

## sg13g2\_stdcell\_typ\_1p50V\_25C Library

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Cell Groups
AND2
AND3
AND4
AO21
BTLx
BUx
DECAPx
DDFRRx
DLHQ
DLHRQ
DLHR
DLLRQ
DLLR
DLY1
DLY2
DLY4
EINVINx
FILLx
GCLK
INx
ITL
KEEPSTATE
MUX2

<b>MUX4</b>
<b>NAND2B1</b>
<b>NAND2</b>
<b>NAND3B1</b>
<b>NOR2</b>
<b>NOR3</b>
<b>NOR4</b>
<b>NP_ANT</b>
<b>OR2</b>
<b>OR3</b>
<b>OR4</b>
<b>SDFRRS</b>
<b>SGCLK</b>
<b>TIE0</b>
<b>TIE1</b>
<b>XNOR2_1</b>
<b>XOR2_1</b>

# AND2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	B	X
0	x	0
1	0	0
1	1	1

## Footprint

Cell Name	Area
sg13g2_and2_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_1	0.00252	0.00246	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	314.37000	392.89200	489.17900

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	<b>0.04330</b>	0.32940	0.06480	<b>0.23373</b>	2.50740	0.30000	<b>0.85691</b>
	B->X (RR)	0.01860	0.00100	<b>0.04657</b>	0.32940	0.06480	<b>0.22992</b>	2.50740	0.30000	<b>0.82988</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	<b>0.03873</b>	0.32940	0.06480	<b>0.20745</b>	2.50740	0.30000	<b>0.72941</b>
	B->X (FF)	0.01860	0.00100	<b>0.04256</b>	0.32940	0.06480	<b>0.21882</b>	2.50740	0.30000	<b>0.76721</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	<b>0.00983</b>	0.32940	0.06480	<b>0.01307</b>	2.50740	0.30000	<b>0.04668</b>
	B	0.01860	0.00100	<b>0.01208</b>	0.32940	0.06480	<b>0.01436</b>	2.50740	0.30000	<b>0.04735</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	<b>0.00859</b>	0.32940	0.06480	<b>0.01218</b>	2.50740	0.30000	<b>0.04570</b>
	B	0.01860	0.00100	<b>0.00894</b>	0.32940	0.06480	<b>0.01224</b>	2.50740	0.30000	<b>0.04559</b>

# AND3



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
A	B	C	X
0	x	x	0
1	0	x	0
1	1	0	0
1	1	1	1

## Footprint

Cell Name	Area
sg13g2_and3_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_1	0.00252	0.00242	0.00245	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	317.50100	437.22200	686.65700



## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	<b>0.05666</b>	0.32940	0.06480	<b>0.25998</b>	2.50740	0.30000	<b>0.93297</b>
	B->X (RR)	0.01860	0.00100	<b>0.06305</b>	0.32940	0.06480	<b>0.25887</b>	2.50740	0.30000	<b>0.91640</b>
	C->X (RR)	0.01860	0.00100	<b>0.06588</b>	0.32940	0.06480	<b>0.25199</b>	2.50740	0.30000	<b>0.87496</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	<b>0.04128</b>	0.32940	0.06480	<b>0.21266</b>	2.50740	0.30000	<b>0.71464</b>
	B->X (FF)	0.01860	0.00100	<b>0.04527</b>	0.32940	0.06480	<b>0.22377</b>	2.50740	0.30000	<b>0.74892</b>
	C->X (FF)	0.01860	0.00100	<b>0.04778</b>	0.32940	0.06480	<b>0.23326</b>	2.50740	0.30000	<b>0.78902</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	<b>0.01138</b>	0.32940	0.06480	<b>0.01388</b>	2.50740	0.30000	<b>0.04509</b>
	B	0.01860	0.00100	<b>0.01357</b>	0.32940	0.06480	<b>0.01509</b>	2.50740	0.30000	<b>0.04610</b>
	C	0.01860	0.00100	<b>0.01572</b>	0.32940	0.06480	<b>0.01708</b>	2.50740	0.30000	<b>0.04861</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	<b>0.00876</b>	0.32940	0.06480	<b>0.01190</b>	2.50740	0.30000	<b>0.04276</b>
	B	0.01860	0.00100	<b>0.00921</b>	0.32940	0.06480	<b>0.01201</b>	2.50740	0.30000	<b>0.04278</b>
	C	0.01860	0.00100	<b>0.00945</b>	0.32940	0.06480	<b>0.01243</b>	2.50740	0.30000	<b>0.04503</b>

# AND4



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT				OUTPUT
A	B	C	D	X
0	x	x	x	0
1	0	x	x	0
1	1	0	x	0
1	1	1	0	0
1	1	1	1	1

## Footprint

Cell Name	Area
sg13g2_and4_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_1	0.00213	0.00207	0.00245	0.00246	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	321.02100	465.11400	884.36000

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	<b>0.07090</b>	0.32940	0.06480	<b>0.28676</b>	2.50740	0.30000	<b>1.00589</b>
	B->X (RR)	0.01860	0.00100	<b>0.07994</b>	0.32940	0.06480	<b>0.28786</b>	2.50740	0.30000	<b>0.99559</b>
	C->X (RR)	0.01860	0.00100	<b>0.08520</b>	0.32940	0.06480	<b>0.28278</b>	2.50740	0.30000	<b>0.96010</b>
	D->X (RR)	0.01860	0.00100	<b>0.08808</b>	0.32940	0.06480	<b>0.27674</b>	2.50740	0.30000	<b>0.91318</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	<b>0.04348</b>	0.32940	0.06480	<b>0.21595</b>	2.50740	0.30000	<b>0.69893</b>
	B->X (FF)	0.01860	0.00100	<b>0.04743</b>	0.32940	0.06480	<b>0.22645</b>	2.50740	0.30000	<b>0.73164</b>
	C->X (FF)	0.01860	0.00100	<b>0.05023</b>	0.32940	0.06480	<b>0.23546</b>	2.50740	0.30000	<b>0.76643</b>
	D->X (FF)	0.01860	0.00100	<b>0.05217</b>	0.32940	0.06480	<b>0.24381</b>	2.50740	0.30000	<b>0.80492</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	<b>0.01314</b>	0.32940	0.06480	<b>0.01528</b>	2.50740	0.30000	<b>0.04667</b>
	B	0.01860	0.00100	<b>0.01577</b>	0.32940	0.06480	<b>0.01703</b>	2.50740	0.30000	<b>0.04562</b>
	C	0.01860	0.00100	<b>0.01705</b>	0.32940	0.06480	<b>0.01779</b>	2.50740	0.30000	<b>0.04847</b>
	D	0.01860	0.00100	<b>0.01723</b>	0.32940	0.06480	<b>0.01769</b>	2.50740	0.30000	<b>0.04821</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	<b>0.00797</b>	0.32940	0.06480	<b>0.01072</b>	2.50740	0.30000	<b>0.04022</b>
	B	0.01860	0.00100	<b>0.00843</b>	0.32940	0.06480	<b>0.01091</b>	2.50740	0.30000	<b>0.04041</b>
	C	0.01860	0.00100	<b>0.00988</b>	0.32940	0.06480	<b>0.01227</b>	2.50740	0.30000	<b>0.04303</b>
	D	0.01860	0.00100	<b>0.00981</b>	0.32940	0.06480	<b>0.01226</b>	2.50740	0.30000	<b>0.04436</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>-0.00060</b>	0.32940	<b>-0.00059</b>	2.50740	<b>-0.00059</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00150</b>	0.32940	<b>0.00153</b>	2.50740	<b>0.00153</b>

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	<b>-0.00060</b>	0.32940	<b>-0.00059</b>	2.50740	<b>-0.00059</b>

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	<b>0.00150</b>	0.32940	<b>0.00153</b>	2.50740	<b>0.00153</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>-0.00085</b>	0.32940	<b>-0.00086</b>	2.50740	<b>-0.00085</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00124</b>	0.32940	<b>0.00127</b>	2.50740	<b>0.00128</b>

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	<b>-0.00085</b>	0.32940	<b>-0.00086</b>	2.50740	<b>-0.00085</b>

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	<b>0.00124</b>	0.32940	<b>0.00127</b>	2.50740	<b>0.00128</b>

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for C rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for C falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00195</b>	0.32940	<b>0.00198</b>	2.50740	<b>0.00199</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	<b>0.00035</b>	0.32940	<b>0.00031</b>	2.50740	<b>0.00028</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	<b>0.00195</b>	0.32940	<b>0.00198</b>	2.50740	<b>0.00199</b>



**Passive power(pJ) for D falling (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
<b>sg13g2_and4_1</b>	<b>(A * !B * C) + (!A * C)</b>	0.01860	<b>0.00035</b>	0.32940	<b>0.00031</b>	2.50740	<b>0.00028</b>

# A021



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
A1	A2	B1	X
0	x	0	0
x	x	1	1
1	0	0	0
1	1	x	1

## Footprint

Cell Name	Area
sg13g2_a21o_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_1	0.00270	0.00281	0.00240	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	405.34200	458.03200	521.30600

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	<b>0.05318</b>	0.32940	0.06480	<b>0.25661</b>	2.50740	0.30000	<b>0.90971</b>
	A2->X (RR)	0.01860	0.00100	<b>0.05604</b>	0.32940	0.06480	<b>0.24908</b>	2.50740	0.30000	<b>0.87723</b>
	B1->X (RR)	0.01860	0.00100	<b>0.03612</b>	0.32940	0.06480	<b>0.22310</b>	2.50740	0.30000	<b>0.79119</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	<b>0.06122</b>	0.32940	0.06480	<b>0.22730</b>	2.50740	0.30000	<b>0.75715</b>
	A2->X (FF)	0.01860	0.00100	<b>0.06774</b>	0.32940	0.06480	<b>0.23945</b>	2.50740	0.30000	<b>0.79285</b>
	B1->X (FF)	0.01860	0.00100	<b>0.06023</b>	0.32940	0.06480	<b>0.24845</b>	2.50740	0.30000	<b>0.85828</b>

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	<b>0.03612</b>	0.32940	0.06480	<b>0.22310</b>	2.50740	0.30000	<b>0.79119</b>
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	<b>0.03409</b>	0.32940	0.06480	<b>0.21314</b>	2.50740	0.30000	<b>0.76104</b>

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	<b>0.06023</b>	0.32940	0.06480	<b>0.24845</b>	2.50740	0.30000	<b>0.85828</b>
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	<b>0.05275</b>	0.32940	0.06480	<b>0.23359</b>	2.50740	0.30000	<b>0.82968</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	<b>0.01112</b>	0.32940	0.06480	<b>0.01364</b>	2.50740	0.30000	<b>0.04712</b>
	A2	0.01860	0.00100	<b>0.01344</b>	0.32940	0.06480	<b>0.01526</b>	2.50740	0.30000	<b>0.04744</b>
	B1	0.01860	0.00100	<b>0.00884</b>	0.32940	0.06480	<b>0.01211</b>	2.50740	0.30000	<b>0.04795</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	<b>0.01285</b>	0.32940	0.06480	<b>0.01464</b>	2.50740	0.30000	<b>0.04873</b>
	A2	0.01860	0.00100	<b>0.01300</b>	0.32940	0.06480	<b>0.01460</b>	2.50740	0.30000	<b>0.04808</b>
	B1	0.01860	0.00100	<b>0.00871</b>	0.32940	0.06480	<b>0.01238</b>	2.50740	0.30000	<b>0.04632</b>

Internal switching power(pJ) to X rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.01113</b>	0.32940	0.06480	<b>0.01426</b>	2.50740	0.30000	<b>0.05027</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00884</b>	0.32940	0.06480	<b>0.01211</b>	2.50740	0.30000	<b>0.04795</b>

Internal switching power(pJ) to X falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00904</b>	0.32940	0.06480	<b>0.01225</b>	2.50740	0.30000	<b>0.04741</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00871</b>	0.32940	0.06480	<b>0.01238</b>	2.50740	0.30000	<b>0.04632</b>

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>-0.00014</b>	0.32940	<b>-0.00013</b>	2.50740	<b>-0.00013</b>

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>0.00014</b>	0.32940	<b>0.00013</b>	2.50740	<b>0.00013</b>

Passive power(pJ) for A1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	<b>-0.00040</b>	0.32940	<b>-0.00051</b>	2.50740	<b>-0.00050</b>
	(!A2 * B1)	0.01860	<b>-0.00014</b>	0.32940	<b>-0.00013</b>	2.50740	<b>-0.00013</b>

Passive power(pJ) for A1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	<b>0.00051</b>	0.32940	<b>0.00051</b>	2.50740	<b>0.00050</b>
	(!A2 * B1)	0.01860	<b>0.00014</b>	0.32940	<b>0.00013</b>	2.50740	<b>0.00013</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>-0.00004</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00005</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>0.00004</b>	0.32940	<b>0.00005</b>	2.50740	<b>0.00005</b>

Passive power(pJ) for A2 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	<b>-0.00030</b>	0.32940	<b>-0.00043</b>	2.50740	<b>-0.00042</b>
	(!A1 * B1)	0.01860	<b>-0.00004</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00005</b>

Passive power(pJ) for A2 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	<b>0.00043</b>	0.32940	<b>0.00043</b>	2.50740	<b>0.00042</b>
	(!A1 * B1)	0.01860	<b>0.00004</b>	0.32940	<b>0.00005</b>	2.50740	<b>0.00005</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>0.00045</b>	0.32940	<b>0.00049</b>	2.50740	<b>0.00049</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	<b>0.00101</b>	0.32940	<b>0.00102</b>	2.50740	<b>0.00104</b>

Passive power(pJ) for B1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	<b>0.00045</b>	0.32940	<b>0.00049</b>	2.50740	<b>0.00049</b>

Passive power(pJ) for B1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	<b>0.00101</b>	0.32940	<b>0.00102</b>	2.50740	<b>0.00104</b>

# BTLx



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	0
1	0	1
-	1	HiZ

## Footprint

Cell Name	Area
sg13g2_ebufn_8	45.36000
sg13g2_ebufn_4	25.40160
sg13g2_ebufn_2	18.14400

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_ebufn_8	0.00594	0.01664	2.40000
sg13g2_ebufn_4	0.00308	0.01009	1.20000
sg13g2_ebufn_2	0.00264	0.00615	0.60000



## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	590.42200	2069.18000	3795.96000
sg13g2_ebufn_4	416.07500	1118.50000	1944.92000
sg13g2_ebufn_2	331.86200	683.06500	1042.43000

## Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A->Z (RR)	0.01860	0.02015	<b>0.04625</b>	0.32940	0.53755	<b>0.39660</b>	2.50740	2.41915	<b>1.51658</b>
	TE_B->Z (RR)	0.01860	0.02015	<b>0.04965</b>	0.32940	0.53755	<b>0.12414</b>	2.50740	2.41915	<b>0.25739</b>
	TE_B->Z (FR)	0.01860	0.02015	<b>0.02570</b>	0.32940	0.53755	<b>0.37327</b>	2.50740	2.41915	<b>1.86729</b>
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01070	<b>0.04722</b>	0.32940	0.26891	<b>0.39565</b>	2.50740	1.20970	<b>1.50873</b>
	TE_B->Z (RR)	0.01860	0.01070	<b>0.03821</b>	0.32940	0.26891	<b>0.09158</b>	2.50740	1.20970	<b>0.17739</b>
	TE_B->Z (FR)	0.01860	0.01070	<b>0.02537</b>	0.32940	0.26891	<b>0.37074</b>	2.50740	1.20970	<b>1.85703</b>
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00595	<b>0.04113</b>	0.32940	0.13455	<b>0.37063</b>	2.50740	0.60495	<b>1.46255</b>
	TE_B->Z (RR)	0.01860	0.00595	<b>0.03282</b>	0.32940	0.13455	<b>0.07512</b>	2.50740	0.60495	<b>0.14254</b>
	TE_B->Z (FR)	0.01860	0.00595	<b>0.02576</b>	0.32940	0.13455	<b>0.37004</b>	2.50740	0.60495	<b>1.85917</b>

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A->Z (FF)	0.01860	0.02954	<b>0.05937</b>	0.32940	0.54694	<b>0.33486</b>	2.50740	2.42854	<b>1.19254</b>
	TE_B->Z (RF)	0.01860	0.02954	<b>0.02480</b>	0.32940	0.54694	<b>-0.20833</b>	2.50740	2.42854	<b>-1.89465</b>
	TE_B->Z (FF)	0.01860	0.02954	<b>0.05655</b>	0.32940	0.54694	<b>0.29930</b>	2.50740	2.42854	<b>1.01493</b>
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01550	<b>0.06071</b>	0.32940	0.27370	<b>0.33626</b>	2.50740	1.21450	<b>1.19233</b>
	TE_B->Z (RF)	0.01860	0.01550	<b>0.02018</b>	0.32940	0.27370	<b>-0.20739</b>	2.50740	1.21450	<b>-1.89378</b>
	TE_B->Z (FF)	0.01860	0.01550	<b>0.04289</b>	0.32940	0.27370	<b>0.25926</b>	2.50740	1.21450	<b>0.92169</b>
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00841	<b>0.04617</b>	0.32940	0.13701	<b>0.29842</b>	2.50740	0.60741	<b>1.11028</b>
	TE_B->Z (RF)	0.01860	0.00841	<b>0.01422</b>	0.32940	0.13701	<b>-0.21967</b>	2.50740	0.60741	<b>-1.90598</b>
	TE_B->Z (FF)	0.01860	0.00841	<b>0.03666</b>	0.32940	0.13701	<b>0.23295</b>	2.50740	0.60741	<b>0.85831</b>

## Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A	0.01860	0.02015	<b>0.05288</b>	0.32940	0.53755	<b>0.06316</b>	2.50740	2.41915	<b>0.07498</b>
	TE_B	0.01860	0.02015	<b>0.01031</b>	0.32940	0.53755	<b>0.00717</b>	2.50740	2.41915	<b>0.00544</b>
sg13g2_ebufn_4	A	0.01860	0.01070	<b>0.02661</b>	0.32940	0.26891	<b>0.03101</b>	2.50740	1.20970	<b>0.03043</b>
	TE_B	0.01860	0.01070	<b>0.00515</b>	0.32940	0.26891	<b>0.00391</b>	2.50740	1.20970	<b>0.00114</b>
sg13g2_ebufn_2	A	0.01860	0.00595	<b>0.01392</b>	0.32940	0.13455	<b>0.01573</b>	2.50740	0.60495	<b>0.01570</b>
	TE_B	0.01860	0.00595	<b>0.00271</b>	0.32940	0.13455	<b>0.00202</b>	2.50740	0.60495	<b>0.00109</b>

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A	0.01860	0.02954	<b>0.05709</b>	0.32940	0.54694	<b>0.05553</b>	2.50740	2.42854	<b>0.05694</b>
	TE_B	0.01860	0.02954	<b>0.00413</b>	0.32940	0.54694	<b>0.00094</b>	2.50740	2.42854	<b>0.01081</b>
sg13g2_ebufn_4	A	0.01860	0.01550	<b>0.02870</b>	0.32940	0.27370	<b>0.02803</b>	2.50740	1.21450	<b>0.02503</b>
	TE_B	0.01860	0.01550	<b>0.00216</b>	0.32940	0.27370	<b>0.00118</b>	2.50740	1.21450	<b>0.00252</b>
sg13g2_ebufn_2	A	0.01860	0.00841	<b>0.01377</b>	0.32940	0.13701	<b>0.01364</b>	2.50740	0.60741	<b>0.01614</b>
	TE_B	0.01860	0.00841	<b>0.00121</b>	0.32940	0.13701	<b>0.00076</b>	2.50740	0.60741	<b>0.00247</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	<b>0.01570</b>	0.32940	<b>0.02423</b>	2.50740	<b>0.11810</b>
sg13g2_ebufn_4	0.01860	<b>0.00850</b>	0.32940	<b>0.01266</b>	2.50740	<b>0.05947</b>
sg13g2_ebufn_2	0.01860	<b>0.00485</b>	0.32940	<b>0.00894</b>	2.50740	<b>0.05031</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	<b>0.01216</b>	0.32940	<b>0.02154</b>	2.50740	<b>0.11463</b>
sg13g2_ebufn_4	0.01860	<b>0.00640</b>	0.32940	<b>0.01099</b>	2.50740	<b>0.05739</b>
sg13g2_ebufn_2	0.01860	<b>0.00412</b>	0.32940	<b>0.00852</b>	2.50740	<b>0.04942</b>

Passive power(pJ) for TE\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	<b>-0.00606</b>	0.32940	<b>-0.00463</b>	2.50740	<b>0.03849</b>
sg13g2_ebufn_4	0.01860	<b>-0.00165</b>	0.32940	<b>0.00118</b>	2.50740	<b>0.04696</b>
sg13g2_ebufn_2	0.01860	<b>-0.00017</b>	0.32940	<b>0.00313</b>	2.50740	<b>0.04393</b>

Passive power(pJ) for TE\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	<b>0.07988</b>	0.32940	<b>0.08486</b>	2.50740	<b>0.12877</b>
sg13g2_ebufn_4	0.01860	<b>0.04112</b>	0.32940	<b>0.04601</b>	2.50740	<b>0.09191</b>
sg13g2_ebufn_2	0.01860	<b>0.02144</b>	0.32940	<b>0.02604</b>	2.50740	<b>0.06660</b>

# BU<sub>x</sub>



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_buf_16	45.36000
sg13g2_buf_8	23.58720
sg13g2_buf_4	14.51520
sg13g2_buf_2	9.07200
sg13g2_buf_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01780	4.80000
sg13g2_buf_8	0.00889	2.40000
sg13g2_buf_4	0.00377	1.20000
sg13g2_buf_2	0.00262	0.60000
sg13g2_buf_1	0.00226	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	2952.76000	3691.98000	4431.20000
sg13g2_buf_8	1476.39000	1845.99000	2215.60000
sg13g2_buf_4	678.31600	883.10300	1087.89000
sg13g2_buf_2	397.47500	481.44300	565.41000
sg13g2_buf_1	270.75000	290.44400	310.13800

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A->X (RR)	0.01860	0.00100	<b>0.03909</b>	0.32940	1.03680	<b>0.24335</b>	2.50740	4.80000	<b>0.87131</b>
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	<b>0.03850</b>	0.32940	0.51840	<b>0.24209</b>	2.50740	2.40000	<b>0.86951</b>
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	<b>0.04841</b>	0.32940	0.25920	<b>0.27086</b>	2.50740	1.20000	<b>0.98826</b>
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	<b>0.03814</b>	0.32940	0.12960	<b>0.23784</b>	2.50740	0.60000	<b>0.86337</b>
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	<b>0.03411</b>	0.32940	0.06480	<b>0.21869</b>	2.50740	0.30000	<b>0.82035</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A->X (FF)	0.01860	0.00100	<b>0.04429</b>	0.32940	1.03680	<b>0.23419</b>	2.50740	4.80000	<b>0.79482</b>
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	<b>0.04352</b>	0.32940	0.51840	<b>0.23335</b>	2.50740	2.40000	<b>0.79548</b>
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	<b>0.04283</b>	0.32940	0.25920	<b>0.22670</b>	2.50740	1.20000	<b>0.72334</b>
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	<b>0.04175</b>	0.32940	0.12960	<b>0.22283</b>	2.50740	0.60000	<b>0.76267</b>
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	<b>0.03667</b>	0.32940	0.06480	<b>0.20150</b>	2.50740	0.30000	<b>0.72315</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A	0.01860	0.00100	<b>0.12032</b>	0.32940	1.03680	<b>0.14525</b>	2.50740	4.80000	<b>0.42297</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.05829</b>	0.32940	0.51840	<b>0.07139</b>	2.50740	2.40000	<b>0.20970</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.02886</b>	0.32940	0.25920	<b>0.03385</b>	2.50740	1.20000	<b>0.09302</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.01500</b>	0.32940	0.12960	<b>0.01887</b>	2.50740	0.60000	<b>0.05814</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00856</b>	0.32940	0.06480	<b>0.01197</b>	2.50740	0.30000	<b>0.04554</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A	0.01860	0.00100	<b>0.11673</b>	0.32940	1.03680	<b>0.14671</b>	2.50740	4.80000	<b>0.42570</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.05750</b>	0.32940	0.51840	<b>0.07235</b>	2.50740	2.40000	<b>0.21429</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.02874</b>	0.32940	0.25920	<b>0.03454</b>	2.50740	1.20000	<b>0.09290</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.01475</b>	0.32940	0.12960	<b>0.01910</b>	2.50740	0.60000	<b>0.05867</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00868</b>	0.32940	0.06480	<b>0.01240</b>	2.50740	0.30000	<b>0.04631</b>



# DECAP<sub>x</sub>



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Footprint

Cell Name	Area
sg13g2_decap_4	7.25760
sg13g2_decap_8	12.70080

## Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_4	1670.71000	1670.71000	1670.71000
sg13g2_decap_8	3341.40000	3341.40000	3341.40000

# DFFRRx



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

## Truth Table

INPUT			OUTPUT	
D	RESET_B	CLK	Q	Q_N
0	1	R	0	1
1	1	R	1	0
x	0	x	0	1
x	1	x	IQ	IQN

## Footprint

Cell Name	Area
sg13g2_dfrbp_2	54.43200
sg13g2_dfrbp_1	47.17440

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00142	0.00519	0.00290	0.60000	0.60000
sg13g2_dfrbp_1	0.00149	0.00571	0.00272	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1666.35000	1911.40000	2129.32000
sg13g2_dfrbp_1	1278.45000	1513.75000	1738.43000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	<b>0.15600</b>	0.32940	0.12960	<b>0.34254</b>	2.50740	0.60000	<b>0.94248</b>
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	<b>0.12220</b>	0.32940	0.06480	<b>0.30899</b>	2.50740	0.30000	<b>0.87899</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q (RF)	0.01860	0.00100	<b>0.13438</b>	0.32940	0.12960	<b>0.30200</b>	2.50740	0.60000	<b>0.78213</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.18262</b>	0.32940	0.12960	<b>0.38930</b>	2.50740	0.60000	<b>1.03321</b>
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	<b>0.11518</b>	0.32940	0.06480	<b>0.27935</b>	2.50740	0.30000	<b>0.73696</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.15795</b>	0.32940	0.06480	<b>0.36093</b>	2.50740	0.30000	<b>0.99347</b>

Delay(ns) to Q\_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	<b>0.08963</b>	0.32940	0.12960	<b>0.30078</b>	2.50740	0.60000	<b>0.86948</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.13868</b>	0.32940	0.12960	<b>0.38704</b>	2.50740	0.60000	<b>1.12036</b>
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	<b>0.08807</b>	0.32940	0.06480	<b>0.28939</b>	2.50740	0.30000	<b>0.83643</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.13107</b>	0.32940	0.06480	<b>0.36988</b>	2.50740	0.30000	<b>1.09337</b>

Delay(ns) to Q\_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	<b>0.10100</b>	0.32940	0.12960	<b>0.31232</b>	2.50740	0.60000	<b>0.82601</b>
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	<b>0.09164</b>	0.32940	0.06480	<b>0.28541</b>	2.50740	0.30000	<b>0.77308</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	<b>-0.02934</b>	1.26300	1.26300	<b>-0.12682</b>	2.50740	2.50740	<b>-0.17119</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07580</b>	1.26300	1.26300	<b>0.17000</b>	2.50740	2.50740	<b>0.21251</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.03179</b>	1.26300	1.26300	<b>-0.14301</b>	2.50740	2.50740	<b>-0.19480</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07091</b>	1.26300	1.26300	<b>0.18079</b>	2.50740	2.50740	<b>0.23908</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	<b>-0.01956</b>	1.26300	1.26300	<b>-0.13492</b>	2.50740	2.50740	<b>-0.22727</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07580</b>	1.26300	1.26300	<b>0.20777</b>	2.50740	2.50740	<b>0.30106</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.01956</b>	1.26300	1.26300	<b>-0.13492</b>	2.50740	2.50740	<b>-0.22432</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07091</b>	1.26300	1.26300	<b>0.21317</b>	2.50740	2.50740	<b>0.31582</b>

Constraints(ns) for RESET\_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	recovery	CLK (R)	0.01860	0.01860	<b>0.07825</b>	1.26300	1.26300	<b>0.20777</b>	2.50740	2.50740	<b>0.31877</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.06358</b>	1.26300	1.26300	<b>-0.19968</b>	2.50740	2.50740	<b>-0.30991</b>
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	<b>0.07580</b>	1.26300	1.26300	<b>0.22127</b>	2.50740	2.50740	<b>0.34828</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.05868</b>	1.26300	1.26300	<b>-0.20238</b>	2.50740	2.50740	<b>-0.32762</b>

Min Pulse Width (ns) for RESET\_B:

Cell Name	High	Low
sg13g2_dfrbp_2	-	3.3435
sg13g2_dfrbp_1	-	3.3435

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_dfrbp_2	3.3435	3.3435
sg13g2_dfrbp_1	3.3435	3.3435

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	<b>0.06104</b>	0.32940	0.12960	<b>0.20829</b>	2.50740	0.60000	<b>0.79760</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.04536</b>	0.32940	0.06480	<b>0.12164</b>	2.50740	0.30000	<b>0.43680</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	<b>0.05930</b>	0.32940	0.12960	<b>0.20876</b>	2.50740	0.60000	<b>0.79246</b>
	RESET_B	0.01860	0.00100	<b>0.04646</b>	0.32940	0.12960	<b>0.19310</b>	2.50740	0.60000	<b>0.74956</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.04395</b>	0.32940	0.06480	<b>0.12065</b>	2.50740	0.30000	<b>0.43573</b>
	RESET_B	0.01860	0.00100	<b>0.03104</b>	0.32940	0.06480	<b>0.10554</b>	2.50740	0.30000	<b>0.39640</b>

Internal switching power(pJ) to Q\_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	<b>0.05934</b>	0.32940	0.12960	<b>0.20949</b>	2.50740	0.60000	<b>0.79211</b>
	RESET_B	0.01860	0.00100	<b>0.04650</b>	0.32940	0.12960	<b>0.19405</b>	2.50740	0.60000	<b>0.74570</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.04396</b>	0.32940	0.06480	<b>0.12148</b>	2.50740	0.30000	<b>0.43510</b>
	RESET_B	0.01860	0.00100	<b>0.03101</b>	0.32940	0.06480	<b>0.10607</b>	2.50740	0.30000	<b>0.39288</b>

Internal switching power(pJ) to Q\_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	<b>0.06108</b>	0.32940	0.12960	<b>0.20720</b>	2.50740	0.60000	<b>0.79935</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.04535</b>	0.32940	0.06480	<b>0.12120</b>	2.50740	0.30000	<b>0.43916</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.00192</b>	0.32940	<b>0.00371</b>	2.50740	<b>0.02192</b>
sg13g2_dfrbp_1	0.01860	<b>0.00206</b>	0.32940	<b>0.00380</b>	2.50740	<b>0.02197</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.00199</b>	0.32940	<b>0.00389</b>	2.50740	<b>0.02228</b>
sg13g2_dfrbp_1	0.01860	<b>0.00215</b>	0.32940	<b>0.00403</b>	2.50740	<b>0.02236</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	CLK	0.01860	<b>0.00192</b>	0.32940	<b>0.00371</b>	2.50740	<b>0.02192</b>
	(!CLK * RESET_B)	0.01860	<b>0.01720</b>	0.32940	<b>0.01905</b>	2.50740	<b>0.04066</b>
	(!CLK * !RESET_B)	0.01860	<b>-0.00034</b>	0.32940	<b>-0.00035</b>	2.50740	<b>-0.00035</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00206</b>	0.32940	<b>0.00380</b>	2.50740	<b>0.02197</b>
	(!CLK * RESET_B)	0.01860	<b>0.01501</b>	0.32940	<b>0.01692</b>	2.50740	<b>0.03832</b>
	(!CLK * !RESET_B)	0.01860	<b>-0.00022</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	CLK	0.01860	<b>0.00199</b>	0.32940	<b>0.00389</b>	2.50740	<b>0.02228</b>
	(!CLK * RESET_B)	0.01860	<b>0.01424</b>	0.32940	<b>0.01625</b>	2.50740	<b>0.03844</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00059</b>	0.32940	<b>0.00062</b>	2.50740	<b>0.00062</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00215</b>	0.32940	<b>0.00403</b>	2.50740	<b>0.02236</b>
	(!CLK * RESET_B)	0.01860	<b>0.01302</b>	0.32940	<b>0.01509</b>	2.50740	<b>0.03701</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00052</b>	0.32940	<b>0.00054</b>	2.50740	<b>0.00054</b>

Passive power(pJ) for RESET\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.00485</b>	0.32940	<b>0.00589</b>	2.50740	<b>0.02349</b>
sg13g2_dfrbp_1	0.01860	<b>0.00545</b>	0.32940	<b>0.00649</b>	2.50740	<b>0.02400</b>

Passive power(pJ) for RESET\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.01394</b>	0.32940	<b>0.01551</b>	2.50740	<b>0.04363</b>
sg13g2_dfrbp_1	0.01860	<b>0.01217</b>	0.32940	<b>0.01372</b>	2.50740	<b>0.04185</b>

