exp2
```

```
=====
generate layer METAL9.SP.3:met9_allEdg, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.3:met9_lwEdg
```

```
delete layer METAL9.SP.3:met9exp2
```

```
operation group: 1611/2080
```

```
METAL9.SP.3:met9_extEdg = EDGE_SELECT METAL9.SP.3:met9_allEdg METAL9.SP.3:met9_q2
-coincident_only
```

```
=====
generate layer METAL9.SP.3:met9_extEdg, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.3:met9_allEdg
```

```
delete layer METAL9.SP.3:met9_q2
```

```
operation group: 1612/2080
```

```
METAL9.SP.3:met9_last = EDGE_SELECT METAL9.SP.3:met9_extEdg METAL9.SP.3:met9_sp
-coincident_only -not
```

```
=====
generate layer METAL9.SP.3:met9_last, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

```
delete layer METAL9.SP.3:met9_extEdg
```

```
delete layer METAL9.SP.3:met9_sp
```

```
operation group: 1613/2080
```

```
METAL9.SP.3:L263944 = EXTE METAL9.SP.3:met9_last Metal9 -lt 0.08 -abut lt 90 -metric opposite
-output region
```

```
=====
generate layer METAL9.SP.3:L263944, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer METAL9.SP.3:met9_last

Rule Check METAL9.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 65.30% (367 out of 562) rule checks completed.

operation group: 1614/2080

METAL1.A.1:L263945 = AREA Metal1 -lt 0.02

=====

generate layer METAL1.A.1:L263945, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/17.73 peak=17.95

Rule Check METAL1.A.1 finished, 1 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/13.71 peak=17.95

[INFO]: 65.48% (368 out of 562) rule checks completed.

operation group: 1615/2080

METAL2.A.1:L263946 = AREA Metal2 -lt 0.02

=====

generate layer METAL2.A.1:L263946, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL2.A.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 65.66% (369 out of 562) rule checks completed.

operation group: 1616/2080

METAL3.A.1:L263947 = AREA Metal3 -lt 0.02

=====

generate layer METAL3.A.1:L263947, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL3.A.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 65.84% (370 out of 562) rule checks completed.

operation group: 1617/2080

METAL4.A.1:L263948 = AREA Metal4 -lt 0.02

=====

generate layer METAL4.A.1:L263948, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL4.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.01% (371 out of 562) rule checks completed.

operation group: 1618/2080
METAL5.A.1:L263949 = AREA Metal5 -lt 0.02

=====

generate layer METAL5.A.1:L263949, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL5.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.19% (372 out of 562) rule checks completed.

operation group: 1619/2080
METAL6.A.1:L263950 = AREA Metal6 -lt 0.02

=====

generate layer METAL6.A.1:L263950, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL6.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.37% (373 out of 562) rule checks completed.

operation group: 1620/2080
METAL7.A.1:L263951 = AREA Metal7 -lt 0.02

=====

generate layer METAL7.A.1:L263951, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL7.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.55% (374 out of 562) rule checks completed.

operation group: 1621/2080
METAL8.A.1:L263952 = AREA Metal8 -lt 0.02

=====

generate layer METAL8.A.1:L263952, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL8.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.73% (375 out of 562) rule checks completed.

operation group: 1622/2080
METAL9.A.1:L263953 = AREA Metal9 -lt 0.02

=====

generate layer METAL9.A.1:L263953, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL9.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 66.90% (376 out of 562) rule checks completed.

operation group: 1623/2080
METAL10.A.1:L263954 = AREA Metal10 -lt 0.1

=====

generate layer METAL10.A.1:L263954, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL10.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.08% (377 out of 562) rule checks completed.

operation group: 1624/2080
METAL11.A.1:L263955 = AREA Metal11 -lt 0.1

=====

generate layer METAL11.A.1:L263955, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check METAL11.A.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.26% (378 out of 562) rule checks completed.

operation group: 1625/2080

L70100 = NOT L11511 Metal1

```
=====
generate layer L70100, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L11511

operation group: 1626/2080
METAL1.EA.1:L263957 = AREA L70100 -lt 0.045

```
=====
generate layer METAL1.EA.1:L263957, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L70100

Rule Check METAL1.EA.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.44% (379 out of 562) rule checks completed.

operation group: 1627/2080
L86860 = NOT L11512 Metal2

```
=====
generate layer L86860, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L11512

operation group: 1628/2080
METAL2.EA.1:L263959 = AREA L86860 -lt 0.055

```
=====
generate layer METAL2.EA.1:L263959, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L86860

Rule Check METAL2.EA.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.62% (380 out of 562) rule checks completed.

operation group: 1629/2080
L76524 = NOT L11513 Metal3

```
=====
generate layer L76524, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L11513

operation group: 1630/2080

METAL3.EA.1:L263961 = AREA L76524 -lt 0.055

=====

generate layer METAL3.EA.1:L263961, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76524

Rule Check METAL3.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.79% (381 out of 562) rule checks completed.

operation group: 1631/2080

L33812 = NOT L11514 Metal4

=====

generate layer L33812, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11514

operation group: 1632/2080

METAL4.EA.1:L263963 = AREA L33812 -lt 0.055

=====

generate layer METAL4.EA.1:L263963, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L33812

Rule Check METAL4.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 67.97% (382 out of 562) rule checks completed.

operation group: 1633/2080

L23148 = NOT L11515 Metal5

=====

generate layer L23148, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11515

operation group: 1634/2080

METAL5.EA.1:L263965 = AREA L23148 -lt 0.055

=====

generate layer METAL5.EA.1:L263965, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L23148

Rule Check METAL5.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 68.15% (383 out of 562) rule checks completed.

operation group: 1635/2080

L87188 = NOT L11516 Metal6

=====

generate layer L87188, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11516

operation group: 1636/2080

METAL6.EA.1:L263967 = AREA L87188 -lt 0.055

=====

generate layer METAL6.EA.1:L263967, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L87188

Rule Check METAL6.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 68.33% (384 out of 562) rule checks completed.

operation group: 1637/2080

L69772 = NOT L11517 Metal7

=====

generate layer L69772, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11517

operation group: 1638/2080

METAL7.EA.1:L263969 = AREA L69772 -lt 0.055

=====

generate layer METAL7.EA.1:L263969, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L69772

Rule Check METAL7.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 68.51% (385 out of 562) rule checks completed.

operation group: 1639/2080

L40565 = NOT L11518 Metal8

=====

generate layer L40565, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11518

operation group: 1640/2080

METAL8.EA.1:L263971 = AREA L40565 -lt 0.055

=====

generate layer METAL8.EA.1:L263971, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L40565

Rule Check METAL8.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 68.68% (386 out of 562) rule checks completed.

operation group: 1641/2080

L50900 = NOT L11519 Metal9

=====

generate layer L50900, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L11519

operation group: 1642/2080

METAL9.EA.1:L263973 = AREA L50900 -lt 0.055

=====

generate layer METAL9.EA.1:L263973, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L50900

Rule Check METAL9.EA.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 68.86% (387 out of 562) rule checks completed.

operation group: 1643/2080

L15903 = NOT L77703 Metal10

=====

generate layer L15903, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L77703

operation group: 1644/2080

METAL10.EA.1:L263975 = AREA L15903 -lt 0.11

=====

generate layer METAL10.EA.1:L263975, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L15903

Rule Check METAL10.EA.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.04% (388 out of 562) rule checks completed.

operation group: 1645/2080

L38561 = NOT L77702 Metal11

=====

generate layer L38561, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L77702

operation group: 1646/2080

METAL11.EA.1:L263977 = AREA L38561 -lt 0.11

=====

generate layer METAL11.EA.1:L263977, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L38561

Rule Check METAL11.EA.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.22% (389 out of 562) rule checks completed.

operation group: 1647/2080

CMET.S.1:L263978 = EXTE CapMetal -lt 1 -output region -single_point -abut lt 90

=====

generate layer CMET.S.1:L263978, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.S.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.40% (390 out of 562) rule checks completed.

operation group: 1648/2080

CMET.W.1:L263979 = INTE CapMetal -lt 1 -output region -single_point -abut lt 90

=====

generate layer CMET.W.1:L263979, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.57% (391 out of 562) rule checks completed.

operation group: 1649/2080

via10_cap = AND CapMetal Via10

=====

generate layer via10_cap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1650/2080

CMET.E.1:L49600 = SELECT -cut via10_cap Metal11

=====

generate layer CMET.E.1:L49600, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1651/2080

CMET.E.1:L263981 = NOT CMET.E.1:L49600 Metal11

=====

generate layer CMET.E.1:L263981, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer CMET.E.1:L49600

operation group: 1652/2080

CMET.E.1:L263982 = ENC via10_cap Metal11 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer CMET.E.1:L263982, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.75% (392 out of 562) rule checks completed.

operation group: 1653/2080

CMET.E.2:L86172 = SELECT -cut via10_cap CapMetal

=====

generate layer CMET.E.2:L86172, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1654/2080

CMET.E.2:L263984 = NOT CMET.E.2:L86172 CapMetal

=====

generate layer CMET.E.2:L263984, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer CMET.E.2:L86172

operation group: 1655/2080

CMET.E.2:L263985 = ENC via10_cap CapMetal -lt 0.15 -output region -single_point -abut lt 90

=====

generate layer CMET.E.2:L263985, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 69.93% (393 out of 562) rule checks completed.

operation group: 1656/2080

CMET.E.4:L87618 = SELECT -cut CapMetal Metal10

=====

generate layer CMET.E.4:L87618, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1657/2080

CMET.E.4:L263987 = NOT CMET.E.4:L87618 Metal10

=====

generate layer CMET.E.4:L263987, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer CMET.E.4:L87618

operation group: 1658/2080

CMET.E.4:L263988 = ENC CapMetal Metal10 -lt 0.2 -output region -single_point -abut lt 90

=====

generate layer CMET.E.4:L263988, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.E.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 70.11% (394 out of 562) rule checks completed.

operation group: 1659/2080

CMET.E.3:L263989 = ENC Metal11 CapMetal -lt 0.1 -output region -single_point -abut lt 90

=====

generate layer CMET.E.3:L263989, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check CMET.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 70.28% (395 out of 562) rule checks completed.

operation group: 1660/2080

VIA1.W.1:L263990 = RECT_CHK Via1 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA1.W.1:L263990, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA1.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 70.46% (396 out of 562) rule checks completed.

operation group: 1661/2080

VIA1.SP.1:L263991 = EXTE Via1 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA1.SP.1:L263991, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA1.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 70.64% (397 out of 562) rule checks completed.

operation group: 1662/2080

VIA2.W.1:L263992 = RECT_CHK Via2 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA2.W.1:L263992, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA2.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 70.82% (398 out of 562) rule checks completed.

operation group: 1663/2080

VIA2.SP.1:L263993 = EXTE Via2 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA2.SP.1:L263993, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA2.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.00% (399 out of 562) rule checks completed.

operation group: 1664/2080

VIA3.W.1:L263994 = RECT_CHK Via3 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA3.W.1:L263994, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA3.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.17% (400 out of 562) rule checks completed.

operation group: 1665/2080

VIA3.SP.1:L263995 = EXTE Via3 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA3.SP.1:L263995, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA3.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.35% (401 out of 562) rule checks completed.

operation group: 1666/2080

VIA4.W.1:L263996 = RECT_CHK Via4 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA4.W.1:L263996, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA4.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.53% (402 out of 562) rule checks completed.

operation group: 1667/2080

VIA4.SP.1:L263997 = EXTE Via4 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA4.SP.1:L263997, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA4.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.71% (403 out of 562) rule checks completed.

operation group: 1668/2080

VIA5.W.1:L263998 = RECT_CHK Via5 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA5.W.1:L263998, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA5.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 71.89% (404 out of 562) rule checks completed.

operation group: 1669/2080

VIA5.SP.1:L263999 = EXTE Via5 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA5.SP.1:L263999, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA5.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.06% (405 out of 562) rule checks completed.

operation group: 1670/2080

VIA6.W.1:L264000 = RECT_CHK Via6 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA6.W.1:L264000, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA6.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.24% (406 out of 562) rule checks completed.

operation group: 1671/2080

VIA6.SP.1:L264001 = EXTE Via6 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA6.SP.1:L264001, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA6.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.42% (407 out of 562) rule checks completed.

operation group: 1672/2080

VIA7.W.1:L264002 = RECT_CHK Via7 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA7.W.1:L264002, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA7.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.60% (408 out of 562) rule checks completed.

operation group: 1673/2080

VIA7.SP.1:L264003 = EXTE Via7 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA7.SP.1:L264003, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA7.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.78% (409 out of 562) rule checks completed.

operation group: 1674/2080

VIA8.W.1:L264004 = RECT_CHK Via8 -eq 0.07 -not -by eq 0.07

=====

generate layer VIA8.W.1:L264004, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA8.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 72.95% (410 out of 562) rule checks completed.

operation group: 1675/2080

VIA8.SP.1:L264005 = EXTE Via8 -lt 0.07 -output region -single_point -abut lt 90

=====

generate layer VIA8.SP.1:L264005, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA8.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 73.13% (411 out of 562) rule checks completed.

operation group: 1676/2080

VIA9.W.1:L264006 = RECT_CHK Via9 -eq 0.18 -not -by eq 0.18

=====

generate layer VIA9.W.1:L264006, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA9.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 73.31% (412 out of 562) rule checks completed.

operation group: 1677/2080

VIA9.SP.1:L264007 = EXTE Via9 -lt 0.18 -output region -single_point -abut lt 90

=====

generate layer VIA9.SP.1:L264007, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA9.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 73.49% (413 out of 562) rule checks completed.

operation group: 1678/2080

VIA10.W.1:L264008 = RECT_CHK Via10 -eq 0.18 -not -by eq 0.18

=====

generate layer VIA10.W.1:L264008, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA10.W.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 73.67% (414 out of 562) rule checks completed.

operation group: 1679/2080
VIA10.SP.1:L264009 = EXTE Via10 -lt 0.18 -output region -single_point -abut lt 90
=====

generate layer VIA10.SP.1:L264009, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA10.SP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 73.84% (415 out of 562) rule checks completed.

operation group: 1680/2080
VIA1.E.1:L264010 = ENC Via1 metal1_conn -lt 0.005 -output region -single_point -abut lt 90
-outside_also
=====

generate layer VIA1.E.1:L264010, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA1.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.02% (416 out of 562) rule checks completed.

operation group: 1681/2080
L48147 = AND Via1 metal1_conn
=====

generate layer L48147, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1682/2080
VIA1.E.2:L79310 = GROW L48147 -left 0.03 -right 0.03
=====

generate layer VIA1.E.2:L79310, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1683/2080

VIA1.E.2:L61312 = SELECT -inside VIA1.E.2:L79310 metal1_conn

=====

generate layer VIA1.E.2:L61312, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA1.E.2:L79310

operation group: 1684/2080

VIA1.E.2:L97988 = NOT L48147 VIA1.E.2:L61312

=====

generate layer VIA1.E.2:L97988, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L48147

delete layer VIA1.E.2:L61312

operation group: 1685/2080

VIA1.E.2:L45492 = GROW VIA1.E.2:L97988 -top 0.03 -bottom 0.03

=====

generate layer VIA1.E.2:L45492, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1686/2080

VIA1.E.2:L57692 = SELECT -inside VIA1.E.2:L45492 metal1_conn

=====

generate layer VIA1.E.2:L57692, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA1.E.2:L45492

operation group: 1687/2080

VIA1.E.2:L264017 = NOT VIA1.E.2:L97988 VIA1.E.2:L57692

=====

generate layer VIA1.E.2:L264017, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA1.E.2:L97988

delete layer VIA1.E.2:L57692

Rule Check VIA1.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.20% (417 out of 562) rule checks completed.

operation group: 1688/2080

VIA2.E.1:L264018 = ENC Via2 metal2_conn -lt 0.005 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA2.E.1:L264018, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA2.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.38% (418 out of 562) rule checks completed.

operation group: 1689/2080
L22003 = AND Via2 metal2_conn

=====

generate layer L22003, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1690/2080
VIA2.E.2:L45579 = GROW L22003 -left 0.03 -right 0.03

=====

generate layer VIA2.E.2:L45579, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1691/2080
VIA2.E.2:L32443 = SELECT -inside VIA2.E.2:L45579 metal2_conn

=====

generate layer VIA2.E.2:L32443, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA2.E.2:L45579

operation group: 1692/2080
VIA2.E.2:L60436 = NOT L22003 VIA2.E.2:L32443

=====

generate layer VIA2.E.2:L60436, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L22003
delete layer VIA2.E.2:L32443

operation group: 1693/2080
VIA2.E.2:L50898 = GROW VIA2.E.2:L60436 -top 0.03 -bottom 0.03

=====

generate layer VIA2.E.2:L50898, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1694/2080

VIA2.E.2:L22027 = SELECT -inside VIA2.E.2:L50898 metal2_conn

=====

generate layer VIA2.E.2:L22027, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA2.E.2:L50898

operation group: 1695/2080

VIA2.E.2:L264025 = NOT VIA2.E.2:L60436 VIA2.E.2:L22027

=====

generate layer VIA2.E.2:L264025, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA2.E.2:L60436

delete layer VIA2.E.2:L22027

Rule Check VIA2.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.56% (419 out of 562) rule checks completed.

operation group: 1696/2080

VIA3.E.1:L264026 = ENC Via3 metal3_conn -lt 0.005 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA3.E.1:L264026, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA3.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.73% (420 out of 562) rule checks completed.

operation group: 1697/2080

L95859 = AND Via3 metal3_conn

=====

generate layer L95859, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1698/2080

VIA3.E.2:L62370 = GROW L95859 -left 0.03 -right 0.03

=====

generate layer VIA3.E.2:L62370, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1699/2080

VIA3.E.2:L42078 = SELECT -inside VIA3.E.2:L62370 metal3_conn

=====

generate layer VIA3.E.2:L42078, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA3.E.2:L62370

operation group: 1700/2080

VIA3.E.2:L54118 = NOT L95859 VIA3.E.2:L42078

=====

generate layer VIA3.E.2:L54118, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L95859

delete layer VIA3.E.2:L42078

operation group: 1701/2080

VIA3.E.2:L54678 = GROW VIA3.E.2:L54118 -top 0.03 -bottom 0.03

=====

generate layer VIA3.E.2:L54678, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1702/2080

VIA3.E.2:L95398 = SELECT -inside VIA3.E.2:L54678 metal3_conn

=====

generate layer VIA3.E.2:L95398, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA3.E.2:L54678

operation group: 1703/2080

VIA3.E.2:L264033 = NOT VIA3.E.2:L54118 VIA3.E.2:L95398

=====

generate layer VIA3.E.2:L264033, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA3.E.2:L54118

delete layer VIA3.E.2:L95398

Rule Check VIA3.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 74.91% (421 out of 562) rule checks completed.

operation group: 1704/2080

VIA4.E.1:L264034 = ENC Via4 metal4_conn -lt 0.005 -output region -single_point -abut lt 90 -outside_also

=====

generate layer VIA4.E.1:L264034, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA4.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.09% (422 out of 562) rule checks completed.

operation group: 1705/2080

L69715 = AND Via4 metal4_conn

=====

generate layer L69715, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1706/2080

VIA4.E.2:L46022 = GROW L69715 -left 0.03 -right 0.03

=====

generate layer VIA4.E.2:L46022, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1707/2080

VIA4.E.2:L85893 = SELECT -inside VIA4.E.2:L46022 metal4_conn

=====

generate layer VIA4.E.2:L85893, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA4.E.2:L46022

operation group: 1708/2080

VIA4.E.2:L16336 = NOT L69715 VIA4.E.2:L85893

=====

generate layer VIA4.E.2:L16336, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L69715

delete layer VIA4.E.2:L85893

operation group: 1709/2080

VIA4.E.2:L36674 = GROW VIA4.E.2:L16336 -top 0.03 -bottom 0.03

=====

generate layer VIA4.E.2:L36674, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1710/2080

VIA4.E.2:L51171 = SELECT -inside VIA4.E.2:L36674 metal4_conn

=====

generate layer VIA4.E.2:L51171, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA4.E.2:L36674

operation group: 1711/2080

VIA4.E.2:L264041 = NOT VIA4.E.2:L16336 VIA4.E.2:L51171

=====

generate layer VIA4.E.2:L264041, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA4.E.2:L16336

delete layer VIA4.E.2:L51171

Rule Check VIA4.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.27% (423 out of 562) rule checks completed.

operation group: 1712/2080

VIA5.E.1:L264042 = ENC Via5 metal5_conn -lt 0.005 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA5.E.1:L264042, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA5.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.44% (424 out of 562) rule checks completed.

operation group: 1713/2080

L43571 = AND Via5 metal5_conn

=====

generate layer L43571, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1714/2080

VIA5.E.2:L64466 = GROW L43571 -left 0.03 -right 0.03

=====

generate layer VIA5.E.2:L64466, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1715/2080

VIA5.E.2:L24418 = SELECT -inside VIA5.E.2:L64466 metal5_conn

=====

generate layer VIA5.E.2:L24418, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA5.E.2:L64466

operation group: 1716/2080

VIA5.E.2:L89764 = NOT L43571 VIA5.E.2:L24418

=====

generate layer VIA5.E.2:L89764, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L43571

delete layer VIA5.E.2:L24418

operation group: 1717/2080

VIA5.E.2:L18437 = GROW VIA5.E.2:L89764 -top 0.03 -bottom 0.03

=====

generate layer VIA5.E.2:L18437, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1718/2080

VIA5.E.2:L20611 = SELECT -inside VIA5.E.2:L18437 metal5_conn

=====

generate layer VIA5.E.2:L20611, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA5.E.2:L18437

operation group: 1719/2080

VIA5.E.2:L264049 = NOT VIA5.E.2:L89764 VIA5.E.2:L20611

=====

generate layer VIA5.E.2:L264049, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA5.E.2:L89764

delete layer VIA5.E.2:L20611

Rule Check VIA5.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.62% (425 out of 562) rule checks completed.

operation group: 1720/2080

VIA6.E.1:L264050 = ENC Via6 metal6_conn -lt 0.005 -output region -single_point -abut lt 90 -outside_also

=====

generate layer VIA6.E.1:L264050, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA6.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.80% (426 out of 562) rule checks completed.

operation group: 1721/2080

L17427 = AND Via6 metal6_conn

=====

generate layer L17427, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1722/2080

VIA6.E.2:L85740 = GROW L17427 -left 0.03 -right 0.03

=====

generate layer VIA6.E.2:L85740, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1723/2080

VIA6.E.2:L72383 = SELECT -inside VIA6.E.2:L85740 metal6_conn

=====

generate layer VIA6.E.2:L72383, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA6.E.2:L85740

operation group: 1724/2080

VIA6.E.2:L40141 = NOT L17427 VIA6.E.2:L72383

=====

generate layer VIA6.E.2:L40141, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L17427

delete layer VIA6.E.2:L72383

operation group: 1725/2080

VIA6.E.2:L11011 = GROW VIA6.E.2:L40141 -top 0.03 -bottom 0.03

=====

generate layer VIA6.E.2:L11011, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1726/2080

VIA6.E.2:L24165 = SELECT -inside VIA6.E.2:L11011 metal6_conn

=====

generate layer VIA6.E.2:L24165, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.09 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA6.E.2:L11011

operation group: 1727/2080

VIA6.E.2:L264057 = NOT VIA6.E.2:L40141 VIA6.E.2:L24165

=====

generate layer VIA6.E.2:L264057, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA6.E.2:L40141

delete layer VIA6.E.2:L24165

Rule Check VIA6.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 75.98% (427 out of 562) rule checks completed.

operation group: 1728/2080

VIA7.E.1:L264058 = ENC Via7 metal7_conn -lt 0.005 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA7.E.1:L264058, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA7.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 76.16% (428 out of 562) rule checks completed.

operation group: 1729/2080

L76013 = AND Via7 metal7_conn

=====

generate layer L76013, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1730/2080

VIA7.E.2:L9579 = GROW L76013 -left 0.03 -right 0.03

=====

generate layer VIA7.E.2:L9579, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1731/2080

VIA7.E.2:L77354 = SELECT -inside VIA7.E.2:L9579 metal7_conn

=====

generate layer VIA7.E.2:L77354, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA7.E.2:L9579

operation group: 1732/2080

VIA7.E.2:L90834 = NOT L76013 VIA7.E.2:L77354

=====

generate layer VIA7.E.2:L90834, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L76013

delete layer VIA7.E.2:L77354

operation group: 1733/2080

VIA7.E.2:L33997 = GROW VIA7.E.2:L90834 -top 0.03 -bottom 0.03

=====

generate layer VIA7.E.2:L33997, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1734/2080

VIA7.E.2:L99327 = SELECT -inside VIA7.E.2:L33997 metal7_conn

=====

generate layer VIA7.E.2:L99327, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA7.E.2:L33997

operation group: 1735/2080

VIA7.E.2:L264065 = NOT VIA7.E.2:L90834 VIA7.E.2:L99327

=====

generate layer VIA7.E.2:L264065, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.15 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA7.E.2:L90834

delete layer VIA7.E.2:L99327

Rule Check VIA7.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 76.33% (429 out of 562) rule checks completed.

operation group: 1736/2080

VIA8.E.1:L264066 = ENC Via8 metal8_conn -lt 0.005 -output region -single_point -abut lt 90 -outside_also

=====

generate layer VIA8.E.1:L264066, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA8.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 76.51% (430 out of 562) rule checks completed.

operation group: 1737/2080

L2157 = AND Via8 metal8_conn

=====

generate layer L2157, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1738/2080

VIA8.E.2:L82623 = GROW L2157 -left 0.03 -right 0.03

=====

generate layer VIA8.E.2:L82623, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1739/2080

VIA8.E.2:L55130 = SELECT -inside VIA8.E.2:L82623 metal8_conn

=====

generate layer VIA8.E.2:L55130, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA8.E.2:L82623

operation group: 1740/2080

VIA8.E.2:L10147 = NOT L2157 VIA8.E.2:L55130

=====

generate layer VIA8.E.2:L10147, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L2157

delete layer VIA8.E.2:L55130

operation group: 1741/2080

VIA8.E.2:L58106 = GROW VIA8.E.2:L10147 -top 0.03 -bottom 0.03

=====

generate layer VIA8.E.2:L58106, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1742/2080

VIA8.E.2:L29085 = SELECT -inside VIA8.E.2:L58106 metal8_conn

=====

generate layer VIA8.E.2:L29085, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA8.E.2:L58106

operation group: 1743/2080

VIA8.E.2:L264073 = NOT VIA8.E.2:L10147 VIA8.E.2:L29085

=====

generate layer VIA8.E.2:L264073, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA8.E.2:L10147

delete layer VIA8.E.2:L29085

Rule Check VIA8.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 76.69% (431 out of 562) rule checks completed.

operation group: 1744/2080

VIA9.E.1:L264074 = ENC Via9 metal9_conn -lt 0.015 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA9.E.1:L264074, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA9.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 76.87% (432 out of 562) rule checks completed.

operation group: 1745/2080

L28301 = AND Via9 metal9_conn

=====

generate layer L28301, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1746/2080

VIA9.E.2:L32306 = GROW L28301 -left 0.04 -right 0.04

```
=====
generate layer VIA9.E.2:L32306, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1747/2080

VIA9.E.2:L19774 = SELECT -inside VIA9.E.2:L32306 metal9_conn

```
=====
generate layer VIA9.E.2:L19774, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer VIA9.E.2:L32306

operation group: 1748/2080

VIA9.E.2:L42543 = NOT L28301 VIA9.E.2:L19774

```
=====
generate layer VIA9.E.2:L42543, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer L28301

delete layer VIA9.E.2:L19774

operation group: 1749/2080

VIA9.E.2:L24121 = GROW VIA9.E.2:L42543 -top 0.04 -bottom 0.04

```
=====
generate layer VIA9.E.2:L24121, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1750/2080

VIA9.E.2:L36362 = SELECT -inside VIA9.E.2:L24121 metal9_conn

```
=====
generate layer VIA9.E.2:L36362, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer VIA9.E.2:L24121

operation group: 1751/2080

VIA9.E.2:L264081 = NOT VIA9.E.2:L42543 VIA9.E.2:L36362

```
=====
generate layer VIA9.E.2:L264081, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer VIA9.E.2:L42543

delete layer VIA9.E.2:L36362

Rule Check VIA9.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.05% (433 out of 562) rule checks completed.

operation group: 1752/2080

VIA10.E.1:L264082 = ENC Via10 Metal10 -lt 0.015 -output region -single_point -abut lt 90
-outside_also

=====

generate layer VIA10.E.1:L264082, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

Rule Check VIA10.E.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.22% (434 out of 562) rule checks completed.

operation group: 1753/2080

L1578 = AND Metal10 Via10

=====

generate layer L1578, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1754/2080

VIA10.E.2:L13315 = GROW L1578 -left 0.04 -right 0.04

=====

generate layer VIA10.E.2:L13315, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1755/2080

VIA10.E.2:L77898 = SELECT -inside VIA10.E.2:L13315 Metal10

=====

generate layer VIA10.E.2:L77898, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer VIA10.E.2:L13315

operation group: 1756/2080

VIA10.E.2:L22439 = NOT L1578 VIA10.E.2:L77898

=====

generate layer VIA10.E.2:L22439, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer L1578

delete layer VIA10.E.2:L77898

operation group: 1757/2080

VIA10.E.2:L21067 = GROW VIA10.E.2:L22439 -top 0.04 -bottom 0.04

```
=====
generate layer VIA10.E.2:L21067, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

operation group: 1758/2080

VIA10.E.2:L87079 = SELECT -inside VIA10.E.2:L21067 Metal10

```
=====
generate layer VIA10.E.2:L87079, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer VIA10.E.2:L21067

operation group: 1759/2080

VIA10.E.2:L264089 = NOT VIA10.E.2:L22439 VIA10.E.2:L87079

```
=====
generate layer VIA10.E.2:L264089, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer VIA10.E.2:L22439

delete layer VIA10.E.2:L87079

Rule Check VIA10.E.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.40% (435 out of 562) rule checks completed.

operation group: 1760/2080

VIA1.X.2:L264106 = COPY rule_VIA1_X_2

```
=====
generate layer VIA1.X.2:L264106, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer rule_VIA1_X_2

Rule Check VIA1.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.58% (436 out of 562) rule checks completed.

operation group: 1761/2080

VIA2.X.2:L264107 = COPY rule_VIA2_X_2

```
=====
generate layer VIA2.X.2:L264107, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95
```

delete layer rule_VIA2_X_2

Rule Check VIA2.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.76% (437 out of 562) rule checks completed.

operation group: 1762/2080

VIA3.X.2:L264108 = COPY rule_VIA3_X_2

=====

generate layer VIA3.X.2:L264108, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA3_X_2

Rule Check VIA3.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 77.94% (438 out of 562) rule checks completed.

operation group: 1763/2080

VIA4.X.2:L264109 = COPY rule_VIA4_X_2

=====

generate layer VIA4.X.2:L264109, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA4_X_2

Rule Check VIA4.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 78.11% (439 out of 562) rule checks completed.

operation group: 1764/2080

VIA5.X.2:L264110 = COPY rule_VIA5_X_2

=====

generate layer VIA5.X.2:L264110, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA5_X_2

Rule Check VIA5.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 78.29% (440 out of 562) rule checks completed.

