

## sg13g2\_stdcell\_slow\_1p08V\_125C 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\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00222	0.00213	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	514.63100	635.39100	854.90800

## 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>0.09876</b>	0.32940	0.06480	<b>0.50121</b>	2.50740	0.30000	<b>1.82493</b>
	B->X (RR)	0.01860	0.00100	<b>0.10619</b>	0.32940	0.06480	<b>0.50992</b>	2.50740	0.30000	<b>1.85910</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>0.08139</b>	0.32940	0.06480	<b>0.44905</b>	2.50740	0.30000	<b>1.59868</b>
	B->X (FF)	0.01860	0.00100	<b>0.08888</b>	0.32940	0.06480	<b>0.46526</b>	2.50740	0.30000	<b>1.65062</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>0.00509</b>	0.32940	0.06480	<b>0.00499</b>	2.50740	0.30000	<b>0.00695</b>
	B	0.01860	0.00100	<b>0.00609</b>	0.32940	0.06480	<b>0.00592</b>	2.50740	0.30000	<b>0.00753</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>0.00447</b>	0.32940	0.06480	<b>0.00439</b>	2.50740	0.30000	<b>0.00647</b>
	B	0.01860	0.00100	<b>0.00466</b>	0.32940	0.06480	<b>0.00456</b>	2.50740	0.30000	<b>0.00650</b>

# AND3



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00222	0.00209	0.00211	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	508.20100	629.01000	1214.64000



## 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>0.13839</b>	0.32940	0.06480	<b>0.55181</b>	2.50740	0.30000	<b>1.92536</b>
	B->X (RR)	0.01860	0.00100	<b>0.15255</b>	0.32940	0.06480	<b>0.56730</b>	2.50740	0.30000	<b>1.96648</b>
	C->X (RR)	0.01860	0.00100	<b>0.15889</b>	0.32940	0.06480	<b>0.56930</b>	2.50740	0.30000	<b>1.94940</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>0.08763</b>	0.32940	0.06480	<b>0.46160</b>	2.50740	0.30000	<b>1.63136</b>
	B->X (FF)	0.01860	0.00100	<b>0.09550</b>	0.32940	0.06480	<b>0.47755</b>	2.50740	0.30000	<b>1.67789</b>
	C->X (FF)	0.01860	0.00100	<b>0.10066</b>	0.32940	0.06480	<b>0.48954</b>	2.50740	0.30000	<b>1.71834</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>0.00586</b>	0.32940	0.06480	<b>0.00570</b>	2.50740	0.30000	<b>0.00769</b>
	B	0.01860	0.00100	<b>0.00683</b>	0.32940	0.06480	<b>0.00668</b>	2.50740	0.30000	<b>0.00808</b>
	C	0.01860	0.00100	<b>0.00779</b>	0.32940	0.06480	<b>0.00765</b>	2.50740	0.30000	<b>0.00852</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>0.00448</b>	0.32940	0.06480	<b>0.00434</b>	2.50740	0.30000	<b>0.00594</b>
	B	0.01860	0.00100	<b>0.00473</b>	0.32940	0.06480	<b>0.00461</b>	2.50740	0.30000	<b>0.00603</b>
	C	0.01860	0.00100	<b>0.00488</b>	0.32940	0.06480	<b>0.00481</b>	2.50740	0.30000	<b>0.00613</b>

# AND4



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00192	0.00185	0.00210	0.00211	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	508.39400	599.23900	1574.52000

