

C28SOI_IO_EXT_CSF_COMPENSATION1V8_LR_EG Databook

September 2016

COMPENSATION_EXT_1V8

Cell Description

COMPENSATION_EXT_1V8

- The cell has "dont_use" attribute set in the Synopsys STF.
- The cell has "dont_touch" attribute set in the Synopsys STF.

Physical Dimensions

Area(um2): 30872.000

Glossary

Tr : Input Transition time C : Output (capacitive) load

R : Rising edge F : Falling edge

ogical Symbol	
RASTON C3-02-NASTON C3-02-NASTON C3-02-02-02-02-02-02-02-02-02-02-02-02-02-	
ASRCN1V8CORE<3:8> W	

Cell Capacitance

Parameter	Value(pF)		
i arameter	best 0.90 125	worst 0.90 -40	
ACCURATE Input Cap.	0.0083	0.0083	
ANAREXT Input Cap.	0.0100	0.0100	
ANAREXT Max Load	10000.000	10000.000	
ASRCN1V8CORE[0] Input Cap.	0.0100	0.0100	

ASRCN1V8CORE[0] Max Load	10000.000	10000.000
ASRCN1V8CORE[1] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[1] Max Load	10000.000	10000.000
ASRCN1V8CORE[2] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[2] Max Load	10000.000	10000.000
ASRCN1V8CORE[3] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[3] Max Load	10000.000	10000.000
ASRCP1V8CORE[0] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[0] Max Load	10000.000	10000.000
ASRCP1V8CORE[1] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[1] Max Load	10000.000	10000.000
ASRCP1V8CORE[2] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[2] Max Load	10000.000	10000.000
ASRCP1V8CORE[3] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[3] Max Load	10000.000	10000.000
COMPEN Input Cap.	0.0095	0.0095
COMPOK Max Load	0.200	0.200
COMPTQ Input Cap.	0.0120	0.0120
FASTFRZ Input Cap.	0.0680	0.0680
FREEZE Input Cap.	0.0076	0.0076
NASRCN[0] Input Cap.	0.0000	0.0000
NASRCN[0] Max Load	0.200	0.200
NASRCN[1] Input Cap.	0.0000	0.0000
NASRCN[1] Max Load	0.200	0.200
NASRCN[2] Input Cap.	0.0000	0.0000
NASRCN[2] Max Load	0.200	0.200
NASRCN[3] Input Cap.	0.0000	0.0000
NASRCN[3] Max Load	0.200	0.200
NASRCP[0] Input Cap.	0.0000	0.0000
NASRCP[0] Max Load	0.200	0.200
NASRCP[1] Input Cap.	0.0000	0.0000
NASRCP[1] Max Load	0.200	0.200
NASRCP[2] Input Cap.	0.0000	0.0000
NASRCP[2] Max Load	0.200	0.200
NASRCP[3] Input Cap.	0.0000	0.0000
NASRCP[3] Max Load	0.200	0.200
RASRCN[0] Input Cap.	0.0100	0.0100
RASRCN[0] Max Load	-	-
RASRCN[1] Input Cap.	0.0100	0.0100
RASRCN[1] Max Load	-	-
RASRCN[2] Input Cap.	0.0100	0.0100
RASRCN[2] Max Load	-	-
RASRCN[3] Input Cap.	0.0100	0.0100
RASRCN[3] Max Load	-	-
RASRCP[0] Input Cap.	0.0100	0.0100
RASRCP[0] Max Load	-	-
RASRCP[1] Input Cap.	0.0100	0.0100
RASRCP[1] Max Load	-	-
RASRCP[2] Input Cap.	0.0100	0.0100
RASRCP[2] Max Load	-	-
RASRCP[3] Input Cap.	0.0100	0.0100
RASRCP[3] Max Load	-	-





COMPENSATION_EXT_CSF_1V8_FC_LIN

Cell Description

COMPENSATION_EXT_CSF_1V8_FC_LIN

- The cell has "dont_use" attribute set in the Synopsys STF.
- The cell has "dont_touch" attribute set in the Synopsys STF.

