



Foundation_Synopsys_TechnoKit _cmos028FDSOI_6U1x_2T8x_LB

3.3

Release Notes

October 2018



**PDK & Foundation Design
Flows**
Technology R&D – T&DP – Design
Platform

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Revision History

Date	Product Version	Comments
10/06/2016	1.0	First version (aligned with DK 2.8.b)
29/07/2016	2.8.c	Addition of ICC2 files & of custom layers in all tech files
11/08/2016	2.8.d	Bug fix: addition of cfg/ directory
11/08/2016	2.8.e	Bug fix: fix vc.bbview drc.switches key
07/10/2016	2.9	Alignment with DK 2.9 (HLVT inclusion for ICC2 + new layers for ICC1) Inclusion of official LIPA-SC files Dedicated layers_setup.tcl offer
13/01/2017	3.0	Inclusion of layers_setup_COT.tcl for ICC2 (as already done previously for ICC1) Replacement of former ICV DRC deck by ICV DRC mini-deck for ECO hotfix in order to be DRC clean (+ bbview updates) Removal of ICV tiling (but preservation of ICV LFD or litho hot-spots detection) Tech file pessimism removal for VxBAR rule 553i TLUPLUS and NXTGRD parasitics regenerated with latest StarRC version Implant layers added (with width/spacing/area parameters) in ICC1 tech file Update/addition of mappings in ICC1 map_out & strmln.map for implant layers Inclusion of "reduced" LEF files in FTK SNPS for usage in SignOff Physical ECO task (using PrimeTime)
02/06/2017	3.1	TLUPLUS & NXTGRD regenerated for alignment with 28NM_STARRCXT_FDSOI_PROTOTYPE 2.3-PRELIM-00 (using star-rcxt m-2016.12-sp1) Addition of LIMA files (for Michel Herment & Rashna Seli's organizations) Addition of new layers from DK mmW 0.9 in ICC1 map files TLUPLUS mapfile clean-up (PDK-DDF&M CodeX reference => [TRC #418066]) Renaming of layers_setup_COT.tcl in layers_setup_alternative.tcl
20/10/2017	3.2	Addition of new layers from DK 28SOI RF mmW 1.0 in ICC1 & LIMA files Removal of wrong DRC rules on PW layer in ICC2 tech TF (TRC CodeX ticket #446586) Addition of LV layer in ICC1 tech TF as requested by LIMA team Inclusion of 2 new files (Milkyway/dummy_layers.lef & Milkyway/lef_layer.map) for read_lef ICC1 data preparation specific mechanism (requested by Zuma thru HelpDesk ticket 86378)
13/07/2018	3.3 PRELIM	- Addition of new layers from DK 1.1 in ICC1 and LIMA files - Addition of 504k1 rule coding in ICV mini-deck (not

		<p>validated yet on testcase) (TRC ticket #462873)</p> <ul style="list-style-type: none">- Addition of missing "excludedForPGRoute" statements for ContactCodes in ICC1 & ICC2 tech TF (TRC ticket #489193)- Alignment of SNPS LEF content with CDN LEF
10/08/2018	3.3 INTERM	<ul style="list-style-type: none">- TRC #461069 Rule 615: Bad thresholds for V1- TRC #489192 Missing enclosureTbl & minCutsTbl for W0,W1,YZ,XA,XB,XC & VV- TRC #489194 Rules 551_VxLRG<a d> not coded- TRC #465654 613a_V2_M2 not seen by zroute- Removal of 504k1 coding in ICV mini-deck as currently not working (to be planned for a next release)- ICC2 map_out: addition of metal/via fillOPC purposes mappings for track-based fill
07/10/2018	3.3	<p>Coding of new high-voltage FBB rules in ICC1 & ICC2 tech TF</p> <p>Addition of ICC1/ICC2 define_non_default_rules.tcl file to handle FBB < -0.6V in P&R flow</p> <p>Inclusion of new VH/VL custom layers in ICC2 map_out</p> <p>TRC #497923: Mini-deck ICV fixed with proper inclusion of 504k1 rule</p> <p>615 rule coding update cancelled, reverting back to former code (TRC ticket to be fixed in a later release) which is DRC clean</p>

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1.Introduction

This document contains the Release Notes for Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB 3.3. The following sections describe the release in detail and provide other information that supplements the main documentation.