## 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>0.18057</b>	0.32940	0.06480	<b>0.60393</b>	2.50740	0.30000	<b>2.02105</b>
	B->X (RR)	0.01860	0.00100	<b>0.20066</b>	0.32940	0.06480	<b>0.62471</b>	2.50740	0.30000	<b>2.05635</b>
	C->X (RR)	0.01860	0.00100	<b>0.21221</b>	0.32940	0.06480	<b>0.63245</b>	2.50740	0.30000	<b>2.04782</b>
	D->X (RR)	0.01860	0.00100	<b>0.21843</b>	0.32940	0.06480	<b>0.63930</b>	2.50740	0.30000	<b>2.03730</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>0.09339</b>	0.32940	0.06480	<b>0.47050</b>	2.50740	0.30000	<b>1.64970</b>
	B->X (FF)	0.01860	0.00100	<b>0.10101</b>	0.32940	0.06480	<b>0.48533</b>	2.50740	0.30000	<b>1.69257</b>
	C->X (FF)	0.01860	0.00100	<b>0.10646</b>	0.32940	0.06480	<b>0.49625</b>	2.50740	0.30000	<b>1.73068</b>
	D->X (FF)	0.01860	0.00100	<b>0.11054</b>	0.32940	0.06480	<b>0.50611</b>	2.50740	0.30000	<b>1.76709</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>0.00670</b>	0.32940	0.06480	<b>0.00651</b>	2.50740	0.30000	<b>0.00829</b>
	B	0.01860	0.00100	<b>0.00800</b>	0.32940	0.06480	<b>0.00783</b>	2.50740	0.30000	<b>0.00872</b>
	C	0.01860	0.00100	<b>0.00847</b>	0.32940	0.06480	<b>0.00828</b>	2.50740	0.30000	<b>0.00879</b>
	D	0.01860	0.00100	<b>0.00862</b>	0.32940	0.06480	<b>0.00853</b>	2.50740	0.30000	<b>0.00899</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>0.00414</b>	0.32940	0.06480	<b>0.00394</b>	2.50740	0.30000	<b>0.00538</b>
	B	0.01860	0.00100	<b>0.00439</b>	0.32940	0.06480	<b>0.00426</b>	2.50740	0.30000	<b>0.00546</b>
	C	0.01860	0.00100	<b>0.00502</b>	0.32940	0.06480	<b>0.00493</b>	2.50740	0.30000	<b>0.00627</b>
	D	0.01860	0.00100	<b>0.00519</b>	0.32940	0.06480	<b>0.00513</b>	2.50740	0.30000	<b>0.00641</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>-0.00030</b>	0.32940	<b>-0.00031</b>	2.50740	<b>-0.00030</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>0.00071</b>	0.32940	<b>0.00073</b>	2.50740	<b>0.00073</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>-0.00030</b>	0.32940	<b>-0.00031</b>	2.50740	<b>-0.00030</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>0.00071</b>	0.32940	<b>0.00073</b>	2.50740	<b>0.00073</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>-0.00054</b>	0.32940	<b>-0.00055</b>	2.50740	<b>-0.00055</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>0.00055</b>	0.32940	<b>0.00057</b>	2.50740	<b>0.00057</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>-0.00054</b>	0.32940	<b>-0.00055</b>	2.50740	<b>-0.00055</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>0.00055</b>	0.32940	<b>0.00057</b>	2.50740	<b>0.00057</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>-0.00004</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>0.00004</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>-0.00004</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>0.00004</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>0.00075</b>	0.32940	<b>0.00077</b>	2.50740	<b>0.00077</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>0.00005</b>	0.32940	<b>-0.00002</b>	2.50740	<b>-0.00004</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>0.00075</b>	0.32940	<b>0.00077</b>	2.50740	<b>0.00077</b>



**Passive power(pJ) for D falling (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>0.00005</b>	0.32940	<b>-0.00002</b>	2.50740	<b>-0.00004</b>

# A021



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00230	0.00239	0.00214	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	412.49300	650.18700	1047.70000