operation group: 1765/2080

VIA6.X.2:L264111 = COPY rule_VIA6_X_2

=====

generate layer VIA6.X.2:L264111, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA6_X_2

Rule Check VIA6.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 78.47% (441 out of 562) rule checks completed.

operation group: 1766/2080

VIA7.X.2:L264112 = COPY rule_VIA7_X_2

=====

generate layer VIA7.X.2:L264112, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA7_X_2

Rule Check VIA7.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 78.65% (442 out of 562) rule checks completed.

operation group: 1767/2080

VIA8.X.2:L264113 = COPY rule_VIA8_X_2

=====

generate layer VIA8.X.2:L264113, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

delete layer rule_VIA8_X_2

Rule Check VIA8.X.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

[INFO]: 78.83% (443 out of 562) rule checks completed.

operation group: 1768/2080

L89122 = AND Nwell ntap

=====

generate layer L89122, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1769/2080

psd = SELECT -touch pdiff_conn Poly

=====

generate layer psd, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8

Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/17.73 peak=17.95

operation group: 1770/2080
L19028 = AND Nwell psd

=====

generate layer L19028, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.95

operation group: 1771/2080
L97857 = SIZE L89122 -by 20 -inside_of Nwell -step 0.6
LATCHUP.1:L264121 = NOT L19028 L97857

=====

generate layer LATCHUP.1:L264121, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/17.98 peak=17.98

delete layer L89122
delete layer L19028

Rule Check LATCHUP.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.00% (444 out of 562) rule checks completed.

operation group: 1772/2080
L47516 = NOT ptap Nwell

=====

generate layer L47516, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/1.10 real=0.00/1.16 Memory: 9.51/9.69/17.73 peak=17.98

operation group: 1773/2080
L8219 = NOT bulk Nwell

=====

generate layer L8219, TYP = P, HPN = 1, FPN = 1, HEN = 8, FEN = 8
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/17.73 peak=17.98

operation group: 1774/2080
nsd = SELECT -touch ndiff_conn Poly

=====

generate layer nsd, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/17.73 peak=17.98

operation group: 1775/2080
L29684 = OR NPNdummy PNPdummy Nwell

=====

generate layer L29684, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer PNPdummy

operation group: 1776/2080

L62163 = NOT nsd L29684

=====

generate layer L62163, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/13.71 peak=17.98

delete layer L29684

operation group: 1777/2080

L35547 = SIZE L47516 -by 20 -inside_of L8219 -step 0.21

LATCHUP.2:L264128 = NOT L62163 L35547

=====

generate layer LATCHUP.2:L264128, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/17.98 peak=17.98

delete layer L47516

delete layer L8219

delete layer L62163

Rule Check LATCHUP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.18% (445 out of 562) rule checks completed.

operation group: 1778/2080

L23388 = AND ESDdummy Oxide

=====

generate layer L23388, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1779/2080

L23479 = EDGE_BOOLEAN Poly L23388 -inside

=====

generate layer L23479, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1780/2080

ESD.1:L264145 = EDGE_LENGTH L23479 -lege 10 30 -not

=====

generate layer ESD.1:L264145, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check ESD.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.36% (446 out of 562) rule checks completed.

operation group: 1781/2080

nsd_esd = AND ESDdummy nsd

=====

generate layer nsd_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer nsd

operation group: 1782/2080

L54535 = SELECT -cut Oxide nsd_esd

=====

generate layer L54535, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1783/2080

ptap_esd = AND ESDdummy ptap

=====

generate layer ptap_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1784/2080

L31818 = HOLES ptap_esd

=====

generate layer L31818, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1785/2080

L31817 = NOT L31818 ptap_esd

=====

generate layer L31817, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L31818

operation group: 1786/2080

rule_ESD_5 = NOT L54535 L31817

=====

generate layer rule_ESD_5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L54535
delete layer L31817

operation group: 1787/2080

ESD.5:L264151 = AND ESDdummy rule_ESD_5

=====

generate layer ESD.5:L264151, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer rule_ESD_5

Rule Check ESD.5 finished, 0 error(s) reported.
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.54% (447 out of 562) rule checks completed.

operation group: 1788/2080

psd_esd = AND ESDdummy psd

=====

generate layer psd_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer psd

operation group: 1789/2080

L52827 = SELECT -cut Oxide psd_esd

=====

generate layer L52827, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1790/2080

ntap_esd = AND ESDdummy ntap

=====

generate layer ntap_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1791/2080

L85192 = HOLES ntap_esd

=====

generate layer L85192, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1792/2080

L85191 = NOT L85192 ntap_esd

=====

generate layer L85191, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L85192

operation group: 1793/2080

rule_ESD_6 = NOT L52827 L85191

=====

generate layer rule_ESD_6, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L52827

delete layer L85191

operation group: 1794/2080

ESD.6:L264153 = AND ESDdummy rule_ESD_6

=====

generate layer ESD.6:L264153, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer rule_ESD_6

Rule Check ESD.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.72% (448 out of 562) rule checks completed.

operation group: 1795/2080

rule_ESD_7_nmos = SELECT -touch ptap_esd nsd_esd

=====

generate layer rule_ESD_7_nmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer ptap_esd

operation group: 1796/2080

ESD.7:L264155 = AND ESDdummy rule_ESD_7_nmos

=====

generate layer ESD.7:L264155, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer rule_ESD_7_nmos

Rule Check ESD.7 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 79.89% (449 out of 562) rule checks completed.

operation group: 1797/2080

rule_ESD_7_pmos = SELECT -touch ntap_esd psd_esd

=====

generate layer rule_ESD_7_pmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer ntap_esd

operation group: 1798/2080

ESD.7_2:L264157 = AND ESDdummy rule_ESD_7_pmos

=====

generate layer ESD.7_2:L264157, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer rule_ESD_7_pmos

Rule Check ESD.7_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.07% (450 out of 562) rule checks completed.

operation group: 1799/2080

L9896 = EDGE_BOOLEAN SiProt L23388 -inside

=====

generate layer L9896, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1800/2080

ESD.11:L264163 = INTE L23479 L9896 -lt 0.05 -output region -abut lt 90

=====

generate layer ESD.11:L264163, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check ESD.11 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.25% (451 out of 562) rule checks completed.

operation group: 1801/2080

ESD.12:L264164 = ENC L23479 L9896 -lt 0.9 -output region -abut lt 90

=====

generate layer ESD.12:L264164, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L9896

Rule Check ESD.12 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.43% (452 out of 562) rule checks completed.

operation group: 1802/2080

L88738 = AND ESDdummy SiProt

=====

generate layer L88738, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1803/2080

ESD.13:L264166 = INTE L23388 L88738 -lt 0.9 -output region -single_point -abut lt 90

=====

generate layer ESD.13:L264166, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L88738

Rule Check ESD.13 finished, 0 error(s) reported.

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.60% (453 out of 562) rule checks completed.

operation group: 1804/2080

L23215 = AND ESDdummy Poly

=====

generate layer L23215, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1805/2080

L43257 = EDGE_BOOLEAN Oxide L23215 -inside

=====

generate layer L43257, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L23215

operation group: 1806/2080

ESD.14:L264169 = EDGE_LENGTH L43257 -ne 0.2

=====

generate layer ESD.14:L264169, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.11 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L43257

Rule Check ESD.14 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.78% (454 out of 562) rule checks completed.

operation group: 1807/2080

L43275 = AND Cont L23388

=====

generate layer L43275, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L23388

operation group: 1808/2080

ESD.15:L39241 = EDGE_EXPAND L43275 -inside_by 0.001

=====

generate layer ESD.15:L39241, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1809/2080

ESD.15:L64525 = EDGE_EXPAND L23479 -inside_by 0.001

=====

generate layer ESD.15:L64525, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1810/2080

ESD.15:L264173 = AND ESD.15:L39241 ESD.15:L64525

=====

generate layer ESD.15:L264173, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer ESD.15:L39241

delete layer ESD.15:L64525

operation group: 1811/2080

ESD.15:L264174 = EXTE L43275 L23479 -lt 0.12 -output region -abut lt 90

=====

generate layer ESD.15:L264174, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L43275

delete layer L23479

Rule Check ESD.15 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 80.96% (455 out of 562) rule checks completed.

operation group: 1812/2080

BONDPAD.E.1:L93393 = SELECT -cut Bondpad bondpad_metal1_filled

=====

generate layer BONDPAD.E.1:L93393, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1813/2080

BONDPAD.E.1:L264176 = NOT BONDPAD.E.1:L93393 bondpad_metal1_filled

=====

generate layer BONDPAD.E.1:L264176, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1:L93393

operation group: 1814/2080

BONDPAD.E.1:L264177 = ENC Bondpad bondpad_metal1_filled -lt 2 -output region -single_point -abut
lt 90

=====

generate layer BONDPAD.E.1:L264177, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.17 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 81.14% (456 out of 562) rule checks completed.

operation group: 1815/2080

BONDPAD.SP.2:L264178 = EXTE Metal1 bondpad_metal1_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2:L264178, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal1

delete layer bondpad_metal1_filled

Rule Check BONDPAD.SP.2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 81.32% (457 out of 562) rule checks completed.

operation group: 1816/2080

BONDPAD.E.1_2:L3728 = SELECT -cut Bondpad bondpad_metal2_filled

=====

generate layer BONDPAD.E.1_2:L3728, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1817/2080

BONDPAD.E.1_2:L264180 = NOT BONDPAD.E.1_2:L3728 bondpad_metal2_filled

=====

generate layer BONDPAD.E.1_2:L264180, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_2:L3728

operation group: 1818/2080

BONDPAD.E.1_2:L264181 = ENC Bondpad bondpad_metal2_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_2:L264181, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 81.49% (458 out of 562) rule checks completed.

operation group: 1819/2080

BONDPAD.SP.2_2:L264182 = EXTE Metal2 bondpad_metal2_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_2:L264182, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal2

delete layer bondpad_metal2_filled

Rule Check BONDPAD.SP.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 81.67% (459 out of 562) rule checks completed.

operation group: 1820/2080

BONDPAD.E.1_3:L53233 = SELECT -cut Bondpad bondpad_metal3_filled

=====

generate layer BONDPAD.E.1_3:L53233, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1821/2080

BONDPAD.E.1_3:L264184 = NOT BONDPAD.E.1_3:L53233 bondpad_metal3_filled

=====

generate layer BONDPAD.E.1_3:L264184, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_3:L53233

operation group: 1822/2080

BONDPAD.E.1_3:L264185 = ENC Bondpad bondpad_metal3_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_3:L264185, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_3 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 81.85% (460 out of 562) rule checks completed.

operation group: 1823/2080

BONDPAD.SP.2_3:L264186 = EXTE Metal3 bondpad_metal3_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_3:L264186, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal3
delete layer bondpad_metal3_filled

Rule Check BONDPAD.SP.2_3 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.03% (461 out of 562) rule checks completed.

operation group: 1824/2080

BONDPAD.E.1_4:L57102 = SELECT -cut Bondpad bondpad_metal4_filled

=====

generate layer BONDPAD.E.1_4:L57102, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1825/2080

BONDPAD.E.1_4:L264188 = NOT BONDPAD.E.1_4:L57102 bondpad_metal4_filled

=====

generate layer BONDPAD.E.1_4:L264188, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_4:L57102

operation group: 1826/2080

BONDPAD.E.1_4:L264189 = ENC Bondpad bondpad_metal4_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_4:L264189, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.21% (462 out of 562) rule checks completed.

operation group: 1827/2080

BONDPAD.SP.2_4:L264190 = EXTE Metal4 bondpad_metal4_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_4:L264190, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal4
delete layer bondpad_metal4_filled

Rule Check BONDPAD.SP.2_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.38% (463 out of 562) rule checks completed.

operation group: 1828/2080

BONDPAD.E.1_5:L99859 = SELECT -cut Bondpad bondpad_metal5_filled

=====

generate layer BONDPAD.E.1_5:L99859, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1829/2080

BONDPAD.E.1_5:L264192 = NOT BONDPAD.E.1_5:L99859 bondpad_metal5_filled

=====

generate layer BONDPAD.E.1_5:L264192, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_5:L99859

operation group: 1830/2080

BONDPAD.E.1_5:L264193 = ENC Bondpad bondpad_metal5_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_5:L264193, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_5 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.56% (464 out of 562) rule checks completed.

operation group: 1831/2080

BONDPAD.SP.2_5:L264194 = EXTE Metal5 bondpad_metal5_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_5:L264194, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal5
delete layer bondpad_metal5_filled

Rule Check BONDPAD.SP.2_5 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.74% (465 out of 562) rule checks completed.

operation group: 1832/2080

BONDPAD.E.1_6:L10476 = SELECT -cut Bondpad bondpad_metal6_filled

=====

generate layer BONDPAD.E.1_6:L10476, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1833/2080

BONDPAD.E.1_6:L264196 = NOT BONDPAD.E.1_6:L10476 bondpad_metal6_filled

=====

generate layer BONDPAD.E.1_6:L264196, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_6:L10476

operation group: 1834/2080

BONDPAD.E.1_6:L264197 = ENC Bondpad bondpad_metal6_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_6:L264197, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_6 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 82.92% (466 out of 562) rule checks completed.

operation group: 1835/2080

BONDPAD.SP.2_6:L264198 = EXTE Metal6 bondpad_metal6_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_6:L264198, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal6
delete layer bondpad_metal6_filled

Rule Check BONDPAD.SP.2_6 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 83.10% (467 out of 562) rule checks completed.

operation group: 1836/2080

BONDPAD.E.1_7:L46485 = SELECT -cut Bondpad bondpad_metal7_filled

=====

generate layer BONDPAD.E.1_7:L46485, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1837/2080

BONDPAD.E.1_7:L264200 = NOT BONDPAD.E.1_7:L46485 bondpad_metal7_filled

=====

generate layer BONDPAD.E.1_7:L264200, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_7:L46485

operation group: 1838/2080

BONDPAD.E.1_7:L264201 = ENC Bondpad bondpad_metal7_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_7:L264201, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 83.27% (468 out of 562) rule checks completed.

operation group: 1839/2080

BONDPAD.SP.2_7:L264202 = EXTE Metal7 bondpad_metal7_filled -lt 3 -output region -single_point

-abut lt 90

```
=====
generate layer BONDPAD.SP.2_7:L264202, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer Metal7
delete layer bondpad_metal7_filled
```

```
Rule Check BONDPAD.SP.2_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

[INFO]: 83.45% (469 out of 562) rule checks completed.

operation group: 1840/2080

```
BONDPAD.E.1_8:L36150 = SELECT -cut Bondpad bondpad_metal8_filled
```

```
=====
generate layer BONDPAD.E.1_8:L36150, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1841/2080

```
BONDPAD.E.1_8:L264204 = NOT BONDPAD.E.1_8:L36150 bondpad_metal8_filled
```

```
=====
generate layer BONDPAD.E.1_8:L264204, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer BONDPAD.E.1_8:L36150
```

operation group: 1842/2080

```
BONDPAD.E.1_8:L264205 = ENC Bondpad bondpad_metal8_filled -lt 2 -output region -single_point
-abut lt 90
```

```
=====
generate layer BONDPAD.E.1_8:L264205, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
Rule Check BONDPAD.E.1_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

[INFO]: 83.63% (470 out of 562) rule checks completed.

operation group: 1843/2080

```
BONDPAD.SP.2_8:L264206 = EXTE Metal8 bondpad_metal8_filled -lt 3 -output region -single_point
-abut lt 90
```

```
=====
generate layer BONDPAD.SP.2_8:L264206, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer Metal8
```

delete layer bondpad_metal8_filled

Rule Check BONDPAD.SP.2_8 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 83.81% (471 out of 562) rule checks completed.

operation group: 1844/2080

BONDPAD.E.1_9:L74185 = SELECT -cut Bondpad bondpad_metal9_filled

=====

generate layer BONDPAD.E.1_9:L74185, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1845/2080

BONDPAD.E.1_9:L264208 = NOT BONDPAD.E.1_9:L74185 bondpad_metal9_filled

=====

generate layer BONDPAD.E.1_9:L264208, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_9:L74185

operation group: 1846/2080

BONDPAD.E.1_9:L264209 = ENC Bondpad bondpad_metal9_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_9:L264209, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_9 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 83.99% (472 out of 562) rule checks completed.

operation group: 1847/2080

BONDPAD.SP.2_9:L264210 = EXTE Metal9 bondpad_metal9_filled -lt 3 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.2_9:L264210, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer bondpad_metal9_filled

Rule Check BONDPAD.SP.2_9 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 84.16% (473 out of 562) rule checks completed.

operation group: 1848/2080

BONDPAD.E.1_10:L43841 = SELECT -cut Bondpad bondpad_metal10_filled

=====

generate layer BONDPAD.E.1_10:L43841, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1849/2080

BONDPAD.E.1_10:L264212 = NOT BONDPAD.E.1_10:L43841 bondpad_metal10_filled

=====

generate layer BONDPAD.E.1_10:L264212, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_10:L43841

operation group: 1850/2080

BONDPAD.E.1_10:L264213 = ENC Bondpad bondpad_metal10_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_10:L264213, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 84.34% (474 out of 562) rule checks completed.

operation group: 1851/2080

BONDPAD.SP.2_10:L264214 = EXTE Metal10 bondpad_metal10_filled -lt 3 -output region
-single_point -abut lt 90

=====

generate layer BONDPAD.SP.2_10:L264214, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal10
delete layer bondpad_metal10_filled

Rule Check BONDPAD.SP.2_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 84.52% (475 out of 562) rule checks completed.

operation group: 1852/2080

BONDPAD.E.1_11:L13120 = SELECT -cut Bondpad bondpad_metal11_filled

=====

generate layer BONDPAD.E.1_11:L13120, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1853/2080

BONDPAD.E.1_11:L264216 = NOT BONDPAD.E.1_11:L13120 bondpad_metal11_filled

=====

generate layer BONDPAD.E.1_11:L264216, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.1_11:L13120

operation group: 1854/2080

BONDPAD.E.1_11:L264217 = ENC Bondpad bondpad_metal11_filled -lt 2 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.E.1_11:L264217, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.1_11 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 84.70% (476 out of 562) rule checks completed.

operation group: 1855/2080

BONDPAD.SP.2_11:L264218 = EXTE Metal11 bondpad_metal11_filled -lt 3 -output region
-single_point -abut lt 90

=====

generate layer BONDPAD.SP.2_11:L264218, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.SP.2_11 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 84.88% (477 out of 562) rule checks completed.

operation group: 1856/2080

BONDPAD.W.1:L38661 = SELECT -cut bondpad_sq bondpad_to_die_edge

=====

generate layer BONDPAD.W.1:L38661, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1857/2080

BONDPAD.W.1:L84099 = SELECT -cut bondpad_to_die_edge bondpad_sq

=====

generate layer BONDPAD.W.1:L84099, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1858/2080

BONDPAD.W.1:L264232 = AND BONDPAD.W.1:L38661 BONDPAD.W.1:L84099

=====

generate layer BONDPAD.W.1:L264232, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.W.1:L38661

delete layer BONDPAD.W.1:L84099

operation group: 1859/2080

BONDPAD.W.1:L54252 = EXTE bondpad_sq bondpad_to_die_edge -lt 5 -output positive1
-single_point -abut lt 90

=====

generate layer BONDPAD.W.1:L54252, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer bondpad_sq

delete layer bondpad_to_die_edge

operation group: 1860/2080

BONDPAD.W.1:L264234 = EDGE_LENGTH BONDPAD.W.1:L54252 -lt 45

=====

generate layer BONDPAD.W.1:L264234, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.W.1:L54252

Rule Check BONDPAD.W.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 85.05% (478 out of 562) rule checks completed.

operation group: 1861/2080

BONDPAD.SP.1:L264235 = EXTE Bondpad -lt 8 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.1:L264235, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 85.23% (479 out of 562) rule checks completed.

operation group: 1862/2080

L43679 = ANGLE bondpad_metal1 -ltgt 0 90

```
=====
generate layer L43679, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1863/2080

BONDPAD.B.1B:L264238 = EDGE_LENGTH L43679 -lege 1.8 3.2 -not

```
=====
generate layer BONDPAD.B.1B:L264238, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

delete layer L43679

Rule Check BONDPAD.B.1B finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 85.41% (480 out of 562) rule checks completed.

operation group: 1864/2080

L26398 = ANGLE bondpad_metal2 -ltgt 0 90

```
=====
generate layer L26398, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1865/2080

BONDPAD.B.1B_2:L264240 = EDGE_LENGTH L26398 -lege 1.8 3.2 -not

```
=====
generate layer BONDPAD.B.1B_2:L264240, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

delete layer L26398

Rule Check BONDPAD.B.1B_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 85.59% (481 out of 562) rule checks completed.

operation group: 1866/2080

L9117 = ANGLE bondpad_metal3 -ltgt 0 90

```
=====
generate layer L9117, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1867/2080

BONDPAD.B.1B_3:L264242 = EDGE_LENGTH L9117 -lege 1.8 3.2 -not

=====

```
generate layer BONDPAD.B.1B_3:L264242, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer L9117
```

```
Rule Check BONDPAD.B.1B_3 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

[INFO]: 85.77% (482 out of 562) rule checks completed.

```
operation group: 1868/2080
L91836 = ANGLE bondpad_metal4 -ltgt 0 90
```

=====

```
generate layer L91836, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
operation group: 1869/2080
BONDPAD.B.1B_4:L264244 = EDGE_LENGTH L91836 -lege 1.8 3.2 -not
```

=====

```
generate layer BONDPAD.B.1B_4:L264244, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer L91836
```

```
Rule Check BONDPAD.B.1B_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

[INFO]: 85.94% (483 out of 562) rule checks completed.

```
operation group: 1870/2080
L74555 = ANGLE bondpad_metal5 -ltgt 0 90
```

=====

```
generate layer L74555, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
operation group: 1871/2080
BONDPAD.B.1B_5:L264246 = EDGE_LENGTH L74555 -lege 1.8 3.2 -not
```

=====

```
generate layer BONDPAD.B.1B_5:L264246, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

```
delete layer L74555
```

```
Rule Check BONDPAD.B.1B_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

[INFO]: 86.12% (484 out of 562) rule checks completed.

operation group: 1872/2080

L57274 = ANGLE bondpad_metal6 -ltgt 0 90

```
=====
generate layer L57274, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1873/2080

BONDPAD.B.1B_6:L264248 = EDGE_LENGTH L57274 -lege 1.8 3.2 -not

```
=====
generate layer BONDPAD.B.1B_6:L264248, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

delete layer L57274

Rule Check BONDPAD.B.1B_6 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 86.30% (485 out of 562) rule checks completed.

operation group: 1874/2080

L39993 = ANGLE bondpad_metal7 -ltgt 0 90

```
=====
generate layer L39993, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

operation group: 1875/2080

BONDPAD.B.1B_7:L264250 = EDGE_LENGTH L39993 -lege 1.8 3.2 -not

```
=====
generate layer BONDPAD.B.1B_7:L264250, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```

delete layer L39993

Rule Check BONDPAD.B.1B_7 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 86.48% (486 out of 562) rule checks completed.

operation group: 1876/2080

L22712 = ANGLE bondpad_metal8 -ltgt 0 90

```
=====
generate layer L22712, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98
```


operation group: 1877/2080

BONDPAD.B.1B_8:L264252 = EDGE_LENGTH L22712 -lege 1.8 3.2 -not

=====

generate layer BONDPAD.B.1B_8:L264252, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L22712

Rule Check BONDPAD.B.1B_8 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 86.65% (487 out of 562) rule checks completed.

operation group: 1878/2080

L5431 = ANGLE bondpad_metal9 -ltgt 0 90

=====

generate layer L5431, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1879/2080

BONDPAD.B.1B_9:L264254 = EDGE_LENGTH L5431 -lege 1.8 3.2 -not

=====

generate layer BONDPAD.B.1B_9:L264254, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L5431

Rule Check BONDPAD.B.1B_9 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 86.83% (488 out of 562) rule checks completed.

operation group: 1880/2080

L35077 = ANGLE bondpad_metal10 -ltgt 0 90

=====

generate layer L35077, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1881/2080

BONDPAD.B.1B_10:L264256 = EDGE_LENGTH L35077 -lege 1.8 3.2 -not

=====

generate layer BONDPAD.B.1B_10:L264256, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L35077

Rule Check BONDPAD.B.1B_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.01% (489 out of 562) rule checks completed.

operation group: 1882/2080

bondpad_metal11 = AND Metal11 bondpad_metal11_filled

=====

generate layer bondpad_metal11, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer Metal11
delete layer bondpad_metal11_filled

operation group: 1883/2080

L52358 = ANGLE bondpad_metal11 -ltgt 0 90

=====

generate layer L52358, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1884/2080

BONDPAD.B.1B_11:L264258 = EDGE_LENGTH L52358 -lege 1.8 3.2 -not

=====

generate layer BONDPAD.B.1B_11:L264258, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L52358

Rule Check BONDPAD.B.1B_11 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.19% (490 out of 562) rule checks completed.

operation group: 1885/2080

L87123 = AND Via1 bondpad_metal1

=====

generate layer L87123, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1886/2080

BONDPAD.SP.3:L264260 = EXTE L87123 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3:L264260, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L87123

Rule Check BONDPAD.SP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.37% (491 out of 562) rule checks completed.

operation group: 1887/2080

L21299 = AND Via2 bondpad_metal2

=====

generate layer L21299, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1888/2080

BONDPAD.SP.3_2:L264262 = EXTE L21299 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3_2:L264262, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L21299

Rule Check BONDPAD.SP.3_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.54% (492 out of 562) rule checks completed.

operation group: 1889/2080

L55475 = AND Via3 bondpad_metal3

=====

generate layer L55475, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1890/2080

BONDPAD.SP.3_3:L264264 = EXTE L55475 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3_3:L264264, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L55475

Rule Check BONDPAD.SP.3_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.72% (493 out of 562) rule checks completed.

operation group: 1891/2080
L77645 = AND Via4 bondpad_metal4

=====

generate layer L77645, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1892/2080
BONDPAD.SP.3_4:L264266 = EXTE L77645 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3_4:L264266, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L77645

Rule Check BONDPAD.SP.3_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 87.90% (494 out of 562) rule checks completed.

operation group: 1893/2080
L43469 = AND Via5 bondpad_metal5

=====

generate layer L43469, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1894/2080
BONDPAD.SP.3_5:L264268 = EXTE L43469 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3_5:L264268, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L43469

Rule Check BONDPAD.SP.3_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.08% (495 out of 562) rule checks completed.

operation group: 1895/2080
L9293 = AND Via6 bondpad_metal6

=====

generate layer L9293, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1896/2080

BONDPAD.SP.3_6:L264270 = EXTE L9293 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.3_6:L264270, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L9293

Rule Check BONDPAD.SP.3_6 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.26% (496 out of 562) rule checks completed.

operation group: 1897/2080

L75117 = AND Via7 bondpad_metal7

=====

generate layer L75117, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1898/2080

BONDPAD.SP.4:L264272 = EXTE L75117 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.4:L264272, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L75117

Rule Check BONDPAD.SP.4 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.43% (497 out of 562) rule checks completed.

operation group: 1899/2080

L40941 = AND Via8 bondpad_metal8

=====

generate layer L40941, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1900/2080

BONDPAD.SP.4_2:L264274 = EXTE L40941 -lt 0.22 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.4_2:L264274, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L40941

Rule Check BONDPAD.SP.4_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.61% (498 out of 562) rule checks completed.

operation group: 1901/2080

L93235 = AND Via9 bondpad_metal9

=====

generate layer L93235, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1902/2080

BONDPAD.SP.4_3:L264276 = EXTE L93235 -lt 0.54 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.4_3:L264276, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L93235

Rule Check BONDPAD.SP.4_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.79% (499 out of 562) rule checks completed.

operation group: 1903/2080

L88219 = AND Via10 bondpad_metal10

=====

generate layer L88219, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1904/2080

BONDPAD.SP.4_4:L264278 = EXTE L88219 -lt 0.54 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.4_4:L264278, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer L88219

Rule Check BONDPAD.SP.4_4 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 88.97% (500 out of 562) rule checks completed.

operation group: 1905/2080

BONDPAD.E.2:L91026 = SELECT -cut Via1 bondpad_metal1

=====

generate layer BONDPAD.E.2:L91026, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1906/2080

BONDPAD.E.2:L264280 = NOT BONDPAD.E.2:L91026 bondpad_metal1

=====

generate layer BONDPAD.E.2:L264280, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2:L91026

operation group: 1907/2080

BONDPAD.E.2:L264281 = ENC Via1 bondpad_metal1 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2:L264281, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer bondpad_metal1

Rule Check BONDPAD.E.2 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 89.15% (501 out of 562) rule checks completed.

operation group: 1908/2080

BONDPAD.E.2_2:L25201 = SELECT -cut Via2 bondpad_metal2

=====

generate layer BONDPAD.E.2_2:L25201, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1909/2080

BONDPAD.E.2_2:L264283 = NOT BONDPAD.E.2_2:L25201 bondpad_metal2

=====

generate layer BONDPAD.E.2_2:L264283, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2_2:L25201

operation group: 1910/2080

BONDPAD.E.2_2:L264284 = ENC Via2 bondpad_metal2 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_2:L264284, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.2_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 89.32% (502 out of 562) rule checks completed.

operation group: 1911/2080

BONDPAD.E.2_3:L59377 = SELECT -cut Via3 bondpad_metal3

=====

generate layer BONDPAD.E.2_3:L59377, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1912/2080

BONDPAD.E.2_3:L264286 = NOT BONDPAD.E.2_3:L59377 bondpad_metal3

=====

generate layer BONDPAD.E.2_3:L264286, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2_3:L59377

operation group: 1913/2080

BONDPAD.E.2_3:L264287 = ENC Via3 bondpad_metal3 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_3:L264287, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.2_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 89.50% (503 out of 562) rule checks completed.

operation group: 1914/2080

BONDPAD.E.2_4:L73743 = SELECT -cut Via4 bondpad_metal4

=====

generate layer BONDPAD.E.2_4:L73743, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1915/2080

BONDPAD.E.2_4:L264289 = NOT BONDPAD.E.2_4:L73743 bondpad_metal4

=====

generate layer BONDPAD.E.2_4:L264289, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2_4:L73743

operation group: 1916/2080

BONDPAD.E.2_4:L264290 = ENC Via4 bondpad_metal4 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_4:L264290, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.2_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 89.68% (504 out of 562) rule checks completed.

operation group: 1917/2080

BONDPAD.E.2_5:L39567 = SELECT -cut Via5 bondpad_metal5

=====

generate layer BONDPAD.E.2_5:L39567, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1918/2080

BONDPAD.E.2_5:L264292 = NOT BONDPAD.E.2_5:L39567 bondpad_metal5

=====

generate layer BONDPAD.E.2_5:L264292, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2_5:L39567

operation group: 1919/2080

BONDPAD.E.2_5:L264293 = ENC Via5 bondpad_metal5 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_5:L264293, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.2_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 89.86% (505 out of 562) rule checks completed.

operation group: 1920/2080

BONDPAD.E.2_6:L5391 = SELECT -cut Via6 bondpad_metal6

=====

generate layer BONDPAD.E.2_6:L5391, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1921/2080

BONDPAD.E.2_6:L264295 = NOT BONDPAD.E.2_6:L5391 bondpad_metal6

=====

generate layer BONDPAD.E.2_6:L264295, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.2_6:L5391

operation group: 1922/2080

BONDPAD.E.2_6:L264296 = ENC Via6 bondpad_metal6 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_6:L264296, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.2_6 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 90.04% (506 out of 562) rule checks completed.