Passive power(pJ) for RESET\_B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	<b>0.00485</b>	0.32940	<b>0.00589</b>	2.50740	<b>0.02349</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00097</b>	0.32940	<b>0.00092</b>	2.50740	<b>0.00092</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.02035</b>	0.32940	<b>0.02184</b>	2.50740	<b>0.04915</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00107</b>	0.32940	<b>0.00101</b>	2.50740	<b>0.00100</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.00545</b>	0.32940	<b>0.00649</b>	2.50740	<b>0.02400</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00158</b>	0.32940	<b>0.00153</b>	2.50740	<b>0.00153</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01867</b>	0.32940	<b>0.02017</b>	2.50740	<b>0.04769</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00168</b>	0.32940	<b>0.00162</b>	2.50740	<b>0.00162</b>

Passive power(pJ) for RESET\_B falling (conditional):



Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	<b>0.05980</b>	0.32940	<b>0.06417</b>	2.50740	<b>0.11560</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00097</b>	0.32940	<b>-0.00092</b>	2.50740	<b>-0.00092</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01394</b>	0.32940	<b>0.01551</b>	2.50740	<b>0.04363</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00107</b>	0.32940	<b>-0.00101</b>	2.50740	<b>-0.00100</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.04209</b>	0.32940	<b>0.04633</b>	2.50740	<b>0.09681</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00158</b>	0.32940	<b>-0.00153</b>	2.50740	<b>-0.00153</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01217</b>	0.32940	<b>0.01372</b>	2.50740	<b>0.04185</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00168</b>	0.32940	<b>-0.00162</b>	2.50740	<b>-0.00162</b>

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.01552</b>	0.32940	<b>0.01996</b>	2.50740	<b>0.07017</b>
sg13g2_dfrbp_1	0.01860	<b>0.01518</b>	0.32940	<b>0.01924</b>	2.50740	<b>0.06604</b>

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	<b>0.03019</b>	0.32940	<b>0.03508</b>	2.50740	<b>0.08667</b>
sg13g2_dfrbp_1	0.01860	<b>0.02711</b>	0.32940	<b>0.03169</b>	2.50740	<b>0.08045</b>

Passive power(pJ) for CLK rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.01552</b>	0.32940	<b>0.01996</b>	2.50740	<b>0.07017</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01634</b>	0.32940	<b>0.02079</b>	2.50740	<b>0.07091</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01527</b>	0.32940	<b>0.01971</b>	2.50740	<b>0.06987</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01637</b>	0.32940	<b>0.02070</b>	2.50740	<b>0.07090</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.01562</b>	0.32940	<b>0.01969</b>	2.50740	<b>0.06656</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01516</b>	0.32940	<b>0.01923</b>	2.50740	<b>0.06604</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01488</b>	0.32940	<b>0.01897</b>	2.50740	<b>0.06582</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01518</b>	0.32940	<b>0.01924</b>	2.50740	<b>0.06604</b>

Passive power(pJ) for CLK falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.03019</b>	0.32940	<b>0.03508</b>	2.50740	<b>0.08667</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.03030</b>	0.32940	<b>0.03517</b>	2.50740	<b>0.08680</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01553</b>	0.32940	<b>0.02026</b>	2.50740	<b>0.06999</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.00903</b>	0.32940	<b>0.07593</b>	2.50740	<b>0.12551</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01552</b>	0.32940	<b>0.02027</b>	2.50740	<b>0.07004</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01552</b>	0.32940	<b>0.02024</b>	2.50740	<b>0.06996</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.02719</b>	0.32940	<b>0.03180</b>	2.50740	<b>0.08050</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.02711</b>	0.32940	<b>0.03169</b>	2.50740	<b>0.08045</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01474</b>	0.32940	<b>0.01919</b>	2.50740	<b>0.06589</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.00814</b>	0.32940	<b>0.05958</b>	2.50740	<b>0.10615</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01471</b>	0.32940	<b>0.01921</b>	2.50740	<b>0.06592</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01472</b>	0.32940	<b>0.01917</b>	2.50740	<b>0.06587</b>

# DLHQ



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
D	GATE	Q
x	0	IQ
0	1	0
1	1	1

## Footprint

Cell Name	Area
sg13g2_dlhq_1	30.84480

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	GATE	Q
sg13g2_dlhq_1	0.00224	0.00232	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	928.97600	1021.47000	1136.46000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	<b>0.11588</b>	0.32940	0.06480	<b>0.29685</b>	2.50740	0.30000	<b>0.85868</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.09777</b>	0.32940	0.06480	<b>0.27885</b>	2.50740	0.30000	<b>0.79869</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (FF)	0.01860	0.00100	<b>0.10213</b>	0.32940	0.06480	<b>0.26409</b>	2.50740	0.30000	<b>0.74518</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.10338</b>	0.32940	0.06480	<b>0.26102</b>	2.50740	0.30000	<b>0.67859</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	<b>-0.06113</b>	1.26300	1.26300	<b>-0.10794</b>	2.50740	2.50740	<b>-0.10330</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.06847</b>	1.26300	1.26300	<b>0.15651</b>	2.50740	2.50740	<b>0.18595</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	<b>-0.02445</b>	1.26300	1.26300	<b>0.02159</b>	2.50740	2.50740	<b>0.06198</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.03179</b>	1.26300	1.26300	<b>-0.01349</b>	2.50740	2.50740	<b>-0.05608</b>

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhq_1	3.3435	-

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D	0.01860	0.00100	<b>0.02274</b>	0.32940	0.06480	<b>0.02308</b>	2.50740	0.30000	<b>0.02454</b>
	GATE	0.01860	0.00100	<b>0.01937</b>	0.32940	0.06480	<b>0.01978</b>	2.50740	0.30000	<b>0.02391</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D	0.01860	0.00100	<b>0.02328</b>	0.32940	0.06480	<b>0.02402</b>	2.50740	0.30000	<b>0.02635</b>
	GATE	0.01860	0.00100	<b>0.02095</b>	0.32940	0.06480	<b>0.02193</b>	2.50740	0.30000	<b>0.02301</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	<b>0.00510</b>	0.32940	<b>0.00830</b>	2.50740	<b>0.04244</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	<b>0.00543</b>	0.32940	<b>0.00875</b>	2.50740	<b>0.04258</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!GATE * Q)	0.01860	<b>0.00521</b>	0.32940	<b>0.00833</b>	2.50740	<b>0.04247</b>
	(!GATE * !Q)	0.01860	<b>0.00510</b>	0.32940	<b>0.00830</b>	2.50740	<b>0.04244</b>

Passive power(pJ) for D falling (conditional):



Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!GATE * Q)	0.01860	<b>0.00511</b>	0.32940	<b>0.00859</b>	2.50740	<b>0.04237</b>
	(!GATE * !Q)	0.01860	<b>0.00543</b>	0.32940	<b>0.00875</b>	2.50740	<b>0.04258</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	<b>0.01143</b>	0.32940	<b>0.01535</b>	2.50740	<b>0.05808</b>

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	<b>0.00805</b>	0.32940	<b>0.02642</b>	2.50740	<b>0.06957</b>

Passive power(pJ) for GATE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!D * !Q)	0.01860	<b>0.01143</b>	0.32940	<b>0.01535</b>	2.50740	<b>0.05808</b>

Passive power(pJ) for GATE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!D * !Q)	0.01860	<b>0.00805</b>	0.32940	<b>0.02642</b>	2.50740	<b>0.06957</b>

# DLHRQ



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
D	RESET_B	GATE	Q
x	0	x	0
x	1	0	IQ
0	1	1	0
1	1	1	1

## Footprint

Cell Name	Area
sg13g2_dlhrq_1	27.21600

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE	Q
sg13g2_dlhrq_1	0.00209	0.00286	0.00222	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1038.47000	1158.98000	1259.74000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D->Q (RR)	0.01860	0.00100	<b>0.12006</b>	0.32940	0.06480	<b>0.30364</b>	2.50740	0.30000	<b>0.86154</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.10645</b>	0.32940	0.06480	<b>0.29062</b>	2.50740	0.30000	<b>0.80669</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D->Q (FF)	0.01860	0.00100	<b>0.10620</b>	0.32940	0.06480	<b>0.26877</b>	2.50740	0.30000	<b>0.75108</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.10771</b>	0.32940	0.06480	<b>0.26715</b>	2.50740	0.30000	<b>0.68677</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.04401</b>	0.32940	0.06480	<b>0.22479</b>	2.50740	0.30000	<b>0.77879</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	<b>-0.05379</b>	1.26300	1.26300	<b>-0.09714</b>	2.50740	2.50740	<b>-0.08855</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.06602</b>	1.26300	1.26300	<b>0.13762</b>	2.50740	2.50740	<b>0.16234</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	<b>-0.02690</b>	1.26300	1.26300	<b>0.01889</b>	2.50740	2.50740	<b>0.06198</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.03668</b>	1.26300	1.26300	<b>-0.01349</b>	2.50740	2.50740	<b>-0.05313</b>

Constraints(ns) for RESET\_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	<b>-0.00734</b>	1.26300	1.26300	<b>-0.10254</b>	2.50740	2.50740	<b>-0.16824</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.01712</b>	1.26300	1.26300	<b>0.12143</b>	2.50740	2.50740	<b>0.19185</b>

Min Pulse Width (ns) for RESET\_B:

Cell Name	High	Low
sg13g2_dlhrq_1	-	3.3435

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhrq_1	3.3435	-

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D	0.01860	0.00100	<b>0.00330</b>	0.32940	0.06480	<b>0.00278</b>	2.50740	0.30000	<b>0.00331</b>
	GATE	0.01860	0.00100	<b>0.01952</b>	0.32940	0.06480	<b>0.01987</b>	2.50740	0.30000	<b>0.02362</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D	0.01860	0.00100	<b>0.00687</b>	0.32940	0.06480	<b>-0.00278</b>	2.50740	0.30000	<b>-0.00331</b>
	GATE	0.01860	0.00100	<b>0.01912</b>	0.32940	0.06480	<b>0.02023</b>	2.50740	0.30000	<b>0.02142</b>
	RESET_B	0.01860	0.00100	<b>0.01075</b>	0.32940	0.06480	<b>0.01520</b>	2.50740	0.30000	<b>0.05470</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.02445</b>	0.32940	<b>0.02843</b>	2.50740	<b>0.06339</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.01946</b>	0.32940	<b>0.03983</b>	2.50740	<b>0.07510</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	<b>0.00400</b>	0.32940	<b>0.00722</b>	2.50740	<b>0.04135</b>
	!RESET_B	0.01860	<b>0.02445</b>	0.32940	<b>0.02843</b>	2.50740	<b>0.06339</b>

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	<b>0.00470</b>	0.32940	<b>0.00817</b>	2.50740	<b>0.04196</b>
	!RESET_B	0.01860	<b>0.01946</b>	0.32940	<b>0.03983</b>	2.50740	<b>0.07510</b>

Passive power(pJ) for RESET\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>-0.00021</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00004</b>

Passive power(pJ) for RESET\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.00021</b>	0.32940	<b>0.00009</b>	2.50740	<b>0.00004</b>

Passive power(pJ) for RESET\_B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	<b>-0.00037</b>	0.32940	<b>-0.00025</b>	2.50740	<b>-0.00020</b>
	(!D * !GATE * !Q)	0.01860	<b>-0.00021</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00004</b>

Passive power(pJ) for RESET\_B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	<b>0.00037</b>	0.32940	<b>0.00025</b>	2.50740	<b>0.00020</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00021</b>	0.32940	<b>0.00009</b>	2.50740	<b>0.00004</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.01186</b>	0.32940	<b>0.01575</b>	2.50740	<b>0.05838</b>

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.00811</b>	0.32940	<b>0.02620</b>	2.50740	<b>0.06932</b>

Passive power(pJ) for GATE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	<b>0.01574</b>	0.32940	<b>0.01974</b>	2.50740	<b>0.06565</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01186</b>	0.32940	<b>0.01575</b>	2.50740	<b>0.05838</b>

Passive power(pJ) for GATE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	<b>0.01765</b>	0.32940	<b>0.02246</b>	2.50740	<b>0.06839</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00811</b>	0.32940	<b>0.02620</b>	2.50740	<b>0.06932</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00818</b>	0.32940	<b>0.02628</b>	2.50740	<b>0.06939</b>



# DLHR



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE	Q	Q_N
x	0	x	0	1
x	1	0	IQ	IQN
0	1	1	0	1
1	1	1	1	0

## Footprint

Cell Name	Area
sg13g2_dlhr_1	32.65920

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE	Q	Q_N
sg13g2_dlhr_1	0.00211	0.00301	0.00230	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	1322.77000	1454.41000	1537.31000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	<b>0.12995</b>	0.32940	0.06480	<b>0.31801</b>	2.50740	0.30000	<b>0.87628</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.11689</b>	0.32940	0.06480	<b>0.30598</b>	2.50740	0.30000	<b>0.82397</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (FF)	0.01860	0.00100	<b>0.11058</b>	0.32940	0.06480	<b>0.27499</b>	2.50740	0.30000	<b>0.75394</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.11204</b>	0.32940	0.06480	<b>0.27407</b>	2.50740	0.30000	<b>0.68923</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.04765</b>	0.32940	0.06480	<b>0.23742</b>	2.50740	0.30000	<b>0.79287</b>

Delay(ns) to Q\_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q_N (FR)	0.01860	0.00100	<b>0.13548</b>	0.32940	0.06480	<b>0.31474</b>	2.50740	0.30000	<b>0.88388</b>
	GATE->Q_N (RR)	0.01860	0.00100	<b>0.13700</b>	0.32940	0.06480	<b>0.31378</b>	2.50740	0.30000	<b>0.81918</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.07252</b>	0.32940	0.06480	<b>0.27085</b>	2.50740	0.30000	<b>0.86576</b>

Delay(ns) to Q\_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q_N (RF)	0.01860	0.00100	<b>0.15747</b>	0.32940	0.06480	<b>0.31118</b>	2.50740	0.30000	<b>0.77846</b>
	GATE->Q_N (RF)	0.01860	0.00100	<b>0.14424</b>	0.32940	0.06480	<b>0.29917</b>	2.50740	0.30000	<b>0.72688</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	<b>-0.05868</b>	1.26300	1.26300	<b>-0.09714</b>	2.50740	2.50740	<b>-0.08855</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.07091</b>	1.26300	1.26300	<b>0.14031</b>	2.50740	2.50740	<b>0.16234</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	<b>-0.02934</b>	1.26300	1.26300	<b>0.01889</b>	2.50740	2.50740	<b>0.06198</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.03912</b>	1.26300	1.26300	<b>-0.01349</b>	2.50740	2.50740	<b>-0.05313</b>

Constraints(ns) for RESET\_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	<b>-0.00245</b>	1.26300	1.26300	<b>-0.07016</b>	2.50740	2.50740	<b>-0.11511</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.01223</b>	1.26300	1.26300	<b>0.08905</b>	2.50740	2.50740	<b>0.13872</b>

Min Pulse Width (ns) for RESET\_B:

Cell Name	High	Low
sg13g2_dlhr_1	-	3.3435

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhr_1	3.3435	-

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	<b>0.00801</b>	0.32940	0.06480	<b>0.00807</b>	2.50740	0.30000	<b>0.00890</b>
	GATE	0.01860	0.00100	<b>0.01593</b>	0.32940	0.06480	<b>0.01638</b>	2.50740	0.30000	<b>0.01918</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	<b>0.00950</b>	0.32940	0.06480	<b>0.00146</b>	2.50740	0.30000	<b>0.00269</b>
	GATE	0.01860	0.00100	<b>0.01569</b>	0.32940	0.06480	<b>0.01634</b>	2.50740	0.30000	<b>0.01710</b>
	RESET_B	0.01860	0.00100	<b>0.01127</b>	0.32940	0.06480	<b>0.01370</b>	2.50740	0.30000	<b>0.03727</b>

Internal switching power(pJ) to Q\_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	<b>0.00954</b>	0.32940	0.06480	<b>0.00177</b>	2.50740	0.30000	<b>0.00195</b>
	GATE	0.01860	0.00100	<b>0.02139</b>	0.32940	0.06480	<b>0.02424</b>	2.50740	0.30000	<b>0.04614</b>
	RESET_B	0.01860	0.00100	<b>0.01129</b>	0.32940	0.06480	<b>0.01382</b>	2.50740	0.30000	<b>0.03713</b>

Internal switching power(pJ) to Q\_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	<b>0.00801</b>	0.32940	0.06480	<b>0.00781</b>	2.50740	0.30000	<b>0.00931</b>
	GATE	0.01860	0.00100	<b>0.01593</b>	0.32940	0.06480	<b>0.01615</b>	2.50740	0.30000	<b>0.01945</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>0.02394</b>	0.32940	<b>0.02793</b>	2.50740	<b>0.06293</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>0.01925</b>	0.32940	<b>0.03935</b>	2.50740	<b>0.07469</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	<b>0.00446</b>	0.32940	<b>0.00774</b>	2.50740	<b>0.04195</b>
	!RESET_B	0.01860	<b>0.02394</b>	0.32940	<b>0.02793</b>	2.50740	<b>0.06293</b>