## 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>0.12216</b>	0.32940	0.06480	<b>0.53960</b>	2.50740	0.30000	<b>1.93510</b>
	A2->X (RR)	0.01860	0.00100	<b>0.12845</b>	0.32940	0.06480	<b>0.54380</b>	2.50740	0.30000	<b>1.95857</b>
	B1->X (RR)	0.01860	0.00100	<b>0.07575</b>	0.32940	0.06480	<b>0.48485</b>	2.50740	0.30000	<b>1.83741</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>0.13651</b>	0.32940	0.06480	<b>0.50882</b>	2.50740	0.30000	<b>1.67096</b>
	A2->X (FF)	0.01860	0.00100	<b>0.14882</b>	0.32940	0.06480	<b>0.52780</b>	2.50740	0.30000	<b>1.72026</b>
	B1->X (FF)	0.01860	0.00100	<b>0.13404</b>	0.32940	0.06480	<b>0.51229</b>	2.50740	0.30000	<b>1.70387</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>0.07575</b>	0.32940	0.06480	<b>0.48485</b>	2.50740	0.30000	<b>1.83741</b>
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	<b>0.07062</b>	0.32940	0.06480	<b>0.47007</b>	2.50740	0.30000	<b>1.77340</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>0.13404</b>	0.32940	0.06480	<b>0.51229</b>	2.50740	0.30000	<b>1.70387</b>
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	<b>0.11945</b>	0.32940	0.06480	<b>0.49059</b>	2.50740	0.30000	<b>1.64878</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>0.00586</b>	0.32940	0.06480	<b>0.00564</b>	2.50740	0.30000	<b>0.00768</b>
	A2	0.01860	0.00100	<b>0.00687</b>	0.32940	0.06480	<b>0.00672</b>	2.50740	0.30000	<b>0.00814</b>
	B1	0.01860	0.00100	<b>0.00464</b>	0.32940	0.06480	<b>0.00445</b>	2.50740	0.30000	<b>0.00649</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>0.00627</b>	0.32940	0.06480	<b>0.00620</b>	2.50740	0.30000	<b>0.00709</b>
	A2	0.01860	0.00100	<b>0.00630</b>	0.32940	0.06480	<b>0.00638</b>	2.50740	0.30000	<b>0.00707</b>
	B1	0.01860	0.00100	<b>0.00434</b>	0.32940	0.06480	<b>0.00435</b>	2.50740	0.30000	<b>0.00635</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>0.00569</b>	0.32940	0.06480	<b>0.00554</b>	2.50740	0.30000	<b>0.00822</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00464</b>	0.32940	0.06480	<b>0.00445</b>	2.50740	0.30000	<b>0.00649</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>0.00446</b>	0.32940	0.06480	<b>0.00435</b>	2.50740	0.30000	<b>0.00615</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00434</b>	0.32940	0.06480	<b>0.00435</b>	2.50740	0.30000	<b>0.00635</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>-0.00017</b>	0.32940	<b>-0.00015</b>	2.50740	<b>-0.00015</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>0.00017</b>	0.32940	<b>0.00016</b>	2.50740	<b>0.00016</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>0.00007</b>	0.32940	<b>-0.00004</b>	2.50740	<b>-0.00008</b>
	(!A2 * B1)	0.01860	<b>-0.00017</b>	0.32940	<b>-0.00015</b>	2.50740	<b>-0.00015</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>0.00018</b>	0.32940	<b>0.00017</b>	2.50740	<b>0.00017</b>
	(!A2 * B1)	0.01860	<b>0.00017</b>	0.32940	<b>0.00016</b>	2.50740	<b>0.00016</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>-0.00010</b>	0.32940	<b>-0.00010</b>	2.50740	<b>-0.00010</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>0.00011</b>	0.32940	<b>0.00012</b>	2.50740	<b>0.00012</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>0.00012</b>	0.32940	<b>-0.00000</b>	2.50740	<b>-0.00004</b>
	(!A1 * B1)	0.01860	<b>-0.00010</b>	0.32940	<b>-0.00010</b>	2.50740	<b>-0.00010</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>0.00013</b>	0.32940	<b>0.00013</b>	2.50740	<b>0.00013</b>
	(!A1 * B1)	0.01860	<b>0.00011</b>	0.32940	<b>0.00012</b>	2.50740	<b>0.00012</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>0.00018</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00021</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>0.00064</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</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>0.00018</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00021</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>0.00064</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</b>

# BTLx



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00523	0.01395	2.40000
sg13g2_ebufn_4	0.00272	0.00850	1.20000
sg13g2_ebufn_2	0.00231	0.00519	0.60000



## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1655.50000	2491.37000	4310.14000
sg13g2_ebufn_4	1066.80000	1399.03000	2222.84000
sg13g2_ebufn_2	765.92500	931.97500	1199.63000