operation group: 1923/2080

BONDPAD.E.3:L71215 = SELECT -cut Via7 bondpad_metal7

=====

generate layer BONDPAD.E.3:L71215, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1924/2080

BONDPAD.E.3:L264298 = NOT BONDPAD.E.3:L71215 bondpad_metal7

=====

generate layer BONDPAD.E.3:L264298, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.3:L71215

operation group: 1925/2080

BONDPAD.E.3:L264299 = ENC Via7 bondpad_metal7 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3:L264299, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.3 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

[INFO]: 90.21% (507 out of 562) rule checks completed.

operation group: 1926/2080

BONDPAD.E.3_2:L62961 = SELECT -cut Via8 bondpad_metal8

=====

generate layer BONDPAD.E.3_2:L62961, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

operation group: 1927/2080

BONDPAD.E.3_2:L264301 = NOT BONDPAD.E.3_2:L62961 bondpad_metal8

=====

generate layer BONDPAD.E.3_2:L264301, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

delete layer BONDPAD.E.3_2:L62961

operation group: 1928/2080

BONDPAD.E.3_2:L264302 = ENC Via8 bondpad_metal8 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_2:L264302, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.51/9.69/9.69 peak=17.98

Rule Check BONDPAD.E.3_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 90.39% (508 out of 562) rule checks completed.

operation group: 1929/2080

BONDPAD.E.3_3:L97137 = SELECT -cut Via9 bondpad_metal9

=====

generate layer BONDPAD.E.3_3:L97137, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1930/2080

BONDPAD.E.3_3:L264304 = NOT BONDPAD.E.3_3:L97137 bondpad_metal9

=====

generate layer BONDPAD.E.3_3:L264304, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.3_3:L97137

operation group: 1931/2080

BONDPAD.E.3_3:L264305 = ENC Via9 bondpad_metal9 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_3:L264305, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

Rule Check BONDPAD.E.3_3 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 90.57% (509 out of 562) rule checks completed.

operation group: 1932/2080

BONDPAD.E.3_4:L75427 = SELECT -cut Via10 bondpad_metal10

=====

generate layer BONDPAD.E.3_4:L75427, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1933/2080

BONDPAD.E.3_4:L264307 = NOT BONDPAD.E.3_4:L75427 bondpad_metal10

=====

generate layer BONDPAD.E.3_4:L264307, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.3_4:L75427

operation group: 1934/2080

BONDPAD.E.3_4:L264308 = ENC Via10 bondpad_metal10 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_4:L264308, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

Rule Check BONDPAD.E.3_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 90.75% (510 out of 562) rule checks completed.

operation group: 1935/2080

BONDPAD.E.2_7:L91024 = SELECT -cut Via1 bondpad_metal2

=====

generate layer BONDPAD.E.2_7:L91024, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1936/2080

BONDPAD.E.2_7:L264310 = NOT BONDPAD.E.2_7:L91024 bondpad_metal2

=====

generate layer BONDPAD.E.2_7:L264310, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_7:L91024

operation group: 1937/2080

BONDPAD.E.2_7:L264311 = ENC Via1 bondpad_metal2 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_7:L264311, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal2

Rule Check BONDPAD.E.2_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 90.93% (511 out of 562) rule checks completed.

operation group: 1938/2080

BONDPAD.E.2_8:L25200 = SELECT -cut Via2 bondpad_metal3

=====

generate layer BONDPAD.E.2_8:L25200, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1939/2080

BONDPAD.E.2_8:L264313 = NOT BONDPAD.E.2_8:L25200 bondpad_metal3

=====

generate layer BONDPAD.E.2_8:L264313, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_8:L25200

operation group: 1940/2080

BONDPAD.E.2_8:L264314 = ENC Via2 bondpad_metal3 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_8:L264314, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal3

Rule Check BONDPAD.E.2_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.10% (512 out of 562) rule checks completed.

operation group: 1941/2080

BONDPAD.E.2_9:L59376 = SELECT -cut Via3 bondpad_metal4

=====

generate layer BONDPAD.E.2_9:L59376, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1942/2080

BONDPAD.E.2_9:L264316 = NOT BONDPAD.E.2_9:L59376 bondpad_metal4

=====

generate layer BONDPAD.E.2_9:L264316, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_9:L59376

operation group: 1943/2080

BONDPAD.E.2_9:L264317 = ENC Via3 bondpad_metal4 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_9:L264317, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal4

Rule Check BONDPAD.E.2_9 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.28% (513 out of 562) rule checks completed.

operation group: 1944/2080

BONDPAD.E.2_10:L73744 = SELECT -cut Via4 bondpad_metal5

=====

generate layer BONDPAD.E.2_10:L73744, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1945/2080

BONDPAD.E.2_10:L264319 = NOT BONDPAD.E.2_10:L73744 bondpad_metal5

=====

generate layer BONDPAD.E.2_10:L264319, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_10:L73744

operation group: 1946/2080

BONDPAD.E.2_10:L264320 = ENC Via4 bondpad_metal5 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_10:L264320, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal5

Rule Check BONDPAD.E.2_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.46% (514 out of 562) rule checks completed.

operation group: 1947/2080

BONDPAD.E.2_11:L39568 = SELECT -cut Via5 bondpad_metal6

=====

generate layer BONDPAD.E.2_11:L39568, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1948/2080

BONDPAD.E.2_11:L264322 = NOT BONDPAD.E.2_11:L39568 bondpad_metal6

=====

generate layer BONDPAD.E.2_11:L264322, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_11:L39568

operation group: 1949/2080

BONDPAD.E.2_11:L264323 = ENC Via5 bondpad_metal6 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_11:L264323, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal6

Rule Check BONDPAD.E.2_11 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.64% (515 out of 562) rule checks completed.

operation group: 1950/2080

BONDPAD.E.2_12:L5392 = SELECT -cut Via6 bondpad_metal7

=====

generate layer BONDPAD.E.2_12:L5392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1951/2080

BONDPAD.E.2_12:L264325 = NOT BONDPAD.E.2_12:L5392 bondpad_metal7

=====

generate layer BONDPAD.E.2_12:L264325, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.2_12:L5392

operation group: 1952/2080

BONDPAD.E.2_12:L264326 = ENC Via6 bondpad_metal7 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.2_12:L264326, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal7

Rule Check BONDPAD.E.2_12 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.81% (516 out of 562) rule checks completed.

operation group: 1953/2080

BONDPAD.E.3_5:L71216 = SELECT -cut Via7 bondpad_metal8

=====

generate layer BONDPAD.E.3_5:L71216, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1954/2080

BONDPAD.E.3_5:L264328 = NOT BONDPAD.E.3_5:L71216 bondpad_metal8

=====

generate layer BONDPAD.E.3_5:L264328, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.3_5:L71216

operation group: 1955/2080

BONDPAD.E.3_5:L264329 = ENC Via7 bondpad_metal8 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_5:L264329, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal8

Rule Check BONDPAD.E.3_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 91.99% (517 out of 562) rule checks completed.

operation group: 1956/2080

BONDPAD.E.3_6:L62960 = SELECT -cut Via8 bondpad_metal9

=====

generate layer BONDPAD.E.3_6:L62960, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1957/2080

BONDPAD.E.3_6:L264331 = NOT BONDPAD.E.3_6:L62960 bondpad_metal9

=====

generate layer BONDPAD.E.3_6:L264331, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.3_6:L62960

operation group: 1958/2080

BONDPAD.E.3_6:L264332 = ENC Via8 bondpad_metal9 -lt 0.05 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_6:L264332, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal9

Rule Check BONDPAD.E.3_6 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 92.17% (518 out of 562) rule checks completed.

operation group: 1959/2080

BONDPAD.E.3_7:L25033 = SELECT -cut Via9 bondpad_metal10

=====

generate layer BONDPAD.E.3_7:L25033, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1960/2080

BONDPAD.E.3_7:L264334 = NOT BONDPAD.E.3_7:L25033 bondpad_metal10

=====

generate layer BONDPAD.E.3_7:L264334, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BONDPAD.E.3_7:L25033

operation group: 1961/2080

BONDPAD.E.3_7:L264335 = ENC Via9 bondpad_metal10 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.E.3_7:L264335, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal10

Rule Check BOND PAD.E.3_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 92.35% (519 out of 562) rule checks completed.

operation group: 1962/2080

BOND PAD.E.3_8:L75426 = SELECT -cut Via10 bondpad_metal11

=====

generate layer BOND PAD.E.3_8:L75426, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1963/2080

BOND PAD.E.3_8:L264337 = NOT BOND PAD.E.3_8:L75426 bondpad_metal11

=====

generate layer BOND PAD.E.3_8:L264337, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer BOND PAD.E.3_8:L75426

operation group: 1964/2080

BOND PAD.E.3_8:L264338 = ENC Via10 bondpad_metal11 -lt 0.09 -output region -single_point -abut lt 90

=====

generate layer BOND PAD.E.3_8:L264338, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal11

Rule Check BOND PAD.E.3_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 92.53% (520 out of 562) rule checks completed.

operation group: 1965/2080

BOND PAD.SP.6:L264369 = INTE bondpad_metal1_slot_on_edge -lt 1 -output region -single_point -abut lt 90

=====

generate layer BOND PAD.SP.6:L264369, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal1_slot

operation group: 1966/2080

BOND PAD.SP.6:L264371 = SIZE bondpad_metal1_slot_on_edge -by 1.75 -underover

=====

generate layer BOND PAD.SP.6:L264371, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal1_slot_on_edge

Rule Check BONDPAD.SP.6 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 92.70% (521 out of 562) rule checks completed.

operation group: 1967/2080

BONDPAD.SP.6_2:L264372 = INTE bondpad_metal2_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.6_2:L264372, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal2_slot

operation group: 1968/2080

BONDPAD.SP.6_2:L264374 = SIZE bondpad_metal2_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_2:L264374, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal2_slot_on_edge

Rule Check BONDPAD.SP.6_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 92.88% (522 out of 562) rule checks completed.

operation group: 1969/2080

BONDPAD.SP.6_3:L264375 = INTE bondpad_metal3_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.6_3:L264375, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal3_slot

operation group: 1970/2080

BONDPAD.SP.6_3:L264377 = SIZE bondpad_metal3_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_3:L264377, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal3_slot_on_edge

Rule Check BONDPAD.SP.6_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.06% (523 out of 562) rule checks completed.

operation group: 1971/2080

BONDPAD.SP.6_4:L264378 = INTE bondpad_metal4_slot_on_edge -lt 1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.6_4:L264378, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal4_slot

operation group: 1972/2080

BONDPAD.SP.6_4:L264380 = SIZE bondpad_metal4_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_4:L264380, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal4_slot_on_edge

Rule Check BONDPAD.SP.6_4 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.24% (524 out of 562) rule checks completed.

operation group: 1973/2080

BONDPAD.SP.6_5:L264381 = INTE bondpad_metal5_slot_on_edge -lt 1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.6_5:L264381, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal5_slot

operation group: 1974/2080

BONDPAD.SP.6_5:L264383 = SIZE bondpad_metal5_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_5:L264383, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal5_slot_on_edge

Rule Check BONDPAD.SP.6_5 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.42% (525 out of 562) rule checks completed.

operation group: 1975/2080

BONDPAD.SP.6_6:L264384 = INTE bondpad_metal6_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.6_6:L264384, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal6_slot

operation group: 1976/2080

BONDPAD.SP.6_6:L264386 = SIZE bondpad_metal6_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_6:L264386, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal6_slot_on_edge

Rule Check BONDPAD.SP.6_6 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.59% (526 out of 562) rule checks completed.

operation group: 1977/2080

BONDPAD.SP.6_7:L264387 = INTE bondpad_metal7_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.6_7:L264387, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal7_slot

operation group: 1978/2080

BONDPAD.SP.6_7:L264389 = SIZE bondpad_metal7_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_7:L264389, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal7_slot_on_edge

Rule Check BONDPAD.SP.6_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.77% (527 out of 562) rule checks completed.

operation group: 1979/2080

BONDPAD.SP.6_8:L264390 = INTE bondpad_metal8_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====

generate layer BONDPAD.SP.6_8:L264390, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal8_slot

operation group: 1980/2080

BONDPAD.SP.6_8:L264392 = SIZE bondpad_metal8_slot_on_edge -by 1.75 -underover

=====
generate layer BONDPAD.SP.6_8:L264392, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal8_slot_on_edge

Rule Check BONDPAD.SP.6_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 93.95% (528 out of 562) rule checks completed.

operation group: 1981/2080

BONDPAD.SP.6_9:L264393 = INTE bondpad_metal9_slot_on_edge -lt 1 -output region -single_point
-abut lt 90

=====
generate layer BONDPAD.SP.6_9:L264393, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal9_slot

operation group: 1982/2080

BONDPAD.SP.6_9:L264395 = SIZE bondpad_metal9_slot_on_edge -by 1.75 -underover

=====
generate layer BONDPAD.SP.6_9:L264395, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal9_slot_on_edge

Rule Check BONDPAD.SP.6_9 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 94.13% (529 out of 562) rule checks completed.

operation group: 1983/2080

BONDPAD.SP.6_10:L264396 = INTE bondpad_metal10_slot_on_edge -lt 1 -output region
-single_point -abut lt 90

=====
generate layer BONDPAD.SP.6_10:L264396, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal10_slot

operation group: 1984/2080

BONDPAD.SP.6_10:L264398 = SIZE bondpad_metal10_slot_on_edge -by 1.75 -underover

=====

generate layer BONDPAD.SP.6_10:L264398, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_metal10_slot_on_edge

Rule Check BONDPAD.SP.6_10 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 94.31% (530 out of 562) rule checks completed.

operation group: 1985/2080

L92260 = AND Bondpad Via1

=====

generate layer L92260, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1986/2080

bondpad_via1_array = SIZE L92260 -by 0.3 -overunder

=====

generate layer bondpad_via1_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92260

operation group: 1987/2080

BONDPAD.SP.7:L264399 = EXTE bondpad_via1_array -lt 1.1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.7:L264399, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via1_array

Rule Check BONDPAD.SP.7 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 94.48% (531 out of 562) rule checks completed.

operation group: 1988/2080

L92259 = AND Bondpad Via2

=====

generate layer L92259, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1989/2080

bondpad_via2_array = SIZE L92259 -by 0.3 -overunder

=====

generate layer bondpad_via2_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92259

operation group: 1990/2080

BONDPAD.SP.7_2:L264400 = EXTE bondpad_via2_array -lt 1.1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.7_2:L264400, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via2_array

Rule Check BONDPAD.SP.7_2 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 94.66% (532 out of 562) rule checks completed.

operation group: 1991/2080

L92258 = AND Bondpad Via3

=====

generate layer L92258, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 1992/2080

bondpad_via3_array = SIZE L92258 -by 0.3 -overunder

=====

generate layer bondpad_via3_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92258

operation group: 1993/2080

BONDPAD.SP.7_3:L264401 = EXTE bondpad_via3_array -lt 1.1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.7_3:L264401, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via3_array

Rule Check BONDPAD.SP.7_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 94.84% (533 out of 562) rule checks completed.

operation group: 1994/2080

L92257 = AND Bondpad Via4

```
=====
generate layer L92257, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

operation group: 1995/2080

bondpad_via4_array = SIZE L92257 -by 0.3 -overunder

```
=====
generate layer bondpad_via4_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer L92257

operation group: 1996/2080

BONDPAD.SP.7_4:L264402 = EXTE bondpad_via4_array -lt 1.1 -output region -single_point -abut lt 90

```
=====
generate layer BONDPAD.SP.7_4:L264402, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer bondpad_via4_array

Rule Check BONDPAD.SP.7_4 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.02% (534 out of 562) rule checks completed.

operation group: 1997/2080

L92256 = AND Bondpad Via5

```
=====
generate layer L92256, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

operation group: 1998/2080

bondpad_via5_array = SIZE L92256 -by 0.3 -overunder

```
=====
generate layer bondpad_via5_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer L92256

operation group: 1999/2080

BONDPAD.SP.7_5:L264403 = EXTE bondpad_via5_array -lt 1.1 -output region -single_point -abut lt 90

=====
generate layer BONDPAD.SP.7_5:L264403, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via5_array

Rule Check BONDPAD.SP.7_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.20% (535 out of 562) rule checks completed.

operation group: 2000/2080
L92255 = AND Bondpad Via6

=====
generate layer L92255, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 2001/2080
bondpad_via6_array = SIZE L92255 -by 0.3 -overunder

=====
generate layer bondpad_via6_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92255

operation group: 2002/2080
BONDPAD.SP.7_6:L264404 = EXTE bondpad_via6_array -lt 1.1 -output region -single_point -abut lt 90

=====
generate layer BONDPAD.SP.7_6:L264404, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via6_array

Rule Check BONDPAD.SP.7_6 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.37% (536 out of 562) rule checks completed.

operation group: 2003/2080
L92254 = AND Bondpad Via7

=====
generate layer L92254, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 2004/2080

bondpad_via7_array = SIZE L92254 -by 0.3 -overunder

=====

generate layer bondpad_via7_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92254

operation group: 2005/2080

BONDPAD.SP.7_7:L264405 = EXTE bondpad_via7_array -lt 1.1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.7_7:L264405, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via7_array

Rule Check BONDPAD.SP.7_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.55% (537 out of 562) rule checks completed.

operation group: 2006/2080

L92253 = AND Bondpad Via8

=====

generate layer L92253, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 2007/2080

bondpad_via8_array = SIZE L92253 -by 0.3 -overunder

=====

generate layer bondpad_via8_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L92253

operation group: 2008/2080

BONDPAD.SP.7_8:L264406 = EXTE bondpad_via8_array -lt 1.1 -output region -single_point -abut lt 90

=====

generate layer BONDPAD.SP.7_8:L264406, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via8_array

Rule Check BONDPAD.SP.7_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.73% (538 out of 562) rule checks completed.

operation group: 2009/2080

L92252 = AND Bondpad Via9

```
=====
generate layer L92252, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

operation group: 2010/2080

bondpad_via9_array = SIZE L92252 -by 0.3 -overunder

```
=====
generate layer bondpad_via9_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer L92252

operation group: 2011/2080

BONDPAD.SP.7_9:L264407 = EXTE bondpad_via9_array -lt 1.1 -output region -single_point -abut lt 90

```
=====
generate layer BONDPAD.SP.7_9:L264407, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer bondpad_via9_array

Rule Check BONDPAD.SP.7_9 finished, 0 error(s) reported.

Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 95.91% (539 out of 562) rule checks completed.

operation group: 2012/2080

L45652 = AND Bondpad Via10

```
=====
generate layer L45652, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

operation group: 2013/2080

bondpad_via10_array = SIZE L45652 -by 0.3 -overunder

```
=====
generate layer bondpad_via10_array, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.12 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98
```

delete layer L45652

operation group: 2014/2080

BONDPAD.SP.7_10:L264408 = EXTE bondpad_via10_array -lt 1.1 -output region -single_point -abut lt 90

=====
generate layer BONDPAD.SP.7_10:L264408, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer bondpad_via10_array

Rule Check BONDPAD.SP.7_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 96.09% (540 out of 562) rule checks completed.

operation group: 2015/2080

L4140 = EDGE_EXPAND Resdum -outside_by 0.001

=====
generate layer L4140, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

operation group: 2016/2080

L10364 = SELECT -outside L4140 L32232

=====
generate layer L10364, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L4140
delete layer L32232

operation group: 2017/2080

resdum_sz = OR L10364 Resdum

=====
generate layer resdum_sz, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L10364
delete layer Resdum

operation group: 2018/2080

L84129 = EDGE_BOOLEAN oxide_in_res resdum_sz -inside

=====
generate layer L84129, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer oxide_in_res

operation group: 2019/2080

OXIDER.W.1.1:L264410 = INTE L84129 -lt 0.1 -output region -abut lt 90

=====

generate layer OXIDER.W.1.1:L264410, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L84129
delete layer Oxide

Rule Check OXIDER.W.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 96.26% (541 out of 562) rule checks completed.

operation group: 2020/2080
L11022 = EDGE_BOOLEAN poly_in_res resdum_sz -inside

=====

generate layer L11022, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer poly_in_res
delete layer resdum_sz

operation group: 2021/2080
POLYR.W.1.1:L264412 = INTE L11022 -lt 0.1 -output region -abut lt 90

=====

generate layer POLYR.W.1.1:L264412, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.18 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L11022

Rule Check POLYR.W.1.1 finished, 0 error(s) reported.
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

[INFO]: 96.44% (542 out of 562) rule checks completed.

operation group: 2022/2080
bp_tap = AND Bondpad Metal9

=====

generate layer bp_tap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer Metal9

operation group: 2023/2080
via10_nocap = NOT Via10 CapMetal

=====

generate layer via10_nocap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer Via10

operation group: 2024/2080
cont_pdiff = AND Cont pdiff_conn

=====

generate layer cont_pdiff, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/13.83 peak=17.98

operation group: 2025/2080
L61645 = AND NPNdummy ndiff_conn

=====

generate layer L61645, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer NPNdummy

operation group: 2026/2080
npn_emit = NOT L61645 Nwell

=====

generate layer npn_emit, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer L61645
delete layer Nwell

operation group: 2027/2080
cont_ndiff = AND Cont ndiff_conn

=====

generate layer cont_ndiff, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/13.83 peak=17.98

delete layer Cont

operation group: 2028/2080
L78152 = SELECT -touch nsd_esd Poly -eq 1
L78153 = SELECT -touch nsd_esd Poly -eq 2

=====

generate layer L78152, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L78153, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer nsd_esd

operation group: 2029/2080
L90202 = SELECT -touch psd_esd Poly -eq 1
L90201 = SELECT -touch psd_esd Poly -eq 2

=====

generate layer L90202, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer L90201, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.13 real=0.00/1.19 Memory: 9.61/9.81/9.81 peak=17.98

delete layer psd_esd

operation group: 2030/2080

CONNECT Bondpad metal11_conn -by bp_tap
CONNECT metal11_conn CapMetal -by via10_cap
CONNECT metal11_conn metal10_conn -by via10_nocap
CONNECT metal10_conn metal9_conn -by Via9
CONNECT metal9_conn metal8_conn -by Via8
CONNECT metal8_conn metal7_conn -by Via7
CONNECT metal7_conn metal6_conn -by Via6
CONNECT metal6_conn metal5_conn -by Via5
CONNECT metal5_conn metal4_conn -by Via4
CONNECT metal4_conn metal3_conn -by Via3
CONNECT metal3_conn metal2_conn -by Via2
CONNECT metal2_conn metal1_conn -by Via1
CONNECT metal1_conn poly_conn -by cont_poly
CONNECT metal1_conn pdiff_conn -by cont_pdiff
CONNECT metal1_conn npn_emit -by cont_ndiff
CONNECT metal1_conn ndiff_conn -by cont_ndiff
SCONNECT pdiff_conn ptap
SCONNECT ptap psubstrate
SCONNECT ndiff_conn ntap
SCONNECT ntap nwell_conn
SCONNECT nwell_conn nb_tap
SCONNECT nb_tap Nburied

=====

Time: cpu=0.01/1.14 real=0.01/1.20 Memory: 9.61/9.81/25.89 peak=25.89

delete layer bp_tap
delete layer via10_cap
delete layer via10_nocap
delete layer Via9
delete layer Via8
delete layer Via7
delete layer Via6
delete layer Via5
delete layer Via4
delete layer Via3
delete layer Via2
delete layer Via1
delete layer poly_conn
delete layer cont_poly
delete layer cont_pdiff
delete layer cont_ndiff

operation group: 2031/2080

soft_check_1:L262960 = EXTE pdiff_conn ptap -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_1:L262960, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_1 finished, 0 error(s) reported.
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 96.62% (543 out of 562) rule checks completed.

operation group: 2032/2080

soft_check_2:L262961 = SELECT -interact ptap pdiff_conn -gt 1 -by_net

=====

generate layer soft_check_2:L262961, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_2 finished, 0 error(s) reported.
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 96.80% (544 out of 562) rule checks completed.

operation group: 2033/2080

soft_check_4:L262964 = EXTE ptap psubstrate -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_4:L262964, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_4 finished, 0 error(s) reported.
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 96.98% (545 out of 562) rule checks completed.

operation group: 2034/2080

soft_check_5:L262965 = SELECT -interact psubstrate ptap -gt 1 -by_net

=====

generate layer soft_check_5:L262965, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_5 finished, 0 error(s) reported.
Time: cpu=0.00/1.14 real=0.00/1.20 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 97.15% (546 out of 562) rule checks completed.

operation group: 2035/2080

soft_check_7:L262968 = EXTE ndiff_conn ntap -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_7:L262968, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_7 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 97.33% (547 out of 562) rule checks completed.

operation group: 2036/2080

soft_check_8:L262969 = SELECT -interact ntap ndiff_conn -gt 1 -by_net

=====

generate layer soft_check_8:L262969, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_8 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 97.51% (548 out of 562) rule checks completed.

operation group: 2037/2080

soft_check_10:L262972 = EXTE ntap nwell_conn -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_10:L262972, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_10 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 97.69% (549 out of 562) rule checks completed.

operation group: 2038/2080

soft_check_11:L262973 = SELECT -interact nwell_conn ntap -gt 1 -by_net

=====

generate layer soft_check_11:L262973, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check soft_check_11 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 97.86% (550 out of 562) rule checks completed.

operation group: 2039/2080

soft_check_13:L262976 = EXTE nwell_conn nb_tap -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_13:L262976, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

Rule Check soft_check_13 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.04% (551 out of 562) rule checks completed.

operation group: 2040/2080

soft_check_14:L262977 = SELECT -interact nb_tap nwell_conn -gt 1 -by_net

=====

generate layer soft_check_14:L262977, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

Rule Check soft_check_14 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.22% (552 out of 562) rule checks completed.

operation group: 2041/2080

soft_check_16:L262980 = EXTE nb_tap Nburied -eq 0 -inside_also -not_connected -output region

=====

generate layer soft_check_16:L262980, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

Rule Check soft_check_16 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.40% (553 out of 562) rule checks completed.

operation group: 2042/2080

soft_check_17:L262981 = SELECT -interact Nburied nb_tap -gt 1 -by_net

=====

generate layer soft_check_17:L262981, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

Rule Check soft_check_17 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.58% (554 out of 562) rule checks completed.

operation group: 2043/2080

NW.SP.1:L263032 = EXTE nwell_conn -lt 0.3 -output region -connected -single_point -abut lt 90

=====

generate layer NW.SP.1:L263032, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check NW.SP.1 finished, 0 error(s) reported.

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.75% (555 out of 562) rule checks completed.

operation group: 2044/2080

NW.SP.2_3:L263039 = EXTE nwell_conn -lt 0.6 -output region -not_connected -single_point -notch not

=====

generate layer NW.SP.2_3:L263039, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/17.85 peak=25.89

Rule Check NW.SP.2_3 finished, 0 error(s) reported.

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 98.93% (556 out of 562) rule checks completed.

operation group: 2045/2080

esd_ndiff_conn = AND ndiff_conn ESDdummy

=====

generate layer esd_ndiff_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2046/2080

L80382 = ANTENNA -gt 0 ndiff_conn Bondpad

=====

generate layer L80382, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2047/2080

L73764 = SELECT -touch Poly L80382

=====

generate layer L73764, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2048/2080

nmos_io_esd = SELECT -touch esd_ndiff_conn L73764

=====

generate layer nmos_io_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer esd_ndiff_conn
delete layer L73764

operation group: 2049/2080

esd_pdiff_conn = AND pdiff_conn ESDdummy

=====

generate layer esd_pdiff_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2050/2080

L64324 = ANTENNA -gt 0 pdiff_conn Bondpad

=====

generate layer L64324, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2051/2080

L1826 = SELECT -touch Poly L64324

=====

generate layer L1826, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer Poly

operation group: 2052/2080

pmos_io_esd = SELECT -touch esd_pdiff_conn L1826

=====

generate layer pmos_io_esd, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer esd_pdiff_conn
delete layer L1826

operation group: 2053/2080

LATCHUP.3:L53421 = SELECT -cut nmos_io_esd pmos_io_esd

=====

generate layer LATCHUP.3:L53421, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2054/2080

LATCHUP.3:L63347 = SELECT -cut pmos_io_esd nmos_io_esd

=====

generate layer LATCHUP.3:L63347, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

operation group: 2055/2080

LATCHUP.3:L264131 = AND LATCHUP.3:L53421 LATCHUP.3:L63347

```
=====
generate layer LATCHUP.3:L264131, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

operation group: 2056/2080

LATCHUP.3:L264132 = EXTE nmos_io_esd pmos_io_esd -lt 10 -output region -single_point -abut lt 90

LATCHUP.4:L51316 = EXTE nmos_io_esd pmos_io_esd -lt 30 -output region -single_point -abut lt 90

```
=====
generate layer LATCHUP.3:L264132, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
generate layer LATCHUP.4:L51316, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

Rule Check LATCHUP.3 finished, 0 error(s) reported.

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 99.11% (557 out of 562) rule checks completed.

operation group: 2057/2080

LATCHUP.4:L264135 = AND LATCHUP.3:L53421 LATCHUP.3:L63347

```
=====
generate layer LATCHUP.4:L264135, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

delete layer LATCHUP.3:L53421

delete layer LATCHUP.3:L63347

operation group: 2058/2080

LATCHUP.4:L35560 = NOT LATCHUP.4:L51316 ntap

```
=====
generate layer LATCHUP.4:L35560, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

delete layer ntap

operation group: 2059/2080

LATCHUP.4:L11845 = SELECT -interact LATCHUP.4:L35560 nmos_io_esd

```
=====
generate layer LATCHUP.4:L11845, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

delete layer LATCHUP.4:L35560

operation group: 2060/2080

LATCHUP.4:L264139 = SELECT -interact LATCHUP.4:L11845 pmos_io_esd

=====

```
generate layer LATCHUP.4:L264139, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

```
delete layer LATCHUP.4:L11845
```

operation group: 2061/2080

```
LATCHUP.4:L75978 = NOT LATCHUP.4:L51316 ptap
```

=====

```
generate layer LATCHUP.4:L75978, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

```
delete layer LATCHUP.4:L51316
```

```
delete layer ptap
```

operation group: 2062/2080

```
LATCHUP.4:L83094 = SELECT -interact LATCHUP.4:L75978 nmos_io_esd
```

=====

```
generate layer LATCHUP.4:L83094, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

```
delete layer LATCHUP.4:L75978
```

```
delete layer nmos_io_esd
```

operation group: 2063/2080

```
LATCHUP.4:L264142 = SELECT -interact LATCHUP.4:L83094 pmos_io_esd
```

=====

```
generate layer LATCHUP.4:L264142, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

```
delete layer LATCHUP.4:L83094
```

```
delete layer pmos_io_esd
```

```
Rule Check LATCHUP.4 finished, 0 error(s) reported.
```

```
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

[INFO]: 99.29% (558 out of 562) rule checks completed.

operation group: 2064/2080

```
L10595 = ANTENNA -gt 0 ndiff_conn psubstrate
```

=====

```
layer L10595 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

```
delete layer ndiff_conn
```

operation group: 2065/2080

```
L87558 = OR L10595 L80382
```

=====

layer L87558 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L10595
delete layer L80382

operation group: 2066/2080
rule_ESD_4_nmos = NOT L78152 L87558

=====

generate layer rule_ESD_4_nmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L78152

operation group: 2067/2080
ESD.4:L264147 = AND ESDdummy rule_ESD_4_nmos

=====

generate layer ESD.4:L264147, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer rule_ESD_4_nmos

Rule Check ESD.4 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 99.47% (559 out of 562) rule checks completed.

operation group: 2068/2080
L65219 = ANTENNA -gt 0 pdiff_conn nwell_conn

=====

layer L65219 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer nwell_conn

operation group: 2069/2080
L40217 = OR L64324 L65219

=====

layer L40217 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L65219

operation group: 2070/2080
rule_ESD_4_pmos = NOT L90202 L40217

=====

generate layer rule_ESD_4_pmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L90202
delete layer L40217

operation group: 2071/2080

ESD.4_2:L264149 = AND ESDdummy rule_ESD_4_pmos

=====

generate layer ESD.4_2:L264149, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer rule_ESD_4_pmos

Rule Check ESD.4_2 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 99.64% (560 out of 562) rule checks completed.

operation group: 2072/2080

L40153 = NOT L78153 L87558

=====

generate layer L40153, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L78153
delete layer L87558

operation group: 2073/2080

rule_ESD_8_nmos = SELECT -outside L40153 SiProt

=====

generate layer rule_ESD_8_nmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L40153

operation group: 2074/2080

ESD.8:L264159 = AND ESDdummy rule_ESD_8_nmos

=====

generate layer ESD.8:L264159, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer rule_ESD_8_nmos

Rule Check ESD.8 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

[INFO]: 99.82% (561 out of 562) rule checks completed.

operation group: 2075/2080

L12421 = ANTENNA -gt 0 pdiff_conn psubstrate

```
=====
layer L12421 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer pdiff_conn
delete layer psubstrate
```

```
operation group: 2076/2080
L42888 = OR L12421 L64324
```

```
=====
layer L42888 not generated, operation is dynamically optimized out.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L12421
delete layer L64324
```

```
operation group: 2077/2080
L65050 = NOT L90201 L42888
```

```
=====
generate layer L65050, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L90201
delete layer L42888
```

```
operation group: 2078/2080
rule_ESD_8_pmos = SELECT -outside L65050 SiProt
```

```
=====
generate layer rule_ESD_8_pmos, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer L65050
delete layer SiProt
```

```
operation group: 2079/2080
ESD.8_2:L264161 = AND ESDdummy rule_ESD_8_pmos
```

```
=====
generate layer ESD.8_2:L264161, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

delete layer ESDdummy
delete layer rule_ESD_8_pmos
```

```
Rule Check ESD.8_2 finished, 0 error(s) reported.
Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89
```

[INFO]: 100.00% (562 out of 562) rule checks completed.

```
operation group: 2080/2080
```

_EPTMPL264413 = DISCONNECT

Time: cpu=0.00/1.15 real=0.00/1.21 Memory: 9.61/9.81/9.81 peak=25.89

Outputting Results ...

