

# C28SOI\_IO\_EXT\_ALLF\_FBBRBB\_SUBSTRATEBIAS\_LR\_EG Databook

July 2017

# IO\_NMOSBIAS\_EXT\_1V8\_NEG\_CSF\_CL\_LIN

#### **Cell Description**

#### IO\_NMOSBIAS\_EXT\_1V8\_NEG\_CSF\_CL\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

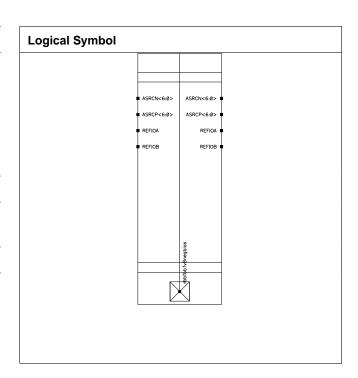
#### **Physical Dimensions**

Area(um2): 4252.000

#### Glossary

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

R : Rising edge F : Falling edge



Parameter	Value(pF)		
Faiametei	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000

ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000
ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8negbias
(mW)			
best 1.10 -40	0.000e+00	1.066e-07	3.951e-04
typ 1.00 25	5.112e-24	6.886e-08	5.420e-05
worst 0.90 125	9.427e-24	4.908e-07	2.401e-04



## IO\_NMOSBIAS\_EXT\_1V8\_NEG\_CSF\_FC\_LIN

#### **Cell Description**

#### IO\_NMOSBIAS\_EXT\_1V8\_NEG\_CSF\_FC\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

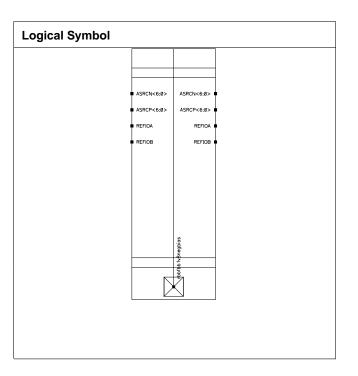
#### **Physical Dimensions**

Area(um2): 3632.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
Farameter	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8negbias
(mW)			
best 1.10 -40	0.000e+00	1.066e-07	3.951e-04
typ 1.00 25	5.112e-24	6.886e-08	5.420e-05
worst 0.90 125	9.427e-24	4.908e-07	2.401e-04



## IO\_NMOSBIAS\_EXT\_1V8\_POS\_CSF\_CL\_LIN

#### **Cell Description**

#### IO\_NMOSBIAS\_EXT\_1V8\_POS\_CSF\_CL\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

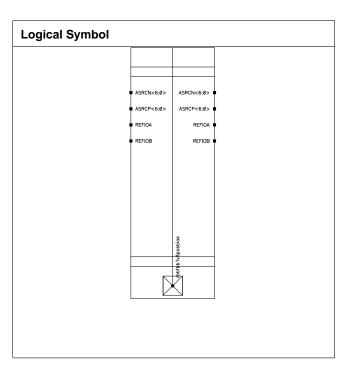
#### **Physical Dimensions**

Area(um2): 4252.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8posbias
(mW)			
best 1.10 -40	0.000e+00	7.629e-09	3.951e-04
typ 1.00 25	0.000e+00	6.642e-09	5.422e-05
worst 0.90 125	9.454e-24	2.612e-08	2.402e-04



## IO\_NMOSBIAS\_EXT\_1V8\_POS\_CSF\_FC\_LIN

#### **Cell Description**

#### IO\_NMOSBIAS\_EXT\_1V8\_POS\_CSF\_FC\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

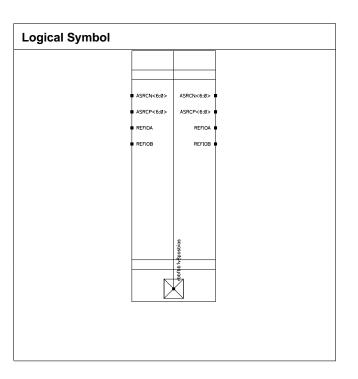
#### **Physical Dimensions**

Area(um2): 3632.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8posbias
(mW)			
best 1.10 -40	0.000e+00	7.629e-09	3.951e-04
typ 1.00 25	0.000e+00	6.642e-09	5.422e-05
worst 0.90 125	9.454e-24	2.612e-08	2.402e-04