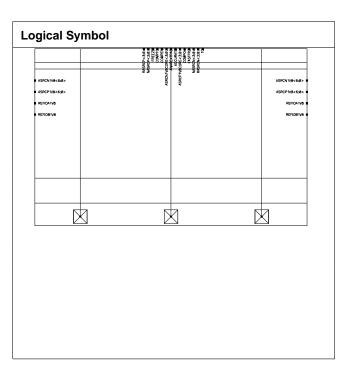
Physical Dimensions

Area(um2): 41768.000

Glossary

Tr : Input Transition time C : Output (capacitive) load

R : Rising edge F : Falling edge



Cell Capacitance

Dorometer	Value(pF)	
Parameter	best 0.90 125	worst 0.90 -40
ACCURATE Input Cap.	0.0083	0.0083
ANAREXTPAD Input Cap.	1.4000	1.4000
ANAREXTPAD Max Load	10000.000	10000.000
ASRCN1V8[0] Input Cap.	0.0100	0.0100
ASRCN1V8[0] Max Load	10000.000	10000.000
ASRCN1V8[1] Input Cap.	0.0100	0.0100
ASRCN1V8[1] Max Load	10000.000	10000.000
ASRCN1V8[2] Input Cap.	0.0100	0.0100
ASRCN1V8[2] Max Load	10000.000	10000.000
ASRCN1V8[3] Input Cap.	0.0100	0.0100
ASRCN1V8[3] Max Load	10000.000	10000.000
ASRCN1V8[4] Input Cap.	0.0100	0.0100
ASRCN1V8[4] Max Load	10000.000	10000.000
ASRCN1V8[5] Input Cap.	0.0100	0.0100
ASRCN1V8[5] Max Load	10000.000	10000.000
ASRCN1V8[6] Input Cap.	0.0100	0.0100
ASRCN1V8[6] Max Load	10000.000	10000.000
ASRCN1V8CORE[0] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[0] Max Load	10000.000	10000.000
ASRCN1V8CORE[1] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[1] Max Load	10000.000	10000.000
ASRCN1V8CORE[2] Input Cap.	0.0100	0.0100



ASRCN1V8CORE[2] Max Load	10000.000	10000.000
ASRCN1V8CORE[3] Input Cap.	0.0100	0.0100
ASRCN1V8CORE[3] Max Load	10000.000	10000.000
ASRCP1V8[0] Input Cap.	0.0100	0.0100
ASRCP1V8[0] Max Load	10000.000	10000.000
ASRCP1V8[1] Input Cap.	0.0100	0.0100
ASRCP1V8[1] Max Load	10000.000	10000.000
ASRCP1V8[2] Input Cap.	0.0100	0.0100
ASRCP1V8[2] Max Load	10000.000	10000.000
ASRCP1V8[3] Input Cap.	0.0100	0.0100
ASRCP1V8[3] Max Load	10000.000	10000.000
ASRCP1V8[4] Input Cap.	0.0100	0.0100
ASRCP1V8[4] Max Load	10000.000	10000.000
ASRCP1V8[5] Input Cap.	0.0100	0.0100
ASRCP1V8[5] Max Load	10000.000	10000.000
ASRCP1V8[6] Input Cap.	0.0100	0.0100
ASRCP1V8[6] Max Load	10000.000	10000.000
ASRCP1V8CORE[0] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[0] Max Load	10000.000	10000.000
ASRCP1V8CORE[1] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[1] Max Load	10000.000	10000.000
ASRCP1V8CORE[2] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[2] Max Load	10000.000	10000.000
ASRCP1V8CORE[3] Input Cap.	0.0100	0.0100
ASRCP1V8CORE[3] Max Load	10000.000	10000.000
COMPEN Input Cap.	0.0095	0.0095
COMPOK Max Load	0.200	0.200
COMPTQ Input Cap.	0.0120	0.0120
FASTFRZ Input Cap.	0.0069	0.0069
FREEZE Input Cap.	0.0076	0.0076
NASRCN[0] Input Cap.	0.0000	0.0000
NASRCN[0] Max Load	0.200	0.200
NASRCN[1] Input Cap.	0.0000	0.0000
NASRCN[1] Max Load	0.200	0.200
NASRCN[2] Input Cap.	0.0000	0.0000
NASRCN[2] Max Load	0.200	0.200
NASRCN[3] Input Cap.	0.0000	0.0000
NASRCN[3] Max Load	0.200	0.200
NASRCP[0] Input Cap.	0.0000	0.0000
NASRCP[0] Max Load	0.200	0.200
NASRCP[1] Input Cap.	0.0000	0.0000
NASRCP[1] Max Load	0.200	0.200
NASRCP[2] Input Cap.	0.0000	0.0000
NASRCP[2] Max Load	0.200	0.200
NASRCP[2] Max Load NASRCP[3] Input Cap.	0.200	0.0000
NASRCP[3] Max Load	0.200	0.200
RASRCN[0] Input Cap.	0.200	0.200
RASRCN[0] Max Load	- 0.0100	
RASRCN[0] Max Load RASRCN[1] Input Cap.	0.0100	0.0100
RASRON[1] Input Cap.	0.0100	0.0100
RASRON[1] Max Load RASRON[2] Input Cap.	0.0100	0.0100
RASRCN[2] Max Load	- 0.0100	0.0100
KASKCIN[2] IVIAX LOAG	-	-



RASRCN[3] Input Cap.	0.0100	0.0100
RASRCN[3] Max Load	-	-
RASRCP[0] Input Cap.	0.0100	0.0100
RASRCP[0] Max Load	-	-
RASRCP[1] Input Cap.	0.0100	0.0100
RASRCP[1] Max Load	-	-
RASRCP[2] Input Cap.	0.0100	0.0100
RASRCP[2] Max Load	-	-
RASRCP[3] Input Cap.	0.0100	0.0100
RASRCP[3] Max Load	-	-
REFIOA1V8 Input Cap.	0.2360	0.2360
REFIOA1V8 Max Load	10000.000	10000.000
REFIOB1V8 Input Cap.	0.2360	0.2360
REFIOB1V8 Max Load	10000.000	10000.000
TQ Input Cap.	0.0085	0.0085





Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2012 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com