## 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	0.01618	<b>0.09453</b>	0.32940	0.53358	<b>0.85444</b>	2.50740	2.41518	<b>3.40756</b>
	TE_B->Z (RR)	0.01860	0.01618	<b>0.09290</b>	0.32940	0.53358	<b>0.22355</b>	2.50740	2.41518	<b>0.55622</b>
	TE_B->Z (FR)	0.01860	0.01618	<b>0.05047</b>	0.32940	0.53358	<b>0.76707</b>	2.50740	2.41518	<b>3.75935</b>
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.00863	<b>0.09774</b>	0.32940	0.26683	<b>0.85443</b>	2.50740	1.20763	<b>3.40564</b>
	TE_B->Z (RR)	0.01860	0.00863	<b>0.07406</b>	0.32940	0.26683	<b>0.17899</b>	2.50740	1.20763	<b>0.40394</b>
	TE_B->Z (FR)	0.01860	0.00863	<b>0.05141</b>	0.32940	0.26683	<b>0.76517</b>	2.50740	1.20763	<b>3.74850</b>
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00485	<b>0.08425</b>	0.32940	0.13345	<b>0.81431</b>	2.50740	0.60385	<b>3.29276</b>
	TE_B->Z (RR)	0.01860	0.00485	<b>0.06432</b>	0.32940	0.13345	<b>0.15514</b>	2.50740	0.60385	<b>0.33605</b>
	TE_B->Z (FR)	0.01860	0.00485	<b>0.05115</b>	0.32940	0.13345	<b>0.76434</b>	2.50740	0.60385	<b>3.74840</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	0.02930	<b>0.12955</b>	0.32940	0.54670	<b>0.72852</b>	2.50740	2.42830	<b>2.73535</b>
	TE_B->Z (RF)	0.01860	0.02930	<b>0.06430</b>	0.32940	0.54670	<b>-0.15614</b>	2.50740	2.42830	<b>-1.84241</b>
	TE_B->Z (FF)	0.01860	0.02930	<b>0.14462</b>	0.32940	0.54670	<b>0.94789</b>	2.50740	2.42830	<b>3.68738</b>
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01542	<b>0.13337</b>	0.32940	0.27362	<b>0.73182</b>	2.50740	1.21442	<b>2.74269</b>
	TE_B->Z (RF)	0.01860	0.01542	<b>0.04696</b>	0.32940	0.27362	<b>-0.15520</b>	2.50740	1.21442	<b>-1.84083</b>
	TE_B->Z (FF)	0.01860	0.01542	<b>0.10973</b>	0.32940	0.27362	<b>0.88278</b>	2.50740	1.21442	<b>3.49078</b>
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00839	<b>0.09989</b>	0.32940	0.13699	<b>0.67590</b>	2.50740	0.60739	<b>2.57654</b>
	TE_B->Z (RF)	0.01860	0.00839	<b>0.03377</b>	0.32940	0.13699	<b>-0.18019</b>	2.50740	0.60739	<b>-1.86681</b>
	TE_B->Z (FF)	0.01860	0.00839	<b>0.09228</b>	0.32940	0.13699	<b>0.83505</b>	2.50740	0.60739	<b>3.36396</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	0.01618	<b>0.00942</b>	0.32940	0.53358	<b>0.01537</b>	2.50740	2.41518	<b>0.01475</b>
	TE_B	0.01860	0.01618	<b>0.00820</b>	0.32940	0.53358	<b>0.00701</b>	2.50740	2.41518	<b>0.00506</b>
sg13g2_ebufn_4	A	0.01860	0.00863	<b>0.00483</b>	0.32940	0.26683	<b>0.00754</b>	2.50740	1.20763	<b>0.00604</b>
	TE_B	0.01860	0.00863	<b>0.00411</b>	0.32940	0.26683	<b>0.00332</b>	2.50740	1.20763	<b>0.00177</b>
sg13g2_ebufn_2	A	0.01860	0.00485	<b>0.00267</b>	0.32940	0.13345	<b>0.00390</b>	2.50740	0.60385	<b>0.00371</b>
	TE_B	0.01860	0.00485	<b>0.00204</b>	0.32940	0.13345	<b>0.00164</b>	2.50740	0.60385	<b>0.00129</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	0.02930	<b>0.02617</b>	0.32940	0.54670	<b>0.02625</b>	2.50740	2.42830	<b>0.02204</b>
	TE_B	0.01860	0.02930	<b>0.00923</b>	0.32940	0.54670	<b>0.07440</b>	2.50740	2.42830	<b>0.31324</b>
sg13g2_ebufn_4	A	0.01860	0.01542	<b>0.01313</b>	0.32940	0.27362	<b>0.01307</b>	2.50740	1.21442	<b>0.01115</b>
	TE_B	0.01860	0.01542	<b>0.00471</b>	0.32940	0.27362	<b>0.03722</b>	2.50740	1.21442	<b>0.15679</b>
sg13g2_ebufn_2	A	0.01860	0.00839	<b>0.00656</b>	0.32940	0.13699	<b>0.00658</b>	2.50740	0.60739	<b>0.00512</b>
	TE_B	0.01860	0.00839	<b>0.00240</b>	0.32940	0.13699	<b>0.01859</b>	2.50740	0.60739	<b>0.07853</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>0.02300</b>	0.32940	<b>0.02262</b>	2.50740	<b>0.02885</b>
sg13g2_ebufn_4	0.01860	<b>0.01176</b>	0.32940	<b>0.01158</b>	2.50740	<b>0.01463</b>
sg13g2_ebufn_2	0.01860	<b>0.00633</b>	0.32940	<b>0.00620</b>	2.50740	<b>0.00900</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>0.00751</b>	0.32940	<b>0.00730</b>	2.50740	<b>0.01310</b>
sg13g2_ebufn_4	0.01860	<b>0.00396</b>	0.32940	<b>0.00385</b>	2.50740	<b>0.00670</b>
sg13g2_ebufn_2	0.01860	<b>0.00260</b>	0.32940	<b>0.00253</b>	2.50740	<b>0.00519</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>-0.00301</b>	0.32940	<b>-0.00421</b>	2.50740	<b>-0.00214</b>
sg13g2_ebufn_4	0.01860	<b>-0.00055</b>	0.32940	<b>-0.00131</b>	2.50740	<b>0.00144</b>
sg13g2_ebufn_2	0.01860	<b>0.00027</b>	0.32940	<b>-0.00019</b>	2.50740	<b>0.00247</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>0.03576</b>	0.32940	<b>0.03572</b>	2.50740	<b>0.03848</b>
sg13g2_ebufn_4	0.01860	<b>0.01858</b>	0.32940	<b>0.01867</b>	2.50740	<b>0.02157</b>
sg13g2_ebufn_2	0.01860	<b>0.00987</b>	0.32940	<b>0.00996</b>	2.50740	<b>0.01258</b>