## IO\_PMOSBIAS\_EXT\_1V8\_NEG\_CSF\_CL\_LIN

#### **Cell Description**

#### IO\_PMOSBIAS\_EXT\_1V8\_NEG\_CSF\_CL\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

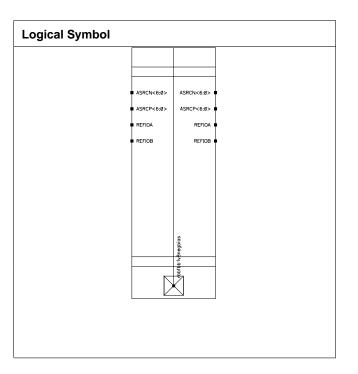
#### **Physical Dimensions**

Area(um2): 4252.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
Farameter	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8negbias
(mW)			
best 1.10 -40	0.000e+00	1.066e-07	3.951e-04
typ 1.00 25	5.112e-24	6.886e-08	5.420e-05
worst 0.90 125	9.427e-24	4.908e-07	2.401e-04



## IO\_PMOSBIAS\_EXT\_1V8\_NEG\_CSF\_FC\_LIN

#### **Cell Description**

#### IO\_PMOSBIAS\_EXT\_1V8\_NEG\_CSF\_FC\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

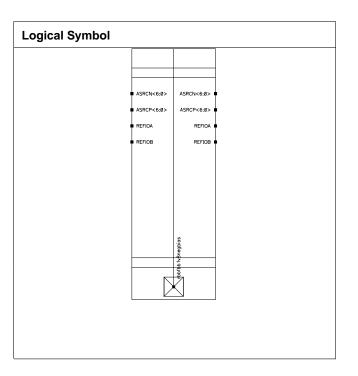
#### **Physical Dimensions**

Area(um2): 3632.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
Farameter	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8negbias
(mW)			
best 1.10 -40	0.000e+00	1.066e-07	3.951e-04
typ 1.00 25	5.112e-24	6.886e-08	5.420e-05
worst 0.90 125	9.427e-24	4.908e-07	2.401e-04



## IO\_PMOSBIAS\_EXT\_1V8\_POS\_CSF\_CL\_LIN

#### **Cell Description**

#### IO\_PMOSBIAS\_EXT\_1V8\_POS\_CSF\_CL\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

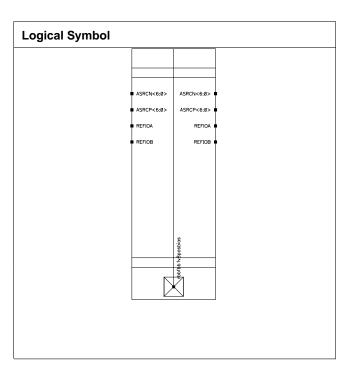
#### **Physical Dimensions**

Area(um2): 4252.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)	
Parameter	best 1.10 -40	typ 1.00 25	worst 0.90 125
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100
ASRCN[0] Max Load	10000.000	10000.000	10000.000
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100
ASRCN[1] Max Load	10000.000	10000.000	10000.000
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100
ASRCN[2] Max Load	10000.000	10000.000	10000.000
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100
ASRCN[3] Max Load	10000.000	10000.000	10000.000
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100
ASRCN[4] Max Load	10000.000	10000.000	10000.000
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100
ASRCN[5] Max Load	10000.000	10000.000	10000.000
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100
ASRCN[6] Max Load	10000.000	10000.000	10000.000
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100
ASRCP[0] Max Load	10000.000	10000.000	10000.000
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100
ASRCP[1] Max Load	10000.000	10000.000	10000.000
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100
ASRCP[2] Max Load	10000.000	10000.000	10000.000
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100
ASRCP[3] Max Load	10000.000	10000.000	10000.000



