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.

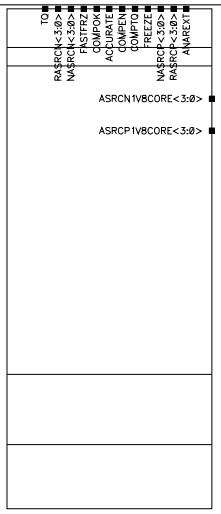
Physical Dimensions

Area(um2) : 30872.000

Glossary

Tr : Input Transition time
C : Output (capacitive) load
R : Rising edge
F : Falling edge

Logical Symbol



Cell Capacitance

Parameter	Value(pF)		
	best 1.10 -40	**typ 1.00 25**	**worst 0.90 125**
ACCURATE Input Cap.	0.0083	0.0083	0.0083
ANAREXT Input Cap.	0.0100	0.0100	0.0100
ANAREXT Max Load	10000.000	10000.000	10000.000

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

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

Default Leakage Power

Default Leakage Power (mW)	vdd	vdde1v8
best 1.10 -40	1.333e-04	9.100e-04
typ 1.00 25	2.957e-05	2.216e-04
worst 0.90 125	1.163e-04	1.794e-03

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.

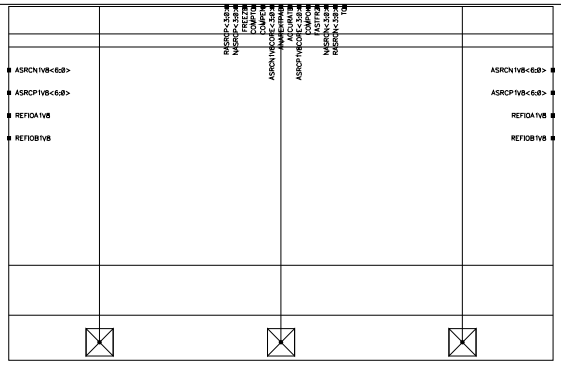
Physical Dimensions

Area(um2) : 41768.000

Glossary

Tr : Input Transition time
C : Output (capacitive) load
R : Rising edge
F : Falling edge

Logical Symbol



Cell Capacitance

Parameter	Value(pF)		
	best 1.10 -40	**typ 1.00 25**	**worst 0.90 125**
ACCURATE Input Cap.	0.0083	0.0083	0.0083
ANAREXTPAD Input Cap.	1.4000	1.4000	1.4000
ANAREXTPAD Max Load	10000.000	10000.000	10000.000
ASRCN1V8[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[0] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[1] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[2] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[3] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[4] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[5] Max Load	10000.000	10000.000	10000.000
ASRCN1V8[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8[6] Max Load	10000.000	10000.000	10000.000
ASRCN1V8CORE[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN1V8CORE[0] Max Load	10000.000	10000.000	10000.000

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

NASRCN[3] Input Cap.	0.0000	0.0000	0.0000
NASRCN[3] Max Load	0.200	0.200	0.200
NASRCP[0] Input Cap.	0.0000	0.0000	0.0000
NASRCP[0] Max Load	0.200	0.200	0.200
NASRCP[1] Input Cap.	0.0000	0.0000	0.0000
NASRCP[1] Max Load	0.200	0.200	0.200
NASRCP[2] Input Cap.	0.0000	0.0000	0.0000
NASRCP[2] Max Load	0.200	0.200	0.200
NASRCP[3] Input Cap.	0.0000	0.0000	0.0000
NASRCP[3] Max Load	0.200	0.200	0.200
RASRCN[0] Input Cap.	0.0100	0.0100	0.0100
RASRCN[0] Max Load	-	-	-
RASRCN[1] Input Cap.	0.0100	0.0100	0.0100
RASRCN[1] Max Load	-	-	-
RASRCN[2] Input Cap.	0.0100	0.0100	0.0100
RASRCN[2] Max Load	-	-	-
RASRCN[3] Input Cap.	0.0100	0.0100	0.0100
RASRCN[3] Max Load	-	-	-
RASRCP[0] Input Cap.	0.0100	0.0100	0.0100
RASRCP[0] Max Load	-	-	-
RASRCP[1] Input Cap.	0.0100	0.0100	0.0100
RASRCP[1] Max Load	-	-	-
RASRCP[2] Input Cap.	0.0100	0.0100	0.0100
RASRCP[2] Max Load	-	-	-
RASRCP[3] Input Cap.	0.0100	0.0100	0.0100
RASRCP[3] Max Load	-	-	-
REFIOA1V8 Input Cap.	0.2360	0.2360	0.2360
REFIOA1V8 Max Load	10000.000	10000.000	10000.000
REFIOB1V8 Input Cap.	0.2360	0.2360	0.2360
REFIOB1V8 Max Load	10000.000	10000.000	10000.000
TQ Input Cap.	0.0085	0.0085	0.0085

Default Leakage Power

Default Leakage Power (mW)	vdd	vdde1v8
best 1.10 -40	1.333e-04	9.100e-04
typ 1.00 25	2.957e-05	2.216e-04
worst 0.90 125	1.163e-04	1.794e-03

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