#####

ONE LAYER BOOLEAN: Cumulative Time CPU = 0(s) REAL = 0(s)
TWO LAYER BOOLEAN: Cumulative Time CPU = 0(s) REAL = 0(s)
POLYGON TOPOLOGICAL: Cumulative Time CPU = 0(s) REAL = 0(s)
POLYGON MEASUREMENT: Cumulative Time CPU = 0(s) REAL = 0(s)
SIZE: Cumulative Time CPU = 0(s) REAL = 0(s)
EDGE TOPOLOGICAL: Cumulative Time CPU = 0(s) REAL = 0(s)
EDGE MEASUREMENT: Cumulative Time CPU = 0(s) REAL = 0(s)
STAMP: Cumulative Time CPU = 0(s) REAL = 0(s)
ONE LAYER DRC: Cumulative Time CPU = 0(s) REAL = 0(s)
TWO LAYER DRC: Cumulative Time CPU = 0(s) REAL = 0(s)
NET AREA: Cumulative Time CPU = 0(s) REAL = 0(s)
DENSITY: Cumulative Time CPU = 0(s) REAL = 0(s)
MISCELLANEOUS: Cumulative Time CPU = 0(s) REAL = 0(s)
CONNECT: Cumulative Time CPU = 0(s) REAL = 0(s)
DEVICE: Cumulative Time CPU = 0(s) REAL = 0(s)
ERC: Cumulative Time CPU = 0(s) REAL = 0(s)
PATTERN_MATCH: Cumulative Time CPU = 0(s) REAL = 0(s)
DFM FILL: Cumulative Time CPU = 0(s) REAL = 0(s)

Total CPU Time : 1(s)

Total Real Time : 1(s)

Peak Memory Used : 26(M)

Total Original Geometry : 54(54)

Total DRC RuleChecks : 562

Total DRC Results : 1 (1)

Summary can be found in file inv.sum

ASCII report database is

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/drc/inv.drc_errors.a
scii

Checking in all SoftShare licenses.

Design Rule Check Finished Normally. Sun Apr 21 00:28:36 2024

4.2 LVS report

```

Running: /data/cadence/installs/PVS211/tools.lnx86/pvs/bin/64bit/pvsvirt \
-mode lvs \
-global_log_file
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/pvsuilvs.log \
-control
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/pvslvsctl \
-df2_version 6.1.8.0 \
-run_dir /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs \
-no_rules_check \
-schLibName testINV \
-schCellName inv \
-schViewName schematic \
-simViewList auCdl\ schematic \
-simStopList auCdl \
-displayPinInfo \
-source_cdl
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.cdl \
-spice /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.spi
\
-layLibName testINV \
-layCellName inv \
-layViewName layout \
-igds /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.gds
\
-layScale 0.0005 \
-layTechLib gpdk045 \
-convertPin geometry \
-replaceBusBitChar nil \
-noConvertHalfWidthPath nil \
-layHierDepth 32 \
-layMaxVertices 2048 \
-rulesFile
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/.technology.rul

```

Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.03s.

```

Product   : Virtuoso(R) XStream Out
Program   : @(#)CDS: strmount version 6.1.8-64b 10/01/2018 19:51 (ip-172-18-22-52) $
           : sub-version IC6.1.8-64b.83
Started at: 21-Apr-2024 00:36:20
User Name : cc01group5
Host Name : ktmnt
Directory : /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0
CADENCE Design Systems, Inc.

```

Info: Cellview Rev Num:99, Tech Rev Num:59

```

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!
WARNING (XSTRM-20): Output Stream file
'/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testlINV/inv/pvs/inv.gds'
already exists. It will be overwritten.
INFO (XSTRM-217): Reading the layer map file,
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/gpdk045/gpdk045.layermap
INFO (XSTRM-162): You have not used the viaMap option. If the OpenAccess design has native oaVia
instances, use the -viaMap option for preserving oaVia instances in a Stream Out - Stream In round trip.
Using the -viaMap option improves performance and VM usage of applications using the Streamed-In
design. For details on the viaMap option, refer to the "Design Data Translator's Reference" guide for
XStream.

Summary of Options :

library	testlINV
strmFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testlINV/inv/pvs/inv.gds	
topCell	inv
view	layout
runDir	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testlINV/inv/pvs	
logFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testlINV/inv/pvs/PIPO1.LOG	
techLib	gpdk045
hierDepth	32
maxVertices	2048
layerMap	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/gpdk045/gpdk045.layermap	
userSkillFile	
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testlINV/inv/pvs/strmout.il	
labelDepth	32
case	Preserve
convertDot	node

INFO (XSTRM-223): 1. Translating cellView gpdk045/M1_PO/layout as STRUCTURE M1_PO_CDNS_1.
INFO (XSTRM-223): 2. Translating cellView gpdk045/nmos1v/layout as STRUCTURE
nmos1v_CDNS_2.
INFO (XSTRM-223): 3. Translating cellView gpdk045/pmos1v/layout as STRUCTURE
pmos1v_CDNS_3.
INFO (XSTRM-223): 4. Translating cellView testlINV/inv/layout as STRUCTURE inv.

Scalar Instances:	2
Array Instances:	0
Polygons:	0
Paths:	0
Rectangles:	46
Lines:	0
Arcs:	0
Donuts:	0
Dots:	0
Ellipses:	0
Boundaries:	0
Area Blockages:	0
Layer Blockages:	0
Area Halos:	0
Markers:	0
Rows:	0
Standard Vias	1
Custom Vias:	0
CdsGen Vias:	0
Pathsegs:	9
Text:	3
TextDisplay:	0
Cells:	4

```
Creation of CDL for testINV/inv/schematic is started
si -batch /data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/
>/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/Sl.OUT
2>/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/Sl.LOG
Virtuoso Framework License (111) was checked out successfully. Total checkout time was 0.03s.
```

```

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!
Running Artist Hierarchical Netlisting ...
End netlisting Apr 21 00:36:21 2024

Running simin

Running runSim()...

Running runsim with simulator: "auCdl"
Begin simulation: Apr 21 00:36:21 2024

auCdl netlisting completed
End simulation: Apr 21 00:36:21 2024
INFO (AUCDL-21): (Analog) CDL netlisting completed successfully.

pvs 21.12-s022 64 bit (Wed Feb 9 12:12:42 PST 2022)
Build Ref No.: 022 Production (02-09-2022) [pvs_2112]

Copyright 2022 Cadence Design Systems, Inc.
All rights reserved worldwide.

Build O/S: Linux x86_64 3.10.0-693.el7.x86_64
Executed on: ktm1 (Linux x86_64 3.10.0-1160.80.1.el7.x86_64)
Process Id: 890
Starting Time: Sun Apr 21 00:36:24 2024 (Sat Apr 20 17:36:24 2024 GMT)
With parameters: -lvs -top_cell inv -source_top_cell inv -spice
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/pvs/inv.spi -control
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/pvs/pvslvsctl
-ui_data -gdb_data -ai
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdK045_v_6_0/testINV/inv/pvs/.technology.rul

#####

Get host info ...

#####

CPU info:

model name : Intel(R) Xeon(R) CPU E5-2640 v3 @ 2.60GHz
cpu MHz : 1200.000
cache size : 20480 KB
physical cores : 16
logical cores : 32
hyper-threading on

Memory info:

128636M physical memory installed.

MemTotal: 131726584 kB
MemFree: 27208708 kB

MemAvailable: 124491956 kB
Buffers: 1157944 kB
Cached: 93154456 kB
SwapCached: 0 kB
Active: 12323756 kB
Inactive: 86497376 kB
Active(anon): 4510940 kB
Inactive(anon): 61408 kB
Active(file): 7812816 kB
Inactive(file): 86435968 kB
Unevictable: 0 kB
Mlocked: 0 kB
SwapTotal: 4194300 kB
SwapFree: 4194300 kB
Dirty: 172 kB
Writeback: 0 kB
AnonPages: 4505548 kB
Mapped: 470344 kB
Shmem: 63620 kB
Slab: 3954316 kB
SReclaimable: 3660604 kB
SUnreclaim: 293712 kB
KernelStack: 18320 kB
PageTables: 68788 kB
NFS_Unstable: 0 kB
Bounce: 0 kB
WritebackTmp: 0 kB
CommitLimit: 70057592 kB
Committed_AS: 11834664 kB
VmallocTotal: 34359738367 kB
VmallocUsed: 493752 kB
VmallocChunk: 34291845116 kB
Percpu: 9856 kB
HardwareCorrupted: 0 kB
AnonHugePages: 1859584 kB
CmaTotal: 0 kB
CmaFree: 0 kB
HugePages_Total: 0
HugePages_Free: 0
HugePages_Rsvd: 0
HugePages_Surp: 0
Hugepagesize: 2048 kB
DirectMap4k: 184828 kB
DirectMap2M: 4925440 kB
DirectMap1G: 131072000 kB

#####

Get environment info ...

#####

ENV VAR: TCL_LIBRARY = /data/cadence/installs/PVS211/share/lib/tcltk/08.64/tcl8.6

ENV VAR: TCLX_LIBRARY = /data/cadence/installs/PVS211/share/lib/tclx/08.40

ENV VAR: TCLLIBPATH = /data/cadence/installs/PVS211/share/lib/itcl/3.4.1

/data/cadence/installs/PVS211/share/lib/tclxml/3.2 /data/cadence/installs/PVS211/share/lib/tcllib/1.18

/data/cadence/installs/PVS211/share/lib/itcl/3.4.1 /data/cadence/installs/PVS211/share/lib/tclxml/3.2

/data/cadence/installs/PVS211/share/lib/tcllib/1.18 /data/cadence/installs/PVS211/share/lib/itcl/3.4.1
/data/cadence/installs/PVS211/share/lib/tclxml/3.2 /data/cadence/installs/PVS211/share/lib/tcllib/1.18

#####

Parsing Control File

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/pvslvsctl ...

#####

TEXT_DEPTH -primary;
VIRTUAL_CONNECT -colon no;
VIRTUAL_CONNECT -semicolon_as_colon yes;
VIRTUAL_CONNECT -report no;
VIRTUAL_CONNECT -depth -primary;
LVS_IGNORE_PORTS no;
LVS_EXPAND_CELL_ON_ERROR no;
LVS_BREAK_AMBIG_MAX 32;
LVS_ABORT -softchk no;
LVS_ABORT -supply_error no;
LVS_ABORT -check_device_for_property_rule no;
LVS_FIND_SHORTS no;
SCONNECT_UPPER_SHAPE_COUNT no;
LVS_REPORT_FILE "inv.rep";
LVS_REPORT_MAX 50 -mismatched_net_limit 100;
LVS_RUN_ERC_CHECKS yes;
LVS_REPORT_OPT -none;
REPORT_SUMMARY -erc "inv.sum" -replace;
MAX_RESULTS -erc 1000;
RESULTS_DB -erc
"/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.erc_errors.
ascii" -ascii;
KEEP_LAYERS -none;
SCHEMATIC_FORMAT cdl;
SCHEMATIC_PATH
"/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.cdl";
ABORT_ON_LAYOUT_ERROR yes;
LAYOUT_FORMAT gdsii;
LAYOUT_PATH
"/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.gds";

#####

Parsing Rule File

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/.technology.rul

...

#####

TECHNOLOGY gpdk045_pvs -ruleSet default -techLib
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvtech.lib;
[INFO] TECHNOLOGY: Rules file
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/.pvlLVS.rul will be
included after the remainder of the current rules are processed.
[INFO] TECHNOLOGY gpdk045_pvs -techLib
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvtech.lib: End of additions.
include "./pvs_control_file"
variable R_metal1 0.0736;
variable R_metal2_7 0.0604;
variable R_metal8_10 0.0214;

```
variable R_metal11 0.021;
variable R_snpoly 15;
variable R_sppoly 15;
variable R_nsnpoly 200;
variable R_nsppoly 650;
variable R_snactive 18;
variable R_spactive 15;
variable R_nsnactive 100;
variable R_nspactive 200;
variable R_nwell 450;
variable R_pwell 1000;
variable resTol 5;
LVS_NETLIST yes -allow_inconsistent_model;
LVS_FILTER_OPTION AG RC RE RG;
INPUT_SCALE 2000;
GRID 5;
UNIT -length u;
TEXT_DEPTH -primary;
[WARN]: TEXT_DEPTH at line 87 in file
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/pvs/./pvLVS.rul is skipped. It is
set in control file.
MASK_SVDB_DIR svdb;
LAYOUT_PRESERVE_CASE -property yes;
LAYER_DEF empty 999;
LAYER_DEF BJTdum 1000;
LAYER_MAP 15 -datatype 0 1000;
LAYER_DEF Bondpad 1001;
LAYER_MAP 36 -datatype 0 1001;
LAYER_DEF Cap3dum 1002;
LAYER_MAP 84 -datatype 0 1002;
LAYER_DEF CapMetal 1003;
LAYER_MAP 14 -datatype 0 1003;
LAYER_DEF Capdum 1004;
LAYER_MAP 12 -datatype 0 1004;
LAYER_DEF Cont 1005;
LAYER_MAP 6 -datatype 0 1005;
LAYER_DEF DIOfdummy 1006;
LAYER_MAP 22 -datatype 0 1006;
LAYER_DEF IND2dummy 1007;
LAYER_MAP 17 -datatype 0 1007;
LAYER_DEF INDdummy 1008;
LAYER_MAP 16 -datatype 0 1008;
LAYER_DEF M1Resdum 1009;
LAYER_MAP 75 -datatype 0 1009;
LAYER_DEF M2Resdum 1010;
LAYER_MAP 76 -datatype 0 1010;
LAYER_DEF M3Resdum 1011;
LAYER_MAP 77 -datatype 0 1011;
LAYER_DEF M4Resdum 1012;
LAYER_MAP 78 -datatype 0 1012;
LAYER_DEF M5Resdum 1013;
LAYER_MAP 79 -datatype 0 1013;
LAYER_DEF M6Resdum 1014;
LAYER_MAP 80 -datatype 0 1014;
LAYER_DEF M7Resdum 1015;
```

LAYER_MAP 81 -datatype 0 1015;
LAYER_DEF M8Resdum 1016;
LAYER_MAP 82 -datatype 0 1016;
LAYER_DEF M9Resdum 1017;
LAYER_MAP 83 -datatype 0 1017;
LAYER_DEF M10Resdum 1018;
LAYER_MAP 93 -datatype 0 1018;
LAYER_DEF M11Resdum 1019;
LAYER_MAP 103 -datatype 0 1019;
LAYER_DEF Metal1 1020;
LAYER_MAP 7 -datatype -le 5 1020;
LAYER_DEF Metal2 1021;
LAYER_MAP 9 -datatype -le 5 1021;
LAYER_DEF Metal3 1022;
LAYER_MAP 11 -datatype -le 5 1022;
LAYER_DEF Metal4 1023;
LAYER_MAP 31 -datatype -le 5 1023;
LAYER_DEF Metal5 1024;
LAYER_MAP 33 -datatype -le 5 1024;
LAYER_DEF Metal6 1025;
LAYER_MAP 35 -datatype -le 5 1025;
LAYER_DEF Metal7 1026;
LAYER_MAP 38 -datatype -le 5 1026;
LAYER_DEF Metal8 1027;
LAYER_MAP 40 -datatype -le 5 1027;
LAYER_DEF Metal9 1028;
LAYER_MAP 42 -datatype -le 5 1028;
LAYER_DEF Metal10 1029;
LAYER_MAP 152 -datatype -le 5 1029;
LAYER_DEF Metal11 1030;
LAYER_MAP 162 -datatype -le 5 1030;
LAYER_DEF NPN2dum 1031;
LAYER_MAP 110 -datatype 0 1031;
LAYER_DEF NPN5dum 1032;
LAYER_MAP 111 -datatype 0 1032;
LAYER_DEF NPN10dum 1033;
LAYER_MAP 112 -datatype 0 1033;
LAYER_DEF NPNdummy 1034;
LAYER_MAP 20 -datatype 0 1034;
LAYER_DEF Nburied 1035;
LAYER_MAP 19 -datatype 0 1035;
LAYER_DEF Nhvt 1036;
LAYER_MAP 18 -datatype 0 1036;
LAYER_DEF Nimp 1037;
LAYER_MAP 4 -datatype 0 1037;
LAYER_DEF Nlvt 1038;
LAYER_MAP 26 -datatype 0 1038;
LAYER_DEF Nwell 1039;
LAYER_MAP 2 -datatype 0 1039;
LAYER_DEF Nzvt 1040;
LAYER_MAP 52 -datatype 0 1040;
LAYER_DEF Oxide 1041;
LAYER_MAP 1 -datatype 0 1041;
LAYER_DEF Oxide_thk 1042;
LAYER_MAP 24 -datatype 0 1042;

LAYER_DEF PNPdummy 1043;
LAYER_MAP 21 -datatype 0 1043;
LAYER_DEF Phvt 1044;
LAYER_MAP 23 -datatype 0 1044;
LAYER_DEF Pimp 1045;
LAYER_MAP 5 -datatype 0 1045;
LAYER_DEF Plvt 1046;
LAYER_MAP 27 -datatype 0 1046;
LAYER_DEF Poly 1047;
LAYER_MAP 3 -datatype 0 1047;
LAYER_DEF Psub 1048;
LAYER_MAP 25 -datatype 0 1048;
LAYER_DEF ResWdum 1049;
LAYER_MAP 71 -datatype 0 1049;
LAYER_DEF Resdum 1050;
LAYER_MAP 13 -datatype 0 1050;
LAYER_DEF SiProt 1051;
LAYER_MAP 72 -datatype 0 1051;
LAYER_DEF Via1 1052;
LAYER_MAP 8 -datatype 0 1052;
LAYER_DEF Via2 1053;
LAYER_MAP 10 -datatype 0 1053;
LAYER_DEF Via3 1054;
LAYER_MAP 30 -datatype 0 1054;
LAYER_DEF Via4 1055;
LAYER_MAP 32 -datatype 0 1055;
LAYER_DEF Via5 1056;
LAYER_MAP 34 -datatype 0 1056;
LAYER_DEF Via6 1057;
LAYER_MAP 37 -datatype 0 1057;
LAYER_DEF Via7 1058;
LAYER_MAP 39 -datatype 0 1058;
LAYER_DEF Via8 1059;
LAYER_MAP 41 -datatype 0 1059;
LAYER_DEF Via9 1060;
LAYER_MAP 151 -datatype 0 1060;
LAYER_DEF Via10 1061;
LAYER_MAP 161 -datatype 0 1061;
LAYER_DEF text 1098;
LAYER_MAP 63 -texttype 0 1098;
TEXT_LAYER text;
PORT -text_layer text;
LAYER_DEF ind10_text 1062;
LAYER_MAP 152 -texttype 0 1062;
TEXT_LAYER ind10_text;
PORT -text_layer ind10_text;
LAYER_DEF ind11_text 1063;
LAYER_MAP 162 -texttype 0 1063;
TEXT_LAYER ind11_text;
PORT -text_layer ind11_text;
LAYER_DEF nwell_conn_text 10645;
LAYER_MAP 2 -texttype 0 10645;
TEXT_LAYER nwell_conn_text;
PORT -text_layer nwell_conn_text;
LAYER_DEF metal1_conn_text 1064;

LAYER_MAP 7 -texttype 0 1064;
TEXT_LAYER metal1_conn_text;
PORT -text_layer metal1_conn_text;
LAYER_DEF metal2_conn_text 1065;
LAYER_MAP 9 -texttype 0 1065;
TEXT_LAYER metal2_conn_text;
PORT -text_layer metal2_conn_text;
LAYER_DEF metal3_conn_text 1066;
LAYER_MAP 11 -texttype 0 1066;
TEXT_LAYER metal3_conn_text;
PORT -text_layer metal3_conn_text;
LAYER_DEF metal4_conn_text 1067;
LAYER_MAP 31 -texttype 0 1067;
TEXT_LAYER metal4_conn_text;
PORT -text_layer metal4_conn_text;
LAYER_DEF metal5_conn_text 1068;
LAYER_MAP 33 -texttype 0 1068;
TEXT_LAYER metal5_conn_text;
PORT -text_layer metal5_conn_text;
LAYER_DEF metal6_conn_text 1069;
LAYER_MAP 35 -texttype 0 1069;
TEXT_LAYER metal6_conn_text;
PORT -text_layer metal6_conn_text;
LAYER_DEF metal7_conn_text 1070;
LAYER_MAP 38 -texttype 0 1070;
TEXT_LAYER metal7_conn_text;
PORT -text_layer metal7_conn_text;
LAYER_DEF metal8_conn_text 1071;
LAYER_MAP 40 -texttype 0 1071;
TEXT_LAYER metal8_conn_text;
PORT -text_layer metal8_conn_text;
LAYER_DEF metal9_conn_text 1072;
LAYER_MAP 42 -texttype 0 1072;
TEXT_LAYER metal9_conn_text;
PORT -text_layer metal9_conn_text;
LAYER_DEF metal10_conn_text 1073;
LAYER_MAP 152 -texttype 0 1073;
TEXT_LAYER metal10_conn_text;
PORT -text_layer metal10_conn_text;
LAYER_DEF metal11_conn_text 1074;
LAYER_MAP 162 -texttype 0 1074;
TEXT_LAYER metal11_conn_text;
PORT -text_layer metal11_conn_text;
LAYER_DEF nwell_label 10765;
LAYER_MAP 2 -texttype 0 10765;
TEXT_LAYER nwell_label;
PORT -text_layer nwell_label;
LAYER_DEF m1_label 1076;
LAYER_MAP 7 -texttype 3 1076;
TEXT_LAYER m1_label;
PORT -text_layer m1_label;
LAYER_DEF m2_label 1077;
LAYER_MAP 9 -texttype 3 1077;
TEXT_LAYER m2_label;
PORT -text_layer m2_label;

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LAYER_DEF m3_label 1078;
LAYER_MAP 11 -texttype 3 1078;
TEXT_LAYER m3_label;
PORT -text_layer m3_label;
LAYER_DEF m4_label 1079;
LAYER_MAP 31 -texttype 3 1079;
TEXT_LAYER m4_label;
PORT -text_layer m4_label;
LAYER_DEF m5_label 1080;
LAYER_MAP 33 -texttype 3 1080;
TEXT_LAYER m5_label;
PORT -text_layer m5_label;
LAYER_DEF m6_label 1081;
LAYER_MAP 35 -texttype 3 1081;
TEXT_LAYER m6_label;
PORT -text_layer m6_label;
LAYER_DEF m7_label 1082;
LAYER_MAP 38 -texttype 3 1082;
TEXT_LAYER m7_label;
PORT -text_layer m7_label;
LAYER_DEF m8_label 1083;
LAYER_MAP 40 -texttype 3 1083;
TEXT_LAYER m8_label;
PORT -text_layer m8_label;
LAYER_DEF m9_label 1084;
LAYER_MAP 42 -texttype 3 1084;
TEXT_LAYER m9_label;
PORT -text_layer m9_label;
LAYER_DEF m10_label 1085;
LAYER_MAP 152 -texttype 3 1085;
TEXT_LAYER m10_label;
PORT -text_layer m10_label;
LAYER_DEF m11_label 1086;
LAYER_MAP 162 -texttype 3 1086;
TEXT_LAYER m11_label;
PORT -text_layer m11_label;
LAYER_DEF nwell_pin 10875;
LAYER_MAP 2 -texttype 0 10875;
TEXT_LAYER nwell_pin;
PORT -text_layer nwell_pin;
LAYER_DEF m1_pin 1087;
LAYER_MAP 7 -texttype 1 1087;
TEXT_LAYER m1_pin;
PORT -text_layer m1_pin;
LAYER_DEF m2_pin 1088;
LAYER_MAP 9 -texttype 1 1088;
TEXT_LAYER m2_pin;
PORT -text_layer m2_pin;
LAYER_DEF m3_pin 1089;
LAYER_MAP 11 -texttype 1 1089;
TEXT_LAYER m3_pin;
PORT -text_layer m3_pin;
LAYER_DEF m4_pin 1090;
LAYER_MAP 31 -texttype 1 1090;
TEXT_LAYER m4_pin;
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PORT -text_layer m4_pin;
LAYER_DEF m5_pin 1091;
LAYER_MAP 33 -texttype 1 1091;
TEXT_LAYER m5_pin;
PORT -text_layer m5_pin;
LAYER_DEF m6_pin 1092;
LAYER_MAP 35 -texttype 1 1092;
TEXT_LAYER m6_pin;
PORT -text_layer m6_pin;
LAYER_DEF m7_pin 1093;
LAYER_MAP 38 -texttype 1 1093;
TEXT_LAYER m7_pin;
PORT -text_layer m7_pin;
LAYER_DEF m8_pin 1094;
LAYER_MAP 40 -texttype 1 1094;
TEXT_LAYER m8_pin;
PORT -text_layer m8_pin;
LAYER_DEF m9_pin 1095;
LAYER_MAP 42 -texttype 1 1095;
TEXT_LAYER m9_pin;
PORT -text_layer m9_pin;
LAYER_DEF m10_pin 1096;
LAYER_MAP 152 -texttype 1 1096;
TEXT_LAYER m10_pin;
PORT -text_layer m10_pin;
LAYER_DEF m11_pin 1097;
LAYER_MAP 162 -texttype 1 1097;
TEXT_LAYER m11_pin;
PORT -text_layer m11_pin;
EXTENT bulk;
AND NPN2dum NPNdummy _nnp2;
AND NPN5dum NPNdummy _nnp5;
AND NPN10dum NPNdummy _nnp10;
AND M1Resdum Metal1 _resm1;
AND M2Resdum Metal2 _resm2;
AND M3Resdum Metal3 _resm3;
AND M4Resdum Metal4 _resm4;
AND M5Resdum Metal5 _resm5;
AND M6Resdum Metal6 _resm6;
AND M7Resdum Metal7 _resm7;
AND M8Resdum Metal8 _resm8;
AND M9Resdum Metal9 _resm9;
AND M10Resdum Metal10 _resm10;
AND M11Resdum Metal11 _resm11;
AND Bondpad Metal9 bp_tap;
AND Cont Poly cont_poly;
AND INDdummy Metal10 ind10;
NOT Metal1 M1Resdum metal1_conn;
NOT Metal2 M2Resdum metal2_conn;
NOT Metal3 M3Resdum metal3_conn;
NOT Metal4 M4Resdum metal4_conn;
NOT Metal5 M5Resdum metal5_conn;
NOT Metal6 M6Resdum metal6_conn;
NOT Metal7 M7Resdum metal7_conn;
NOT Metal8 M8Resdum metal8_conn;
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NOT Metal9 M9Resdum metal9_conn;
AND Nimp Oxide nactive;
AND Nburied Nwell nb_tap;
NOT Nwell ResWdum nwell_conn;
AND Oxide Pimp pactive;
NOT pactive Poly pdiff;
NOT pdiff Resdum pdiff_conn;
AND Cont pdiff_conn cont_pdiff;
NOT Poly Resdum poly_conn;
NOT nactive poly_conn ndiff;
NOT ndiff Resdum ndiff_conn;
AND Cont ndiff_conn cont_ndiff;
AND CapMetal Via10 via10_cap;
NOT Via10 CapMetal via10_nocap;
AND Nwell SiProt L40182;
AND L40182 ResWdum _resnwoxide;
SELECT -interact -not Nwell SiProt L25544;
AND L25544 ResWdum _resnwsti;
AND BJTdum pdiff_conn L68803;
AREA L68803 -eq 4 _vpnp2;
AREA L68803 -eq 25 _vpnp5;
AREA L68803 -eq 100 _vpnp10;
AND INDdummy Metal11 L13465;
SIZE L13465 -by 0.01 -overunder ind11;
SELECT -enclose INDdummy ind11 -lt 2 _ind_a;
SELECT -interact -not INDdummy _ind_a _ind_s1;
SELECT -enclose _ind_s1 ind11 _ind_s;
NOT ind10 ind11 ind_nr;
OR INDdummy M10Resdum L17074;
NOT Metal10 L17074 metal10_conn;
OR INDdummy M11Resdum L86607;
NOT Metal11 L86607 metal11_conn;
AND metal10_conn metal11_conn L92042;
SELECT -interact CapMetal L92042 _mimcap;
AND NPNdummy ndiff_conn L61645;
NOT L61645 Nwell npn_emit;
AND Psub pdiff_conn L98077;
AND L98077 PNPdummy pnp_emit;
OR CapMetal INDdummy L47735;
NOT Via10 L47735 via10_nodev;
ANGLE -not IND2dummy -ltgt 0 90 L57315;
EDGE_EXPAND L57315 -outside_by 0.01 L71536;
NOT L71536 IND2dummy L93547;
SELECT -inside L93547 ind11 ind2_width;
AND _ind_a ind2_width inda_width;
AND _ind_s ind2_width inds_width;
OR ind10 ind11 L83584;
HOLES L83584 -inner L87155;
VERTEX L87155 -lt 14 ind_hole;
AND Nwell ndiff_conn L74405;
AND NPNdummy Psub L28555;
NOT L74405 L28555 ntap;
NOT pdiff_conn Nwell L65704;
NOT L65704 PNPdummy ptap;
AND DIODummy Oxide L54696;