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8posbias
(mW)			
best 1.10 -40	0.000e+00	7.629e-09	3.951e-04
typ 1.00 25	0.000e+00	6.642e-09	5.422e-05
worst 0.90 125	9.454e-24	2.612e-08	2.402e-04



## IO\_PMOSBIAS\_EXT\_1V8\_POS\_CSF\_FC\_LIN

#### **Cell Description**

#### IO\_PMOSBIAS\_EXT\_1V8\_POS\_CSF\_FC\_LIN

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

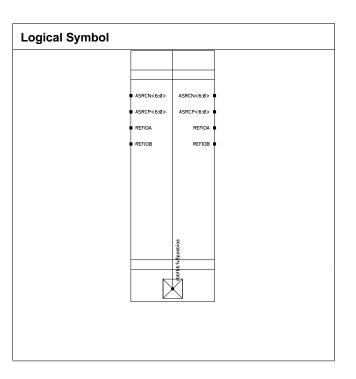
#### **Physical Dimensions**

Area(um2): 3632.000

#### **Glossary**

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

R : Rising edge F : Falling edge



Parameter		Value(pF)		
Farameter	best 1.10 -40	typ 1.00 25	worst 0.90 125	
ASRCN[0] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[0] Max Load	10000.000	10000.000	10000.000	
ASRCN[1] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[1] Max Load	10000.000	10000.000	10000.000	
ASRCN[2] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[2] Max Load	10000.000	10000.000	10000.000	
ASRCN[3] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[3] Max Load	10000.000	10000.000	10000.000	
ASRCN[4] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[4] Max Load	10000.000	10000.000	10000.000	
ASRCN[5] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[5] Max Load	10000.000	10000.000	10000.000	
ASRCN[6] Input Cap.	0.0100	0.0100	0.0100	
ASRCN[6] Max Load	10000.000	10000.000	10000.000	
ASRCP[0] Input Cap.	0.0100	0.0100	0.0100	
ASRCP[0] Max Load	10000.000	10000.000	10000.000	
ASRCP[1] Input Cap.	0.0100	0.0100	0.0100	
ASRCP[1] Max Load	10000.000	10000.000	10000.000	
ASRCP[2] Input Cap.	0.0100	0.0100	0.0100	
ASRCP[2] Max Load	10000.000	10000.000	10000.000	
ASRCP[3] Input Cap.	0.0100	0.0100	0.0100	
ASRCP[3] Max Load	10000.000	10000.000	10000.000	



ASRCP[4] Input Cap.	0.0100	0.0100	0.0100
ASRCP[4] Max Load	10000.000	10000.000	10000.000
ASRCP[5] Input Cap.	0.0100	0.0100	0.0100
ASRCP[5] Max Load	10000.000	10000.000	10000.000
ASRCP[6] Input Cap.	0.0100	0.0100	0.0100
ASRCP[6] Max Load	10000.000	10000.000	10000.000
REFIOA Input Cap.	0.0100	0.0100	0.0100
REFIOA Max Load	10000.000	10000.000	10000.000
REFIOB Input Cap.	0.0100	0.0100	0.0100
REFIOB Max Load	10000.000	10000.000	10000.000

Default Leakage Power	vdd	vdde	rbbfbb1v8posbias
(mW)			
best 1.10 -40	0.000e+00	7.629e-09	3.951e-04
typ 1.00 25	0.000e+00	6.642e-09	5.422e-05
worst 0.90 125	9.454e-24	2.612e-08	2.402e-04