Product Name	Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB
Release Number	3.3
Release Date	07/10/2018
Library Type	8T, 12T
Technology	cmos028FDSOI_6U1x_2T8x_LB
DK version	DK_cmos028FDSOI_RF_mmW_6U1x_2T8x_LB@1.2
CAD tool versions	icompiler l-2016.03-sp5 icompiler2 n-2017.09-sp4 For SignOff tools versions, please refer to DDF&M team (Christophe Pouly - Sylvain Biard)

2.History

This section provides a brief history of all the previous releases of this product. It includes the updates made in the corresponding releases.

2.1 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.3

- Coding of new high-voltage FBB rules in ICC1 & ICC2 tech TF
- Addition of ICC1/ICC2 define_non_default_rules.tcl file to handle FBB < -0.6V in P&R flow
- Inclusion of new VH/VL custom layers in ICC2 map_out
- TRC #497923: Mini-deck ICV fixed with proper inclusion of 504k1 rule
- 615 rule coding update cancelled, reverting back to former code (TRC ticket to be fixed in a later release) which is DRC clean

2.2 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.3 INTERM

- TRC #461069 Rule 615: Bad thresholds for V1
- TRC #489192 Missing enclosureTbl & minCutsTbl for W0,W1,YZ,XA,XB,XC & VV

- TRC #489194 Rules 551_VxLRG<a|d> not coded
- TRC #465654 613a_V2_M2 not seen by zroute
- Removal of 504k1 coding in ICV mini-deck as currently not working (to be planned for a next release)
- ICC2 map_out: addition of metal/via fillOPC purposes mappings for track-based fill

2.3 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.3 PRELIM

- Addition of new layers from DK 1.1 in ICC1 and LIMA files
- Addition of 504k1 rule coding in ICV mini-deck (not validated yet on testcase) (TRC ticket #462873)
- Addition of missing "excludedForPGRoute" statements for ContactCodes in ICC1 & ICC2 tech TF (TRC ticket #489193)
- Alignment of SNPS LEF content with CDN LEF

2.4 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.2

- Addition of new layers from DK 28SOI RF mmW 1.0 in ICC1 & LIMA files
- Removal of wrong DRC rules on PW layer in ICC2 tech TF (TRC CodeX ticket #446586)
- Addition of LV layer in ICC1 tech TF as requested by LIMA team
- Inclusion of 2 new files (Milkyway/dummy_layers.lef & Milkyway/lef_layer.map) for read_lef ICC1 data preparation specific mechanism (requested by Zuma thru HelpDesk ticket 86378)

2.5 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.1

- TLUPLUS & NXTGRD regenerated for alignment with 28NM_STARRCXT_FDSOI_PROTOTYPE 2.3-PRELIM-00 (using star-rcxt m-2016.12-sp1)
- Addition of LIMA files (for Michel Herment & Rashna Seli's organizations)
- Addition of new layers from DK mmW 0.9 in ICC1 map files
- TLUPLUS mapfile clean-up (PDK-DDF&M CodeX reference => [TRC #418066])
- Renaming of layers_setup_COT.tcl in layers_setup_alternative.tcl

2.6 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@3.0

- Inclusion of layers_setup_COT.tcl for ICC2 (as already done previously for ICC1)
- Replacement of former ICV deck by ICV mini-deck for ECO hotfix in order to be DRC clean (+ bbview updates)
- Removal of ICV tiling (but preservation of ICV LFD for litho hot-spots detection)
- Tech file pessimism removal for VxBAR rule 553i

- TLUPLUS and NXTGRD parasitics regenerated with latest StarRC version (I-2016.06-sp2)
- Implant layers added (with width/spacing/area parameters) in ICC1 tech file
- Update/addition of mappings in ICC1 map_out & strmln.map for implant layers
- Inclusion of “reduced” LEF files in FTK SNPS for usage in SignOff Physical ECO task (using PrimeTime)

2.7 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@2.9

- Alignment with DK 2.9 (HLVT inclusion for ICC2 + new layers for ICC1)
- Inclusion of official LIPA-SC files
- Dedicated layers_setup.tcl offer (ST default & COT alternative regarding IA orientation change)

2.8 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@2.8.e

- Bug fix: update of drc.switches key in vc.bbview

2.9 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@2.8.d

- Bug fix: inclusion of cfg/ directory for ODIF usage

2.10 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@2.8.c

- Inclusion of ICC2 tech/map files
- Addition of custom layers (T3/SXCUT/MKR_HSSOI/Boundary Snap) in tech files

2.11 Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB@1.0

- Initial release
- Contains PNR, SignOff and LIPA files

3. References

Please refer to the Foundation_Synopsys_TechnoKit_cmos028FDSOI_6U1x_2T8x_LB user manual for details concerning the product content.

4. User Interface

Please contact [HELPDESK](#) for any problems or suggestions.