AND L54696 Oxide_thk L77738;
AND L77738 Nzvt L73169;
NOT L73169 Nwell _ndio_2v_nvt;
NOT L54696 Oxide_thk L97435;
AND L97435 Nhvt L22301;
NOT L22301 Nwell _ndio_hvt;
AND L97435 Nlvt L18457;
NOT L18457 Nwell _ndio_lvt;
AND L97435 Nzvt L5003;
NOT L5003 Nwell _ndio_nvt;
AND L97435 Phvt L62719;
AND L62719 Nwell _pdio_hvt;
AND L97435 Plvt L58875;
AND L58875 Nwell _pdio_lvt;
NOT Oxide Oxide_thk L28394;
AND L28394 Poly L66375;
AND L66375 Pimp L29970;
AND L29970 Phvt _pmos1v_hvt;
AND L29970 Plvt _pmos1v_lvt;
AND SiProt nactive L18758;
AND L18758 Resdum L23316;
NOT L23316 Nwell _resnsndiff;
AND Poly SiProt L5240;
AND L5240 Nimp L1378;
AND L1378 Resdum L66582;
NOT L66582 Nwell _resnsnpoly;
AND L66582 Nwell _resnsnpoly_nw;
AND SiProt pactive L88604;
AND L88604 Resdum L197;
AND L197 Nwell _resnsndiff;
AND L5240 Pimp L60960;
AND L60960 Resdum L4294;
NOT L4294 Nwell _resnsppoly;
AND L4294 Nwell _resnsppoly_nw;
SELECT -interact -not nactive SiProt L62496;
AND L62496 Resdum L426;
NOT L426 Nwell _ressndiff;
NOT Poly SiProt L90381;
AND L90381 Nimp L49196;
AND L49196 Resdum L17878;
NOT L17878 Nwell _ressnpoly;
AND L17878 Nwell _ressnpoly_nw;
SELECT -interact -not pactive SiProt L79746;
AND L79746 Resdum L22728;
AND L22728 Nwell _ressndiff;
AND L90381 Pimp L8778;
AND L8778 Resdum L54937;
NOT L54937 Nwell _ressppoly;
AND L54937 Nwell _ressppoly_nw;
AND ind10 ind11 L54420;
AND L54420 _ind_s L42364;
SELECT -touch L42364 ind_hole L12760;
SELECT -interact L12760 Via10 ind_ct;
AND Via10 _ind_s L13648;
NOT L13648 ind_ct ind_via_diva;

AND Oxide Oxide_thk L24975;
AND L24975 Poly L98842;
AND L98842 Pimp L73768;
OR Cap3dum Capdum L8948;
NOT L73768 L8948 _pmos2v;
ANGLE -not ind_ct -ltgt 0 90 L65767;
EDGE_EXPAND L65767 -outside_by 0.1 L12066;
AND L12066 ind10 L64022;
EDGE_BOOLEAN -coincident_only L64022 ind_hole -outside L30099;
EDGE_EXPAND L30099 -outside_by 101 L43958;
AND L43958 ind_hole ind_rad;
NOT bulk nb_tap L14174;
SIZE Psub -by -0.001 L86601;
NOT Psub L86601 L7495;
NOT L14174 L7495 psubstrate;
AND L66375 Nimp L89552;
AND L89552 Nzvt L70180;
NOT L70180 Nhvt L21328;
NOT L21328 Nburied _nmos_12_native;
AND L98842 Nimp L14186;
AND L14186 Nzvt L15681;
NOT L15681 Nhvt L10869;
NOT L10869 Nburied _nmos_25_native;
AND L97435 Pimp L62041;
NOT L62041 Plvt L28017;
NOT L28017 Phvt L17166;
AND L17166 Nwell _pdio;
AND L77738 Pimp L16131;
NOT L16131 Plvt L48360;
NOT L48360 Phvt L917;
AND L917 Nwell _pdio_2v;
SIZE IND2dummy -by 5 L70261;
SIZE INDdummy -by -1 L66884;
NOT L70261 L66884 L26372;
AND INDdummy L26372 L19884;
NOT L19884 ind11 L73859;
EDGE_BOOLEAN -coincident_only ind11 L73859 -outside L50941;
EDGE_EXPAND L50941 -inside_by 0.001 L12819;
SELECT -interact ind11 L12819 L33493;
SELECT -interact L73859 L33493 -eq 2 ind2_sp1;
SELECT -touch ind_nr IND2dummy L69850;
ANGLE -not L69850 -ltgt 0 90 L78036;
EDGE_EXPAND L78036 -outside_by 0.01 L91609;
NOT L91609 ind11 L15138;
NOT L15138 ind10 L37576;
VERTEX L37576 -lt 5 ind2_space;
AND _ind_a ind_hole L69131;
SIZE L69131 -by 0.1 L1472;
EDGE_EXPAND L1472 -inside_by 0.1 L82556;
NOT L1472 L69131 L62333;
NOT L62333 L82556 L28951;
ANGLE -not L28951 -ltgt 0 90 L87029;
EDGE_EXPAND L87029 -outside_by 101 L27296;
OR L27296 L28951 L13931;
AND L13931 ind_hole L10222;

ANGLE L10222 -ltgt 0 90 L25455;
EDGE_EXPAND L25455 -inside_by 0.001 L96841;
SELECT -interact -not L10222 L96841 L68829;
AREA L68829 -gt 0.8 inda_rad;
AND L97435 Nimp L21623;
NOT L21623 Nlvt L12020;
NOT L12020 Nhvt L4397;
NOT L4397 Nzvt L8315;
NOT L8315 Nwell _ndio;
AND L77738 Nimp L56549;
NOT L56549 Nlvt L18325;
NOT L18325 Nhvt L87119;
NOT L87119 Nzvt L50344;
NOT L50344 Nwell _ndio_2v;
AND L89552 Nhvt L87478;
OR Nlvt Nzvt L49009;
OR L49009 Nburied L13756;
NOT L87478 L13756 _nmos1v_hvt;
AND L89552 Nlvt L83634;
OR Nhvt Nzvt L25035;
OR L25035 Nburied L68361;
NOT L83634 L68361 _nmos1v_lvt;
NOT L89552 Nzvt L25441;
NOT L25441 Nhvt L70734;
NOT L70734 Nburied L8530;
AND Capdum L8530 _nmoscap1v;
NOT L14186 Nzvt L55994;
NOT L55994 Nhvt L55604;
NOT L55604 Nburied L64343;
AND Capdum L64343 _nmoscap2v;
OR Phvt Plvt L20537;
OR Capdum L20537 L86632;
OR Cap3dum L86632 L85139;
NOT L29970 L85139 _pmos1v;
NOT L29970 Nzvt L5017;
NOT L5017 Nhvt L28655;
NOT L28655 Nburied L38143;
AND Capdum L38143 _pmoscap1v;
NOT L73768 Nzvt L4203;
NOT L4203 Nhvt L16207;
NOT L16207 Nburied L72451;
AND Capdum L72451 _pmoscap2v;
NOT L64343 L8948 _nmos_25;
OR L25035 Nlvt L40124;
OR L40124 Nburied L71361;
OR Capdum L71361 L32193;
OR Cap3dum L32193 L26526;
NOT L89552 L26526 _nmos1v;
CONNECT Bondpad metal11_conn -by bp_tap;
CONNECT ind11 metal11_conn;
CONNECT metal11_conn CapMetal -by via10_cap;
CONNECT metal11_conn metal10_conn -by via10_nocap;
CONNECT ind11 ind10 -by ind_via_diva;
CONNECT metal11_conn metal10_conn -by via10_nodev;
CONNECT ind_ct ind10;

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CONNECT ind10 metal10_conn;
CONNECT metal10_conn metal9_conn -by Via9;
CONNECT metal9_conn metal8_conn -by Via8;
CONNECT metal8_conn metal7_conn -by Via7;
CONNECT metal7_conn metal6_conn -by Via6;
CONNECT metal6_conn metal5_conn -by Via5;
CONNECT metal5_conn metal4_conn -by Via4;
CONNECT metal4_conn metal3_conn -by Via3;
CONNECT metal3_conn metal2_conn -by Via2;
CONNECT metal2_conn metal1_conn -by Via1;
CONNECT metal1_conn poly_conn -by cont_poly;
CONNECT metal1_conn pdiff_conn -by cont_pdiff;
CONNECT metal1_conn npn_emit -by cont_ndiff;
CONNECT metal1_conn ndiff_conn -by cont_ndiff;
CONNECT metal1_conn pnp_emit -by cont_pdiff;
SCONNECT pdiff_conn psubstrate -by ptap;
LVS_SOFTCHK psubstrate -type contact;
SCONNECT ndiff_conn nwell_conn -by ntap;
LVS_SOFTCHK nwell_conn -type contact;
SCONNECT nwell_conn Nburied -by nb_tap;
LVS_SOFTCHK Nburied -type contact;
ATTACH ind11_text ind11;
ATTACH metal11_conn_text metal11_conn;
ATTACH ind11_text ind_ct;
ATTACH ind10_text ind_ct;
ATTACH ind10_text ind10;
ATTACH metal10_conn_text metal10_conn;
ATTACH metal9_conn_text metal9_conn;
ATTACH metal8_conn_text metal8_conn;
ATTACH metal7_conn_text metal7_conn;
ATTACH metal6_conn_text metal6_conn;
ATTACH metal5_conn_text metal5_conn;
ATTACH metal4_conn_text metal4_conn;
ATTACH metal3_conn_text metal3_conn;
ATTACH metal2_conn_text metal2_conn;
ATTACH metal1_conn_text metal1_conn;
ATTACH nwell_conn_text nwell_conn;
ATTACH nwell_label nwell_conn;
ATTACH m1_label metal1_conn;
ATTACH m2_label metal2_conn;
ATTACH m3_label metal3_conn;
ATTACH m4_label metal4_conn;
ATTACH m5_label metal5_conn;
ATTACH m6_label metal6_conn;
ATTACH m7_label metal7_conn;
ATTACH m8_label metal8_conn;
ATTACH m9_label metal9_conn;
ATTACH m10_label metal10_conn;
ATTACH m11_label metal11_conn;
ATTACH nwell_pin nwell_conn;
ATTACH m1_pin metal1_conn;
ATTACH m2_pin metal2_conn;
ATTACH m3_pin metal3_conn;
ATTACH m4_pin metal4_conn;
ATTACH m5_pin metal5_conn;
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ATTACH m6_pin metal6_conn;
ATTACH m7_pin metal7_conn;
ATTACH m8_pin metal8_conn;
ATTACH m9_pin metal9_conn;
ATTACH m10_pin metal10_conn;
ATTACH m11_pin metal11_conn;
AND psubstrate nactive _nmos1v_sti;
SIZE _nmos1v -by 1 _nmos1v_wpe_temp;
NOT _nmos1v_wpe_temp Nwell _nmos1v_wpe;
DEVICE MN ( g45n1svt ) _nmos1v poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) ( S D
) -model g45n1svt < _nmos1v_sti > < _nmos1v_wpe > [ property fw , w , l , ad , as , pd , ps , sa , sb , sca
, scb , scc
width = perim_co ( _nmos1v , ndiff_conn ) / 2
fw = width
w = width
l = area ( _nmos1v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos1v_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos1v , _nmos1v_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos1v , _nmos1v_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MN ( g45n1svt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45n1svt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n1svt ) MN ( g45n1svt );
AND psubstrate nactive _nmos1v_hvt_sti;
SIZE _nmos1v_hvt -by 1 _nmos1v_hvt_wpe_temp;
NOT _nmos1v_hvt_wpe_temp Nwell _nmos1v_hvt_wpe;
DEVICE MN ( g45n1hvt ) _nmos1v_hvt poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) (
S D ) -model g45n1hvt < _nmos1v_hvt_sti > < _nmos1v_hvt_wpe > [ property fw , w , l , ad , as , pd , ps ,
sa , sb , sca , scb , scc
width = perim_co ( _nmos1v_hvt , ndiff_conn ) / 2
fw = width
w = width
l = area ( _nmos1v_hvt ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos1v_hvt_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos1v_hvt , _nmos1v_hvt_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos1v_hvt , _nmos1v_hvt_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )

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scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MN ( g45n1hvt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45n1hvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n1hvt ) MN ( g45n1hvt );
AND psubstrate nactive _nmos1v_lvt_sti;
SIZE _nmos1v_lvt -by 1 _nmos1v_lvt_wpe_temp;
NOT _nmos1v_lvt_wpe_temp Nwell _nmos1v_lvt_wpe;
DEVICE MN ( g45n1lvt ) _nmos1v_lvt poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) ( S
D ) -model g45n1lvt < _nmos1v_lvt_sti > < _nmos1v_lvt_wpe > [ property w , l , ad , as , pd , ps , sa , sb ,
sca , scb , scc
width = perim_co ( _nmos1v_lvt , ndiff_conn ) / 2
w = width
l = area ( _nmos1v_lvt ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos1v_lvt_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos1v_lvt , _nmos1v_lvt_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos1v_lvt , _nmos1v_lvt_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MN ( g45n1lvt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45n1lvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n1lvt ) MN ( g45n1lvt );
AND psubstrate nactive _nmos_12_native_sti;
SIZE _nmos_12_native -by 1 _nmos_12_native_wpe_temp;
NOT _nmos_12_native_wpe_temp Nwell _nmos_12_native_wpe;
DEVICE MN ( g45n1nvt ) _nmos_12_native poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate (
B ) ( S D ) -model g45n1nvt < _nmos_12_native_sti > < _nmos_12_native_wpe > [ property fw , w , l , ad ,
as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _nmos_12_native , ndiff_conn ) / 2
fw = width
w = width
l = area ( _nmos_12_native ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos_12_native_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos_12_native , _nmos_12_native_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos_12_native , _nmos_12_native_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];

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LVS_CHECK_PROPERTY MN ( g45n1nvt ) || -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45n1nvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n1nvt ) MN ( g45n1nvt );
AND psubstrate nactive _nmos_25_sti;
SIZE _nmos_25 -by 1 _nmos_25_wpe_temp;
NOT _nmos_25_wpe_temp Nwell _nmos_25_wpe;
DEVICE MN ( g45n2svt ) _nmos_25 poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) ( S
D ) -model g45n2svt < _nmos_25_sti > < _nmos_25_wpe > [ property fw , w , l , ad , as , pd , ps , sa , sb ,
sca , scb , scc
width = perim_co ( _nmos_25 , ndiff_conn ) / 2
fw = width
w = width
l = area ( _nmos_25 ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos_25_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos_25 , _nmos_25_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos_25 , _nmos_25_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MN ( g45n2svt ) || -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45n2svt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n2svt ) MN ( g45n2svt );
AND psubstrate nactive _nmos_25_native_sti;
SIZE _nmos_25_native -by 1 _nmos_25_native_wpe_temp;
NOT _nmos_25_native_wpe_temp Nwell _nmos_25_native_wpe;
DEVICE MN ( g45n2nvt ) _nmos_25_native poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate (
B ) ( S D ) -model g45n2nvt < _nmos_25_native_sti > < _nmos_25_native_wpe > [ property fw , w , l , ad ,
as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _nmos_25_native , ndiff_conn ) / 2
fw = width
w = width
l = area ( _nmos_25_native ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( _nmos_25_native_sti , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _nmos_25_native , _nmos_25_native_wpe , S , 1 )
scv = ENCLOSURE_PARALLEL ( _nmos_25_native , _nmos_25_native_wpe , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MN ( g45n2nvt ) || -tolerance 0;

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LVS_CHECK_PROPERTY MN ( g45n2nvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45n2nvt ) MN ( g45n2nvt );
DEVICE MN ( g45ncap1 ) _nmoscap1v poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) (
S D ) -model g45ncap1 [ property w , l , ad , as , pd , ps
width = perim_co ( _nmoscap1v , ndiff_conn ) / 2
w = width
l = area ( _nmoscap1v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
];
LVS_CHECK_PROPERTY MN ( g45ncap1 ) l l -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45ncap1 ) w w -tolerance 0;
DEVICE MN ( g45ncap2 ) _nmoscap2v poly_conn ( G ) ndiff_conn ( S ) ndiff_conn ( D ) psubstrate ( B ) (
S D ) -model g45ncap2 [ property w , l , ad , as , pd , ps
width = perim_co ( _nmoscap2v , ndiff_conn ) / 2
w = width
l = area ( _nmoscap2v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
];
LVS_CHECK_PROPERTY MN ( g45ncap2 ) l l -tolerance 0;
LVS_CHECK_PROPERTY MN ( g45ncap2 ) w w -tolerance 0;
DEVICE MP ( g45p1svt ) _pmos1v poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) ( S D )
) -model g45p1svt < pactive > [ property fw , w , l , ad , as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _pmos1v , pdiff_conn ) / 2
fw = width
w = width
l = area ( _pmos1v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( pactive , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _pmos1v , nwell_conn , S , 1 )
scv = ENCLOSURE_PARALLEL ( _pmos1v , nwell_conn , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MP ( g45p1svt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45p1svt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45p1svt ) MP ( g45p1svt );
DEVICE MP ( g45p1hvt ) _pmos1v_hvt poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) (
S D ) -model g45p1hvt < pactive > [ property fw , w , l , ad , as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _pmos1v_hvt , pdiff_conn ) / 2
fw = width
w = width
l = area ( _pmos1v_hvt ) / width

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ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( pactive , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _pmos1v_hvt , nwell_conn , S , 1 )
scv = ENCLOSURE_PARALLEL ( _pmos1v_hvt , nwell_conn , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MP ( g45p1hvt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45p1hvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45p1hvt ) MP ( g45p1hvt );
DEVICE MP ( g45p1lvt ) _pmos1v_lvt poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) (
S D ) -model g45p1lvt < pactive > [ property fw , w , l , ad , as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _pmos1v_lvt , pdiff_conn ) / 2
fw = width
w = width
l = area ( _pmos1v_lvt ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( pactive , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _pmos1v_lvt , nwell_conn , S , 1 )
scv = ENCLOSURE_PARALLEL ( _pmos1v_lvt , nwell_conn , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MP ( g45p1lvt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45p1lvt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45p1lvt ) MP ( g45p1lvt );
DEVICE MP ( g45p2svt ) _pmos2v poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) ( S D
) -model g45p2svt < pactive > [ property fw , w , l , ad , as , pd , ps , sa , sb , sca , scb , scc
width = perim_co ( _pmos2v , pdiff_conn ) / 2
fw = width
w = width
l = area ( _pmos2v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
s = ENCLOSURE_VECTOR ( pactive , 2 )
sw = SUM ( s::w )
sa = SUM ( s::a * ( s::w / sw ) )
sb = SUM ( s::b * ( s::w / sw ) )
sch = ENCLOSURE_PERPENDICULAR ( _pmos2v , nwell_conn , S , 1 )

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scv = ENCLOSURE_PARALLEL ( _pmos2v , nwell_conn , S , 1 )
sca = TVF_NUM_FUN ( "calc_sca" , "wpe_procedure" , sch , scv , w , l , 1 )
scb = TVF_NUM_FUN ( "calc_scb" , "wpe_procedure" , sch , scv , w , l , 1 )
scc = TVF_NUM_FUN ( "calc_scc" , "wpe_procedure" , sch , scv , w , l , 1 )
];
LVS_CHECK_PROPERTY MP ( g45p2svt ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45p2svt ) w w -tolerance 0;
LVS_MAP_DEVICE M ( g45p2svt ) MP ( g45p2svt );
DEVICE MP ( g45pcap1 ) _pmoscap1v poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) (
S D ) -model g45pcap1 [ property w , l , ad , as , pd , ps
width = perim_co ( _pmoscap1v , pdiff_conn ) / 2
w = width
l = area ( _pmoscap1v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
];
LVS_CHECK_PROPERTY MP ( g45pcap1 ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45pcap1 ) w w -tolerance 0;
DEVICE MP ( g45pcap2 ) _pmoscap2v poly_conn ( G ) pdiff_conn ( S ) pdiff_conn ( D ) nwell_conn ( B ) (
S D ) -model g45pcap2 [ property w , l , ad , as , pd , ps
width = perim_co ( _pmoscap2v , pdiff_conn ) / 2
w = width
l = area ( _pmoscap2v ) / width
ad = area ( D )
as = area ( S )
pd = perimeter ( D )
ps = perimeter ( S )
];
LVS_CHECK_PROPERTY MP ( g45pcap2 ) l l -tolerance 0;
LVS_CHECK_PROPERTY MP ( g45pcap2 ) w w -tolerance 0;
DEVICE R ( g45rm1 ) _resm1 metal1_conn ( PLUS ) metal1_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm1 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm1 , metal1_conn ) / 2
length = perim_out ( _resm1 , metal1_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm1 ) * width ) )
effL = l
segL = l
r = R_metal1 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm1 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm1 ) l l -tolerance 0;
DEVICE R ( g45rm2 ) _resm2 metal2_conn ( PLUS ) metal2_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm2 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm2 , metal2_conn ) / 2
length = perim_out ( _resm2 , metal2_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm2 ) * width ) )
effL = l

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segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm2 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm2 ) l l -tolerance 0;
DEVICE R ( g45rm3 ) _resm3 metal3_conn ( PLUS ) metal3_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm3 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm3 , metal3_conn ) / 2
length = perim_out ( _resm3 , metal3_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm3 ) * width ) )
effL = l
segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm3 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm3 ) l l -tolerance 0;
DEVICE R ( g45rm4 ) _resm4 metal4_conn ( PLUS ) metal4_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm4 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm4 , metal4_conn ) / 2
length = perim_out ( _resm4 , metal4_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm4 ) * width ) )
effL = l
segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm4 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm4 ) l l -tolerance 0;
DEVICE R ( g45rm5 ) _resm5 metal5_conn ( PLUS ) metal5_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm5 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm5 , metal5_conn ) / 2
length = perim_out ( _resm5 , metal5_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm5 ) * width ) )
effL = l
segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm5 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm5 ) l l -tolerance 0;
DEVICE R ( g45rm6 ) _resm6 metal6_conn ( PLUS ) metal6_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm6 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm6 , metal6_conn ) / 2
length = perim_out ( _resm6 , metal6_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm6 ) * width ) )

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effL = l
segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm6 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm6 ) l l -tolerance 0;
DEVICE R ( g45rm7 ) _resm7 metal7_conn ( PLUS ) metal7_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm7 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm7 , metal7_conn ) / 2
length = perim_out ( _resm7 , metal7_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm7 ) * width ) )
effL = l
segL = l
r = R_metal2_7 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm7 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm7 ) l l -tolerance 0;
DEVICE R ( g45rm8 ) _resm8 metal8_conn ( PLUS ) metal8_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm8 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm8 , metal8_conn ) / 2
length = perim_out ( _resm8 , metal8_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm8 ) * width ) )
effL = l
segL = l
r = R_metal8_10 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm8 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm8 ) l l -tolerance 0;
DEVICE R ( g45rm9 ) _resm9 metal9_conn ( PLUS ) metal9_conn ( MINUS ) ( PLUS MINUS ) -model
g45rm9 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm9 , metal9_conn ) / 2
length = perim_out ( _resm9 , metal9_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm9 ) * width ) )
effL = l
segL = l
r = R_metal8_10 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm9 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm9 ) l l -tolerance 0;
DEVICE R ( g45rm10 ) _resm10 metal10_conn ( PLUS ) metal10_conn ( MINUS ) ( PLUS MINUS )
-model g45rm10 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm10 , metal10_conn ) / 2
length = perim_out ( _resm10 , metal10_conn ) / 2
w = width
effW = width
segW = width

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l = ( length - ( 0.45 * bends ( _resm10 ) * width ) )
effL = l
segL = l
r = R_metal8_10 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm10 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm10 ) l l -tolerance 0;
DEVICE R ( g45rm11 ) _resm11 metal11_conn ( PLUS ) metal11_conn ( MINUS ) ( PLUS MINUS )
-model g45rm11 [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resm11 , metal11_conn ) / 2
length = perim_out ( _resm11 , metal11_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resm11 ) * width ) )
effL = l
segL = l
r = R_metal11 * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rm11 ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rm11 ) l l -tolerance 0;
DEVICE R ( g45rsnd ) _ressndiff ndiff_conn ( PLUS ) ndiff_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rsnd [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _ressndiff , ndiff_conn ) / 2
length = perim_out ( _ressndiff , ndiff_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _ressndiff ) * width ) )
effL = l
segL = l
r = R_snactive * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnd ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnd ) l l -tolerance 0;
DEVICE R ( g45rsnd ) _resnsndiff ndiff_conn ( PLUS ) ndiff_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rsnd [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnsndiff , ndiff_conn ) / 2
length = perim_out ( _resnsndiff , ndiff_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnsndiff ) * width ) )
effL = l
segL = l
r = R_nsnactive * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnd ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnd ) l l -tolerance 0;
DEVICE R ( g45rsnp ) _ressnpoly poly_conn ( PLUS ) poly_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rsnp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _ressnpoly , poly_conn ) / 2
length = perim_out ( _ressnpoly , poly_conn ) / 2
w = width
effW = width

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```

segW = width
l = ( length - ( 0.45 * bends ( _ressnpoly ) * width ) )
effL = l
segL = l
r = R_spactive * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnp ) l l -tolerance 0;
DEVICE R ( g45rsnp ) _ressnpoly_nw poly_conn ( PLUS ) poly_conn ( MINUS ) nwell_conn ( B ) ( PLUS
MINUS ) -model g45rsnp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _ressnpoly_nw , poly_conn ) / 2
length = perim_out ( _ressnpoly_nw , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _ressnpoly_nw ) * width ) )
effL = l
segL = l
r = R_snpoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnp ) l l -tolerance 0;
DEVICE R ( g45rsnp ) _resnsnpoly poly_conn ( PLUS ) poly_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rsnp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnsnpoly , poly_conn ) / 2
length = perim_out ( _resnsnpoly , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnsnpoly ) * width ) )
effL = l
segL = l
r = R_nsnpoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnp ) l l -tolerance 0;
DEVICE R ( g45rsnp ) _resnsnpoly_nw poly_conn ( PLUS ) poly_conn ( MINUS ) nwell_conn ( B ) (
PLUS MINUS ) -model g45rsnp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnsnpoly_nw , poly_conn ) / 2
length = perim_out ( _resnsnpoly_nw , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnsnpoly_nw ) * width ) )
effL = l
segL = l
r = R_nsnpoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rsnp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rsnp ) l l -tolerance 0;
DEVICE R ( g45rsnp ) _resspdiff pdiff_conn ( PLUS ) pdiff_conn ( MINUS ) nwell_conn ( B ) ( PLUS
MINUS ) -model g45rsnp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resspdiff , pdiff_conn ) / 2
length = perim_out ( _resspdiff , pdiff_conn ) / 2
w = width

```

```

effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resspdiff ) * width ) )
effL = l
segL = l
r = R_spactive * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rspd ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rspd ) l l -tolerance 0;
DEVICE R ( g45rspd ) _resnspsdiff pdiff_conn ( PLUS ) pdiff_conn ( MINUS ) nwell_conn ( B ) ( PLUS
MINUS ) -model g45rspd [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnspsdiff , pdiff_conn ) / 2
length = perim_out ( _resnspsdiff , pdiff_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnspsdiff ) * width ) )
effL = l
segL = l
r = R_nspactive * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rspp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rspp ) l l -tolerance 0;
DEVICE R ( g45rspp ) _ressppoly poly_conn ( PLUS ) poly_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rspp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _ressppoly , poly_conn ) / 2
length = perim_out ( _ressppoly , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _ressppoly ) * width ) )
effL = l
segL = l
r = R_sppoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rspp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rspp ) l l -tolerance 0;
DEVICE R ( g45rspp ) _ressppoly_nw poly_conn ( PLUS ) poly_conn ( MINUS ) nwell_conn ( B ) ( PLUS
MINUS ) -model g45rspp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _ressppoly_nw , poly_conn ) / 2
length = perim_out ( _ressppoly_nw , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _ressppoly_nw ) * width ) )
effL = l
segL = l
r = R_sppoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rspp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rspp ) l l -tolerance 0;
DEVICE R ( g45rspp ) _resnsppoly poly_conn ( PLUS ) poly_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rspp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnsppoly , poly_conn ) / 2
length = perim_out ( _resnsppoly , poly_conn ) / 2

```



```

w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnsppoly ) * width ) )
effL = l
segL = l
r = R_nsppoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rnspp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rnspp ) l l -tolerance 0;
DEVICE R ( g45rnspp ) _resnsppoly_nw poly_conn ( PLUS ) poly_conn ( MINUS ) nwell_conn ( B ) (
PLUS MINUS ) -model g45rnspp [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnsppoly_nw , poly_conn ) / 2
length = perim_out ( _resnsppoly_nw , poly_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnsppoly_nw ) * width ) )
effL = l
segL = l
r = R_nsppoly * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rnspp ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rnspp ) l l -tolerance 0;
DEVICE R ( g45rnws ) _resnwsti nwell_conn ( PLUS ) nwell_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rnws [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnwsti , nwell_conn ) / 2
length = perim_out ( _resnwsti , nwell_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnwsti ) * width ) )
effL = l
segL = l
r = R_nwell * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rnws ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rnws ) l l -tolerance 0;
DEVICE R ( g45rnwo ) _resnwoxide nwell_conn ( PLUS ) nwell_conn ( MINUS ) psubstrate ( B ) ( PLUS
MINUS ) -model g45rnwo [ property w , effW , l , effL , r , segW , segL
width = perim_co ( _resnwoxide , nwell_conn ) / 2
length = perim_out ( _resnwoxide , nwell_conn ) / 2
w = width
effW = width
segW = width
l = ( length - ( 0.45 * bends ( _resnwoxide ) * width ) )
effL = l
segL = l
r = R_nwell * ( l / w )
];
LVS_CHECK_PROPERTY R ( g45rnwo ) w w -tolerance 0;
LVS_CHECK_PROPERTY R ( g45rnwo ) l l -tolerance 0;
DEVICE D ( g45nd1svt ) _ndio psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd1svt [ property
area , pj
area = area ( _ndio )

```