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	<b>0.00489</b>	0.32940	<b>0.00840</b>	2.50740	<b>0.04229</b>
	!RESET_B	0.01860	<b>0.01925</b>	0.32940	<b>0.03935</b>	2.50740	<b>0.07469</b>

Passive power(pJ) for RESET\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>-0.00036</b>	0.32940	<b>-0.00025</b>	2.50740	<b>-0.00020</b>

Passive power(pJ) for RESET\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>0.00036</b>	0.32940	<b>0.00025</b>	2.50740	<b>0.00020</b>

Passive power(pJ) for RESET\_B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	<b>-0.00052</b>	0.32940	<b>-0.00041</b>	2.50740	<b>-0.00036</b>
	(!D * !GATE * !Q)	0.01860	<b>-0.00036</b>	0.32940	<b>-0.00025</b>	2.50740	<b>-0.00020</b>

Passive power(pJ) for RESET\_B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	<b>0.00052</b>	0.32940	<b>0.00041</b>	2.50740	<b>0.00036</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00036</b>	0.32940	<b>0.00025</b>	2.50740	<b>0.00020</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>0.01137</b>	0.32940	<b>0.01529</b>	2.50740	<b>0.05805</b>

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	<b>0.00835</b>	0.32940	<b>0.02582</b>	2.50740	<b>0.06906</b>

Passive power(pJ) for GATE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	<b>0.01527</b>	0.32940	<b>0.01924</b>	2.50740	<b>0.06521</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01137</b>	0.32940	<b>0.01529</b>	2.50740	<b>0.05805</b>

Passive power(pJ) for GATE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	<b>0.01813</b>	0.32940	<b>0.02287</b>	2.50740	<b>0.06887</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00835</b>	0.32940	<b>0.02582</b>	2.50740	<b>0.06906</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00842</b>	0.32940	<b>0.02590</b>	2.50740	<b>0.06914</b>



# DLLRQ



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
D	RESET_B	GATE_N	Q
x	0	x	0
0	1	0	0
x	1	1	IQ
1	1	0	1

## Footprint

Cell Name	Area
sg13g2_dllrq_1	29.03040

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE_N	Q
sg13g2_dllrq_1	0.00207	0.00290	0.00220	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1029.35000	1158.05000	1266.87000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D->Q (RR)	0.01860	0.00100	<b>0.11990</b>	0.32940	0.06480	<b>0.30320</b>	2.50740	0.30000	<b>0.86115</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.13199</b>	0.32940	0.06480	<b>0.32968</b>	2.50740	0.30000	<b>0.95998</b>
	RESET_B->Q (RR)	0.01860	0.00100	<b>0.05457</b>	0.32940	0.06480	<b>0.23816</b>	2.50740	0.30000	<b>0.85108</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D->Q (FF)	0.01860	0.00100	<b>0.10573</b>	0.32940	0.06480	<b>0.26647</b>	2.50740	0.30000	<b>0.74473</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.10010</b>	0.32940	0.06480	<b>0.27885</b>	2.50740	0.30000	<b>0.83699</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.04444</b>	0.32940	0.06480	<b>0.22455</b>	2.50740	0.30000	<b>0.77779</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	<b>-0.04646</b>	1.26300	1.26300	<b>-0.06746</b>	2.50740	2.50740	<b>-0.09740</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.05624</b>	1.26300	1.26300	<b>0.07555</b>	2.50740	2.50740	<b>0.10626</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	<b>-0.05379</b>	1.26300	1.26300	<b>-0.17539</b>	2.50740	2.50740	<b>-0.24793</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.06113</b>	1.26300	1.26300	<b>0.22127</b>	2.50740	2.50740	<b>0.32467</b>

Constraints(ns) for RESET\_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	recovery	GATE_N (R)	0.01860	0.01860	<b>-0.01956</b>	1.26300	1.26300	<b>-0.04048</b>	2.50740	2.50740	<b>-0.02656</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.02934</b>	1.26300	1.26300	<b>0.05397</b>	2.50740	2.50740	<b>0.03837</b>

Min Pulse Width (ns) for RESET\_B:

Cell Name	High	Low
sg13g2_dllrq_1	-	3.3435

Min Pulse Width (ns) for GATE\_N:

Cell Name	High	Low
sg13g2_dllrq_1	-	3.3435

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D	0.01860	0.00100	<b>0.01064</b>	0.32940	0.06480	<b>0.01142</b>	2.50740	0.30000	<b>0.01302</b>
	GATE_N	0.01860	0.00100	<b>0.02421</b>	0.32940	0.06480	<b>0.01095</b>	2.50740	0.30000	<b>0.01289</b>
	RESET_B	0.01860	0.00100	<b>0.01549</b>	0.32940	0.06480	<b>0.01747</b>	2.50740	0.30000	<b>0.05720</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D	0.01860	0.00100	<b>0.01961</b>	0.32940	0.06480	<b>0.00010</b>	2.50740	0.30000	<b>0.00097</b>
	GATE_N	0.01860	0.00100	<b>0.02199</b>	0.32940	0.06480	<b>0.00903</b>	2.50740	0.30000	<b>0.01369</b>
	RESET_B	0.01860	0.00100	<b>0.01091</b>	0.32940	0.06480	<b>0.01531</b>	2.50740	0.30000	<b>0.05602</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>0.01708</b>	0.32940	<b>0.01984</b>	2.50740	<b>0.05400</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>0.00681</b>	0.32940	<b>0.03028</b>	2.50740	<b>0.06559</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	<b>0.00389</b>	0.32940	<b>0.00716</b>	2.50740	<b>0.04134</b>
	!RESET_B	0.01860	<b>0.01708</b>	0.32940	<b>0.01984</b>	2.50740	<b>0.05400</b>

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	<b>0.00459</b>	0.32940	<b>0.00809</b>	2.50740	<b>0.04196</b>
	!RESET_B	0.01860	<b>0.00681</b>	0.32940	<b>0.03028</b>	2.50740	<b>0.06559</b>

Passive power(pJ) for RESET\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>-0.00030</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00013</b>

Passive power(pJ) for RESET\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>0.00030</b>	0.32940	<b>0.00018</b>	2.50740	<b>0.00013</b>

Passive power(pJ) for RESET\_B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	<b>-0.00030</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00013</b>
	(!D * GATE_N * !Q)	0.01860	<b>-0.00030</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00013</b>

Passive power(pJ) for RESET\_B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	<b>0.00030</b>	0.32940	<b>0.00018</b>	2.50740	<b>0.00013</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00030</b>	0.32940	<b>0.00018</b>	2.50740	<b>0.00013</b>

Passive power(pJ) for GATE\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>0.01058</b>	0.32940	<b>0.01450</b>	2.50740	<b>0.05720</b>

Passive power(pJ) for GATE\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	<b>0.00816</b>	0.32940	<b>0.02614</b>	2.50740	<b>0.06938</b>

Passive power(pJ) for GATE\_N rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	<b>0.01904</b>	0.32940	<b>0.02283</b>	2.50740	<b>0.06504</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01058</b>	0.32940	<b>0.01450</b>	2.50740	<b>0.05720</b>

Passive power(pJ) for GATE\_N falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	<b>0.01728</b>	0.32940	<b>0.02161</b>	2.50740	<b>0.06434</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00816</b>	0.32940	<b>0.02614</b>	2.50740	<b>0.06938</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00823</b>	0.32940	<b>0.02622</b>	2.50740	<b>0.06945</b>

# DLLR



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE_N	Q	Q_N
x	0	x	0	1
0	1	0	0	1
x	1	1	IQ	IQN
1	1	0	1	0

## Footprint

Cell Name	Area
sg13g2_dllr_1	34.47360

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE_N	Q	Q_N
sg13g2_dllr_1	0.00212	0.00302	0.00227	0.30000	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1313.38000	1477.50000	1560.97000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q (RR)	0.01860	0.00100	<b>0.13140</b>	0.32940	0.06480	<b>0.31891</b>	2.50740	0.30000	<b>0.87754</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.14389</b>	0.32940	0.06480	<b>0.34725</b>	2.50740	0.30000	<b>0.97904</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q (FF)	0.01860	0.00100	<b>0.11170</b>	0.32940	0.06480	<b>0.27597</b>	2.50740	0.30000	<b>0.75518</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.10673</b>	0.32940	0.06480	<b>0.28995</b>	2.50740	0.30000	<b>0.85114</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.04751</b>	0.32940	0.06480	<b>0.24031</b>	2.50740	0.30000	<b>0.75967</b>

Delay(ns) to Q\_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q_N (FR)	0.01860	0.00100	<b>0.13646</b>	0.32940	0.06480	<b>0.31557</b>	2.50740	0.30000	<b>0.88396</b>
	GATE_N->Q_N (FR)	0.01860	0.00100	<b>0.13160</b>	0.32940	0.06480	<b>0.32920</b>	2.50740	0.30000	<b>0.97908</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.07293</b>	0.32940	0.06480	<b>0.27205</b>	2.50740	0.30000	<b>0.87208</b>

Delay(ns) to Q\_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q_N (RF)	0.01860	0.00100	<b>0.15877</b>	0.32940	0.06480	<b>0.31243</b>	2.50740	0.30000	<b>0.77995</b>
	GATE_N->Q_N (FF)	0.01860	0.00100	<b>0.17111</b>	0.32940	0.06480	<b>0.34058</b>	2.50740	0.30000	<b>0.88264</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	<b>-0.05379</b>	1.26300	1.26300	<b>-0.07016</b>	2.50740	2.50740	<b>-0.10330</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.06602</b>	1.26300	1.26300	<b>0.07825</b>	2.50740	2.50740	<b>0.11216</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	<b>-0.05624</b>	1.26300	1.26300	<b>-0.18079</b>	2.50740	2.50740	<b>-0.25383</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.06358</b>	1.26300	1.26300	<b>0.22666</b>	2.50740	2.50740	<b>0.33352</b>

Constraints(ns) for RESET\_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	<b>-0.01223</b>	1.26300	1.26300	<b>-0.00810</b>	2.50740	2.50740	<b>0.02952</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.02445</b>	1.26300	1.26300	<b>0.02159</b>	2.50740	2.50740	<b>-0.01476</b>

Min Pulse Width (ns) for RESET\_B:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

Min Pulse Width (ns) for GATE\_N:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	<b>0.01600</b>	0.32940	0.06480	<b>0.08863</b>	2.50740	0.30000	<b>0.35493</b>
	GATE_N	0.01860	0.00100	<b>0.03417</b>	0.32940	0.06480	<b>0.10692</b>	2.50740	0.30000	<b>0.37785</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	<b>0.02034</b>	0.32940	0.06480	<b>0.07211</b>	2.50740	0.30000	<b>0.34054</b>
	GATE_N	0.01860	0.00100	<b>0.03123</b>	0.32940	0.06480	<b>0.10380</b>	2.50740	0.30000	<b>0.37325</b>
	RESET_B	0.01860	0.00100	<b>0.03579</b>	0.32940	0.06480	<b>0.11084</b>	2.50740	0.30000	<b>0.41424</b>

Internal switching power(pJ) to Q\_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	<b>0.02042</b>	0.32940	0.06480	<b>0.07278</b>	2.50740	0.30000	<b>0.33770</b>
	GATE_N	0.01860	0.00100	<b>0.04359</b>	0.32940	0.06480	<b>0.12088</b>	2.50740	0.30000	<b>0.43557</b>
	RESET_B	0.01860	0.00100	<b>0.03584</b>	0.32940	0.06480	<b>0.11135</b>	2.50740	0.30000	<b>0.41198</b>

Internal switching power(pJ) to Q\_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	<b>0.01601</b>	0.32940	0.06480	<b>0.08809</b>	2.50740	0.30000	<b>0.35705</b>
	GATE_N	0.01860	0.00100	<b>0.03418</b>	0.32940	0.06480	<b>0.10642</b>	2.50740	0.30000	<b>0.37301</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>0.02568</b>	0.32940	<b>0.02894</b>	2.50740	<b>0.06388</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>0.01912</b>	0.32940	<b>0.04310</b>	2.50740	<b>0.07836</b>

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	<b>0.00448</b>	0.32940	<b>0.00772</b>	2.50740	<b>0.04195</b>
	!RESET_B	0.01860	<b>0.02568</b>	0.32940	<b>0.02894</b>	2.50740	<b>0.06388</b>

Passive power(pJ) for D falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	<b>0.00438</b>	0.32940	<b>0.00788</b>	2.50740	<b>0.04178</b>
	!RESET_B	0.01860	<b>0.01912</b>	0.32940	<b>0.04310</b>	2.50740	<b>0.07836</b>

Passive power(pJ) for RESET\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>-0.00046</b>	0.32940	<b>-0.00035</b>	2.50740	<b>-0.00030</b>

Passive power(pJ) for RESET\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>0.00046</b>	0.32940	<b>0.00035</b>	2.50740	<b>0.00030</b>

Passive power(pJ) for RESET\_B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	<b>-0.00017</b>	0.32940	<b>-0.00024</b>	2.50740	<b>-0.00024</b>
	(!D * GATE_N * !Q)	0.01860	<b>-0.00046</b>	0.32940	<b>-0.00035</b>	2.50740	<b>-0.00030</b>

Passive power(pJ) for RESET\_B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	<b>0.00046</b>	0.32940	<b>0.00034</b>	2.50740	<b>0.00030</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00046</b>	0.32940	<b>0.00035</b>	2.50740	<b>0.00030</b>

Passive power(pJ) for GATE\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>0.00438</b>	0.32940	<b>0.02575</b>	2.50740	<b>0.06830</b>

Passive power(pJ) for GATE\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	<b>0.01232</b>	0.32940	<b>0.01674</b>	2.50740	<b>0.05990</b>

Passive power(pJ) for GATE\_N rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	<b>0.01932</b>	0.32940	<b>0.02306</b>	2.50740	<b>0.06525</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00438</b>	0.32940	<b>0.02575</b>	2.50740	<b>0.06830</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00454</b>	0.32940	<b>0.02591</b>	2.50740	<b>0.06846</b>

**Passive power(pJ) for GATE\_N falling (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	<b>0.01783</b>	0.32940	<b>0.02222</b>	2.50740	<b>0.06485</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01232</b>	0.32940	<b>0.01674</b>	2.50740	<b>0.05990</b>

# DLY1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	16.32960

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00139	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	435.62900	473.15700	510.68500



## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A->X (RR)	0.01860	0.00100	<b>0.07577</b>	0.32940	0.06480	<b>0.25198</b>	2.50740	0.30000	<b>0.73437</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A->X (FF)	0.01860	0.00100	<b>0.08763</b>	0.32940	0.06480	<b>0.27109</b>	2.50740	0.30000	<b>0.86473</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	<b>0.01899</b>	0.32940	0.06480	<b>0.02138</b>	2.50740	0.30000	<b>0.04532</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	<b>0.01804</b>	0.32940	0.06480	<b>0.02082</b>	2.50740	0.30000	<b>0.04382</b>

# DLY2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	16.32960

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00139	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	515.77600	553.33200	590.88800

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	<b>0.11415</b>	0.32940	0.06480	<b>0.30186</b>	2.50740	0.30000	<b>0.81996</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (FF)	0.01860	0.00100	<b>0.12844</b>	0.32940	0.06480	<b>0.32935</b>	2.50740	0.30000	<b>0.94878</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	<b>0.02283</b>	0.32940	0.06480	<b>0.02458</b>	2.50740	0.30000	<b>0.04675</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	<b>0.02207</b>	0.32940	0.06480	<b>0.02407</b>	2.50740	0.30000	<b>0.04678</b>

# DLY4



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_dlygate4sd3_1	16.32960

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd3_1	0.00135	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1214.87000	1252.41000	1289.95000

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	<b>0.25068</b>	0.32940	0.06480	<b>0.46463</b>	2.50740	0.30000	<b>1.05479</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (FF)	0.01860	0.00100	<b>0.25902</b>	0.32940	0.06480	<b>0.49325</b>	2.50740	0.30000	<b>1.17978</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	<b>0.03389</b>	0.32940	0.06480	<b>0.03443</b>	2.50740	0.30000	<b>0.05489</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	<b>0.03353</b>	0.32940	0.06480	<b>0.03401</b>	2.50740	0.30000	<b>0.05433</b>



# EINVIN<sub>x</sub>



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	1
1	0	0
-	1	HiZ

## Footprint

Cell Name	Area
sg13g2_einvn_4	23.58720
sg13g2_einvn_2	16.32960

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_4	0.00765	0.00919	1.20000
sg13g2_einvn_2	0.00383	0.00481	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1259.67000	1555.34000	1851.00000
sg13g2_einvn_2	633.83500	781.67600	929.51700

## Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (FR)	0.01860	0.01071	<b>0.01911</b>	0.32940	0.26891	<b>0.39491</b>	2.50740	1.20971	<b>2.14484</b>
	TE_B->Z (RR)	0.01860	0.01071	<b>0.03679</b>	0.32940	0.26891	<b>0.09057</b>	2.50740	1.20971	<b>0.17465</b>
	TE_B->Z (FR)	0.01860	0.01071	<b>0.02349</b>	0.32940	0.26891	<b>0.36713</b>	2.50740	1.20971	<b>1.84963</b>
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00598	<b>0.02015</b>	0.32940	0.13458	<b>0.39470</b>	2.50740	0.60498	<b>2.13984</b>
	TE_B->Z (RR)	0.01860	0.00598	<b>0.03566</b>	0.32940	0.13458	<b>0.08593</b>	2.50740	0.60498	<b>0.17017</b>
	TE_B->Z (FR)	0.01860	0.00598	<b>0.02449</b>	0.32940	0.13458	<b>0.36712</b>	2.50740	0.60498	<b>1.85006</b>

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01545	<b>0.01668</b>	0.32940	0.27365	<b>0.32036</b>	2.50740	1.21445	<b>1.76394</b>
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00841	<b>0.01775</b>	0.32940	0.13701	<b>0.32031</b>	2.50740	0.60741	<b>1.76362</b>

## Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.01071	<b>0.01570</b>	0.32940	0.26891	<b>0.02046</b>	2.50740	1.20971	<b>0.06707</b>
	TE_B	0.01860	0.01071	<b>0.03266</b>	0.32940	0.26891	<b>0.02326</b>	2.50740	1.20971	<b>0.01834</b>
sg13g2_einvn_2	A	0.01860	0.00598	<b>0.00797</b>	0.32940	0.13458	<b>0.01020</b>	2.50740	0.60498	<b>0.03221</b>
	TE_B	0.01860	0.00598	<b>0.01615</b>	0.32940	0.13458	<b>0.01153</b>	2.50740	0.60498	<b>0.00843</b>

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.01545	<b>0.01441</b>	0.32940	0.27365	<b>0.01960</b>	2.50740	1.21445	<b>0.05724</b>
sg13g2_einvn_2	A	0.01860	0.00841	<b>0.00735</b>	0.32940	0.13701	<b>0.00981</b>	2.50740	0.60741	<b>0.02888</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_einvn_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_einvn_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for TE\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	<b>-0.01355</b>	0.32940	<b>-0.01191</b>	2.50740	<b>0.03402</b>
sg13g2_einvn_2	0.01860	<b>-0.00701</b>	0.32940	<b>-0.00539</b>	2.50740	<b>0.01947</b>

**Passive power(pJ) for TE\_B falling :**

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
<b>sg13g2_einvn_4</b>	0.01860	<b>0.01355</b>	0.32940	<b>0.02664</b>	2.50740	<b>0.07385</b>
<b>sg13g2_einvn_2</b>	0.01860	<b>0.00701</b>	0.32940	<b>0.01367</b>	2.50740	<b>0.03904</b>

# FILLx



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

## Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_fill_1	0.00000	0.00000	0.00000
sg13g2_fill_2	0.00000	0.00000	0.00000
sg13g2_fill_4	0.00000	0.00000	0.00000
sg13g2_fill_8	0.00000	0.00000	0.00000

# GCLK



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
GATE	CLK	GCLK
x	0	0
x	1	GCLK

## Footprint

Cell Name	Area
sg13g2_lgcp_1	27.21600

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	GATE	CLK	GCLK
sg13g2_lgcp_1	0.00236	0.00528	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	1095.49000	1124.36000	1180.02000

## Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (RR)	0.01860	0.00100	<b>0.04958</b>	0.32940	0.06480	<b>0.23115</b>	2.50740	0.30000	<b>0.83278</b>

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (FF)	0.01860	0.00100	<b>0.04251</b>	0.32940	0.06480	<b>0.21937</b>	2.50740	0.30000	<b>0.76974</b>



## Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.02392</b>	1.26300	1.26300	<b>-0.13762</b>	2.50740	2.50740	<b>-0.23345</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.03981</b>	1.26300	1.26300	<b>0.18619</b>	2.50740	2.50740	<b>0.35942</b>

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.01055</b>	1.26300	1.26300	<b>-0.02698</b>	2.50740	2.50740	<b>-0.03995</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.03258</b>	1.26300	1.26300	<b>0.05936</b>	2.50740	2.50740	<b>0.08489</b>

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_lgcp_1	3.3435	3.3435

## Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	<b>0.01471</b>	0.32940	0.06480	<b>0.01657</b>	2.50740	0.30000	<b>0.04994</b>

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	<b>0.00911</b>	0.32940	0.06480	<b>0.01279</b>	2.50740	0.30000	<b>0.04804</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	<b>0.02606</b>	0.32940	<b>0.03104</b>	2.50740	<b>0.06662</b>

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	<b>0.01452</b>	0.32940	<b>0.04536</b>	2.50740	<b>0.08100</b>

Passive power(pJ) for GATE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	<b>0.02606</b>	0.32940	<b>0.03104</b>	2.50740	<b>0.06662</b>

Passive power(pJ) for GATE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	<b>0.01452</b>	0.32940	<b>0.04536</b>	2.50740	<b>0.08100</b>

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	<b>0.00917</b>	0.32940	<b>0.01319</b>	2.50740	<b>0.05585</b>

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	<b>0.01124</b>	0.32940	<b>0.01555</b>	2.50740	<b>0.05881</b>

# IN<sub>x</sub>



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

## Footprint

Cell Name	Area
sg13g2_inv_16	34.47360
sg13g2_inv_8	18.14400
sg13g2_inv_4	10.88640
sg13g2_inv_2	7.25760
sg13g2_inv_1	5.44320

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04728	4.80000
sg13g2_inv_8	0.02304	2.40000
sg13g2_inv_4	0.01153	1.20000
sg13g2_inv_2	0.00576	0.60000
sg13g2_inv_1	0.00289	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	1502.34000	2685.07000	3867.81000
sg13g2_inv_8	751.17500	1342.54000	1933.90000
sg13g2_inv_4	375.58700	671.26900	966.95100
sg13g2_inv_2	187.79400	335.63500	483.47600
sg13g2_inv_1	93.89740	167.81700	241.73700

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A->Y (FR)	0.01860	0.00100	<b>0.01226</b>	0.32940	1.03680	<b>0.27411</b>	2.50740	4.80000	<b>1.53308</b>
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	<b>0.01213</b>	0.32940	0.51840	<b>0.27364</b>	2.50740	2.40000	<b>1.53373</b>
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	<b>0.01243</b>	0.32940	0.25920	<b>0.27337</b>	2.50740	1.20000	<b>1.53246</b>
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	<b>0.01337</b>	0.32940	0.12960	<b>0.27288</b>	2.50740	0.60000	<b>1.52864</b>
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	<b>0.01564</b>	0.32940	0.06480	<b>0.27333</b>	2.50740	0.30000	<b>1.52855</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A->Y (RF)	0.01860	0.00100	<b>0.01155</b>	0.32940	1.03680	<b>0.24668</b>	2.50740	4.80000	<b>1.38311</b>
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	<b>0.01143</b>	0.32940	0.51840	<b>0.24688</b>	2.50740	2.40000	<b>1.38461</b>
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	<b>0.01171</b>	0.32940	0.25920	<b>0.24663</b>	2.50740	1.20000	<b>1.38409</b>
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	<b>0.01251</b>	0.32940	0.12960	<b>0.24534</b>	2.50740	0.60000	<b>1.37843</b>
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	<b>0.01447</b>	0.32940	0.06480	<b>0.24556</b>	2.50740	0.30000	<b>1.37871</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A	0.01860	0.00100	<b>0.03478</b>	0.32940	1.03680	<b>0.06296</b>	2.50740	4.80000	<b>0.32460</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.01658</b>	0.32940	0.51840	<b>0.03043</b>	2.50740	2.40000	<b>0.16403</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00832</b>	0.32940	0.25920	<b>0.01522</b>	2.50740	1.20000	<b>0.07909</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00417</b>	0.32940	0.12960	<b>0.00761</b>	2.50740	0.60000	<b>0.03967</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00240</b>	0.32940	0.06480	<b>0.00405</b>	2.50740	0.30000	<b>0.02039</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A	0.01860	0.00100	<b>0.02887</b>	0.32940	1.03680	<b>0.05434</b>	2.50740	4.80000	<b>0.27427</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.01365</b>	0.32940	0.51840	<b>0.02650</b>	2.50740	2.40000	<b>0.13077</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00692</b>	0.32940	0.25920	<b>0.01314</b>	2.50740	1.20000	<b>0.06601</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00353</b>	0.32940	0.12960	<b>0.00675</b>	2.50740	0.60000	<b>0.03462</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00224</b>	0.32940	0.06480	<b>0.00372</b>	2.50740	0.30000	<b>0.01788</b>

# ITL



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	1
1	0	0
-	1	HiZ

## Footprint

Cell Name	Area
sg13g2_einvn_8	39.84120

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01523	0.01559	2.40000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2425.44000	3016.80000	3608.16000

## Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (FR)	0.01860	0.02036	<b>0.01868</b>	0.32940	0.53776	<b>0.39642</b>	2.50740	2.41936	<b>2.14806</b>
	TE_B->Z (RR)	0.01860	0.02036	<b>0.04783</b>	0.32940	0.53776	<b>0.12289</b>	2.50740	2.41936	<b>0.25600</b>
	TE_B->Z (FR)	0.01860	0.02036	<b>0.02448</b>	0.32940	0.53776	<b>0.36966</b>	2.50740	2.41936	<b>1.85557</b>

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (RF)	0.01860	0.02980	<b>0.01669</b>	0.32940	0.54720	<b>0.32184</b>	2.50740	2.42880	<b>1.77046</b>

## Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A	0.01860	0.02036	<b>0.03057</b>	0.32940	0.53776	<b>0.04169</b>	2.50740	2.41936	<b>0.13614</b>
	TE_B	0.01860	0.02036	<b>0.07015</b>	0.32940	0.53776	<b>0.04811</b>	2.50740	2.41936	<b>0.04329</b>

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A	0.01860	0.02980	<b>0.02785</b>	0.32940	0.54720	<b>0.03873</b>	2.50740	2.42880	<b>0.10986</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for TE\_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	<b>-0.01967</b>	0.32940	<b>-0.03180</b>	2.50740	<b>0.01150</b>

Passive power(pJ) for TE\_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	<b>0.01967</b>	0.32940	<b>0.04363</b>	2.50740	<b>0.08934</b>

# KEEPSTATE



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library:  
Process sg13g2\_stdcell\_typ\_1p50V\_25C,  
Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT	OUTPUT
SH	SH
x	-

## Footprint

Cell Name	Area
sg13g2_sighold	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	SH	SH
sg13g2_sighold	0.00000	-

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	76.35460	435.86100	795.36700

## Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

# MUX2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
A0	A1	S	X
0	0	x	0
0	1	0	0
x	1	1	1
1	x	0	1
1	0	1	0

## Footprint

Cell Name	Area
sg13g2_mux2_1	18.14400

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_1	0.00199	0.00199	0.00525	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	622.29900	726.31200	861.45500

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	<b>0.04825</b>	0.32940	0.06480	<b>0.24441</b>	2.50740	0.30000	<b>0.83582</b>
	A1->X (RR)	0.01860	0.00100	<b>0.03640</b>	0.32940	0.06480	<b>0.24696</b>	2.50740	0.30000	<b>0.84378</b>
	S->X (-R)	0.01860	0.00100	<b>0.07790</b>	0.32940	0.06480	<b>0.26489</b>	2.50740	0.30000	<b>0.83675</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	<b>0.04224</b>	0.32940	0.06480	<b>0.26119</b>	2.50740	0.30000	<b>0.89192</b>
	A1->X (FF)	0.01860	0.00100	<b>0.06406</b>	0.32940	0.06480	<b>0.26513</b>	2.50740	0.30000	<b>0.90115</b>
	S->X (-F)	0.01860	0.00100	<b>0.07264</b>	0.32940	0.06480	<b>0.25007</b>	2.50740	0.30000	<b>0.84212</b>

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	<b>0.05359</b>	0.32940	0.06480	<b>0.24276</b>	2.50740	0.30000	<b>0.83513</b>
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	<b>0.07790</b>	0.32940	0.06480	<b>0.26489</b>	2.50740	0.30000	<b>0.83675</b>

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	<b>0.07264</b>	0.32940	0.06480	<b>0.25007</b>	2.50740	0.30000	<b>0.84212</b>
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	<b>0.09304</b>	0.32940	0.06480	<b>0.26139</b>	2.50740	0.30000	<b>0.73955</b>



## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	<b>0.01538</b>	0.32940	0.06480	<b>0.01839</b>	2.50740	0.30000	<b>0.05361</b>
	A1	0.01860	0.00100	<b>0.01446</b>	0.32940	0.06480	<b>0.02272</b>	2.50740	0.30000	<b>0.05835</b>
	S	0.01860	0.00100	<b>0.01442</b>	0.32940	0.06480	<b>0.01715</b>	2.50740	0.30000	<b>0.05237</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	<b>0.01488</b>	0.32940	0.06480	<b>0.02381</b>	2.50740	0.30000	<b>0.05985</b>
	A1	0.01860	0.00100	<b>0.01555</b>	0.32940	0.06480	<b>0.01876</b>	2.50740	0.30000	<b>0.05506</b>
	S	0.01860	0.00100	<b>0.01455</b>	0.32940	0.06480	<b>0.01694</b>	2.50740	0.30000	<b>0.05305</b>

Internal switching power(pJ) to X rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	<b>0.01521</b>	0.32940	0.06480	<b>0.01525</b>	2.50740	0.30000	<b>0.01761</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01442</b>	0.32940	0.06480	<b>0.01715</b>	2.50740	0.30000	<b>0.05237</b>

Internal switching power(pJ) to X falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	<b>0.01444</b>	0.32940	0.06480	<b>0.01477</b>	2.50740	0.30000	<b>0.01690</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01455</b>	0.32940	0.06480	<b>0.01694</b>	2.50740	0.30000	<b>0.05305</b>

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	<b>0.00653</b>	0.32940	<b>0.00945</b>	2.50740	<b>0.04345</b>

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	<b>0.00589</b>	0.32940	<b>0.00926</b>	2.50740	<b>0.04300</b>

# MUX4



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT						OUTPUT
A0	A1	A2	A3	S0	S1	X
0	0	0	0	x	x	0
0	x	0	1	0	x	0
x	0	x	1	1	0	0
x	x	x	1	1	1	1
0	0	1	x	x	0	0
0	x	1	x	0	1	1
0	x	1	0	1	1	0
0	1	0	x	0	x	0
0	1	x	x	1	0	1
0	1	x	0	1	1	0
0	1	1	x	0	0	0
1	0	0	x	0	0	1
1	x	0	0	x	1	0
1	0	x	0	1	x	0
1	x	0	1	0	1	0
1	x	1	x	0	x	1
1	1	0	x	x	0	1
1	1	1	x	1	0	1
1	1	1	0	1	1	0

## Footprint

Cell Name	Area
sg13g2_mux4_1	38.10240

## Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)
	A0	A1	A2	A3	S0	S1	X
sg13g2_mux4_1	0.00280	0.00280	0.00280	0.00281	0.00804	0.00492	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	863.95600	1307.21000	1573.89000

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0->X (RR)	0.01860	0.00100	<b>0.08822</b>	0.32940	0.06480	<b>0.29951</b>	2.50740	0.30000	<b>0.96991</b>
	A1->X (RR)	0.01860	0.00100	<b>0.08627</b>	0.32940	0.06480	<b>0.29839</b>	2.50740	0.30000	<b>0.96780</b>
	A2->X (RR)	0.01860	0.00100	<b>0.09278</b>	0.32940	0.06480	<b>0.30543</b>	2.50740	0.30000	<b>0.98351</b>
	A3->X (RR)	0.01860	0.00100	<b>0.08934</b>	0.32940	0.06480	<b>0.30417</b>	2.50740	0.30000	<b>0.98168</b>
	S0->X (-R)	0.01860	0.00100	<b>0.07430</b>	0.32940	0.06480	<b>0.30039</b>	2.50740	0.30000	<b>0.97217</b>
	S1->X (-R)	0.01860	0.00100	<b>-0.00738</b>	0.32940	0.06480	<b>0.24189</b>	2.50740	0.30000	<b>0.84410</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0->X (FF)	0.01860	0.00100	<b>0.10461</b>	0.32940	0.06480	<b>0.30100</b>	2.50740	0.30000	<b>0.89222</b>
	A1->X (FF)	0.01860	0.00100	<b>0.10558</b>	0.32940	0.06480	<b>0.30100</b>	2.50740	0.30000	<b>0.89427</b>
	A2->X (FF)	0.01860	0.00100	<b>0.11156</b>	0.32940	0.06480	<b>0.31010</b>	2.50740	0.30000	<b>0.90994</b>
	A3->X (FF)	0.01860	0.00100	<b>0.11207</b>	0.32940	0.06480	<b>0.30961</b>	2.50740	0.30000	<b>0.90965</b>
	S0->X (-F)	0.01860	0.00100	<b>0.09301</b>	0.32940	0.06480	<b>0.30986</b>	2.50740	0.30000	<b>0.94234</b>
	S1->X (-F)	0.01860	0.00100	<b>0.02885</b>	0.32940	0.06480	<b>0.24467</b>	2.50740	0.30000	<b>0.84226</b>