# BU<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.01567	4.80000
sg13g2_buf_8	0.00783	2.40000
sg13g2_buf_4	0.00333	1.20000
sg13g2_buf_2	0.00230	0.60000
sg13g2_buf_1	0.00197	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	5028.75000	6741.44000	8454.12000
sg13g2_buf_8	2514.39000	3370.79000	4227.19000
sg13g2_buf_4	1257.50000	1653.20000	2048.91000
sg13g2_buf_2	697.49800	882.31900	1067.14000
sg13g2_buf_1	494.45700	531.74800	569.03900

## 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>0.08147</b>	0.32940	1.03680	<b>0.51080</b>	2.50740	4.80000	<b>1.90572</b>
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	<b>0.08046</b>	0.32940	0.51840	<b>0.50929</b>	2.50740	2.40000	<b>1.90282</b>
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	<b>0.10413</b>	0.32940	0.25920	<b>0.54927</b>	2.50740	1.20000	<b>2.04726</b>
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	<b>0.08034</b>	0.32940	0.12960	<b>0.50330</b>	2.50740	0.60000	<b>1.89316</b>
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	<b>0.07141</b>	0.32940	0.06480	<b>0.47569</b>	2.50740	0.30000	<b>1.80361</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>0.09220</b>	0.32940	1.03680	<b>0.48855</b>	2.50740	4.80000	<b>1.70665</b>
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	<b>0.09105</b>	0.32940	0.51840	<b>0.48761</b>	2.50740	2.40000	<b>1.70744</b>
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	<b>0.08936</b>	0.32940	0.25920	<b>0.48343</b>	2.50740	1.20000	<b>1.67748</b>
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	<b>0.08765</b>	0.32940	0.12960	<b>0.47277</b>	2.50740	0.60000	<b>1.66011</b>
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	<b>0.07671</b>	0.32940	0.06480	<b>0.44035</b>	2.50740	0.30000	<b>1.56346</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>0.05939</b>	0.32940	1.03680	<b>0.05956</b>	2.50740	4.80000	<b>0.07800</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.02877</b>	0.32940	0.51840	<b>0.02903</b>	2.50740	2.40000	<b>0.03684</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.01383</b>	0.32940	0.25920	<b>0.01366</b>	2.50740	1.20000	<b>0.01713</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.00754</b>	0.32940	0.12960	<b>0.00749</b>	2.50740	0.60000	<b>0.01008</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00448</b>	0.32940	0.06480	<b>0.00443</b>	2.50740	0.30000	<b>0.00614</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>0.05596</b>	0.32940	1.03680	<b>0.05790</b>	2.50740	4.80000	<b>0.06902</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.02759</b>	0.32940	0.51840	<b>0.02861</b>	2.50740	2.40000	<b>0.03537</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.01381</b>	0.32940	0.25920	<b>0.01434</b>	2.50740	1.20000	<b>0.01519</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.00731</b>	0.32940	0.12960	<b>0.00740</b>	2.50740	0.60000	<b>0.00911</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00455</b>	0.32940	0.06480	<b>0.00457</b>	2.50740	0.30000	<b>0.00586</b>



# DECAP<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

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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	98.65020	98.65020	98.65020
sg13g2_decap_8	197.29500	197.29500	197.29500

# DFFRRx



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00126	0.00454	0.00254	0.60000	0.60000
sg13g2_dfrbp_1	0.00133	0.00506	0.00238	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	2762.66000	3213.97000	3740.65000
sg13g2_dfrbp_1	2077.25000	2501.99000	2984.47000