```

pj = perimeter ( _ndio )
];
LVS_CHECK_PROPERTY D ( g45nd1svt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd1svt ) P P -tolerance 0;
DEVICE D ( g45nd1lvt ) _ndio_lvt psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd1lvt [ property
area , pj
area = area ( _ndio_lvt )
pj = perimeter ( _ndio_lvt )
];
LVS_CHECK_PROPERTY D ( g45nd1hvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd1hvt ) P P -tolerance 0;
DEVICE D ( g45nd1hvt ) _ndio_hvt psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd1hvt [
property area , pj
area = area ( _ndio_hvt )
pj = perimeter ( _ndio_hvt )
];
LVS_CHECK_PROPERTY D ( g45nd1nvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd1nvt ) P P -tolerance 0;
DEVICE D ( g45nd1nvt ) _ndio_nvt psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd1nvt [
property area , pj
area = area ( _ndio_nvt )
pj = perimeter ( _ndio_nvt )
];
LVS_CHECK_PROPERTY D ( g45nd1nvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd1nvt ) P P -tolerance 0;
DEVICE D ( g45nd2svt ) _ndio_2v psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd2svt [ property
area , pj
area = area ( _ndio_2v )
pj = perimeter ( _ndio_2v )
];
LVS_CHECK_PROPERTY D ( g45nd2svt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd2svt ) P P -tolerance 0;
DEVICE D ( g45nd2nvt ) _ndio_2v_nvt psubstrate ( PLUS ) ndiff_conn ( MINUS ) -model g45nd2nvt [
property area , pj
area = area ( _ndio_2v_nvt )
pj = perimeter ( _ndio_2v_nvt )
];
LVS_CHECK_PROPERTY D ( g45nd2nvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45nd2nvt ) P P -tolerance 0;
DEVICE D ( g45pd1svt ) _pdio pdiff_conn ( PLUS ) nwell_conn ( MINUS ) -model g45pd1svt [ property
area , pj
area = area ( _pdio )
pj = perimeter ( _pdio )
];
LVS_CHECK_PROPERTY D ( g45pd1svt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45pd1svt ) P P -tolerance 0;
DEVICE D ( g45pd1lvt ) _pdio_lvt pdiff_conn ( PLUS ) nwell_conn ( MINUS ) -model g45pd1lvt [ property
area , pj
area = area ( _pdio_lvt )
pj = perimeter ( _pdio_lvt )
];
LVS_CHECK_PROPERTY D ( g45pd1lvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45pd1lvt ) P P -tolerance 0;
DEVICE D ( g45pd1hvt ) _pdio_hvt pdiff_conn ( PLUS ) nwell_conn ( MINUS ) -model g45pd1hvt [
property area , pj

```

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area = area ( _pdio_hvt )
pj = perimeter ( _pdio_hvt )
];
LVS_CHECK_PROPERTY D ( g45pd1hvt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45pd1hvt ) P P -tolerance 0;
DEVICE D ( g45pd2svt ) _pdio_2v pdiff_conn ( PLUS ) nwell_conn ( MINUS ) -model g45pd2svt [
property area , pj
area = area ( _pdio_2v )
pj = perimeter ( _pdio_2v )
];
LVS_CHECK_PROPERTY D ( g45pd2svt ) A A -tolerance 0;
LVS_CHECK_PROPERTY D ( g45pd2svt ) P P -tolerance 0;
DEVICE Q ( g45vpnp2 ) _vpnp2 psubstrate ( C ) nwell_conn ( B ) pdiff_conn ( E ) -model g45vpnp2 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vpnp2 ) A A -tolerance 0;
DEVICE Q ( g45vpnp5 ) _vpnp5 psubstrate ( C ) nwell_conn ( B ) pdiff_conn ( E ) -model g45vpnp5 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vpnp5 ) A A -tolerance 0;
DEVICE Q ( g45vpnp10 ) _vpnp10 psubstrate ( C ) nwell_conn ( B ) pdiff_conn ( E ) -model g45vpnp10 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vpnp10 ) A A -tolerance 0;
DEVICE Q ( g45vnnp2 ) _nnp2 nwell_conn ( C ) psubstrate ( B ) npn_emit ( E ) -model g45vnnp2 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vnnp2 ) A A -tolerance 0;
DEVICE Q ( g45vnnp5 ) _nnp5 nwell_conn ( C ) psubstrate ( B ) npn_emit ( E ) -model g45vnnp5 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vnnp5 ) A A -tolerance 0;
DEVICE Q ( g45vnnp10 ) _nnp10 nwell_conn ( C ) psubstrate ( B ) npn_emit ( E ) -model g45vnnp10 [
property area
area = area ( E ) * 1 * 1e+12
];
LVS_CHECK_PROPERTY Q ( g45vnnp10 ) A A -tolerance 0;
DEVICE C ( g45cmim ) _mimcap CapMetal ( PLUS ) metal10_conn ( MINUS ) psubstrate ( B ) -model
g45cmim [ property w , l , c , area , pj
w = ( ( perimeter ( _mimcap ) * 0.25 ) + 0.5 * sqrt ( ( 0.25 * pow ( perimeter ( _mimcap ) , 2 ) ) - ( 4 * area (
_mimcap ) ) ) ) )
l = ( ( perimeter ( _mimcap ) * 0.25 ) - 0.5 * sqrt ( ( 0.25 * pow ( perimeter ( _mimcap ) , 2 ) ) - ( 4 * area (
_mimcap ) ) ) ) )
c = area ( _mimcap ) * 1e-15 + perimeter ( _mimcap ) * 1e-16
area = area ( _mimcap )
pj = perimeter ( _mimcap )
];
LVS_CHECK_PROPERTY C ( g45cmim ) l l -tolerance 0;
LVS_CHECK_PROPERTY C ( g45cmim ) w w -tolerance 0;
LVS_REDUCE_DEVICE C ( g45cmim ) -parallel yes [ tolerance l 0 w 0

```

```

effective l , w
l = sum ( l ) / count ( )
w = sum ( w )
];
DEVICE L ( g45inda ) _ind_a ind10 ( PLUS ) ind11 ( MINUS ) psubstrate ( B ) ( PLUS MINUS ) <
inda_width > < ind2_space > < inda_rad > < ind_nr > -model g45inda [ property width space nr rad
width = area ( inda_width ) * 100000000
space = area ( ind2_space ) * 50000000
nr = count ( ind_nr ) - 0.5
rad = area ( inda_rad ) * 5000000
];
LVS_CHECK_PROPERTY L ( g45inda ) width width -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inda ) space space -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inda ) nr nr -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inda ) rad rad -tolerance 0;
SELECT -inside ind10 _ind_s _ind_s_enc;
DEVICE L ( g45inds ) _ind_s ind11 ( PLUS ) ind11 ( MINUS ) psubstrate ( B ) ( PLUS MINUS ) -model
g45inds < inds_width > < ind2_sp1 > < ind_rad > < _ind_s_enc > [ property width rad space nr
width = area ( inds_width ) * 100000000
space = area ( ind2_sp1 ) * 1000000
rad = area ( ind_rad ) * 5000000
nr = ( count ( _ind_s_enc ) + 1 )
];
LVS_CHECK_PROPERTY L ( g45inds ) width width -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inds ) space space -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inds ) nr nr -tolerance 0;
LVS_CHECK_PROPERTY L ( g45inds ) rad rad -tolerance 0;

```

```
tcl_code wpe_procedure
```

```

{
proc calc_sca { SCH SCV W L scref } {
set sca1 0.0
set sca2 0.0
set SCref [ expr { [$scref] * 1e-6 } ]
set slice_count1 [ $SCH slice_count ]
set slice_count2 [ $SCV slice_count ]

for { set i 0 } { $i < $slice_count1 } { incr i } {
set sca1 [ expr { $sca1 + ([ $SCH w $i ] * ( ( ($SCref * $SCref / [ $SCH a $i ] ) - ( $SCref * $SCref / ([ $SCH a $i ] + [ $L ] ) ) ) + ( ( $SCref * $SCref / [ $SCH b $i ] ) - ( $SCref * $SCref / ([ $SCH b $i ] + [ $L ] ) ) ) ) } ]
}

for { set i 0 } { $i < $slice_count2 } { incr i } {
set sca2 [ expr { $sca2 + ([ $SCV w $i ] * ( ( ($SCref * $SCref / [ $SCV a $i ] ) - ( $SCref * $SCref / ([ $SCV a $i ] + [ $W ] ) ) ) + ( ( $SCref * $SCref / [ $SCV b $i ] ) - ( $SCref * $SCref / ([ $SCV b $i ] + [ $W ] ) ) ) ) } ]
}

return [ expr { ($sca1 + $sca2) / ([ $W ] * [ $L ] ) } ]
}

```

```

proc calc_scb { SCH SCV W L scref } {
set scb1 0.0
set scb2 0.0
set SCref [ expr { [$scref] * 1e-06 } ]
set slice_count1 [ $SCH slice_count ]

```

```

set slice_count2 [ $SCV slice_count ]

for { set i 0 } { $i < $slice_count1 } { incr i } {
    set expo_ha1 [ expr { exp(-10*[$SCH a $i]/$SCref) } ]
    set expo_ha2 [ expr { exp(-10*([$SCH a $i]+[$L])/ $SCref) } ]
    set expo_hb1 [ expr { exp(-10*[$SCH b $i]/$SCref) } ]
    set expo_hb2 [ expr { exp(-10*([$SCH b $i]+[$L])/ $SCref) } ]
    set scb1 [ expr { $scb1 + ([ $SCH w $i ] * (([ $SCH a $i ]/10 + $SCref/100)*$expo_ha1 - (([ $SCH a $i ] +
    [$L])/10 + $SCref/100)*$expo_ha2 + ([ $SCH b $i ]/10 + $SCref/100)*$expo_hb1 - (([ $SCH b $i ] + [$L])/10
    + $SCref/100)*$expo_hb2) ) } ]
}

for { set i 0 } { $i < $slice_count2 } { incr i } {
    set expo_va1 [ expr { exp(-10*[$SCV a $i]/$SCref) } ]
    set expo_va2 [ expr { exp(-10*([$SCV a $i]+[$W])/ $SCref) } ]
    set expo_vb1 [ expr { exp(-10*[$SCV b $i]/$SCref) } ]
    set expo_vb2 [ expr { exp(-10*([$SCV b $i]+[$W])/ $SCref) } ]
    set scb2 [ expr { $scb2 + ([ $SCV w $i ] * (([ $SCV a $i ]/10 + $SCref/100)*$expo_va1 - (([ $SCV a $i ] +
    [$W])/10 + $SCref/100)*$expo_va2 + ([ $SCV b $i ]/10 + $SCref/100)*$expo_vb1 - (([ $SCV b $i ] +
    [$W])/10 + $SCref/100)*$expo_vb2) ) } ]
}

return [ expr { ($scb1 + $scb2) / (([$W] * [$L])) } ]
}

proc calc_scc { SCH SCV W L scref } {
    set scc1 0.0
    set scc2 0.0
    set SCref [ expr { [$scref] * 1e-6 } ]
    set slice_count1 [ $SCH slice_count ]
    set slice_count2 [ $SCV slice_count ]

    for { set i 0 } { $i < $slice_count1 } { incr i } {
        set expo_ha1 [ expr { exp(-20*[$SCH a $i]/$SCref) } ]
        set expo_ha2 [ expr { exp(-20*([$SCH a $i]+[$L])/ $SCref) } ]
        set expo_hb1 [ expr { exp(-20*[$SCH b $i]/$SCref) } ]
        set expo_hb2 [ expr { exp(-20*([$SCH b $i]+[$L])/ $SCref) } ]
        set scc1 [ expr { $scc1 + ([ $SCH w $i ] * (([ $SCH a $i ]/20 + $SCref/400)*$expo_ha1 - (([ $SCH a $i ] +
        [$L])/20 + $SCref/400)*$expo_ha2 + ([ $SCH b $i ]/20 + $SCref/400)*$expo_hb1 - (([ $SCH b $i ] + [$L])/20
        + $SCref/400)*$expo_hb2) ) } ]
    }

    for { set i 0 } { $i < $slice_count2 } { incr i } {
        set expo_va1 [ expr { exp(-20*[$SCV a $i]/$SCref) } ]
        set expo_va2 [ expr { exp(-20*([$SCV a $i]+[$W])/ $SCref) } ]
        set expo_vb1 [ expr { exp(-20*[$SCV b $i]/$SCref) } ]
        set expo_vb2 [ expr { exp(-20*([$SCV b $i]+[$W])/ $SCref) } ]
        set scc2 [ expr { $scc2 + ([ $SCV w $i ] * (([ $SCV a $i ]/20 + $SCref/400)*$expo_va1 - (([ $SCV a $i ] +
        [$W])/20 + $SCref/400)*$expo_va2 + ([ $SCV b $i ]/20 + $SCref/400)*$expo_vb1 - (([ $SCV b $i ] +
        [$W])/20 + $SCref/400)*$expo_vb2) ) } ]
    }

    return [ expr { ($scc1 + $scc2) / (([$W] * [$L])) } ]
}

```

};

checkout license ...

This mode requires 1 primary license.
Checking out SoftShare license Phys_Ver_Sys_LVS_XL 21.1 Qty: 1 ... succeeded (1s).

Optimizing Rules ...

[WARN] Neither hcell nor -automatch option is specified.
Time: cpu=0.51/0.51 real=0.55/0.55 Memory: 14.01/14.67/15.18 peak=15.18

Loading Layout Data ...

Parsing Layer Mapping File inv.lmap ...

GDSII Input Summary

Date: Sun Apr 21 00:36:25 2024
GDSII file:
/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.gds
GDSII size: 4096
GDSII version: 5.0
GDSII library name: testINV
Last Modified: 0:24:36 4/21/2024
Last Accessed: 0:36:20 4/21/2024
data base unit in user units : 0.0005
physical size of data base unit : 5e-10
magnification: 1

loading cell M1_PO_CDNS_1 ...
loading cell nmos1v_CDNS_2 ...
loading cell pmos1v_CDNS_3 ...
loading cell inv ...
Time: cpu=0.01/0.51 real=0.01/0.57 Memory: 22.06/22.71/22.71 peak=22.71

Cell Summary:

CELL	INSTANCE	GEOMETRY	LABELS	HREF	FREF
M1_PO_CDNS_1	0	3	0	1	1
nmos1v_CDNS_2	0	19	0	1	1
pmos1v_CDNS_3	0	20	0	1	1
inv	3	12	3	1	1

TOTAL CELL = 4; INSTANCE = 3; GEOMETRY = 54; LABEL = 3

Layer Summary:

LAYER	ID	HPN	HTC	FPN	FTC
BJTdum	1000	0	0	0	0
Bondpad	1001	0	0	0	0
Cap3dum	1002	0	0	0	0
CapMetal	1003	0	0	0	0
Capdum	1004	0	0	0	0
Cont	1005	9	0	9	0
DIOdummy	1006	0	0	0	0
IND2dummy	1007	0	0	0	0
INDdummy	1008	0	0	0	0
M1Resdum	1009	0	0	0	0
M2Resdum	1010	0	0	0	0
M3Resdum	1011	0	0	0	0
M4Resdum	1012	0	0	0	0
M5Resdum	1013	0	0	0	0
M6Resdum	1014	0	0	0	0
M7Resdum	1015	0	0	0	0
M8Resdum	1016	0	0	0	0
M9Resdum	1017	0	0	0	0
M10Resdum	1018	0	0	0	0
M11Resdum	1019	0	0	0	0
Metal1	1020	16	0	16	0
Metal2	1021	0	0	0	0
Metal3	1022	0	0	0	0
Metal4	1023	0	0	0	0
Metal5	1024	0	0	0	0
Metal6	1025	0	0	0	0
Metal7	1026	0	0	0	0
Metal8	1027	0	0	0	0
Metal9	1028	0	0	0	0
Metal10	1029	0	0	0	0
Metal11	1030	0	0	0	0
NPN2dum	1031	0	0	0	0
NPN5dum	1032	0	0	0	0
NPN10dum	1033	0	0	0	0
NPNdummy	1034	0	0	0	0
Nburied	1035	0	0	0	0
Nhvt	1036	0	0	0	0
Nimp	1037	3	0	3	0
Nlvt	1038	0	0	0	0
Nwell	1039	1	0	1	0
Nzvt	1040	0	0	0	0
Oxide	1041	8	0	8	0
Oxide_thk	1042	0	0	0	0
PNPdummy	1043	0	0	0	0
Phvt	1044	0	0	0	0
Pimp	1045	3	0	3	0
Plvt	1046	0	0	0	0
Poly	1047	14	0	14	0
Sub	1048	0	0	0	0
ResWdum	1049	0	0	0	0
Resdum	1050	0	0	0	0

SiProt	1051	0	0	0	0
Via1	1052	0	0	0	0
Via2	1053	0	0	0	0
Via3	1054	0	0	0	0
Via4	1055	0	0	0	0
Via5	1056	0	0	0	0
Via6	1057	0	0	0	0
Via7	1058	0	0	0	0
Via8	1059	0	0	0	0
Via9	1060	0	0	0	0
Via10	1061	0	0	0	0
ind10_text	1062	0	0	0	0
ind11_text	1063	0	0	0	0
metal1_conn_text	1064	0	3	0	3
metal2_conn_text	1065	0	0	0	0
metal3_conn_text	1066	0	0	0	0
metal4_conn_text	1067	0	0	0	0
metal5_conn_text	1068	0	0	0	0
metal6_conn_text	1069	0	0	0	0
metal7_conn_text	1070	0	0	0	0
metal8_conn_text	1071	0	0	0	0
metal9_conn_text	1072	0	0	0	0
metal10_conn_text	1073	0	0	0	0
metal11_conn_text	1074	0	0	0	0
m1_label	1076	0	0	0	0
m2_label	1077	0	0	0	0
m3_label	1078	0	0	0	0
m4_label	1079	0	0	0	0
m5_label	1080	0	0	0	0
m6_label	1081	0	0	0	0
m7_label	1082	0	0	0	0
m8_label	1083	0	0	0	0
m9_label	1084	0	0	0	0
m10_label	1085	0	0	0	0
m11_label	1086	0	0	0	0
m1_pin	1087	0	0	0	0
m2_pin	1088	0	0	0	0
m3_pin	1089	0	0	0	0
m4_pin	1090	0	0	0	0
m5_pin	1091	0	0	0	0
m6_pin	1092	0	0	0	0
m7_pin	1093	0	0	0	0
m8_pin	1094	0	0	0	0
m9_pin	1095	0	0	0	0
m10_pin	1096	0	0	0	0
m11_pin	1097	0	0	0	0
text	1098	0	0	0	0
nwell_conn_text	10645	0	0	0	0
nwell_label	10765	0	0	0	0
nwell_pin	10875	0	0	0	0

CHIP EXTENT: 160 -3430 2140 -230

Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 22.08/22.71/22.71 peak=22.71

Ports ...
=====

Texts For Connectivity ...
=====

VSS (0.435, -1.685) 1064 inv
O (1.040, -0.910) 1064 inv
I (0.110, -0.915) 1064 inv

Texts For SELECT -LABEL ...
=====

Texts For EXPAND_TEXT_ORIGIN ...
=====

Texts For DFM_TEXT ...
=====

Texts For Device Text Model Layer ...
=====

Texts For Device Text Property Layer ...
=====

Layer Summary(Texts For Connectivity):

LAYER	ID	TEXTS
metal1_conn_text	1064	3

Layer Summary(Texts For SELECT -LABEL):

LAYER	ID	TEXTS

Layer Summary(Texts For EXPAND_TEXT_ORIGIN):

LAYER	ID	TEXTS

Layer Summary(Texts For DFM_TEXT):

LAYER	ID	TEXTS

Preparing Hierarchical Database ...
#####

Constructing Hierarchical Database ...

M1_PO_CDNS_1 is expanded.
Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 22.09/22.71/22.71 peak=22.71

REORGANIZE HIERARCHIES (1)...

Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 22.09/22.71/22.71 peak=22.71

REORGANIZE HIERARCHIES (2)...

Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 22.09/22.71/22.71 peak=22.71

Cell Summary:

CELL	INSTANCE	GEOMETRY	LABELS	HREF	FREF
nmos1v_CDNS_2	0	19	0	1	1
pmos1v_CDNS_3	0	20	0	1	1
inv	2	15	3	1	1

TOTAL CELL = 3; INSTANCE = 2; GEOMETRY = 54; LABEL = 3

Layer Summary:

LAYER	ID	HPN	HTC	FPN	FTC
BJTdum	1000	0	0	0	0
Bondpad	1001	0	0	0	0
Cap3dum	1002	0	0	0	0
CapMetal	1003	0	0	0	0
Capdum	1004	0	0	0	0
Cont	1005	9	0	9	0
DIOdummy	1006	0	0	0	0
IND2dummy	1007	0	0	0	0
INDdummy	1008	0	0	0	0
M1Resdum	1009	0	0	0	0
M2Resdum	1010	0	0	0	0
M3Resdum	1011	0	0	0	0
M4Resdum	1012	0	0	0	0
M5Resdum	1013	0	0	0	0
M6Resdum	1014	0	0	0	0
M7Resdum	1015	0	0	0	0
M8Resdum	1016	0	0	0	0
M9Resdum	1017	0	0	0	0
M10Resdum	1018	0	0	0	0
M11Resdum	1019	0	0	0	0
Metal1	1020	16	0	16	0
Metal2	1021	0	0	0	0
Metal3	1022	0	0	0	0
Metal4	1023	0	0	0	0
Metal5	1024	0	0	0	0

Metal6	1025	0	0	0	0
Metal7	1026	0	0	0	0
Metal8	1027	0	0	0	0
Metal9	1028	0	0	0	0
Metal10	1029	0	0	0	0
Metal11	1030	0	0	0	0
NPN2dum	1031	0	0	0	0
NPN5dum	1032	0	0	0	0
NPN10dum	1033	0	0	0	0
NPNdummy	1034	0	0	0	0
Nburied	1035	0	0	0	0
Nhvt	1036	0	0	0	0
Nimp	1037	3	0	3	0
Nlvt	1038	0	0	0	0
Nwell	1039	1	0	1	0
Nzvt	1040	0	0	0	0
Oxide	1041	8	0	8	0
Oxide_thk	1042	0	0	0	0
PNPdummy	1043	0	0	0	0
Phvt	1044	0	0	0	0
Pimp	1045	3	0	3	0
Plvt	1046	0	0	0	0
Poly	1047	14	0	14	0
Psub	1048	0	0	0	0
ResWdum	1049	0	0	0	0
Resdum	1050	0	0	0	0
SiProt	1051	0	0	0	0
Via1	1052	0	0	0	0
Via2	1053	0	0	0	0
Via3	1054	0	0	0	0
Via4	1055	0	0	0	0
Via5	1056	0	0	0	0
Via6	1057	0	0	0	0
Via7	1058	0	0	0	0
Via8	1059	0	0	0	0
Via9	1060	0	0	0	0
Via10	1061	0	0	0	0
ind10_text	1062	0	0	0	0
ind11_text	1063	0	0	0	0
metal1_conn_text	1064	0	3	0	3
metal2_conn_text	1065	0	0	0	0
metal3_conn_text	1066	0	0	0	0
metal4_conn_text	1067	0	0	0	0
metal5_conn_text	1068	0	0	0	0
metal6_conn_text	1069	0	0	0	0
metal7_conn_text	1070	0	0	0	0
metal8_conn_text	1071	0	0	0	0
metal9_conn_text	1072	0	0	0	0
metal10_conn_text	1073	0	0	0	0
metal11_conn_text	1074	0	0	0	0
m1_label	1076	0	0	0	0
m2_label	1077	0	0	0	0
m3_label	1078	0	0	0	0
m4_label	1079	0	0	0	0
m5_label	1080	0	0	0	0

m6_label	1081	0	0	0	0
m7_label	1082	0	0	0	0
m8_label	1083	0	0	0	0
m9_label	1084	0	0	0	0
m10_label	1085	0	0	0	0
m11_label	1086	0	0	0	0
m1_pin	1087	0	0	0	0
m2_pin	1088	0	0	0	0
m3_pin	1089	0	0	0	0
m4_pin	1090	0	0	0	0
m5_pin	1091	0	0	0	0
m6_pin	1092	0	0	0	0
m7_pin	1093	0	0	0	0
m8_pin	1094	0	0	0	0
m9_pin	1095	0	0	0	0
m10_pin	1096	0	0	0	0
m11_pin	1097	0	0	0	0
text	1098	0	0	0	0
nwell_conn_text	10645	0	0	0	0
nwell_label	10765	0	0	0	0
nwell_pin	10875	0	0	0	0

Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 22.09/22.71/22.71 peak=22.71

Compacting Hierarchy Library ...

Time: cpu=0.00/0.51 real=0.00/0.57 Memory: 14.02/14.67/22.71 peak=22.71

Analyzing Cell Overlapings ...

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/18.69 peak=22.71

Merge Layers ...

Cont = OR Cont

generate layer Cont, TYP = P, HPN = 9, FPN = 9, HEN = 36, FEN = 36

Metal1 = OR Metal1

generate layer Metal1, TYP = P, HPN = 10, FPN = 10, HEN = 48, FEN = 48

Nimp = OR Nimp

generate layer Nimp, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16

Nwell = OR Nwell

generate layer Nwell, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Oxide = OR Oxide

generate layer Oxide, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16

Pimp = OR Pimp

generate layer Pimp, TYP = P, HPN = 2, FPN = 2, HEN = 16, FEN = 16

Poly = OR Poly
generate layer Poly, TYP = P, HPN = 3, FPN = 3, HEN = 20, FEN = 20

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/18.69 peak=22.71

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

Execute Operations ...
#####

operation group: 1/249
bulk = EXTENT

=====
generate layer bulk, TYP = P, HPN = 3, FPN = 3, HEN = 20, FEN = 20
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/22.71 peak=22.71

operation group: 2/249
L86607 = OR INDdummy M11Resdum

=====
generate layer L86607, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 3/249
metal11_conn = NOT Metal11 L86607

=====
generate layer metal11_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L86607

operation group: 4/249
bp_tap = AND Bondpad Metal9

=====
generate layer bp_tap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 5/249
L13465 = AND INDdummy Metal11

=====
generate layer L13465, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 6/249

ind11 = SIZE L13465 -by 0.01 -overunder

```
=====
generate layer ind11, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

delete layer L13465

operation group: 7/249

via10_cap = AND CapMetal Via10

```
=====
generate layer via10_cap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 8/249

L17074 = OR INDdummy M10Resdum

```
=====
generate layer L17074, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 9/249

metal10_conn = NOT Metal10 L17074

```
=====
generate layer metal10_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

delete layer L17074

operation group: 10/249

via10_nocap = NOT Via10 CapMetal

```
=====
generate layer via10_nocap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 11/249

ind10 = AND INDdummy Metal10

```
=====
generate layer ind10, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 12/249

_ind_a = SELECT -enclose INDdummy ind11 -lt 2

```
=====
generate layer _ind_a, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 13/249

_ind_s1 = SELECT -interact INDdummy _ind_a -not

=====

generate layer _ind_s1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 14/249

_ind_s = SELECT -enclose _ind_s1 ind11

=====

generate layer _ind_s, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer _ind_s1

operation group: 15/249

L13648 = AND Via10 _ind_s

=====

generate layer L13648, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 16/249

L54420 = AND ind10 ind11

=====

generate layer L54420, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 17/249

L42364 = AND L54420 _ind_s

=====

generate layer L42364, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L54420

operation group: 18/249

L83584 = OR ind10 ind11

=====

generate layer L83584, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 19/249

L87155 = HOLES L83584 -inner

=====

generate layer L87155, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L83584

operation group: 20/249

ind_hole = VERTEX L87155 -lt 14

=====

generate layer ind_hole, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L87155

operation group: 21/249

L12760 = SELECT -touch L42364 ind_hole

=====

generate layer L12760, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L42364

operation group: 22/249

ind_ct = SELECT -interact L12760 Via10

=====

generate layer ind_ct, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L12760

operation group: 23/249

ind_via_diva = NOT L13648 ind_ct

=====

generate layer ind_via_diva, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L13648

operation group: 24/249

L47735 = OR CapMetal INDdummy

=====

generate layer L47735, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 25/249

via10_nodev = NOT Via10 L47735

=====

generate layer via10_nodev, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

delete layer Via10
delete layer L47735

operation group: 26/249

metal9_conn = NOT Metal9 M9Resdum

=====

generate layer metal9_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 27/249

metal8_conn = NOT Metal8 M8Resdum

=====

generate layer metal8_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 28/249

metal7_conn = NOT Metal7 M7Resdum

=====

generate layer metal7_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 29/249

metal6_conn = NOT Metal6 M6Resdum

=====

generate layer metal6_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 30/249

metal5_conn = NOT Metal5 M5Resdum

=====

generate layer metal5_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 31/249

metal4_conn = NOT Metal4 M4Resdum

=====

generate layer metal4_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 32/249

metal3_conn = NOT Metal3 M3Resdum

=====

generate layer metal3_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 33/249
metal2_conn = NOT Metal2 M2Resdum

=====

generate layer metal2_conn, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 34/249
metal1_conn = NOT Metal1 M1Resdum

=====

generate layer metal1_conn, TYP = P, HPN = 10, FPN = 10, HEN = 48, FEN = 48
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 35/249
poly_conn = NOT Poly Resdum

=====

generate layer poly_conn, TYP = P, HPN = 3, FPN = 3, HEN = 20, FEN = 20
Time: cpu=0.00/0.52 real=0.00/0.57 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 36/249
cont_poly = AND Cont Poly

=====

generate layer cont_poly, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.52 real=0.00/0.58 Memory: 14.02/14.67/18.69 peak=22.71

operation group: 37/249
pactive = AND Oxide Pimp

=====

generate layer pactive, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.53 real=0.00/0.58 Memory: 14.02/14.67/18.69 peak=22.71

operation group: 38/249
pdiff = NOT pactive Poly

=====

generate layer pdiff, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.53 real=0.00/0.58 Memory: 14.02/14.67/18.69 peak=22.71

operation group: 39/249

pdiff_conn = NOT pdiff Resdum

```
=====
generate layer pdiff_conn, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.53 real=0.00/0.58 Memory: 14.02/14.67/14.67 peak=22.71
```

delete layer pdiff

operation group: 40/249

cont_pdiff = AND Cont pdiff_conn

```
=====
generate layer cont_pdiff, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/0.53 real=0.00/0.58 Memory: 14.02/14.67/18.69 peak=22.71
```

operation group: 41/249

nactive = AND Nimp Oxide

```
=====
generate layer nactive, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.53 real=0.00/0.59 Memory: 14.02/14.67/18.69 peak=22.71
```

operation group: 42/249

ndiff = NOT nactive poly_conn

```
=====
generate layer ndiff, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/18.69 peak=22.71
```

operation group: 43/249

ndiff_conn = NOT ndiff Resdum

```
=====
generate layer ndiff_conn, TYP = P, HPN = 3, FPN = 3, HEN = 12, FEN = 12
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71
```

delete layer ndiff

operation group: 44/249

L61645 = AND NPNdummy ndiff_conn

```
=====
generate layer L61645, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71
```

operation group: 45/249

npn_emit = NOT L61645 Nwell

```
=====
generate layer npn_emit, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71
```

delete layer L61645

operation group: 46/249

cont_ndiff = AND Cont ndiff_conn

=====

generate layer cont_ndiff, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/18.69 peak=22.71

delete layer Cont

operation group: 47/249

L98077 = AND Psub pdiff_conn

=====

generate layer L98077, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 48/249

pnf_emit = AND L98077 PNPdummy

=====

generate layer pnf_emit, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L98077

operation group: 49/249

nb_tap = AND Nburied Nwell

=====

generate layer nb_tap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 50/249

L14174 = NOT bulk nb_tap

=====

generate layer L14174, TYP = P, HPN = 3, FPN = 3, HEN = 20, FEN = 20
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 51/249

L86601 = SIZE Psub -by -0.001

=====

generate layer L86601, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 52/249

L7495 = NOT Psub L86601