## NMOSBIAS\_EXT\_NEGESDCLAMP\_NOB2B\_1V8

#### **Cell Description**

#### NMOSBIAS\_EXT\_NEGESDCLAMP\_NOB2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

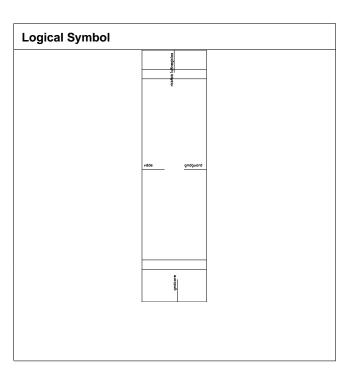
#### **Physical Dimensions**

Area(um2): 4080.260

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	vdde	rbbfbb1v8negbias
best 1.10 -40	1.470e-07	1.469e-07
typ 1.00 25	1.081e-07	1.080e-07
worst 0.90 125	6.000e-07	5.998e-07



# NMOSBIAS\_EXT\_NEGESDCLAMP\_WITH\_B2B\_1V8

#### **Cell Description**

#### NMOSBIAS\_EXT\_NEGESDCLAMP\_WITH\_B2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

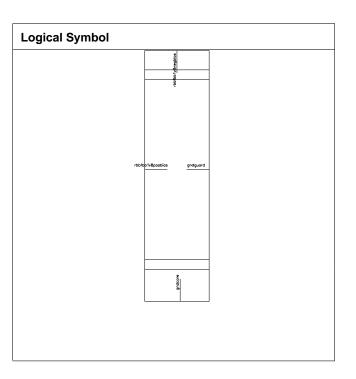
#### **Physical Dimensions**

Area(um2): 4566.140

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	vdde	rbbfbb1v8negbias
best 1.10 -40	2.046e-07	2.049e-07
typ 1.00 25	1.695e-07	1.697e-07
worst 0.90 125	8.191e-07	8.191e-07



# NMOSBIAS\_EXT\_POSESDCLAMP\_NOB2B\_1V8

#### **Cell Description**

#### NMOSBIAS\_EXT\_POSESDCLAMP\_NOB2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

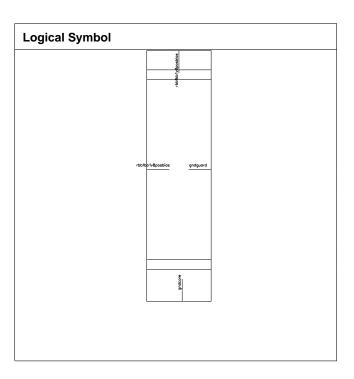
#### **Physical Dimensions**

Area(um2): 4080.260

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	rbbfbb1v8posbias
best 1.10 -40	0.000e+00
typ 1.00 25	2.231e-21
worst 0.90 125	0.000e+00



# NMOSBIAS\_EXT\_POSESDCLAMP\_WITH\_B2B\_1V8

#### **Cell Description**

#### NMOSBIAS\_EXT\_POSESDCLAMP\_WITH\_B2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

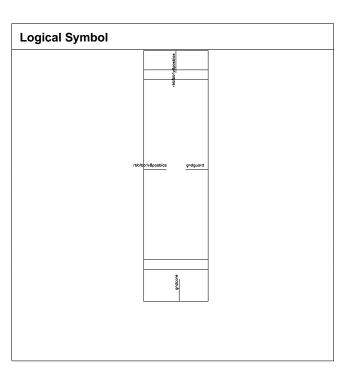
#### **Physical Dimensions**

Area(um2): 4566.140

#### Glossary

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	rbbfbb1v8posbias
best 1.10 -40	0.000e+00
typ 1.00 25	2.317e-21
worst 0.90 125	0.000e+00