## 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>0.36185</b>	0.32940	0.12960	<b>0.75538</b>	2.50740	0.60000	<b>2.14456</b>
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	<b>0.28156</b>	0.32940	0.06480	<b>0.68170</b>	2.50740	0.30000	<b>2.04218</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>0.31371</b>	0.32940	0.12960	<b>0.67993</b>	2.50740	0.60000	<b>1.87371</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.42390</b>	0.32940	0.12960	<b>0.81734</b>	2.50740	0.60000	<b>2.24078</b>
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	<b>0.26967</b>	0.32940	0.06480	<b>0.63511</b>	2.50740	0.30000	<b>1.81054</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.36795</b>	0.32940	0.06480	<b>0.76042</b>	2.50740	0.30000	<b>2.15503</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>0.20643</b>	0.32940	0.12960	<b>0.66426</b>	2.50740	0.60000	<b>2.00775</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.31921</b>	0.32940	0.12960	<b>0.79889</b>	2.50740	0.60000	<b>2.37394</b>
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	<b>0.20439</b>	0.32940	0.06480	<b>0.64395</b>	2.50740	0.30000	<b>1.97329</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.30354</b>	0.32940	0.06480	<b>0.76611</b>	2.50740	0.30000	<b>2.31834</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>0.23168</b>	0.32940	0.12960	<b>0.69242</b>	2.50740	0.60000	<b>1.92671</b>
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	<b>0.20869</b>	0.32940	0.06480	<b>0.63272</b>	2.50740	0.30000	<b>1.84959</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>-0.06847</b>	1.26300	1.26300	<b>-0.26714</b>	2.50740	2.50740	<b>-0.36599</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.20540</b>	1.26300	1.26300	<b>0.40475</b>	2.50740	2.50740	<b>0.51652</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.07336</b>	1.26300	1.26300	<b>-0.28873</b>	2.50740	2.50740	<b>-0.39846</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.19562</b>	1.26300	1.26300	<b>0.40745</b>	2.50740	2.50740	<b>0.53128</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>-0.02934</b>	1.26300	1.26300	<b>-0.17269</b>	2.50740	2.50740	<b>-0.27449</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.19317</b>	1.26300	1.26300	<b>0.35888</b>	2.50740	2.50740	<b>0.48405</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.02934</b>	1.26300	1.26300	<b>-0.16730</b>	2.50740	2.50740	<b>-0.27154</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.18339</b>	1.26300	1.26300	<b>0.35349</b>	2.50740	2.50740	<b>0.48405</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>0.21518</b>	1.26300	1.26300	<b>0.42634</b>	2.50740	2.50740	<b>0.58145</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.16872</b>	1.26300	1.26300	<b>-0.38856</b>	2.50740	2.50740	<b>-0.54013</b>
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	<b>0.20784</b>	1.26300	1.26300	<b>0.43174</b>	2.50740	2.50740	<b>0.59621</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.15649</b>	1.26300	1.26300	<b>-0.38587</b>	2.50740	2.50740	<b>-0.54013</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>0.02797</b>	0.32940	0.12960	<b>0.10380</b>	2.50740	0.60000	<b>0.38239</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.02241</b>	0.32940	0.06480	<b>0.05978</b>	2.50740	0.30000	<b>0.19975</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>0.02847</b>	0.32940	0.12960	<b>0.10422</b>	2.50740	0.60000	<b>0.38138</b>
	RESET_B	0.01860	0.00100	<b>0.02159</b>	0.32940	0.12960	<b>0.09727</b>	2.50740	0.60000	<b>0.37148</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.02183</b>	0.32940	0.06480	<b>0.05924</b>	2.50740	0.30000	<b>0.19904</b>
	RESET_B	0.01860	0.00100	<b>0.01496</b>	0.32940	0.06480	<b>0.05229</b>	2.50740	0.30000	<b>0.18981</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>0.02848</b>	0.32940	0.12960	<b>0.10459</b>	2.50740	0.60000	<b>0.38327</b>
	RESET_B	0.01860	0.00100	<b>0.02163</b>	0.32940	0.12960	<b>0.09767</b>	2.50740	0.60000	<b>0.37304</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.02183</b>	0.32940	0.06480	<b>0.05949</b>	2.50740	0.30000	<b>0.20022</b>
	RESET_B	0.01860	0.00100	<b>0.01496</b>	0.32940	0.06480	<b>0.05250</b>	2.50740	0.30000	<b>0.19090</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>0.02797</b>	0.32940	0.12960	<b>0.10339</b>	2.50740	0.60000	<b>0.37962</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.02239</b>	0.32940	0.06480	<b>0.05959</b>	2.50740	0.30000	<b>0.19927</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>0.00133</b>	0.32940	<b>0.00125</b>	2.50740	<b>0.00243</b>
sg13g2_dfrbp_1	0.01860	<b>0.00137</b>	0.32940	<b>0.00129</b>	2.50740	<b>0.00246</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>0.00122</b>	0.32940	<b>0.00112</b>	2.50740	<b>0.00226</b>
sg13g2_dfrbp_1	0.01860	<b>0.00130</b>	0.32940	<b>0.00120</b>	2.50740	<b>0.00233</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>0.00133</b>	0.32940	<b>0.00125</b>	2.50740	<b>0.00243</b>
	(!CLK * RESET_B)	0.01860	<b>0.00883</b>	0.32940	<b>0.00866</b>	2.50740	<b>0.00984</b>
	(!CLK * !RESET_B)	0.01860	<b>-0.00016</b>	0.32940	<b>-0.00017</b>	2.50740	<b>-0.00018</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00137</b>	0.32940	<b>0.00129</b>	2.50740	<b>0.00246</b>
	(!CLK * RESET_B)	0.01860	<b>0.00759</b>	0.32940	<b>0.00746</b>	2.50740	<b>0.00867</b>