```

=====
generate layer L7495, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L86601

operation group: 53/249
  psubstrate = NOT L14174 L7495
=====
generate layer psubstrate, TYP = P, HPN = 3, FPN = 3, HEN = 20, FEN = 20
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L14174
delete layer L7495

operation group: 54/249
  L65704 = NOT pdiff_conn Nwell
=====
generate layer L65704, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/18.69 peak=22.71

operation group: 55/249
  ptap = NOT L65704 PNPdummy
=====
generate layer ptap, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L65704
delete layer PNPdummy

operation group: 56/249
  nwell_conn = NOT Nwell ResWdum
=====
generate layer nwell_conn, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

operation group: 57/249
  L74405 = AND Nwell ndiff_conn
=====
generate layer L74405, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/18.69 peak=22.71

operation group: 58/249
  L28555 = AND NPNdummy Psub
=====
generate layer L28555, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

```

Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer Psub

operation group: 59/249

ntap = NOT L74405 L28555

=====

generate layer ntap, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

Time: cpu=0.00/0.54 real=0.00/0.59 Memory: 14.02/14.67/14.67 peak=22.71

delete layer L74405

delete layer L28555

operation group: 60/249

CONNECT Bondpad metal11_conn -by bp_tap

CONNECT ind11 metal11_conn

CONNECT metal11_conn CapMetal -by via10_cap

CONNECT metal11_conn metal10_conn -by via10_nocap

CONNECT ind11 ind10 -by ind_via_diva

CONNECT metal11_conn metal10_conn -by via10_nodev

CONNECT ind_ct ind10

CONNECT ind10 metal10_conn

CONNECT metal10_conn metal9_conn -by Via9

CONNECT metal9_conn metal8_conn -by Via8

CONNECT metal8_conn metal7_conn -by Via7

CONNECT metal7_conn metal6_conn -by Via6

CONNECT metal6_conn metal5_conn -by Via5

CONNECT metal5_conn metal4_conn -by Via4

CONNECT metal4_conn metal3_conn -by Via3

CONNECT metal3_conn metal2_conn -by Via2

CONNECT metal2_conn metal1_conn -by Via1

CONNECT metal1_conn poly_conn -by cont_poly

CONNECT metal1_conn pdiff_conn -by cont_pdiff

CONNECT metal1_conn npn_emit -by cont_ndiff

CONNECT metal1_conn ndiff_conn -by cont_ndiff

CONNECT metal1_conn pnp_emit -by cont_pdiff

SCONNECT pdiff_conn psubstrate -by ptap

SCONNECT ndiff_conn nwell_conn -by ntap

SCONNECT nwell_conn Nburied -by nb_tap

=====

LVS_SOFTCHK psubstrate -TYPE CONTACT Total Result 0 (0)

LVS_SOFTCHK nwell_conn -TYPE CONTACT Total Result 0 (0)

LVS_SOFTCHK Nburied -TYPE CONTACT Total Result 0 (0)

Time: cpu=0.01/0.55 real=0.01/0.61 Memory: 14.02/14.67/34.77 peak=34.77

delete layer bp_tap

delete layer via10_cap

delete layer via10_nocap

delete layer ind_via_diva

delete layer via10_nodev

delete layer Via9

delete layer Via8

delete layer Via7

delete layer Via6
delete layer Via5
delete layer Via4
delete layer Via3
delete layer Via2
delete layer Via1
delete layer cont_poly
delete layer cont_ndiff
delete layer cont_pdiff
delete layer ptap
delete layer ntap
delete layer nb_tap

operation group: 61/249

_npn2 = AND NPN2dum NPNdummy

=====

generate layer _npn2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer NPN2dum

operation group: 62/249

_npn5 = AND NPN5dum NPNdummy

=====

generate layer _npn5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer NPN5dum

operation group: 63/249

_npn10 = AND NPN10dum NPNdummy

=====

generate layer _npn10, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer NPN10dum
delete layer NPNdummy

operation group: 64/249

_resm1 = AND M1Resdum Metal1

=====

generate layer _resm1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M1Resdum
delete layer Metal1

operation group: 65/249

_resm2 = AND M2Resdum Metal2

=====

generate layer _resm2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M2Resdum
delete layer Metal2

operation group: 66/249

_resm3 = AND M3Resdum Metal3

=====

generate layer _resm3, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M3Resdum
delete layer Metal3

operation group: 67/249

_resm4 = AND M4Resdum Metal4

=====

generate layer _resm4, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M4Resdum
delete layer Metal4

operation group: 68/249

_resm5 = AND M5Resdum Metal5

=====

generate layer _resm5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M5Resdum
delete layer Metal5

operation group: 69/249

_resm6 = AND M6Resdum Metal6

=====

generate layer _resm6, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M6Resdum
delete layer Metal6

operation group: 70/249

_resm7 = AND M7Resdum Metal7

=====

generate layer _resm7, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M7Resdum
delete layer Metal7

operation group: 71/249

_resm8 = AND M8Resdum Metal8

=====

generate layer _resm8, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M8Resdum
delete layer Metal8

operation group: 72/249

_resm9 = AND M9Resdum Metal9

=====

generate layer _resm9, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M9Resdum
delete layer Metal9

operation group: 73/249

_resm10 = AND M10Resdum Metal10

=====

generate layer _resm10, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M10Resdum
delete layer Metal10

operation group: 74/249

_resm11 = AND M11Resdum Metal11

=====

generate layer _resm11, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer M11Resdum
delete layer Metal11

operation group: 75/249

L40182 = AND Nwell SiProt

=====

generate layer L40182, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 76/249

_resnwoxide = AND L40182 ResWdum

=====

generate layer _resnwoxide, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L40182

operation group: 77/249

L25544 = SELECT -interact Nwell SiProt -not

=====

layer L25544 not generated, operation is dynamically optimized out.

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 78/249

_resnwsti = AND L25544 ResWdum

=====

generate layer _resnwsti, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L25544

delete layer ResWdum

operation group: 79/249

L68803 = AND BJTdum pdiff_conn

=====

generate layer L68803, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer BJTdum

operation group: 80/249

_vpnp2 = AREA L68803 -eq 4

=====

generate layer _vpnp2, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 81/249

_vpnp5 = AREA L68803 -eq 25

=====

generate layer _vpnp5, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 82/249

_vpnp10 = AREA L68803 -eq 100

=====

generate layer _vpnp10, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L68803

operation group: 83/249

L92042 = AND metal10_conn metal11_conn

```
=====
generate layer L92042, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 84/249

_mimcap = SELECT -interact CapMetal L92042

```
=====
generate layer _mimcap, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L92042

operation group: 85/249

L54696 = AND DIOdummy Oxide

```
=====
generate layer L54696, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer DIOdummy

operation group: 86/249

L77738 = AND L54696 Oxide_thk

```
=====
generate layer L77738, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 87/249

L73169 = AND L77738 Nzvt

```
=====
generate layer L73169, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 88/249

_ndio_2v_nvt = NOT L73169 Nwell

```
=====
generate layer _ndio_2v_nvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L73169

operation group: 89/249

L97435 = NOT L54696 Oxide_thk

```
=====
```

generate layer L97435, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L54696

operation group: 90/249

L22301 = AND L97435 Nhvt

=====

generate layer L22301, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 91/249

_ndio_hvt = NOT L22301 Nwell

=====

generate layer _ndio_hvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L22301

operation group: 92/249

L18457 = AND L97435 Nlvt

=====

generate layer L18457, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 93/249

_ndio_lvt = NOT L18457 Nwell

=====

generate layer _ndio_lvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L18457

operation group: 94/249

L5003 = AND L97435 Nzvt

=====

generate layer L5003, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 95/249

_ndio_nvt = NOT L5003 Nwell

=====

generate layer _ndio_nvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L5003

operation group: 96/249

L62719 = AND L97435 Phvt

=====

generate layer L62719, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 97/249

_pdio_hvt = AND L62719 Nwell

=====

generate layer _pdio_hvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L62719

operation group: 98/249

L58875 = AND L97435 Plvt

=====

generate layer L58875, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 99/249

_pdio_lvt = AND L58875 Nwell

=====

generate layer _pdio_lvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L58875

operation group: 100/249

L28394 = NOT Oxide Oxide_thk

=====

generate layer L28394, TYP = P, HPN = 4, FPN = 4, HEN = 16, FEN = 16
Time: cpu=0.00/0.55 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 101/249

L66375 = AND L28394 Poly

=====

generate layer L66375, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/18.69 peak=34.77

delete layer L28394

operation group: 102/249

L29970 = AND L66375 Pimp

```
=====
generate layer L29970, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/18.69 peak=34.77
```

```
operation group: 103/249
_pmos1v_hvt = AND L29970 Phvt
```

```
=====
generate layer _pmos1v_hvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

```
operation group: 104/249
_pmos1v_lvt = AND L29970 Plvt
```

```
=====
generate layer _pmos1v_lvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

```
operation group: 105/249
L18758 = AND SiProt nactive
```

```
=====
generate layer L18758, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

```
operation group: 106/249
L23316 = AND L18758 Resdum
```

```
=====
generate layer L23316, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

```
delete layer L18758
```

```
operation group: 107/249
_resnsndiff = NOT L23316 Nwell
```

```
=====
generate layer _resnsndiff, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

```
delete layer L23316
```

```
operation group: 108/249
L5240 = AND Poly SiProt
```

```
=====
generate layer L5240, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 109/249
L1378 = AND L5240 Nimp

=====

generate layer L1378, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 110/249
L66582 = AND L1378 Resdum

=====

generate layer L66582, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L1378

operation group: 111/249
_resnsnpoly = NOT L66582 Nwell

=====

generate layer _resnsnpoly, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 112/249
_resnsnpoly_nw = AND L66582 Nwell

=====

generate layer _resnsnpoly_nw, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L66582

operation group: 113/249
L88604 = AND SiProt pactive

=====

generate layer L88604, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 114/249
L197 = AND L88604 Resdum

=====

generate layer L197, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L88604

operation group: 115/249
_resnsdiff = AND L197 Nwell

=====

generate layer _resnspdiff, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L197

operation group: 116/249

L60960 = AND L5240 Pimp

=====

generate layer L60960, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L5240

operation group: 117/249

L4294 = AND L60960 Resdum

=====

generate layer L4294, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L60960

operation group: 118/249

_resnspoly = NOT L4294 Nwell

=====

generate layer _resnspoly, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 119/249

_resnspoly_nw = AND L4294 Nwell

=====

generate layer _resnspoly_nw, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L4294

operation group: 120/249

L62496 = SELECT -interact nactive SiProt -not

=====

layer L62496 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 121/249

L426 = AND L62496 Resdum

=====

generate layer L426, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L62496

operation group: 122/249

_ressndiff = NOT L426 Nwell

=====

generate layer _ressndiff, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L426

operation group: 123/249

L90381 = NOT Poly SiProt

=====

layer L90381 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 124/249

L49196 = AND L90381 Nimp

=====

layer L49196 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 125/249

L17878 = AND L49196 Resdum

=====

generate layer L17878, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L49196

operation group: 126/249

_ressnpoly = NOT L17878 Nwell

=====

generate layer _ressnpoly, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 127/249

_ressnpoly_nw = AND L17878 Nwell

=====

generate layer _ressnpoly_nw, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L17878

operation group: 128/249

L79746 = SELECT -interact pactive SiProt -not

=====

layer L79746 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer SiProt

operation group: 129/249

L22728 = AND L79746 Resdum

=====

generate layer L22728, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L79746

operation group: 130/249

_resspdiff = AND L22728 Nwell

=====

generate layer _resspdiff, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L22728

operation group: 131/249

L8778 = AND L90381 Pimp

=====

layer L8778 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L90381

operation group: 132/249

L54937 = AND L8778 Resdum

=====

generate layer L54937, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L8778
delete layer Resdum

operation group: 133/249

_ressppoly = NOT L54937 Nwell

=====

generate layer _ressppoly, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 134/249

_ressppoly_nw = AND L54937 Nwell

```

=====
generate layer _ressppoly_nw, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L54937

operation group: 135/249
L24975 = AND Oxide Oxide_thk
=====
generate layer L24975, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer Oxide
delete layer Oxide_thk

operation group: 136/249
L98842 = AND L24975 Poly
=====
generate layer L98842, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L24975
delete layer Poly

operation group: 137/249
L73768 = AND L98842 Pimp
=====
generate layer L73768, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 138/249
L8948 = OR Cap3dum Capdum
=====
generate layer L8948, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 139/249
_pmos2v = NOT L73768 L8948
=====
generate layer _pmos2v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.61 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 140/249
L89552 = AND L66375 Nimp
=====
generate layer L89552, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4

```

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/18.69 peak=34.77

delete layer L66375

operation group: 141/249

L70180 = AND L89552 Nzvt

=====

generate layer L70180, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 142/249

L21328 = NOT L70180 Nhvt

=====

generate layer L21328, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L70180

operation group: 143/249

_nmos_12_native = NOT L21328 Nburied

=====

generate layer _nmos_12_native, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L21328

operation group: 144/249

L14186 = AND L98842 Nimp

=====

generate layer L14186, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L98842

operation group: 145/249

L15681 = AND L14186 Nzvt

=====

generate layer L15681, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 146/249

L10869 = NOT L15681 Nhvt

=====

generate layer L10869, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L15681

operation group: 147/249

_nmos_25_native = NOT L10869 Nburied

=====

generate layer _nmos_25_native, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L10869

operation group: 148/249

L62041 = AND L97435 Pimp

=====

generate layer L62041, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 149/249

L28017 = NOT L62041 Plvt

=====

generate layer L28017, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L62041

operation group: 150/249

L17166 = NOT L28017 Phvt

=====

generate layer L17166, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L28017

operation group: 151/249

_pdio = AND L17166 Nwell

=====

generate layer _pdio, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L17166

operation group: 152/249

L16131 = AND L77738 Pimp

=====

generate layer L16131, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer Pimp

operation group: 153/249

L48360 = NOT L16131 Plvt

=====

generate layer L48360, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L16131

operation group: 154/249

L917 = NOT L48360 Phvt

=====

generate layer L917, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L48360

operation group: 155/249

_pdio_2v = AND L917 Nwell

=====

generate layer _pdio_2v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L917

operation group: 156/249

L21623 = AND L97435 Nimp

=====

generate layer L21623, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L97435

operation group: 157/249

L12020 = NOT L21623 Nlvt

=====

generate layer L12020, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L21623

operation group: 158/249

L4397 = NOT L12020 Nhvt

=====

generate layer L4397, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L12020

operation group: 159/249

L8315 = NOT L4397 Nzvt

```
=====
generate layer L8315, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L4397

operation group: 160/249
_ndio = NOT L8315 Nwell

```
=====
generate layer _ndio, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L8315

operation group: 161/249
L56549 = AND L77738 Nimp

```
=====
generate layer L56549, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L77738
delete layer Nimp

operation group: 162/249
L18325 = NOT L56549 Nlvt

```
=====
generate layer L18325, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L56549

operation group: 163/249
L87119 = NOT L18325 Nhvt

```
=====
generate layer L87119, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L18325

operation group: 164/249
L50344 = NOT L87119 Nzvt

```
=====
generate layer L50344, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L87119

operation group: 165/249

_ndio_2v = NOT L50344 Nwell

```
=====
generate layer _ndio_2v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L50344

operation group: 166/249
L87478 = AND L89552 Nhvt

```
=====
generate layer L87478, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 167/249
L13756 = OR Nlvt Nburied Nzvt

```
=====
generate layer L13756, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 168/249
_nmos1v_hvt = NOT L87478 L13756

```
=====
generate layer _nmos1v_hvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L87478
delete layer L13756

operation group: 169/249
L83634 = AND L89552 Nlvt

```
=====
generate layer L83634, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 170/249
L25035 = OR Nhvt Nzvt

```
=====
generate layer L25035, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 171/249
L68361 = OR L25035 Nburied

```
=====
generate layer L68361, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```


operation group: 172/249

_nmos1v_lvt = NOT L83634 L68361

=====

generate layer _nmos1v_lvt, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L83634
delete layer L68361

operation group: 173/249

L25441 = NOT L89552 Nzvt

=====

layer L25441 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 174/249

L70734 = NOT L25441 Nhvt

=====

layer L70734 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L25441

operation group: 175/249

L8530 = NOT L70734 Nburied

=====

layer L8530 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L70734

operation group: 176/249

_nmoscap1v = AND Capdum L8530

=====

generate layer _nmoscap1v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L8530

operation group: 177/249

L55994 = NOT L14186 Nzvt

=====

generate layer L55994, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L14186

operation group: 178/249

L55604 = NOT L55994 Nhvt

=====

generate layer L55604, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L55994

operation group: 179/249

L64343 = NOT L55604 Nburied

=====

generate layer L64343, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L55604

operation group: 180/249

_nmoscap2v = AND Capdum L64343

=====

generate layer _nmoscap2v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 181/249

L85139 = OR Cap3dum Capdum Phvt Plvt

=====

generate layer L85139, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer Phvt

delete layer Plvt

operation group: 182/249

_pmos1v = NOT L29970 L85139

=====

generate layer _pmos1v, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L85139

operation group: 183/249

L5017 = NOT L29970 Nzvt

=====

layer L5017 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L29970

operation group: 184/249

L28655 = NOT L5017 Nhvt

=====

layer L28655 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L5017

operation group: 185/249

L38143 = NOT L28655 Nburied

=====

layer L38143 not generated, operation is dynamically optimized out.
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L28655

operation group: 186/249

_pmoscap1v = AND Capdum L38143

=====

generate layer _pmoscap1v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L38143

operation group: 187/249

L4203 = NOT L73768 Nzvt

=====

generate layer L4203, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L73768

delete layer Nzvt

operation group: 188/249

L16207 = NOT L4203 Nhvt

=====

generate layer L16207, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L4203

delete layer Nhvt

operation group: 189/249

L72451 = NOT L16207 Nburied

=====

generate layer L72451, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L16207

operation group: 190/249

_pmoscap2v = AND Capdum L72451

=====

generate layer _pmoscap2v, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L72451

operation group: 191/249

_nmos_25 = NOT L64343 L8948

=====

generate layer _nmos_25, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L64343

delete layer L8948

operation group: 192/249

L26526 = OR Cap3dum Capdum L25035 Nburied Nlvt

=====

generate layer L26526, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer Cap3dum

delete layer Capdum

delete layer L25035

delete layer Nlvt

operation group: 193/249

_nmos1v = NOT L89552 L26526

=====

generate layer _nmos1v, TYP = P, HPN = 1, FPN = 1, HEN = 4, FEN = 4
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L89552

delete layer L26526

operation group: 194/249

_nmos1v_sti = AND psubstrate nactive

=====

generate layer _nmos1v_sti, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.56 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer nactive

operation group: 195/249

_nmos1v_wpe_temp = SIZE _nmos1v -by 1

=====

generate layer _nmos1v_wpe_temp, TYP = P, HPN = 2, FPN = 2, HEN = 8, FEN = 8
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/22.71 peak=34.77

operation group: 196/249

_nmos1v_wpe = NOT _nmos1v_wpe_temp Nwell

=====

generate layer _nmos1v_wpe, TYP = P, HPN = 2, FPN = 2, HEN = 12, FEN = 12
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/22.71 peak=34.77

delete layer _nmos1v_wpe_temp

operation group: 197/249

_nmos1v_hvt_wpe_temp = SIZE _nmos1v_hvt -by 1

=====

generate layer _nmos1v_hvt_wpe_temp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 198/249

_nmos1v_hvt_wpe = NOT _nmos1v_hvt_wpe_temp Nwell

=====

generate layer _nmos1v_hvt_wpe, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer _nmos1v_hvt_wpe_temp

operation group: 199/249

_nmos1v_lvt_wpe_temp = SIZE _nmos1v_lvt -by 1

=====

generate layer _nmos1v_lvt_wpe_temp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 200/249

_nmos1v_lvt_wpe = NOT _nmos1v_lvt_wpe_temp Nwell

=====

generate layer _nmos1v_lvt_wpe, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer _nmos1v_lvt_wpe_temp

operation group: 201/249

_nmos_12_native_wpe_temp = SIZE _nmos_12_native -by 1

=====

generate layer _nmos_12_native_wpe_temp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 202/249

_nmos_12_native_wpe = NOT _nmos_12_native_wpe_temp Nwell

=====

generate layer _nmos_12_native_wpe, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer _nmos_12_native_wpe_temp

operation group: 203/249

_nmos_25_wpe_temp = SIZE _nmos_25 -by 1

=====

generate layer _nmos_25_wpe_temp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 204/249

_nmos_25_wpe = NOT _nmos_25_wpe_temp Nwell

=====

generate layer _nmos_25_wpe, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer _nmos_25_wpe_temp

operation group: 205/249

_nmos_25_native_wpe_temp = SIZE _nmos_25_native -by 1

=====

generate layer _nmos_25_native_wpe_temp, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 206/249

_nmos_25_native_wpe = NOT _nmos_25_native_wpe_temp Nwell

=====

generate layer _nmos_25_native_wpe, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer _nmos_25_native_wpe_temp
delete layer Nwell

operation group: 207/249

L57315 = ANGLE IND2dummy -ltgt 0 90 -not

=====

generate layer L57315, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 208/249

L71536 = EDGE_EXPAND L57315 -outside_by 0.01

```

=====
generate layer L71536, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L57315

operation group: 209/249
L93547 = NOT L71536 IND2dummy
=====
generate layer L93547, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L71536

operation group: 210/249
ind2_width = SELECT -inside L93547 ind11
=====
generate layer ind2_width, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L93547

operation group: 211/249
inda_width = AND _ind_a ind2_width
=====
generate layer inda_width, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 212/249
ind_nr = NOT ind10 ind11
=====
generate layer ind_nr, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 213/249
L69850 = SELECT -touch ind_nr IND2dummy
=====
generate layer L69850, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 214/249
L78036 = ANGLE L69850 -ltgt 0 90 -not
=====
generate layer L78036, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

```

delete layer L69850

operation group: 215/249

L91609 = EDGE_EXPAND L78036 -outside_by 0.01

=====

generate layer L91609, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L78036

operation group: 216/249

L15138 = NOT L91609 ind11

=====

generate layer L15138, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L91609

operation group: 217/249

L37576 = NOT L15138 ind10

=====

generate layer L37576, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L15138

operation group: 218/249

ind2_space = VERTEX L37576 -lt 5

=====

generate layer ind2_space, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L37576

operation group: 219/249

L69131 = AND _ind_a ind_hole

=====

generate layer L69131, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 220/249

L1472 = SIZE L69131 -by 0.1

=====

generate layer L1472, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 221/249

L62333 = NOT L1472 L69131

=====

generate layer L62333, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L69131

operation group: 222/249

L82556 = EDGE_EXPAND L1472 -inside_by 0.1

=====

generate layer L82556, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L1472

operation group: 223/249

L28951 = NOT L62333 L82556

=====

generate layer L28951, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L62333

delete layer L82556

operation group: 224/249

L87029 = ANGLE L28951 -ltgt 0 90 -not

=====

generate layer L87029, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 225/249

L27296 = EDGE_EXPAND L87029 -outside_by 101

=====

generate layer L27296, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L87029

operation group: 226/249

L13931 = OR L27296 L28951

=====

generate layer L13931, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L27296

delete layer L28951

operation group: 227/249

L10222 = AND L13931 ind_hole

=====

generate layer L10222, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L13931

operation group: 228/249

L25455 = ANGLE L10222 -ltgt 0 90

=====

generate layer L25455, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 229/249

L96841 = EDGE_EXPAND L25455 -inside_by 0.001

=====

generate layer L96841, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L25455

operation group: 230/249

L68829 = SELECT -interact L10222 L96841 -not

=====

generate layer L68829, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L10222

delete layer L96841

operation group: 231/249

inda_rad = AREA L68829 -gt 0.8

=====

generate layer inda_rad, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L68829

operation group: 232/249

inds_width = AND _ind_s ind2_width

=====

generate layer inds_width, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0

Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer ind2_width

operation group: 233/249

L70261 = SIZE IND2dummy -by 5

```
=====
generate layer L70261, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer IND2dummy

operation group: 234/249

L66884 = SIZE INDdummy -by -1

```
=====
generate layer L66884, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 235/249

L26372 = NOT L70261 L66884

```
=====
generate layer L26372, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L70261

delete layer L66884

operation group: 236/249

L19884 = AND INDdummy L26372

```
=====
generate layer L19884, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer INDdummy

delete layer L26372

operation group: 237/249

L73859 = NOT L19884 ind11

```
=====
generate layer L73859, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

delete layer L19884

operation group: 238/249

L50941 = EDGE_BOOLEAN ind11 L73859 -coincident_only -outside

```
=====
generate layer L50941, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

operation group: 239/249

L12819 = EDGE_EXPAND L50941 -inside_by 0.001

```

=====
generate layer L12819, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L50941

operation group: 240/249
L33493 = SELECT -interact ind11 L12819
=====
generate layer L33493, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L12819

operation group: 241/249
ind2_sp1 = SELECT -interact L73859 L33493 -eq 2
=====
generate layer ind2_sp1, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L73859
delete layer L33493

operation group: 242/249
L65767 = ANGLE ind_ct -ltgt 0 90 -not
=====
generate layer L65767, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

operation group: 243/249
L12066 = EDGE_EXPAND L65767 -outside_by 0.1
=====
generate layer L12066, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L65767

operation group: 244/249
L64022 = AND L12066 ind10
=====
generate layer L64022, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77

delete layer L12066

operation group: 245/249
L30099 = EDGE_BOOLEAN L64022 ind_hole -coincident_only -outside
=====

```

```
generate layer L30099, TYP = E, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

```
delete layer L64022
```

```
operation group: 246/249
```

```
L43958 = EDGE_EXPAND L30099 -outside_by 101
```

```
=====
generate layer L43958, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

```
delete layer L30099
```

```
operation group: 247/249
```

```
ind_rad = AND L43958 ind_hole
```

```
=====
generate layer ind_rad, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

```
delete layer L43958
delete layer ind_hole
```

```
operation group: 248/249
```

```
_ind_s_enc = SELECT -inside ind10 _ind_s
```

```
=====
generate layer _ind_s_enc, TYP = P, HPN = 0, FPN = 0, HEN = 0, FEN = 0
Time: cpu=0.00/0.57 real=0.00/0.62 Memory: 14.02/14.67/14.67 peak=34.77
```

```
operation group: 249/249
```

```
DEVICE MN( g45n1svt) _nmos1v ( S D) -model g45n1svt < _nmos1v_sti> < _nmos1v_wpe>
poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos1v, ndiff_conn) / 2)
fw = width
w = width
l = (area(_nmos1v) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_nmos1v, _nmos1v_wpe, S, 1.000000)
scv = enc_par(_nmos1v, _nmos1v_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]
```

```

    DEVICE MN( g45n1hvt) _nmos1v_hvt ( S D) -model g45n1hvt < _nmos1v_sti> < _nmos1v_hvt_wpe>
poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos1v_hvt, ndiff_conn) / 2)
fw = width
w = width
l = (area(_nmos1v_hvt) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_nmos1v_hvt, _nmos1v_hvt_wpe, S, 1.000000)
scv = enc_par(_nmos1v_hvt, _nmos1v_hvt_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

    DEVICE MN( g45n1lvt) _nmos1v_lvt ( S D) -model g45n1lvt < _nmos1v_sti> < _nmos1v_lvt_wpe>
poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos1v_lvt, ndiff_conn) / 2)
w = width
l = (area(_nmos1v_lvt) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_nmos1v_lvt, _nmos1v_lvt_wpe, S, 1.000000)
scv = enc_par(_nmos1v_lvt, _nmos1v_lvt_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

    DEVICE MN( g45n1nvt) _nmos_12_native ( S D) -model g45n1nvt < _nmos1v_sti> <
_nmos_12_native_wpe> poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos_12_native, ndiff_conn) / 2)
fw = width
w = width
l = (area(_nmos_12_native) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))

```

```

sch = enc_per(_nmos_12_native, _nmos_12_native_wpe, S, 1.000000)
scv = enc_par(_nmos_12_native, _nmos_12_native_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

DEVICE MN( g45n2svt) _nmos_25 ( S D) -model g45n2svt < _nmos1v_sti> < _nmos_25_wpe>
poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos_25, ndiff_conn) / 2)
fw = width
w = width
l = (area(_nmos_25) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_nmos_25, _nmos_25_wpe, S, 1.000000)
scv = enc_par(_nmos_25, _nmos_25_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

DEVICE MN( g45n2nvt) _nmos_25_native ( S D) -model g45n2nvt < _nmos1v_sti> <
_nmos_25_native_wpe> poly_conn( G) ndiff_conn( S) ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmos_25_native, ndiff_conn) / 2)
fw = width
w = width
l = (area(_nmos_25_native) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(_nmos1v_sti, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_nmos_25_native, _nmos_25_native_wpe, S, 1.000000)
scv = enc_par(_nmos_25_native, _nmos_25_native_wpe, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

DEVICE MN( g45ncap1) _nmoscap1v ( S D) -model g45ncap1 poly_conn( G) ndiff_conn( S)
ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmoscap1v, ndiff_conn) / 2)
w = width
l = (area(_nmoscap1v) / width)
ad = area(D)

```

```

as = area(S)
pd = perim(D)
ps = perim(S)
]

```

```

DEVICE MN( g45ncap2) _nmoscap2v ( S D) -model g45ncap2 poly_conn( G) ndiff_conn( S)
ndiff_conn( D) psubstrate( B) [
width = (perim_co(_nmoscap2v, ndiff_conn) / 2)
w = width
l = (area(_nmoscap2v) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
]

```

```

DEVICE MP( g45p1svt) _pmos1v ( S D) -model g45p1svt < pactive> poly_conn( G) pdiff_conn( S)
pdiff_conn( D) nwell_conn( B) [
width = (perim_co(_pmos1v, pdiff_conn) / 2)
fw = width
w = width
l = (area(_pmos1v) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(pactive, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_pmos1v, nwell_conn, S, 1.000000)
scv = enc_par(_pmos1v, nwell_conn, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)
]

```

```

DEVICE MP( g45p1hvt) _pmos1v_hvt ( S D) -model g45p1hvt < pactive> poly_conn( G) pdiff_conn( S)
pdiff_conn( D) nwell_conn( B) [
width = (perim_co(_pmos1v_hvt, pdiff_conn) / 2)
fw = width
w = width
l = (area(_pmos1v_hvt) / width)
ad = area(D)
as = area(S)
pd = perim(D)
ps = perim(S)
s = enc_vec(pactive, 2.000000)
sw = SUM(s :: w)
sa = SUM((s :: a) * ((s :: w) / sw))
sb = SUM((s :: b) * ((s :: w) / sw))
sch = enc_per(_pmos1v_hvt, nwell_conn, S, 1.000000)
scv = enc_par(_pmos1v_hvt, nwell_conn, S, 1.000000)
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)
]

```



```
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)  
]
```

```
DEVICE MP( g45p1lvt) _pmos1v_lvt ( S D) -model g45p1lvt < pactive> poly_conn( G) pdiff_conn( S)  
pdiff_conn( D) nwell_conn( B) [  
width = (perim_co(_pmos1v_lvt, pdiff_conn) / 2)  
fw = width  
w = width  
l = (area(_pmos1v_lvt) / width)  
ad = area(D)  
as = area(S)  
pd = perim(D)  
ps = perim(S)  
s = enc_vec(pactive, 2.000000)  
sw = SUM(s :: w)  
sa = SUM((s :: a) * ((s :: w) / sw))  
sb = SUM((s :: b) * ((s :: w) / sw))  
sch = enc_per(_pmos1v_lvt, nwell_conn, S, 1.000000)  
scv = enc_par(_pmos1v_lvt, nwell_conn, S, 1.000000)  
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)  
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)  
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)  
]
```