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0->X (RR)	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.07430</b>	0.32940	0.06480	<b>0.30039</b>	2.50740	0.30000	<b>0.97217</b>
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.07057</b>	0.32940	0.06480	<b>0.29069</b>	2.50740	0.30000	<b>0.94972</b>
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.11195</b>	0.32940	0.06480	<b>0.31954</b>	2.50740	0.30000	<b>0.92970</b>
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.10898</b>	0.32940	0.06480	<b>0.31452</b>	2.50740	0.30000	<b>0.92203</b>
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	<b>-0.00919</b>	0.32940	0.06480	<b>0.24088</b>	2.50740	0.30000	<b>0.84377</b>
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	<b>-0.00738</b>	0.32940	0.06480	<b>0.24189</b>	2.50740	0.30000	<b>0.84410</b>
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	<b>-0.00915</b>	0.32940	0.06480	<b>0.25443</b>	2.50740	0.30000	<b>0.83369</b>
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	<b>-0.00747</b>	0.32940	0.06480	<b>0.25461</b>	2.50740	0.30000	<b>0.83386</b>

**Delay(ns) to X falling (conditional):**

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0->X (FF)	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.09301</b>	0.32940	0.06480	<b>0.30986</b>	2.50740	0.30000	<b>0.94234</b>
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.08481</b>	0.32940	0.06480	<b>0.29689</b>	2.50740	0.30000	<b>0.91735</b>
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.12292</b>	0.32940	0.06480	<b>0.31668</b>	2.50740	0.30000	<b>0.83935</b>
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.11662</b>	0.32940	0.06480	<b>0.30835</b>	2.50740	0.30000	<b>0.82879</b>
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.02885</b>	0.32940	0.06480	<b>0.24467</b>	2.50740	0.30000	<b>0.84226</b>
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	<b>-0.01017</b>	0.32940	0.06480	<b>0.24226</b>	2.50740	0.30000	<b>0.84146</b>
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	<b>-0.00294</b>	0.32940	0.06480	<b>0.24921</b>	2.50740	0.30000	<b>0.74723</b>
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	<b>-0.01016</b>	0.32940	0.06480	<b>0.24779</b>	2.50740	0.30000	<b>0.74703</b>



## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0	0.01860	0.00100	<b>0.01895</b>	0.32940	0.06480	<b>0.02012</b>	2.50740	0.30000	<b>0.05159</b>
	A1	0.01860	0.00100	<b>0.02362</b>	0.32940	0.06480	<b>0.02469</b>	2.50740	0.30000	<b>0.05588</b>
	A2	0.01860	0.00100	<b>0.02633</b>	0.32940	0.06480	<b>0.02736</b>	2.50740	0.30000	<b>0.06014</b>
	A3	0.01860	0.00100	<b>0.02402</b>	0.32940	0.06480	<b>0.02488</b>	2.50740	0.30000	<b>0.05628</b>
	S0	0.01860	0.00100	<b>0.01373</b>	0.32940	0.06480	<b>0.01650</b>	2.50740	0.30000	<b>0.04995</b>
	S1	0.01860	0.00100	<b>0.01653</b>	0.32940	0.06480	<b>0.05023</b>	2.50740	0.30000	<b>0.07217</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0	0.01860	0.00100	<b>0.02642</b>	0.32940	0.06480	<b>0.02719</b>	2.50740	0.30000	<b>0.05955</b>
	A1	0.01860	0.00100	<b>0.02496</b>	0.32940	0.06480	<b>0.02567</b>	2.50740	0.30000	<b>0.05822</b>
	A2	0.01860	0.00100	<b>0.02096</b>	0.32940	0.06480	<b>0.02144</b>	2.50740	0.30000	<b>0.05392</b>
	A3	0.01860	0.00100	<b>0.02094</b>	0.32940	0.06480	<b>0.02143</b>	2.50740	0.30000	<b>0.05415</b>
	S0	0.01860	0.00100	<b>0.02622</b>	0.32940	0.06480	<b>0.02762</b>	2.50740	0.30000	<b>-0.00105</b>
	S1	0.01860	0.00100	<b>0.01572</b>	0.32940	0.06480	<b>0.04692</b>	2.50740	0.30000	<b>0.07797</b>

Internal switching power(pJ) to X rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.02738</b>	0.32940	0.06480	<b>0.01766</b>	2.50740	0.30000	<b>0.00000</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.02730</b>	0.32940	0.06480	<b>0.01767</b>	2.50740	0.30000	<b>0.00000</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.01365</b>	0.32940	0.06480	<b>0.01664</b>	2.50740	0.30000	<b>0.04968</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.01373</b>	0.32940	0.06480	<b>0.01650</b>	2.50740	0.30000	<b>0.04995</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.01422</b>	0.32940	0.06480	<b>0.05547</b>	2.50740	0.30000	<b>0.07774</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.01653</b>	0.32940	0.06480	<b>0.05023</b>	2.50740	0.30000	<b>0.07217</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.01480</b>	0.32940	0.06480	<b>0.04551</b>	2.50740	0.30000	<b>0.07439</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.01690</b>	0.32940	0.06480	<b>0.04123</b>	2.50740	0.30000	<b>0.06908</b>

**Internal switching power(pJ) to X falling (conditional):**

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.02622</b>	0.32940	0.06480	<b>0.02762</b>	2.50740	0.30000	<b>0.00000</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.02575</b>	0.32940	0.06480	<b>0.02856</b>	2.50740	0.30000	<b>0.00000</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.01552</b>	0.32940	0.06480	<b>0.01231</b>	2.50740	0.30000	<b>0.04510</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.01543</b>	0.32940	0.06480	<b>0.01246</b>	2.50740	0.30000	<b>0.04537</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.02251</b>	0.32940	0.06480	<b>0.03996</b>	2.50740	0.30000	<b>0.06179</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.01765</b>	0.32940	0.06480	<b>0.05683</b>	2.50740	0.30000	<b>0.07999</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.01787</b>	0.32940	0.06480	<b>0.03177</b>	2.50740	0.30000	<b>0.06085</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.01572</b>	0.32940	0.06480	<b>0.04692</b>	2.50740	0.30000	<b>0.07797</b>

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	<b>0.01060</b>	0.32940	<b>0.01791</b>	2.50740	<b>0.09238</b>

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	<b>0.00916</b>	0.32940	<b>0.02256</b>	2.50740	<b>0.09644</b>

Passive power(pJ) for S0 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	<b>0.00979</b>	0.32940	<b>0.01695</b>	2.50740	<b>0.09138</b>
	(A0 * A1 * !S1)	0.01860	<b>0.01071</b>	0.32940	<b>0.01749</b>	2.50740	<b>0.09147</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.01060</b>	0.32940	<b>0.01791</b>	2.50740	<b>0.09238</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.01201</b>	0.32940	<b>0.01895</b>	2.50740	<b>0.09298</b>

Passive power(pJ) for S0 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	<b>0.00955</b>	0.32940	<b>0.02323</b>	2.50740	<b>0.09714</b>
	(A0 * A1 * !S1)	0.01860	<b>0.01043</b>	0.32940	<b>0.02587</b>	2.50740	<b>0.09937</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.00916</b>	0.32940	<b>0.02256</b>	2.50740	<b>0.09644</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.01000</b>	0.32940	<b>0.01758</b>	2.50740	<b>0.09093</b>

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	<b>0.00539</b>	0.32940	<b>0.00965</b>	2.50740	<b>0.05106</b>

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	<b>0.00620</b>	0.32940	<b>0.01092</b>	2.50740	<b>0.05200</b>

Passive power(pJ) for S1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	<b>0.00539</b>	0.32940	<b>0.00965</b>	2.50740	<b>0.05106</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00537</b>	0.32940	<b>0.00962</b>	2.50740	<b>0.05105</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00591</b>	0.32940	<b>0.01038</b>	2.50740	<b>0.05184</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00590</b>	0.32940	<b>0.01037</b>	2.50740	<b>0.05183</b>

Passive power(pJ) for S1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	<b>0.00622</b>	0.32940	<b>0.01095</b>	2.50740	<b>0.05202</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00620</b>	0.32940	<b>0.01092</b>	2.50740	<b>0.05200</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00610</b>	0.32940	<b>0.01066</b>	2.50740	<b>0.05164</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00609</b>	0.32940	<b>0.01066</b>	2.50740	<b>0.05164</b>

# NAND2B1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp  
25.00*

## Truth Table

INPUT		OUTPUT
A_N	B	Y
x	0	1
0	1	0
1	1	1

## Footprint

Cell Name	Area
sg13g2_nand2b_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_1	0.00234	0.00313	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	161.32500	357.09600	551.88100

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N->Y (RR)	0.01860	0.00100	<b>0.03581</b>	0.32940	0.06480	<b>0.22066</b>	2.50740	0.30000	<b>0.82539</b>
	B->Y (FR)	0.01860	0.00100	<b>0.01963</b>	0.32940	0.06480	<b>0.27785</b>	2.50740	0.30000	<b>1.53259</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N->Y (FF)	0.01860	0.00100	<b>0.04317</b>	0.32940	0.06480	<b>0.27734</b>	2.50740	0.30000	<b>1.05767</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02577</b>	0.32940	0.06480	<b>0.30053</b>	2.50740	0.30000	<b>1.58868</b>



## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N	0.01860	0.00100	<b>0.00329</b>	0.32940	0.06480	<b>0.00339</b>	2.50740	0.30000	<b>0.00338</b>
	B	0.01860	0.00100	<b>0.00296</b>	0.32940	0.06480	<b>0.00410</b>	2.50740	0.30000	<b>0.01934</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N	0.01860	0.00100	<b>0.00669</b>	0.32940	0.06480	<b>0.00688</b>	2.50740	0.30000	<b>0.00654</b>
	B	0.01860	0.00100	<b>0.00641</b>	0.32940	0.06480	<b>0.00695</b>	2.50740	0.30000	<b>0.01819</b>

Passive power(pJ) for A\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	0.01860	<b>0.00591</b>	0.32940	<b>0.00933</b>	2.50740	<b>0.04378</b>

Passive power(pJ) for A\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	0.01860	<b>0.00300</b>	0.32940	<b>0.00649</b>	2.50740	<b>0.04044</b>

Passive power(pJ) for A\_N rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	!B	0.01860	<b>0.00591</b>	0.32940	<b>0.00933</b>	2.50740	<b>0.04378</b>

Passive power(pJ) for A\_N falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	!B	0.01860	<b>0.00300</b>	0.32940	<b>0.00649</b>	2.50740	<b>0.04044</b>

# NAND2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	B	Y
0	x	1
1	0	1
1	1	0

## Footprint

Cell Name	Area
sg13g2_nand2_1	7.25760

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_1	0.00285	0.00297	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	92.91990	269.72600	483.47500

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	<b>0.01726</b>	0.32940	0.06480	<b>0.27444</b>	2.50740	0.30000	<b>1.52321</b>
	B->Y (FR)	0.01860	0.00100	<b>0.01988</b>	0.32940	0.06480	<b>0.27724</b>	2.50740	0.30000	<b>1.53006</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	<b>0.02085</b>	0.32940	0.06480	<b>0.31839</b>	2.50740	0.30000	<b>1.75453</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02362</b>	0.32940	0.06480	<b>0.29878</b>	2.50740	0.30000	<b>1.59275</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	<b>0.00264</b>	0.32940	0.06480	<b>0.00409</b>	2.50740	0.30000	<b>0.01737</b>
	B	0.01860	0.00100	<b>0.00278</b>	0.32940	0.06480	<b>0.00394</b>	2.50740	0.30000	<b>0.01854</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	<b>0.00332</b>	0.32940	0.06480	<b>0.00433</b>	2.50740	0.30000	<b>0.01640</b>
	B	0.01860	0.00100	<b>0.00609</b>	0.32940	0.06480	<b>0.00674</b>	2.50740	0.30000	<b>0.01903</b>

# NAND3B1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp  
25.00*

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## Truth Table

INPUT			OUTPUT
A_N	B	C	Y
x	0	x	1
x	1	0	1
0	1	1	0
1	1	1	1

## Footprint

Cell Name	Area
sg13g2_nand3b_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A_N	B	C	Y
sg13g2_nand3b_1	0.00225	0.00298	0.00301	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	164.47300	390.94500	793.61500

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N->Y (RR)	0.01860	0.00100	<b>0.03757</b>	0.32940	0.06480	<b>0.22048</b>	2.50740	0.30000	<b>0.82203</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02164</b>	0.32940	0.06480	<b>0.27965</b>	2.50740	0.30000	<b>1.52867</b>
	C->Y (FR)	0.01860	0.00100	<b>0.02345</b>	0.32940	0.06480	<b>0.28205</b>	2.50740	0.30000	<b>1.53248</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N->Y (FF)	0.01860	0.00100	<b>0.05134</b>	0.32940	0.06480	<b>0.35687</b>	2.50740	0.30000	<b>1.40171</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03762</b>	0.32940	0.06480	<b>0.38410</b>	2.50740	0.30000	<b>1.98125</b>
	C->Y (RF)	0.01860	0.00100	<b>0.04143</b>	0.32940	0.06480	<b>0.36721</b>	2.50740	0.30000	<b>1.79451</b>



## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N	0.01860	0.00100	<b>0.00376</b>	0.32940	0.06480	<b>0.00375</b>	2.50740	0.30000	<b>0.00472</b>
	B	0.01860	0.00100	<b>0.00345</b>	0.32940	0.06480	<b>0.00432</b>	2.50740	0.30000	<b>0.01695</b>
	C	0.01860	0.00100	<b>0.00388</b>	0.32940	0.06480	<b>0.00446</b>	2.50740	0.30000	<b>0.01778</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N	0.01860	0.00100	<b>0.01044</b>	0.32940	0.06480	<b>0.01053</b>	2.50740	0.30000	<b>0.00969</b>
	B	0.01860	0.00100	<b>0.00817</b>	0.32940	0.06480	<b>0.00859</b>	2.50740	0.30000	<b>0.01897</b>
	C	0.01860	0.00100	<b>0.01099</b>	0.32940	0.06480	<b>0.01130</b>	2.50740	0.30000	<b>0.02108</b>

Passive power(pJ) for A\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	0.01860	<b>0.00553</b>	0.32940	<b>0.00897</b>	2.50740	<b>0.04342</b>

Passive power(pJ) for A\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	0.01860	<b>0.00111</b>	0.32940	<b>0.00459</b>	2.50740	<b>0.03855</b>

Passive power(pJ) for A\_N rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	<b>0.00553</b>	0.32940	<b>0.00897</b>	2.50740	<b>0.04342</b>

Passive power(pJ) for A\_N falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	<b>0.00111</b>	0.32940	<b>0.00459</b>	2.50740	<b>0.03855</b>

# NOR2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
x	1	0
1	x	0

## Footprint

Cell Name	Area
sg13g2_nor2_1	7.25760

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_1	0.00300	0.00284	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	187.79400	254.43800	308.45400

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	<b>0.02967</b>	0.32940	0.06480	<b>0.37082</b>	2.50740	0.30000	<b>1.90063</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02526</b>	0.32940	0.06480	<b>0.39643</b>	2.50740	0.30000	<b>2.14358</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	<b>0.01830</b>	0.32940	0.06480	<b>0.25018</b>	2.50740	0.30000	<b>1.38159</b>
	B->Y (RF)	0.01860	0.00100	<b>0.01605</b>	0.32940	0.06480	<b>0.24674</b>	2.50740	0.30000	<b>1.37442</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	<b>0.00683</b>	0.32940	0.06480	<b>0.00740</b>	2.50740	0.30000	<b>0.02006</b>
	B	0.01860	0.00100	<b>0.00331</b>	0.32940	0.06480	<b>0.00449</b>	2.50740	0.30000	<b>0.01721</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	<b>0.00281</b>	0.32940	0.06480	<b>0.00382</b>	2.50740	0.30000	<b>0.01600</b>
	B	0.01860	0.00100	<b>0.00264</b>	0.32940	0.06480	<b>0.00383</b>	2.50740	0.30000	<b>0.01530</b>

# NOR3



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
A	B	C	Y
0	0	0	1
0	x	1	0
x	1	x	0
1	x	x	0

## Footprint

Cell Name	Area
sg13g2_nor3_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_1	0.00299	0.00292	0.00281	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	222.86100	315.30700	439.09300



## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	<b>0.05199</b>	0.32940	0.06480	<b>0.49554</b>	2.50740	0.30000	<b>2.32512</b>
	B->Y (FR)	0.01860	0.00100	<b>0.04847</b>	0.32940	0.06480	<b>0.51606</b>	2.50740	0.30000	<b>2.53517</b>
	C->Y (FR)	0.01860	0.00100	<b>0.03708</b>	0.32940	0.06480	<b>0.52546</b>	2.50740	0.30000	<b>2.69448</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	<b>0.02034</b>	0.32940	0.06480	<b>0.25500</b>	2.50740	0.30000	<b>1.38524</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02012</b>	0.32940	0.06480	<b>0.25242</b>	2.50740	0.30000	<b>1.38257</b>
	C->Y (RF)	0.01860	0.00100	<b>0.01782</b>	0.32940	0.06480	<b>0.24917</b>	2.50740	0.30000	<b>1.37624</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	<b>0.01152</b>	0.32940	0.06480	<b>0.01163</b>	2.50740	0.30000	<b>0.02280</b>
	B	0.01860	0.00100	<b>0.00846</b>	0.32940	0.06480	<b>0.00872</b>	2.50740	0.30000	<b>0.01837</b>
	C	0.01860	0.00100	<b>0.00496</b>	0.32940	0.06480	<b>0.00583</b>	2.50740	0.30000	<b>0.01663</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	<b>0.00367</b>	0.32940	0.06480	<b>0.00425</b>	2.50740	0.30000	<b>0.01483</b>
	B	0.01860	0.00100	<b>0.00338</b>	0.32940	0.06480	<b>0.00400</b>	2.50740	0.30000	<b>0.01378</b>
	C	0.01860	0.00100	<b>0.00291</b>	0.32940	0.06480	<b>0.00402</b>	2.50740	0.30000	<b>0.01323</b>

# NOR4



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT				OUTPUT
A	B	C	D	Y
0	0	0	0	1
0	0	x	1	0
0	x	1	x	0
x	1	x	x	0
1	x	x	x	0

## Footprint

Cell Name	Area
sg13g2_nor4_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_1	0.00297	0.00289	0.00248	0.00253	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	225.53700	385.88800	574.94700

## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	<b>0.07966</b>	0.32940	0.06480	<b>0.64088</b>	2.50740	0.30000	<b>2.82396</b>
	B->Y (FR)	0.01860	0.00100	<b>0.07638</b>	0.32940	0.06480	<b>0.65192</b>	2.50740	0.30000	<b>2.98141</b>
	C->Y (FR)	0.01860	0.00100	<b>0.06643</b>	0.32940	0.06480	<b>0.66066</b>	2.50740	0.30000	<b>3.14485</b>
	D->Y (FR)	0.01860	0.00100	<b>0.04709</b>	0.32940	0.06480	<b>0.65775</b>	2.50740	0.30000	<b>3.25257</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	<b>0.02109</b>	0.32940	0.06480	<b>0.25860</b>	2.50740	0.30000	<b>1.39039</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02175</b>	0.32940	0.06480	<b>0.25672</b>	2.50740	0.30000	<b>1.38790</b>
	C->Y (RF)	0.01860	0.00100	<b>0.02115</b>	0.32940	0.06480	<b>0.25389</b>	2.50740	0.30000	<b>1.38127</b>
	D->Y (RF)	0.01860	0.00100	<b>0.01867</b>	0.32940	0.06480	<b>0.24982</b>	2.50740	0.30000	<b>1.37481</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	<b>0.01475</b>	0.32940	0.06480	<b>0.01467</b>	2.50740	0.30000	<b>0.02459</b>
	B	0.01860	0.00100	<b>0.01240</b>	0.32940	0.06480	<b>0.01234</b>	2.50740	0.30000	<b>0.02137</b>
	C	0.01860	0.00100	<b>0.00979</b>	0.32940	0.06480	<b>0.00989</b>	2.50740	0.30000	<b>0.01826</b>
	D	0.01860	0.00100	<b>0.00647</b>	0.32940	0.06480	<b>0.00721</b>	2.50740	0.30000	<b>0.01681</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	<b>0.00513</b>	0.32940	0.06480	<b>0.00563</b>	2.50740	0.30000	<b>0.01524</b>
	B	0.01860	0.00100	<b>0.00449</b>	0.32940	0.06480	<b>0.00481</b>	2.50740	0.30000	<b>0.01370</b>
	C	0.01860	0.00100	<b>0.00302</b>	0.32940	0.06480	<b>0.00364</b>	2.50740	0.30000	<b>0.01195</b>
	D	0.01860	0.00100	<b>0.00193</b>	0.32940	0.06480	<b>0.00293</b>	2.50740	0.30000	<b>0.01087</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>-0.00049</b>	0.32940	<b>-0.00072</b>	2.50740	<b>-0.00070</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>0.00071</b>	0.32940	<b>0.00072</b>	2.50740	<b>0.00070</b>

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	<b>-0.00049</b>	0.32940	<b>-0.00072</b>	2.50740	<b>-0.00070</b>

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00071</b>	0.32940	<b>0.00072</b>	2.50740	<b>0.00070</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>-0.00005</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00008</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>0.00005</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00008</b>

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	<b>-0.00005</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00008</b>

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	<b>0.00005</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00008</b>

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>0.00076</b>	0.32940	<b>0.00078</b>	2.50740	<b>0.00078</b>

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00038	0.32940	-0.00038	2.50740	-0.00037

Passive power(pJ) for C rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00076	0.32940	0.00078	2.50740	0.00078

Passive power(pJ) for C falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00038	0.32940	-0.00038	2.50740	-0.00037

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00112	0.32940	0.00113	2.50740	0.00113

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00057	0.32940	-0.00058	2.50740	-0.00055

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00112	0.32940	0.00113	2.50740	0.00113



**Passive power(pJ) for D falling (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
<b>sg13g2_nor4_1</b>	<b>(A * !C) + (!A * B * !C)</b>	0.01860	<b>-0.00057</b>	0.32940	<b>-0.00058</b>	2.50740	<b>-0.00055</b>

# NP\_ANT



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT
A
x

## Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

## Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00108

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	6.74997	6.74997	6.74997

## Passive Power Information

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	<b>-0.00047</b>	0.32940	<b>-0.00047</b>	2.50740	<b>-0.00048</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	<b>0.00047</b>	0.32940	<b>0.00047</b>	2.50740	<b>0.00048</b>

# OR2



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
x	1	1
1	x	1

## Footprint

Cell Name	Area
sg13g2_or2_1	10.88640

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_1	0.00229	0.00224	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	255.62000	314.06200	378.54500

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	<b>0.03855</b>	0.32940	0.06480	<b>0.22988</b>	2.50740	0.30000	<b>0.82325</b>
	B->X (RR)	0.01860	0.00100	<b>0.03567</b>	0.32940	0.06480	<b>0.21814</b>	2.50740	0.30000	<b>0.77059</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	<b>0.06122</b>	0.32940	0.06480	<b>0.23094</b>	2.50740	0.30000	<b>0.79378</b>
	B->X (FF)	0.01860	0.00100	<b>0.05688</b>	0.32940	0.06480	<b>0.24244</b>	2.50740	0.30000	<b>0.84915</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	<b>0.00893</b>	0.32940	0.06480	<b>0.01155</b>	2.50740	0.30000	<b>0.04173</b>
	B	0.01860	0.00100	<b>0.00897</b>	0.32940	0.06480	<b>0.01152</b>	2.50740	0.30000	<b>0.04199</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	<b>0.01202</b>	0.32940	0.06480	<b>0.01401</b>	2.50740	0.30000	<b>0.04365</b>
	B	0.01860	0.00100	<b>0.00940</b>	0.32940	0.06480	<b>0.01216</b>	2.50740	0.30000	<b>0.04073</b>

# OR3



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
A	B	C	X
0	0	0	0
0	x	1	1
x	1	x	1
1	x	x	1

## Footprint

Cell Name	Area
sg13g2_or3_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_1	0.00253	0.00248	0.00240	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	266.46700	354.76500	474.06100

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	<b>0.04417</b>	0.32940	0.06480	<b>0.24856</b>	2.50740	0.30000	<b>0.88175</b>
	B->X (RR)	0.01860	0.00100	<b>0.04232</b>	0.32940	0.06480	<b>0.23948</b>	2.50740	0.30000	<b>0.82830</b>
	C->X (RR)	0.01860	0.00100	<b>0.03844</b>	0.32940	0.06480	<b>0.22661</b>	2.50740	0.30000	<b>0.78144</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	<b>0.08729</b>	0.32940	0.06480	<b>0.25607</b>	2.50740	0.30000	<b>0.80396</b>
	B->X (FF)	0.01860	0.00100	<b>0.08337</b>	0.32940	0.06480	<b>0.26610</b>	2.50740	0.30000	<b>0.87385</b>
	C->X (FF)	0.01860	0.00100	<b>0.07271</b>	0.32940	0.06480	<b>0.26946</b>	2.50740	0.30000	<b>0.90087</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	<b>0.00976</b>	0.32940	0.06480	<b>0.01197</b>	2.50740	0.30000	<b>0.04326</b>
	B	0.01860	0.00100	<b>0.00940</b>	0.32940	0.06480	<b>0.01176</b>	2.50740	0.30000	<b>0.04061</b>
	C	0.01860	0.00100	<b>0.00915</b>	0.32940	0.06480	<b>0.01162</b>	2.50740	0.30000	<b>0.04156</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	<b>0.01715</b>	0.32940	0.06480	<b>0.01810</b>	2.50740	0.30000	<b>0.04809</b>
	B	0.01860	0.00100	<b>0.01443</b>	0.32940	0.06480	<b>0.01563</b>	2.50740	0.30000	<b>0.04482</b>
	C	0.01860	0.00100	<b>0.01138</b>	0.32940	0.06480	<b>0.01384</b>	2.50740	0.30000	<b>0.04322</b>

# OR4



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT				OUTPUT
A	B	C	D	X
0	0	0	0	0
0	0	x	1	1
0	x	1	x	1
x	1	x	x	1
1	x	x	x	1

## Footprint

Cell Name	Area
sg13g2_or4_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_1	0.00255	0.00251	0.00206	0.00214	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	269.20100	388.87100	551.50200

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	<b>0.04593</b>	0.32940	0.06480	<b>0.25747</b>	2.50740	0.30000	<b>0.89027</b>
	B->X (RR)	0.01860	0.00100	<b>0.04559</b>	0.32940	0.06480	<b>0.25015</b>	2.50740	0.30000	<b>0.84532</b>
	C->X (RR)	0.01860	0.00100	<b>0.04332</b>	0.32940	0.06480	<b>0.24087</b>	2.50740	0.30000	<b>0.79926</b>
	D->X (RR)	0.01860	0.00100	<b>0.03920</b>	0.32940	0.06480	<b>0.22786</b>	2.50740	0.30000	<b>0.75612</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	<b>0.12096</b>	0.32940	0.06480	<b>0.29584</b>	2.50740	0.30000	<b>0.85666</b>
	B->X (FF)	0.01860	0.00100	<b>0.11718</b>	0.32940	0.06480	<b>0.30199</b>	2.50740	0.30000	<b>0.92635</b>
	C->X (FF)	0.01860	0.00100	<b>0.10722</b>	0.32940	0.06480	<b>0.30508</b>	2.50740	0.30000	<b>0.97018</b>
	D->X (FF)	0.01860	0.00100	<b>0.08947</b>	0.32940	0.06480	<b>0.30207</b>	2.50740	0.30000	<b>0.98511</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	<b>0.01153</b>	0.32940	0.06480	<b>0.01320</b>	2.50740	0.30000	<b>0.04291</b>
	B	0.01860	0.00100	<b>0.01070</b>	0.32940	0.06480	<b>0.01248</b>	2.50740	0.30000	<b>0.03963</b>
	C	0.01860	0.00100	<b>0.00904</b>	0.32940	0.06480	<b>0.01090</b>	2.50740	0.30000	<b>0.03687</b>
	D	0.01860	0.00100	<b>0.00834</b>	0.32940	0.06480	<b>0.01049</b>	2.50740	0.30000	<b>0.03752</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	<b>0.01739</b>	0.32940	0.06480	<b>0.01702</b>	2.50740	0.30000	<b>0.04617</b>
	B	0.01860	0.00100	<b>0.01760</b>	0.32940	0.06480	<b>0.01737</b>	2.50740	0.30000	<b>0.04520</b>
	C	0.01860	0.00100	<b>0.01567</b>	0.32940	0.06480	<b>0.01601</b>	2.50740	0.30000	<b>0.04212</b>
	D	0.01860	0.00100	<b>0.01174</b>	0.32940	0.06480	<b>0.01319</b>	2.50740	0.30000	<b>0.03937</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	<b>-0.00098</b>	0.32940	<b>-0.00099</b>	2.50740	<b>-0.00100</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	<b>0.00340</b>	0.32940	<b>0.00346</b>	2.50740	<b>0.00343</b>

Passive power(pJ) for A rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	<b>-0.00098</b>	0.32940	<b>-0.00099</b>	2.50740	<b>-0.00100</b>

Passive power(pJ) for A falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00340</b>	0.32940	<b>0.00346</b>	2.50740	<b>0.00343</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	<b>-0.00049</b>	0.32940	<b>-0.00053</b>	2.50740	<b>-0.00053</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	<b>0.00049</b>	0.32940	<b>0.00053</b>	2.50740	<b>0.00053</b>

Passive power(pJ) for B rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	<b>-0.00049</b>	0.32940	<b>-0.00053</b>	2.50740	<b>-0.00053</b>

Passive power(pJ) for B falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	<b>0.00049</b>	0.32940	<b>0.00053</b>	2.50740	<b>0.00053</b>

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	<b>0.00059</b>	0.32940	<b>0.00061</b>	2.50740	<b>0.00062</b>



Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00027

Passive power(pJ) for C rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !D) + (!A * B * !D)	0.01860	0.00059	0.32940	0.00061	2.50740	0.00062

Passive power(pJ) for C falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !D) + (!A * B * !D)	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00027

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00089	0.32940	0.00091	2.50740	0.00091

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00058	0.32940	0.00059	2.50740	0.00063

Passive power(pJ) for D rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !C) + (!A * B * !C)	0.01860	0.00089	0.32940	0.00091	2.50740	0.00091

**Passive power(pJ) for D falling (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
<b>sg13g2_or4_1</b>	<b>(A * !C) + (!A * B * !C)</b>	0.01860	<b>0.00058</b>	0.32940	<b>0.00059</b>	2.50740	<b>0.00063</b>

# SDFRRS



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT						OUTPUT	
D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
0	0	x	1	1	R	0	1
0	1	0	1	1	R	0	1
x	1	1	1	1	R	1	0
1	x	0	1	1	R	1	0
1	0	1	1	1	R	0	1
x	x	x	0	0	x	0	0
x	x	x	0	1	x	0	1
x	x	x	1	0	x	1	0
x	x	x	1	1	x	IQ	IQN

## Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

## Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00175	0.00196	0.00339	0.00166	0.00508	0.00308	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1921.44000	2292.71000	2444.94000

## Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	<b>0.18716</b>	0.32940	0.06480	<b>0.37289</b>	2.50740	0.30000	<b>0.94110</b>
	SET_B->Q (FR)	0.01860	0.00100	<b>0.08060</b>	0.32940	0.06480	<b>0.28924</b>	2.50740	0.30000	<b>0.92171</b>

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RF)	0.01860	0.00100	<b>0.15616</b>	0.32940	0.06480	<b>0.32238</b>	2.50740	0.30000	<b>0.81678</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.13159</b>	0.32940	0.06480	<b>0.31517</b>	2.50740	0.30000	<b>0.85867</b>

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	<b>0.18716</b>	0.32940	0.06480	<b>0.37289</b>	2.50740	0.30000	<b>0.94110</b>

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	<b>0.15616</b>	0.32940	0.06480	<b>0.32238</b>	2.50740	0.30000	<b>0.81678</b>

Delay(ns) to Q\_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RR)	0.01860	0.00100	<b>0.12866</b>	0.32940	0.06480	<b>0.33013</b>	2.50740	0.30000	<b>0.91785</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.10340</b>	0.32940	0.06480	<b>0.32771</b>	2.50740	0.30000	<b>0.96811</b>

Delay(ns) to Q\_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RF)	0.01860	0.00100	<b>0.15531</b>	0.32940	0.06480	<b>0.34594</b>	2.50740	0.30000	<b>0.82745</b>
	SET_B->Q_N (FF)	0.01860	0.00100	<b>0.05405</b>	0.32940	0.06480	<b>0.25968</b>	2.50740	0.30000	<b>0.81700</b>

**Delay(ns) to Q\_N rising (conditional):**

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	<b>0.12866</b>	0.32940	0.06480	<b>0.33013</b>	2.50740	0.30000	<b>0.91785</b>