	(!CLK * !RESET_B)	0.01860	<b>-0.00010</b>	0.32940	<b>-0.00011</b>	2.50740	<b>-0.00010</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>0.00122</b>	0.32940	<b>0.00112</b>	2.50740	<b>0.00226</b>
	(!CLK * RESET_B)	0.01860	<b>0.00712</b>	0.32940	<b>0.00694</b>	2.50740	<b>0.00815</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00016</b>	0.32940	<b>0.00017</b>	2.50740	<b>0.00018</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00130</b>	0.32940	<b>0.00120</b>	2.50740	<b>0.00233</b>
	(!CLK * RESET_B)	0.01860	<b>0.00643</b>	0.32940	<b>0.00626</b>	2.50740	<b>0.00746</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00019</b>	0.32940	<b>0.00020</b>	2.50740	<b>0.00020</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>0.00267</b>	0.32940	<b>0.00258</b>	2.50740	<b>0.00335</b>
sg13g2_dfrbp_1	0.01860	<b>0.00301</b>	0.32940	<b>0.00292</b>	2.50740	<b>0.00367</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>0.00742</b>	0.32940	<b>0.00702</b>	2.50740	<b>0.00812</b>
sg13g2_dfrbp_1	0.01860	<b>0.00644</b>	0.32940	<b>0.00602</b>	2.50740	<b>0.00716</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>0.00267</b>	0.32940	<b>0.00258</b>	2.50740	<b>0.00335</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00079</b>	0.32940	<b>0.00078</b>	2.50740	<b>0.00077</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01046</b>	0.32940	<b>0.01018</b>	2.50740	<b>0.01132</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00076</b>	0.32940	<b>0.00075</b>	2.50740	<b>0.00074</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.00301</b>	0.32940	<b>0.00292</b>	2.50740	<b>0.00367</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00112</b>	0.32940	<b>0.00111</b>	2.50740	<b>0.00110</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.00954</b>	0.32940	<b>0.00927</b>	2.50740	<b>0.01046</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00115</b>	0.32940	<b>0.00114</b>	2.50740	<b>0.00114</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>0.02860</b>	0.32940	<b>0.02791</b>	2.50740	<b>0.03056</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00027</b>	0.32940	<b>-0.00042</b>	2.50740	<b>-0.00048</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.00742</b>	0.32940	<b>0.00702</b>	2.50740	<b>0.00812</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00047</b>	0.32940	<b>-0.00060</b>	2.50740	<b>-0.00064</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.02083</b>	0.32940	<b>0.02011</b>	2.50740	<b>0.02278</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00059</b>	0.32940	<b>-0.00074</b>	2.50740	<b>-0.00080</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.00644</b>	0.32940	<b>0.00602</b>	2.50740	<b>0.00716</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00066</b>	0.32940	<b>-0.00080</b>	2.50740	<b>-0.00085</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>0.00853</b>	0.32940	<b>0.00822</b>	2.50740	<b>0.01150</b>
sg13g2_dfrbp_1	0.01860	<b>0.00802</b>	0.32940	<b>0.00775</b>	2.50740	<b>0.01080</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>0.01562</b>	0.32940	<b>0.01513</b>	2.50740	<b>0.01825</b>
sg13g2_dfrbp_1	0.01860	<b>0.01387</b>	0.32940	<b>0.01342</b>	2.50740	<b>0.01630</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>0.00824</b>	0.32940	<b>0.00792</b>	2.50740	<b>0.01122</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00863</b>	0.32940	<b>0.00832</b>	2.50740	<b>0.01159</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.00816</b>	0.32940	<b>0.00785</b>	2.50740	<b>0.01113</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00853</b>	0.32940	<b>0.00822</b>	2.50740	<b>0.01150</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.00828</b>	0.32940	<b>0.00798</b>	2.50740	<b>0.01106</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00802</b>	0.32940	<b>0.00775</b>	2.50740	<b>0.01080</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.00791</b>	0.32940	<b>0.00764</b>	2.50740	<b>0.01070</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00789</b>	0.32940	<b>0.00763</b>	2.50740	<b>0.01068</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>0.01687</b>	0.32940	<b>0.01638</b>	2.50740	<b>0.01951</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.01562</b>	0.32940	<b>0.01513</b>	2.50740	<b>0.01825</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00813</b>	0.32940	<b>0.00782</b>	2.50740	<b>0.01093</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.00192</b>	0.32940	<b>0.02804</b>	2.50740	<b>0.03071</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.00808</b>	0.32940	<b>0.00775</b>	2.50740	<b>0.01087</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00811</b>	0.32940	<b>0.00779</b>	2.50740	<b>0.01091</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.01537</b>	0.32940	<b>0.01492</b>	2.50740	<b>0.01780</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.01387</b>	0.32940	<b>0.01342</b>	2.50740	<b>0.01630</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00768</b>	0.32940	<b>0.00739</b>	2.50740	<b>0.01027</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.00176</b>	0.32940	<b>0.02164</b>	2.50740	<b>0.02414</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.00762</b>	0.32940	<b>0.00732</b>	2.50740	<b>0.01021</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.00766</b>	0.32940	<b>0.00736</b>	2.50740	<b>0.01024</b>