```
DEVICE MP( g45p2svt) _pmos2v ( S D) -model g45p2svt < pactive> poly_conn( G) pdiff_conn( S)  
pdiff_conn( D) nwell_conn( B) [  
width = (perim_co(_pmos2v, pdiff_conn) / 2)  
fw = width  
w = width  
l = (area(_pmos2v) / width)  
ad = area(D)  
as = area(S)  
pd = perim(D)  
ps = perim(S)  
s = enc_vec(pactive, 2.000000)  
sw = SUM(s :: w)  
sa = SUM((s :: a) * ((s :: w) / sw))  
sb = SUM((s :: b) * ((s :: w) / sw))  
sch = enc_per(_pmos2v, nwell_conn, S, 1.000000)  
scv = enc_par(_pmos2v, nwell_conn, S, 1.000000)  
sca = TVF_NUM_FUN("calc_sca", "wpe_procedure", sch, scv, w, l, 1)  
scb = TVF_NUM_FUN("calc_scb", "wpe_procedure", sch, scv, w, l, 1)  
scc = TVF_NUM_FUN("calc_scc", "wpe_procedure", sch, scv, w, l, 1)  
]
```

```
DEVICE MP( g45pcap1) _pmoscap1v ( S D) -model g45pcap1 poly_conn( G) pdiff_conn( S)  
pdiff_conn( D) nwell_conn( B) [  
width = (perim_co(_pmoscap1v, pdiff_conn) / 2)  
w = width  
l = (area(_pmoscap1v) / width)  
ad = area(D)  
as = area(S)  
pd = perim(D)  
ps = perim(S)  
]
```

```

    DEVICE MP( g45pcap2) _pmoscap2v ( S D) -model g45pcap2 poly_conn( G) pdiff_conn( S)
    pdiff_conn( D) nwell_conn( B) [
    width = (perim_co(_pmoscap2v, pdiff_conn) / 2)
    w = width
    l = (area(_pmoscap2v) / width)
    ad = area(D)
    as = area(S)
    pd = perim(D)
    ps = perim(S)
    ]

```

```

    DEVICE R( g45rm1) _resm1 metal1_conn( PLUS) metal1_conn( MINUS) ( PLUS MINUS) -model
    g45rm1 [
    width = (perim_co(_resm1, metal1_conn) / 2)
    length = (perim_out(_resm1, metal1_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resm1)) * width))
    effL = l
    segL = l
    r = (0.0736 * (l / w))
    ]

```

```

    DEVICE R( g45rm2) _resm2 metal2_conn( PLUS) metal2_conn( MINUS) ( PLUS MINUS) -model
    g45rm2 [
    width = (perim_co(_resm2, metal2_conn) / 2)
    length = (perim_out(_resm2, metal2_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resm2)) * width))
    effL = l
    segL = l
    r = (0.0604 * (l / w))
    ]

```

```

    DEVICE R( g45rm3) _resm3 metal3_conn( PLUS) metal3_conn( MINUS) ( PLUS MINUS) -model
    g45rm3 [
    width = (perim_co(_resm3, metal3_conn) / 2)
    length = (perim_out(_resm3, metal3_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resm3)) * width))
    effL = l
    segL = l
    r = (0.0604 * (l / w))
    ]

```

```

    DEVICE R( g45rm4) _resm4 metal4_conn( PLUS) metal4_conn( MINUS) ( PLUS MINUS) -model
    g45rm4 [
    width = (perim_co(_resm4, metal4_conn) / 2)
    length = (perim_out(_resm4, metal4_conn) / 2)

```

```

w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm4)) * width))
effL = l
segL = l
r = (0.0604 * (l / w))
]

```

```

DEVICE R( g45rm5) _resm5 metal5_conn( PLUS) metal5_conn( MINUS) ( PLUS MINUS) -model
g45rm5 [
width = (perim_co(_resm5, metal5_conn) / 2)
length = (perim_out(_resm5, metal5_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm5)) * width))
effL = l
segL = l
r = (0.0604 * (l / w))
]

```

```

DEVICE R( g45rm6) _resm6 metal6_conn( PLUS) metal6_conn( MINUS) ( PLUS MINUS) -model
g45rm6 [
width = (perim_co(_resm6, metal6_conn) / 2)
length = (perim_out(_resm6, metal6_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm6)) * width))
effL = l
segL = l
r = (0.0604 * (l / w))
]

```

```

DEVICE R( g45rm7) _resm7 metal7_conn( PLUS) metal7_conn( MINUS) ( PLUS MINUS) -model
g45rm7 [
width = (perim_co(_resm7, metal7_conn) / 2)
length = (perim_out(_resm7, metal7_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm7)) * width))
effL = l
segL = l
r = (0.0604 * (l / w))
]

```

```

DEVICE R( g45rm8) _resm8 metal8_conn( PLUS) metal8_conn( MINUS) ( PLUS MINUS) -model
g45rm8 [
width = (perim_co(_resm8, metal8_conn) / 2)
length = (perim_out(_resm8, metal8_conn) / 2)
w = width
effW = width
segW = width

```

```

l = (length - ((0.45 * bends(_resm8)) * width))
effL = l
segL = l
r = (0.0214 * (l / w))
]

```

```

DEVICE R( g45rm9) _resm9 metal9_conn( PLUS) metal9_conn( MINUS) ( PLUS MINUS) -model
g45rm9 [
width = (perim_co(_resm9, metal9_conn) / 2)
length = (perim_out(_resm9, metal9_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm9)) * width))
effL = l
segL = l
r = (0.0214 * (l / w))
]

```

```

DEVICE R( g45rm10) _resm10 metal10_conn( PLUS) metal10_conn( MINUS) ( PLUS MINUS) -model
g45rm10 [
width = (perim_co(_resm10, metal10_conn) / 2)
length = (perim_out(_resm10, metal10_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm10)) * width))
effL = l
segL = l
r = (0.0214 * (l / w))
]

```

```

DEVICE R( g45rm11) _resm11 metal11_conn( PLUS) metal11_conn( MINUS) ( PLUS MINUS) -model
g45rm11 [
width = (perim_co(_resm11, metal11_conn) / 2)
length = (perim_out(_resm11, metal11_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resm11)) * width))
effL = l
segL = l
r = (0.021 * (l / w))
]

```

```

DEVICE R( g45rsnd) _ressndiff ndiff_conn( PLUS) ndiff_conn( MINUS) psubstrate( B) ( PLUS MINUS)
-model g45rsnd [
width = (perim_co(_ressndiff, ndiff_conn) / 2)
length = (perim_out(_ressndiff, ndiff_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_ressndiff)) * width))
effL = l
segL = l

```

```
r = (18 * (l / w))
```

```
]
```

```
DEVICE R( g45rnsnd) _resnsndiff ndiff_conn( PLUS) ndiff_conn( MINUS) psubstrate( B) ( PLUS  
MINUS) -model g45rnsnd [
```

```
width = (perim_co(_resnsndiff, ndiff_conn) / 2)
```

```
length = (perim_out(_resnsndiff, ndiff_conn) / 2)
```

```
w = width
```

```
effW = width
```

```
segW = width
```

```
l = (length - ((0.45 * bends(_resnsndiff)) * width))
```

```
effL = l
```

```
segL = l
```

```
r = (100 * (l / w))
```

```
]
```

```
DEVICE R( g45rsnp) _ressnpoly poly_conn( PLUS) poly_conn( MINUS) psubstrate( B) ( PLUS MINUS)  
-model g45rsnp [
```

```
width = (perim_co(_ressnpoly, poly_conn) / 2)
```

```
length = (perim_out(_ressnpoly, poly_conn) / 2)
```

```
w = width
```

```
effW = width
```

```
segW = width
```

```
l = (length - ((0.45 * bends(_ressnpoly)) * width))
```

```
effL = l
```

```
segL = l
```

```
r = (15 * (l / w))
```

```
]
```

```
DEVICE R( g45rsnp) _ressnpoly_nw poly_conn( PLUS) poly_conn( MINUS) nwell_conn( B) ( PLUS  
MINUS) -model g45rsnp [
```

```
width = (perim_co(_ressnpoly_nw, poly_conn) / 2)
```

```
length = (perim_out(_ressnpoly_nw, poly_conn) / 2)
```

```
w = width
```

```
effW = width
```

```
segW = width
```

```
l = (length - ((0.45 * bends(_ressnpoly_nw)) * width))
```

```
effL = l
```

```
segL = l
```

```
r = (15 * (l / w))
```

```
]
```

```
DEVICE R( g45rsnp) _resnsnpoly poly_conn( PLUS) poly_conn( MINUS) psubstrate( B) ( PLUS  
MINUS) -model g45rsnp [
```

```
width = (perim_co(_resnsnpoly, poly_conn) / 2)
```

```
length = (perim_out(_resnsnpoly, poly_conn) / 2)
```

```
w = width
```

```
effW = width
```

```
segW = width
```

```
l = (length - ((0.45 * bends(_resnsnpoly)) * width))
```

```
effL = l
```

```
segL = l
```

```
r = (200 * (l / w))
```

```
]
```

```

    DEVICE R( g45rnsnp) _resnsnpoly_nw poly_conn( PLUS) poly_conn( MINUS) nwell_conn( B) ( PLUS
MINUS) -model g45rnsnp [
    width = (perim_co(_resnsnpoly_nw, poly_conn) / 2)
    length = (perim_out(_resnsnpoly_nw, poly_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resnsnpoly_nw)) * width))
    effL = l
    segL = l
    r = (200 * (l / w))
]

```

```

    DEVICE R( g45rspd) _resspdiff pdiff_conn( PLUS) pdiff_conn( MINUS) nwell_conn( B) ( PLUS MINUS)
-model g45rspd [
    width = (perim_co(_resspdiff, pdiff_conn) / 2)
    length = (perim_out(_resspdiff, pdiff_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resspdiff)) * width))
    effL = l
    segL = l
    r = (15 * (l / w))
]

```

```

    DEVICE R( g45rnsdpd) _resnsdpdiff pdiff_conn( PLUS) pdiff_conn( MINUS) nwell_conn( B) ( PLUS
MINUS) -model g45rnsdpd [
    width = (perim_co(_resnsdpdiff, pdiff_conn) / 2)
    length = (perim_out(_resnsdpdiff, pdiff_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_resnsdpdiff)) * width))
    effL = l
    segL = l
    r = (200 * (l / w))
]

```

```

    DEVICE R( g45rspp) _ressppoly poly_conn( PLUS) poly_conn( MINUS) psubstrate( B) ( PLUS MINUS)
-model g45rspp [
    width = (perim_co(_ressppoly, poly_conn) / 2)
    length = (perim_out(_ressppoly, poly_conn) / 2)
    w = width
    effW = width
    segW = width
    l = (length - ((0.45 * bends(_ressppoly)) * width))
    effL = l
    segL = l
    r = (15 * (l / w))
]

```

```

    DEVICE R( g45rspp) _ressppoly_nw poly_conn( PLUS) poly_conn( MINUS) nwell_conn( B) ( PLUS
MINUS) -model g45rspp [
    width = (perim_co(_ressppoly_nw, poly_conn) / 2)

```

```

length = (perim_out(_ressppoly_nw, poly_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_ressppoly_nw)) * width))
effL = l
segL = l
r = (15 * (l / w))
]

```

```

DEVICE R( g45rnspp) _resnsppoly poly_conn( PLUS) poly_conn( MINUS) psubstrate( B) ( PLUS
MINUS) -model g45rnspp [
width = (perim_co(_resnsppoly, poly_conn) / 2)
length = (perim_out(_resnsppoly, poly_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resnsppoly)) * width))
effL = l
segL = l
r = (650 * (l / w))
]

```

```

DEVICE R( g45rnspp) _resnsppoly_nw poly_conn( PLUS) poly_conn( MINUS) nwell_conn( B) ( PLUS
MINUS) -model g45rnspp [
width = (perim_co(_resnsppoly_nw, poly_conn) / 2)
length = (perim_out(_resnsppoly_nw, poly_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resnsppoly_nw)) * width))
effL = l
segL = l
r = (650 * (l / w))
]

```

```

DEVICE R( g45rnws) _resnwsti nwell_conn( PLUS) nwell_conn( MINUS) psubstrate( B) ( PLUS
MINUS) -model g45rnws [
width = (perim_co(_resnwsti, nwell_conn) / 2)
length = (perim_out(_resnwsti, nwell_conn) / 2)
w = width
effW = width
segW = width
l = (length - ((0.45 * bends(_resnwsti)) * width))
effL = l
segL = l
r = (450 * (l / w))
]

```

```

DEVICE R( g45rnwo) _resnwoxide nwell_conn( PLUS) nwell_conn( MINUS) psubstrate( B) ( PLUS
MINUS) -model g45rnwo [
width = (perim_co(_resnwoxide, nwell_conn) / 2)
length = (perim_out(_resnwoxide, nwell_conn) / 2)
w = width
effW = width

```

```

segW = width
l = (length - ((0.45 * bends(_resnwoxide)) * width))
effL = l
segL = l
r = (450 * (l / w))
]

```

```

DEVICE D( g45nd1svt) _ndio psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd1svt [
area = area(_ndio)
pj = perim(_ndio)
]

```

```

DEVICE D( g45nd1lvt) _ndio_lvt psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd1lvt [
area = area(_ndio_lvt)
pj = perim(_ndio_lvt)
]

```

```

DEVICE D( g45nd1hvt) _ndio_hvt psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd1hvt [
area = area(_ndio_hvt)
pj = perim(_ndio_hvt)
]

```

```

DEVICE D( g45nd1nvt) _ndio_nvt psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd1nvt [
area = area(_ndio_nvt)
pj = perim(_ndio_nvt)
]

```

```

DEVICE D( g45nd2svt) _ndio_2v psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd2svt [
area = area(_ndio_2v)
pj = perim(_ndio_2v)
]

```

```

DEVICE D( g45nd2nvt) _ndio_2v_nvt psubstrate( PLUS) ndiff_conn( MINUS) -model g45nd2nvt [
area = area(_ndio_2v_nvt)
pj = perim(_ndio_2v_nvt)
]

```

```

DEVICE D( g45pd1svt) _pdio pdiff_conn( PLUS) nwell_conn( MINUS) -model g45pd1svt [
area = area(_pdio)
pj = perim(_pdio)
]

```

```

DEVICE D( g45pd1lvt) _pdio_lvt pdiff_conn( PLUS) nwell_conn( MINUS) -model g45pd1lvt [
area = area(_pdio_lvt)
pj = perim(_pdio_lvt)
]

```

```

DEVICE D( g45pd1hvt) _pdio_hvt pdiff_conn( PLUS) nwell_conn( MINUS) -model g45pd1hvt [
area = area(_pdio_hvt)
pj = perim(_pdio_hvt)
]

```

```

DEVICE D( g45pd2svt) _pdio_2v pdiff_conn( PLUS) nwell_conn( MINUS) -model g45pd2svt [
area = area(_pdio_2v)
pj = perim(_pdio_2v)
]

```



```

]

DEVICE Q( g45vpnp2) _vpnp2 psubstrate( C) nwell_conn( B) pdiff_conn( E) -model g45vpnp2 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE Q( g45vpnp5) _vpnp5 psubstrate( C) nwell_conn( B) pdiff_conn( E) -model g45vpnp5 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE Q( g45vpnp10) _vpnp10 psubstrate( C) nwell_conn( B) pdiff_conn( E) -model g45vpnp10 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE Q( g45vnnp2) _npn2 nwell_conn( C) psubstrate( B) npn_emit( E) -model g45vnnp2 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE Q( g45vnnp5) _npn5 nwell_conn( C) psubstrate( B) npn_emit( E) -model g45vnnp5 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE Q( g45vnnp10) _npn10 nwell_conn( C) psubstrate( B) npn_emit( E) -model g45vnnp10 [
area = ((area(E) * 1) * 1000000000000)
]

DEVICE C( g45cmim) _mimcap CapMetal( PLUS) metal10_conn( MINUS) psubstrate( B) -model
g45cmim [
w = ((perim(_mimcap) * 0.25) + (0.5 * sqrt(((0.25 * pow(perim(_mimcap), 2)) - (4 * area(_mimcap))))))
l = ((perim(_mimcap) * 0.25) - (0.5 * sqrt(((0.25 * pow(perim(_mimcap), 2)) - (4 * area(_mimcap))))))
c = ((area(_mimcap) * 1e-15) + (perim(_mimcap) * 1e-16))
area = area(_mimcap)
pj = perim(_mimcap)
]

DEVICE L( g45inda) _ind_a ind10( PLUS) ind11( MINUS) psubstrate( B) ( PLUS MINUS) <
inda_width> < ind2_space> < inda_rad> < ind_nr> -model g45inda [
width = (area(inda_width) * 100000000)
space = (area(ind2_space) * 50000000)
nr = (count(ind_nr) - 0.5)
rad = (area(inda_rad) * 5000000)
]

DEVICE L( g45inds) _ind_s ind11( PLUS) ind11( MINUS) psubstrate( B) ( PLUS MINUS) -model
g45inds < inds_width> < ind2_sp1> < ind_rad> < _ind_s_enc> [
width = (area(inds_width) * 100000000)
space = (area(ind2_sp1) * 1000000)
rad = (area(ind_rad) * 5000000)
nr = (count(_ind_s_enc) + 1)
]

```

=====

DEVICE RECOGNITION ...

layer _EPTMPL262536 not generated, operation is dynamically optimized out.
layer _EPTMPL262538 not generated, operation is dynamically optimized out.
layer _EPTMPL262540 not generated, operation is dynamically optimized out.
layer _EPTMPL262542 not generated, operation is dynamically optimized out.
layer _EPTMPL262545 not generated, operation is dynamically optimized out.
Time: cpu=0.01/0.58 real=0.01/0.63 Memory: 14.02/14.67/26.73 peak=34.77

delete layer _nmos1v
delete layer _nmos1v_wpe
delete layer _nmos1v_hvt
delete layer _nmos1v_hvt_wpe
delete layer _nmos1v_lvt
delete layer _nmos1v_lvt_wpe
delete layer _nmos_12_native
delete layer _nmos_12_native_wpe
delete layer _nmos_25
delete layer _nmos_25_wpe
delete layer _nmos_25_native
delete layer _nmos1v_sti
delete layer _nmos_25_native_wpe
delete layer _nmoscap1v
delete layer _nmoscap2v
delete layer _pmos1v
delete layer _pmos1v_hvt
delete layer _pmos1v_lvt
delete layer _pmos2v
delete layer pactive
delete layer _pmoscap1v
delete layer _pmoscap2v
delete layer _resm1
delete layer _resm2
delete layer _resm3
delete layer _resm4
delete layer _resm5
delete layer _resm6
delete layer _resm7
delete layer _resm8
delete layer _resm9
delete layer _resm10
delete layer _resm11
delete layer _ressndiff
delete layer _resnsndiff
delete layer _ressnpoly
delete layer _ressnpoly_nw
delete layer _resnsnpoly
delete layer _resnsnpoly_nw
delete layer _resspdiff
delete layer _resnspdif
delete layer _ressppoly
delete layer _ressppoly_nw
delete layer _resnsppoly
delete layer poly_conn
delete layer _resnsppoly_nw
delete layer _resnwsti
delete layer _resnwoxide

delete layer _ndio
delete layer _ndio_lvt
delete layer _ndio_hvt
delete layer _ndio_nvt
delete layer _ndio_2v
delete layer ndiff_conn
delete layer _ndio_2v_nvt
delete layer _pdio
delete layer _pdio_lvt
delete layer _pdio_hvt
delete layer _pdio_2v
delete layer _vpnp2
delete layer _vpnp5
delete layer pdiff_conn
delete layer _vpnp10
delete layer _nnp2
delete layer _nnp5
delete layer nwell_conn
delete layer _nnp10
delete layer _mimcap
delete layer _ind_a
delete layer inda_width
delete layer ind2_space
delete layer inda_rad
delete layer ind_nr
delete layer psubstrate
delete layer _ind_s
delete layer inds_width
delete layer ind2_sp1
delete layer ind_rad
delete layer _ind_s_enc

Outputting Results ...
#####

ONE LAYER BOOLEAN: Cumulative Time CPU = 0(s) REAL = 0(s)
TWO LAYER BOOLEAN: Cumulative Time CPU = 0(s) REAL = 0(s)
POLYGON TOPOLOGICAL: Cumulative Time CPU = 0(s) REAL = 0(s)
POLYGON MEASUREMENT: Cumulative Time CPU = 0(s) REAL = 0(s)
SIZE: Cumulative Time CPU = 0(s) REAL = 0(s)
EDGE TOPOLOGICAL: Cumulative Time CPU = 0(s) REAL = 0(s)
EDGE MEASUREMENT: Cumulative Time CPU = 0(s) REAL = 0(s)
STAMP: Cumulative Time CPU = 0(s) REAL = 0(s)
ONE LAYER DRC: Cumulative Time CPU = 0(s) REAL = 0(s)
TWO LAYER DRC: Cumulative Time CPU = 0(s) REAL = 0(s)
NET AREA: Cumulative Time CPU = 0(s) REAL = 0(s)
DENSITY: Cumulative Time CPU = 0(s) REAL = 0(s)
MISCELLANEOUS: Cumulative Time CPU = 0(s) REAL = 0(s)
CONNECT: Cumulative Time CPU = 0(s) REAL = 0(s)
DEVICE: Cumulative Time CPU = 0(s) REAL = 0(s)
ERC: Cumulative Time CPU = 0(s) REAL = 0(s)
PATTERN_MATCH: Cumulative Time CPU = 0(s) REAL = 0(s)
DFM FILL: Cumulative Time CPU = 0(s) REAL = 0(s)

```

Total CPU Time      : 1(s)
Total Real Time    : 1(s)
Peak Memory Used   : 35(M)
Total Original Geometry : 54(54)
Total ERC RuleChecks : 0
Total ERC Results  : 0 (0)
Summary can be found in file inv.sum
Creating extracted connectivity database ...
CmdLine: /data/cadence/installs/PVS211/tools.Inx86/pvs/bin/64bit/edbToEcdb -kf -edb inv_890.db -ecdb
./ -topcell inv -netlist svdb/inv.net -layermap svdb/inv.ecdbmap -textmap svdb/inv.ports -dependmap
inv.lmap.perc -lvsfile svdb/inv.lvsfile -saveFloatingNets .inv.info.softchk
Legend for cell operations:
  C - Cells
  P - Pins
  N - Net
  D - Device
  I - Insts
  S - Shapes
  X - Delete cell memory
Opening layer file 'inv_890.db/__layer'...
Loading layer map file 'svdb/inv.ecdbmap'...
Loading text map file 'svdb/inv.ports'...
Loading dependency map file 'inv.lmap.perc'...
Pre loading edb directory contents...
ECDB file name './.inv.ecdb'...
Loading lvs file 'svdb/inv.lvsfile'...
Writing db header information...(0s)
Transferring cdl structures to ecdb structures...
Read Netlist (32 threads)...
  DONE - (2s)
Process (32 threads)...
Cell(    2): 33% Done...(2s), inv
Cell(    1): 66% Done...(2s), pmos1v_CDNS_3
Cell(    0): 100% Done...(2s), nmos1v_CDNS_2
  DONE - (0s)
Cells creation time: (2s)
Write netlist items...(2s)
Saving name table to db...
Save device templates to the db...
Save connect rules to the db...
Write calculated header information to the top of file...
Erasing cdl subckts... (0s)
ecdb created...TOTAL TIME: (2s)
Total CPU Time    : 0(s)
Total Real Time   : 2(s)
  Read edb time   : 0(s)
  Write ecdb time  : 0(s)
Peak Memory Used  : 294.26(M)

edbToEcdb Header Information:
ECDB file version : 37
DevTmpl offset    : 5984
Connect offset    : 0

```

NameTable offset : 5433
Layer Map offset : 167
Cell Start offset : 5223
Cell End offset : 5433
Aux Data offset : 6088
Labels offset : 0
Layer RW offset : 0
NVP :
Scale : 8000
GDS Scale : 2000
File size (static) : 6134
File size (dynamic) : 0
Cell count : 3
ECDB create time : 2
EDB info : 10
Top Cell : inv
EDB info (Trans) : WRITTEN_64 W_NOT_NET_ORDER

edbToEcdb Sizes written to disk (MB):

NameTbl : 0.000551
Layers : 0.003320
Shapes : 0.000663
XYTree : 0.000562
LookUpTbIs : 0.000125
Cells : 0.000233
Insts : 0.000072
Ports : 0.000090
Nets : 0.000088
Pins : 0.000033
Labels : 0.000084
DevTmpl : 0.000100
Connect : 0.000000
Header : 0.000167
AuxData : 0.000044
NvnLabels : 0.000002

Total : 0.006134

edbToEcdb Done

Creating extraction database ...

pvsextdb 21.12-s022 64 bit (Wed Feb 9 12:12:42 PST 2022)

Build Ref No.: 022 Production (02-09-2022) [pvs_2112]

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Build O/S: Linux x86_64 3.10.0-693.el7.x86_64

Executed on: ktm1 (Linux x86_64 3.10.0-1160.80.1.el7.x86_64)

Process Id: 1062

Starting Time: Sun Apr 21 00:36:27 2024 (Sat Apr 20 17:36:27 2024 GMT)

With parameters: -license_timeout 300 inv.rep REPORTDB

Processing file inv.rep
Completed creation of REPORTDB

Netlist Extraction Finished Normally. Sun Apr 21 00:36:28 2024

Comparing netlists ...

pvsnv 21.12-s022 64 bit (Wed Feb 9 12:12:42 PST 2022)

Build Ref No.: 022 Production (02-09-2022) [pvs_2112]

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Build O/S: Linux x86_64 3.10.0-693.el7.x86_64

Executed on: kmtt (Linux x86_64 3.10.0-1160.80.1.el7.x86_64)

Process Id: 1097

Starting Time: Sun Apr 21 00:36:28 2024 (Sat Apr 20 17:36:28 2024 GMT)

With parameters: -ai

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/.technology.rul.
rsf

Setup VLDB (0s)

Init sch rules (0s)

Init lay rules (0s)

Init structures (0s)

Set cells to delete (0s)

Reading schematic network

inputting cdl netlist

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/netlist...

WARNING (NVN-13002): *.BIPOLAR is not supported.

WARNING (NVN-13002): *.RESI is not supported.

WARNING (NVN-13002): *.RESVAL is not supported.

WARNING (NVN-13002): *.CAPVAL is not supported.

WARNING (NVN-13002): *.DIOPERI is not supported.

WARNING (NVN-13002): *.DIOAREA is not supported.

WARNING (NVN-13002): *.EQUATION is not supported.

WARNING (NVN-13003): "/*.SCALE" is not supported. Use "/*.OPTION SCALE" instead or specify

'lvs_cdn_flow_options -cdl_use_scale' in the rule file.

finished loading cdl netlist

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/netlist (1s)

commit cdl netlist(s)...

finished committing cdl netlists (0s)

Post sch netlist rule processing (0s)

Reading layout network

inputting (fast parser) cdl netlist

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.spi...

finished loading cdl netlist

/data/vlsi2023/cc01group5/2152840/work/layout_env/pdk/gpdk045_v_6_0/testINV/inv/pvs/inv.spi (0s)

commit cdl netlist(s)...

finished committing cdl netlists (0s)

Post lay netlist rule processing (0s)

Processing blackBox rules (0s)

Processing bindings (0s)

Commit sch verilog netlist (0s)

Commit lay verilog netlist (0s)

Erase netlist data (0s)

Set blackbox cells (0s)

Sch put cells in memory (0s)

Sch update netlist rules (0s)

Sch adjust device pins (0s)

Sch calc hier order (0s)

Sch process inherited connections (0s)

Sch generate qrc files (0s)

Sch handle global pins (0s)

Sch apply rule actions with processed netlist (0s)

Sch process cell supply (0s)

Lay put cells in memory (0s)

Lay update netlist rules (0s)

Lay calc hier order (0s)

Lay process inherited connections (0s)

Lay generate qrc files (0s)

Lay handle global pins (0s)

Lay apply rule actions with processed netlist (0s)

Lay process cell supply (0s)

Check if interposer flow (0s)

Check binding file (0s)

Set topcell global pin indicator (0s)

Calculate preserve parameterized cells (0s)

Check generic device bindings (0s)

Calculate primitive device bindings (0s)

Remove unused device parameters (0s)

Set instances to flatten inside cells (0s)

Calculate parameters (0s)

Start sch normalization (0s)

Start lay normalization (0s)

Calculate primitive device bindings (2nd time) (0s)

Finalize binding (0s)

Check expand on pin error (0s)

Sch join nets (0s)

Sch setup hier normalization (0s)

Sch remove feedthroughs and black box cell instances (0s)

Sch remove identical pins (0s)

Sch calc connection counts (0s)

Run genHierCells (0s)

Reset normalization flags (0s)

Lay join nets (0s)

Lay setup hier normalization (0s)

Lay remove feedthroughs and black box cell instances (0s)

Lay remove identical pins (0s)

Lay calc connection counts (0s)

Normalize sch (0s)

Read in color file (0s)

Set scale factor per cell (0s)

Setup property init rules (0s)
 Write sch vldb file (0s)
 Write lay vldb file (0s)
 Apply preserve parameterized cells (0s)
 Cleanup after VLDB processing (0s)
 WARNING (NVN-15002): Rule 'lvs_recognize_gates -all' was set, but either the power net or the ground net (or both) was missing as follows.
 schematic power
 schematic ground
 layout power
 layout ground
 Rule 'lvs_recognize_gates -all' requires both power and ground nets to operate. These can be identified using rules 'lvs_power_name' and 'lvs_ground_name'.
 Resetting rule to 'lvs_recognize_gates -simple'

Cell comparison output format:
 <Comparing|Top Cell> <Layout Cell> vs <Schematic Cell>
 <Layout instances> insts vs <Schematic instances> insts (<Time>)-<Status>

Top Cell inv vs inv
 2 insts vs 2 insts (0s)-mismatch

Generating the LVS report...
 Report Init (0s)
 Load common queries (0s)
 Create report (0s)
 Cleanup (0s)
 Report finished

Extraction Run Summary
 Total CPU Time : 1(s)
 Total Real Time : 1(s)
 Peak Memory Used : 35.00(M)

NVN Run Summary
 Total CPU Time : 1(s)
 Total Real Time : 2(s)
 Peak Memory Used : 251.29(M)

LVS Summary
 Total CPU Time : 2(s)
 Total Real Time : 3(s)
 Peak Memory Used : 251.29(M)

```
#####
#                                     #
# Run Result      : MISMATCH          #
#                                     #
# Run Summary     : [ERROR] Connectivity Mismatches #
#                 : [ERROR] Pin Mismatches          #
#                 : [INFO] ERC Results: Empty       #
#                 : [INFO] Extraction Clean         #
#                 :                                     #
```

```
# ERC Summary File      : inv.sum          #
# Extraction Report File : inv.rep          #
# Comparison Report File : inv.rep.cls      #
#                                           #
#####
```

Checking in all SoftShare licenses.

PVS Comparison Finished. Sun Apr 21 00:36:30 2024