# PMOSBIAS\_EXT\_NEGESDCLAMP\_NOB2B\_1V8

#### **Cell Description**

#### PMOSBIAS\_EXT\_NEGESDCLAMP\_NOB2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

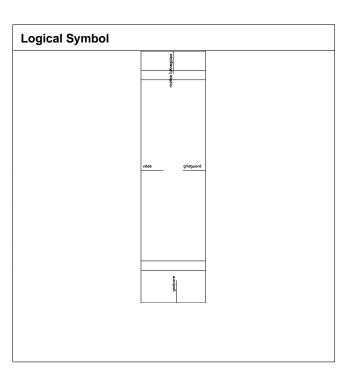
#### **Physical Dimensions**

Area(um2): 4080.260

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	vdde	rbbfbb1v8negbias
best 1.10 -40	1.470e-07	1.469e-07
typ 1.00 25	1.081e-07	1.080e-07
worst 0.90 125	6.000e-07	5.998e-07



# PMOSBIAS\_EXT\_NEGESDCLAMP\_WITH\_B2B\_1V8

#### **Cell Description**

#### PMOSBIAS\_EXT\_NEGESDCLAMP\_WITH\_B2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

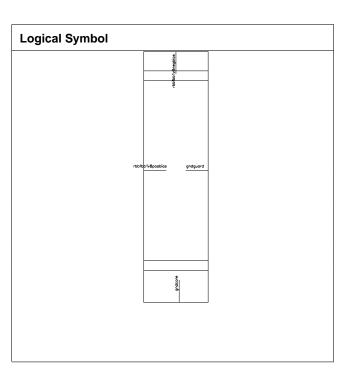
#### **Physical Dimensions**

Area(um2): 4566.140

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	vdde	rbbfbb1v8negbias
best 1.10 -40	2.046e-07	2.049e-07
typ 1.00 25	1.695e-07	1.697e-07
worst 0.90 125	8.191e-07	8.191e-07



# PMOSBIAS\_EXT\_POSESDCLAMP\_NOB2B\_1V8

#### **Cell Description**

#### PMOSBIAS\_EXT\_POSESDCLAMP\_NOB2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

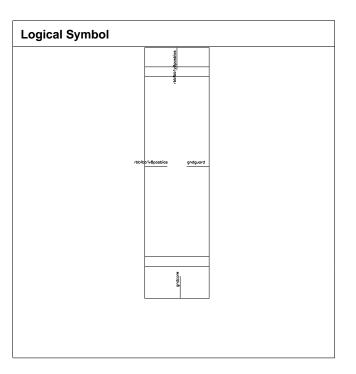
#### **Physical Dimensions**

Area(um2): 4080.260

#### **Glossary**

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	rbbfbb1v8posbias
best 1.10 -40	0.000e+00
typ 1.00 25	2.231e-21
worst 0.90 125	0.000e+00



# PMOSBIAS\_EXT\_POSESDCLAMP\_WITH\_B2B\_1V8

#### **Cell Description**

#### PMOSBIAS\_EXT\_POSESDCLAMP\_WITH\_B2B\_1V8

- The cell has "dont\_use" attribute set in the Synopsys STF.
- The cell has "dont\_touch" attribute set in the Synopsys STF.

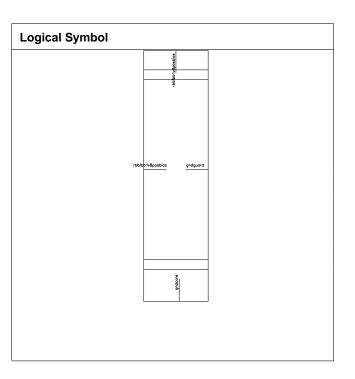
#### **Physical Dimensions**

Area(um2): 4566.140

#### Glossary

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

R : Rising edge F : Falling edge



Default Leakage Power (mW)	rbbfbb1v8posbias
best 1.10 -40	0.000e+00
typ 1.00 25	2.317e-21
worst 0.90 125	0.000e+00





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