**Delay(ns) to Q\_N falling (conditional):**

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	<b>0.15531</b>	0.32940	0.06480	<b>0.34594</b>	2.50740	0.30000	<b>0.82745</b>

## Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.05624</b>	1.26300	1.26300	<b>-0.18349</b>	2.50740	2.50740	<b>-0.25088</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.08314</b>	1.26300	1.26300	<b>0.19968</b>	2.50740	2.50740	<b>0.27154</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.06602</b>	1.26300	1.26300	<b>-0.16190</b>	2.50740	2.50740	<b>-0.22432</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11003</b>	1.26300	1.26300	<b>0.23206</b>	2.50740	2.50740	<b>0.33648</b>

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.07336</b>	1.26300	1.26300	<b>-0.21317</b>	2.50740	2.50740	<b>-0.29811</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.10025</b>	1.26300	1.26300	<b>0.22936</b>	2.50740	2.50740	<b>0.31582</b>

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.08803</b>	1.26300	1.26300	<b>-0.16190</b>	2.50740	2.50740	<b>-0.21841</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.13448</b>	1.26300	1.26300	<b>0.22936</b>	2.50740	2.50740	<b>0.32762</b>

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.05868</b>	1.26300	1.26300	<b>-0.20508</b>	2.50740	2.50740	<b>-0.29220</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.08803</b>	1.26300	1.26300	<b>0.23476</b>	2.50740	2.50740	<b>0.33057</b>

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.06602</b>	1.26300	1.26300	<b>-0.11063</b>	2.50740	2.50740	<b>-0.14167</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11248</b>	1.26300	1.26300	<b>0.18349</b>	2.50740	2.50740	<b>0.25973</b>

**Constraints(ns) for RESET\_B rising :**

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	<b>0.05379</b>	1.26300	1.26300	<b>0.09444</b>	2.50740	2.50740	<b>0.12101</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.02934</b>	1.26300	1.26300	<b>-0.07016</b>	2.50740	2.50740	<b>-0.08559</b>

**Min Pulse Width (ns) for RESET\_B:**

Cell Name	High	Low
sg13g2_sdfbbp_1	-	3.3435

**Constraints(ns) for SET\_B rising :**

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	<b>0.02201</b>	1.26300	1.26300	<b>0.23476</b>	2.50740	2.50740	<b>0.56374</b>
	removal	CLK (R)	0.01860	0.01860	<b>0.01956</b>	1.26300	1.26300	<b>0.04857</b>	2.50740	2.50740	<b>0.04132</b>
	hold	RESET_B (R)	0.01860	0.01860	<b>-0.04890</b>	1.26300	1.26300	<b>-0.14571</b>	2.50740	2.50740	<b>-0.20956</b>
	setup	RESET_B (R)	0.01860	0.01860	<b>0.06113</b>	1.26300	1.26300	<b>0.18079</b>	2.50740	2.50740	<b>0.28040</b>

**Min Pulse Width (ns) for SET\_B:**

Cell Name	High	Low
sg13g2_sdfbbp_1	-	3.3435

**Min Pulse Width (ns) for CLK:**

Cell Name	High	Low
sg13g2_sdfbbp_1	3.3435	3.3435



## Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	<b>0.02445</b>	0.32940	0.06480	<b>0.02701</b>	2.50740	0.30000	<b>0.05362</b>
	SET_B	0.01860	0.00100	<b>0.04642</b>	0.32940	0.06480	<b>0.12440</b>	2.50740	0.30000	<b>0.45275</b>

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	<b>0.02425</b>	0.32940	0.06480	<b>0.02680</b>	2.50740	0.30000	<b>0.05427</b>
	RESET_B	0.01860	0.00100	<b>0.05342</b>	0.32940	0.06480	<b>0.12735</b>	2.50740	0.30000	<b>0.42233</b>

Internal switching power(pJ) to Q rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	<b>0.02445</b>	0.32940	0.06480	<b>0.02701</b>	2.50740	0.30000	<b>0.05362</b>

Internal switching power(pJ) to Q falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	<b>0.02425</b>	0.32940	0.06480	<b>0.02680</b>	2.50740	0.30000	<b>0.05427</b>

Internal switching power(pJ) to Q\_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	<b>0.02425</b>	0.32940	0.06480	<b>0.02695</b>	2.50740	0.30000	<b>0.05415</b>
	RESET_B	0.01860	0.00100	<b>0.05342</b>	0.32940	0.06480	<b>0.12788</b>	2.50740	0.30000	<b>0.42687</b>

Internal switching power(pJ) to Q\_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	<b>0.02444</b>	0.32940	0.06480	<b>0.02677</b>	2.50740	0.30000	<b>0.05414</b>
	SET_B	0.01860	0.00100	<b>0.04637</b>	0.32940	0.06480	<b>0.12381</b>	2.50740	0.30000	<b>0.45658</b>

Internal switching power(pJ) to Q\_N rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	<b>0.02425</b>	0.32940	0.06480	<b>0.02695</b>	2.50740	0.30000	<b>0.05415</b>

**Internal switching power(pJ) to Q\_N falling (conditional):**

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	<b>0.02444</b>	0.32940	0.06480	<b>0.02677</b>	2.50740	0.30000	<b>0.05414</b>

**Passive power(pJ) for D rising :**

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.00651</b>	0.32940	<b>0.00769</b>	2.50740	<b>0.02661</b>

**Passive power(pJ) for D falling :**

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.00661</b>	0.32940	<b>0.00795</b>	2.50740	<b>0.02673</b>

**Passive power(pJ) for D rising (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	<b>0.01598</b>	0.32940	<b>0.01745</b>	2.50740	<b>0.03866</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>0.00651</b>	0.32940	<b>0.00769</b>	2.50740	<b>0.02661</b>

**Passive power(pJ) for D falling (conditional):**

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	<b>0.01738</b>	0.32940	<b>0.01888</b>	2.50740	<b>0.04029</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>0.00661</b>	0.32940	<b>0.00795</b>	2.50740	<b>0.02673</b>

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.00907</b>	0.32940	<b>0.00981</b>	2.50740	<b>0.02806</b>

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.00884</b>	0.32940	<b>0.00977</b>	2.50740	<b>0.02834</b>

Passive power(pJ) for SCD rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	<b>0.01856</b>	0.32940	<b>0.01948</b>	2.50740	<b>0.03982</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>0.00907</b>	0.32940	<b>0.00981</b>	2.50740	<b>0.02806</b>

Passive power(pJ) for SCD falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	<b>0.02436</b>	0.32940	<b>0.02488</b>	2.50740	<b>0.04591</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>0.00884</b>	0.32940	<b>0.00977</b>	2.50740	<b>0.02834</b>

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.02028</b>	0.32940	<b>0.02285</b>	2.50740	<b>0.04917</b>

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.02146</b>	0.32940	<b>0.02417</b>	2.50740	<b>0.04978</b>

Passive power(pJ) for SCE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	<b>0.02028</b>	0.32940	<b>0.02285</b>	2.50740	<b>0.04917</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.02427</b>	0.32940	<b>0.02572</b>	2.50740	<b>0.05187</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.01845</b>	0.32940	<b>0.02283</b>	2.50740	<b>0.07053</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>0.00889</b>	0.32940	<b>0.01288</b>	2.50740	<b>0.05827</b>

Passive power(pJ) for SCE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	<b>0.02146</b>	0.32940	<b>0.02417</b>	2.50740	<b>0.04978</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.02331</b>	0.32940	<b>0.03586</b>	2.50740	<b>0.06149</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.00512</b>	0.32940	<b>0.04203</b>	2.50740	<b>0.08852</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>0.00814</b>	0.32940	<b>0.01191</b>	2.50740	<b>0.05625</b>

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.01573</b>	0.32940	<b>0.02023</b>	2.50740	<b>0.07071</b>

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	<b>0.01748</b>	0.32940	<b>0.02269</b>	2.50740	<b>0.07370</b>

Passive power(pJ) for CLK rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01566</b>	0.32940	<b>0.02006</b>	2.50740	<b>0.07044</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.02094</b>	0.32940	<b>0.02543</b>	2.50740	<b>0.07563</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01573</b>	0.32940	<b>0.02023</b>	2.50740	<b>0.07071</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01564</b>	0.32940	<b>0.02005</b>	2.50740	<b>0.07043</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>0.01498</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.06992</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01572</b>	0.32940	<b>0.02023</b>	2.50740	<b>0.07071</b>

Passive power(pJ) for CLK falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01434</b>	0.32940	<b>0.01915</b>	2.50740	<b>0.06912</b>
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.02683</b>	0.32940	<b>0.03180</b>	2.50740	<b>0.08340</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.01748</b>	0.32940	<b>0.02269</b>	2.50740	<b>0.07370</b>
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	<b>0.02986</b>	0.32940	<b>0.03500</b>	2.50740	<b>0.08600</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01468</b>	0.32940	<b>0.01960</b>	2.50740	<b>0.06950</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01434</b>	0.32940	<b>0.01915</b>	2.50740	<b>0.06912</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>0.01272</b>	0.32940	<b>0.01764</b>	2.50740	<b>0.06755</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01463</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.06945</b>

# SGCLK



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT			OUTPUT
GATE	SCE	CLK	GCLK
x	x	0	0
x	x	1	GCLK

## Footprint

Cell Name	Area
sg13g2_slgcp_1	30.84480

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	GATE	SCE	CLK	GCLK
sg13g2_slgcp_1	0.00184	0.00230	0.00506	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	1087.23000	1198.51000	1290.30000



## Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (RR)	0.01860	0.00100	<b>0.04933</b>	0.32940	0.06480	<b>0.23106</b>	2.50740	0.30000	<b>0.83221</b>

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (FF)	0.01860	0.00100	<b>0.04258</b>	0.32940	0.06480	<b>0.21950</b>	2.50740	0.30000	<b>0.77068</b>

## Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.02499</b>	1.26300	1.26300	<b>-0.12682</b>	2.50740	2.50740	<b>-0.16679</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.04268</b>	1.26300	1.26300	<b>0.19158</b>	2.50740	2.50740	<b>0.30813</b>

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.04229</b>	1.26300	1.26300	<b>-0.17809</b>	2.50740	2.50740	<b>-0.28220</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.06749</b>	1.26300	1.26300	<b>0.24015</b>	2.50740	2.50740	<b>0.36835</b>

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.02887</b>	1.26300	1.26300	<b>-0.15381</b>	2.50740	2.50740	<b>-0.22739</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.00200</b>	1.26300	1.26300	<b>0.00200</b>	2.50740	2.50740	<b>0.00200</b>

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.04419</b>	1.26300	1.26300	<b>-0.13762</b>	2.50740	2.50740	<b>-0.21250</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07476</b>	1.26300	1.26300	<b>0.18889</b>	2.50740	2.50740	<b>0.33060</b>

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_slgcp_1	3.3435	3.3435

## Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	<b>0.01470</b>	0.32940	0.06480	<b>0.01659</b>	2.50740	0.30000	<b>0.05078</b>

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	<b>0.00938</b>	0.32940	0.06480	<b>0.01305</b>	2.50740	0.30000	<b>0.04798</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.02634</b>	0.32940	<b>0.03068</b>	2.50740	<b>0.06313</b>

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.01643</b>	0.32940	<b>0.04793</b>	2.50740	<b>0.08071</b>

Passive power(pJ) for GATE rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	<b>0.02634</b>	0.32940	<b>0.03068</b>	2.50740	<b>0.06313</b>

Passive power(pJ) for GATE falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	<b>0.01643</b>	0.32940	<b>0.04793</b>	2.50740	<b>0.08071</b>

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.01426</b>	0.32940	<b>0.01696</b>	2.50740	<b>0.05038</b>

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.01794</b>	0.32940	<b>0.04634</b>	2.50740	<b>0.07868</b>

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.00941</b>	0.32940	<b>0.01344</b>	2.50740	<b>0.05623</b>

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	<b>0.01021</b>	0.32940	<b>0.01460</b>	2.50740	<b>0.05787</b>

# TIE0



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Footprint

Cell Name	Area
sg13g2_tielo	7.25760

## Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_LO
sg13g2_tielo	-

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tielo	266.16600	266.16600	266.16600

# TIE1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Footprint

Cell Name	Area
sg13g2_tiehi	7.25760

## Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_HI
sg13g2_tiehi	-

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tiehi	238.37800	238.37800	238.37800

# XNOR2\_1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp  
25.00*

## Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

## Footprint

Cell Name	Area
sg13g2_xnor2_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_xnor2_1	0.00563	0.00479	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	276.70500	577.45300	766.90400



## Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A->Y (RR)	0.01860	0.00100	<b>0.04836</b>	0.32940	0.06480	<b>0.23155</b>	2.50740	0.30000	<b>0.83258</b>
	A->Y (FR)	0.01860	0.00100	<b>0.03815</b>	0.32940	0.06480	<b>0.38079</b>	2.50740	0.30000	<b>1.90654</b>
	B->Y (RR)	0.01860	0.00100	<b>0.04467</b>	0.32940	0.06480	<b>0.23436</b>	2.50740	0.30000	<b>0.85793</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03358</b>	0.32940	0.06480	<b>0.40550</b>	2.50740	0.30000	<b>2.14996</b>

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A->Y (FF)	0.01860	0.00100	<b>0.04917</b>	0.32940	0.06480	<b>0.29446</b>	2.50740	0.30000	<b>1.09991</b>
	A->Y (RF)	0.01860	0.00100	<b>0.03240</b>	0.32940	0.06480	<b>0.31009</b>	2.50740	0.30000	<b>1.60107</b>
	B->Y (FF)	0.01860	0.00100	<b>0.04920</b>	0.32940	0.06480	<b>0.28531</b>	2.50740	0.30000	<b>1.07099</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02707</b>	0.32940	0.06480	<b>0.30362</b>	2.50740	0.30000	<b>1.59158</b>

## Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A	0.01860	0.00100	<b>0.01187</b>	0.32940	0.06480	<b>0.01429</b>	2.50740	0.30000	<b>0.04782</b>
	B	0.01860	0.00100	<b>0.01164</b>	0.32940	0.06480	<b>0.01445</b>	2.50740	0.30000	<b>0.04866</b>

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A	0.01860	0.00100	<b>0.01081</b>	0.32940	0.06480	<b>0.01412</b>	2.50740	0.30000	<b>0.04831</b>
	B	0.01860	0.00100	<b>0.01175</b>	0.32940	0.06480	<b>0.01340</b>	2.50740	0.30000	<b>0.04751</b>

# XOR2\_1



*sg13g2\_stdcell\_typ\_1p50V\_25C Cell Library: Process  
sg13g2\_stdcell\_typ\_1p50V\_25C, Voltage 1.50, Temp 25.00*

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## Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
0	1	1
1	0	1
1	1	0

## Footprint

Cell Name	Area
sg13g2_xor2_1	16.32960

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00579	0.00491	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	427.71900	522.97100	652.81300

## Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A->X (RR)	0.01860	0.00100	<b>0.04950</b>	0.32940	0.06480	<b>0.36928</b>	2.50740	0.30000	<b>1.44426</b>
	A->X (FR)	0.01860	0.00100	<b>0.04213</b>	0.32940	0.06480	<b>0.38491</b>	2.50740	0.30000	<b>1.91596</b>
	B->X (RR)	0.01860	0.00100	<b>0.05182</b>	0.32940	0.06480	<b>0.35850</b>	2.50740	0.30000	<b>1.39248</b>
	B->X (FR)	0.01860	0.00100	<b>0.03562</b>	0.32940	0.06480	<b>0.37860</b>	2.50740	0.30000	<b>1.90245</b>

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A->X (FF)	0.01860	0.00100	<b>0.05869</b>	0.32940	0.06480	<b>0.22220</b>	2.50740	0.30000	<b>0.75120</b>
	A->X (RF)	0.01860	0.00100	<b>0.03064</b>	0.32940	0.06480	<b>0.30800</b>	2.50740	0.30000	<b>1.59664</b>
	B->X (FF)	0.01860	0.00100	<b>0.05379</b>	0.32940	0.06480	<b>0.23055</b>	2.50740	0.30000	<b>0.79807</b>
	B->X (RF)	0.01860	0.00100	<b>0.02689</b>	0.32940	0.06480	<b>0.32613</b>	2.50740	0.30000	<b>1.75946</b>

## Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A	0.01860	0.00100	<b>0.01025</b>	0.32940	0.06480	<b>0.01307</b>	2.50740	0.30000	<b>0.04644</b>
	B	0.01860	0.00100	<b>0.01100</b>	0.32940	0.06480	<b>0.01235</b>	2.50740	0.30000	<b>0.04475</b>

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A	0.01860	0.00100	<b>0.01361</b>	0.32940	0.06480	<b>0.01592</b>	2.50740	0.30000	<b>0.04873</b>
	B	0.01860	0.00100	<b>0.01246</b>	0.32940	0.06480	<b>0.01541</b>	2.50740	0.30000	<b>0.04814</b>