# DLHQ



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00195	0.00200	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	1392.36000	1694.94000	2124.80000

## 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>0.26040</b>	0.32940	0.06480	<b>0.66068</b>	2.50740	0.30000	<b>1.97055</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.22079</b>	0.32940	0.06480	<b>0.62067</b>	2.50740	0.30000	<b>1.92432</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>0.23155</b>	0.32940	0.06480	<b>0.59103</b>	2.50740	0.30000	<b>1.70078</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.23612</b>	0.32940	0.06480	<b>0.59987</b>	2.50740	0.30000	<b>1.72030</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>-0.13938</b>	1.26300	1.26300	<b>-0.33730</b>	2.50740	2.50740	<b>-0.42502</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.15894</b>	1.26300	1.26300	<b>0.41555</b>	2.50740	2.50740	<b>0.55784</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>-0.05868</b>	1.26300	1.26300	<b>-0.03508</b>	2.50740	2.50740	<b>-0.00885</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.08069</b>	1.26300	1.26300	<b>0.04857</b>	2.50740	2.50740	<b>0.02361</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>0.01112</b>	0.32940	0.06480	<b>0.01127</b>	2.50740	0.30000	<b>0.01099</b>
	GATE	0.01860	0.00100	<b>0.00892</b>	0.32940	0.06480	<b>0.00893</b>	2.50740	0.30000	<b>0.00887</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>0.01147</b>	0.32940	0.06480	<b>0.01170</b>	2.50740	0.30000	<b>0.01126</b>
	GATE	0.01860	0.00100	<b>0.00973</b>	0.32940	0.06480	<b>0.01008</b>	2.50740	0.30000	<b>0.00991</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>0.00263</b>	0.32940	<b>0.00251</b>	2.50740	<b>0.00476</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>0.00283</b>	0.32940	<b>0.00270</b>	2.50740	<b>0.00478</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>0.00324</b>	0.32940	<b>0.00308</b>	2.50740	<b>0.00529</b>
	(!GATE * !Q)	0.01860	<b>0.00263</b>	0.32940	<b>0.00251</b>	2.50740	<b>0.00476</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>0.00260</b>	0.32940	<b>0.00252</b>	2.50740	<b>0.00465</b>
	(!GATE * !Q)	0.01860	<b>0.00283</b>	0.32940	<b>0.00270</b>	2.50740	<b>0.00478</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>0.00666</b>	0.32940	<b>0.00645</b>	2.50740	<b>0.00927</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>0.00166</b>	0.32940	<b>0.01132</b>	2.50740	<b>0.01407</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>0.00666</b>	0.32940	<b>0.00645</b>	2.50740	<b>0.00927</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>0.00166</b>	0.32940	<b>0.01132</b>	2.50740	<b>0.01407</b>

# DLHRQ



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00181	0.00246	0.00192	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1556.95000	1833.47000	2128.14000

## 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>0.27285</b>	0.32940	0.06480	<b>0.67899</b>	2.50740	0.30000	<b>1.98585</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.24351</b>	0.32940	0.06480	<b>0.65058</b>	2.50740	0.30000	<b>1.95277</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>0.24301</b>	0.32940	0.06480	<b>0.60339</b>	2.50740	0.30000	<b>1.71438</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.24847</b>	0.32940	0.06480	<b>0.61583</b>	2.50740	0.30000	<b>1.74041</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.09245</b>	0.32940	0.06480	<b>0.47297</b>	2.50740	0.30000	<b>1.67522</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>-0.11737</b>	1.26300	1.26300	<b>-0.30761</b>	2.50740	2.50740	<b>-0.38665</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.15160</b>	1.26300	1.26300	<b>0.38856</b>	2.50740	2.50740	<b>0.51652</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>-0.06602</b>	1.26300	1.26300	<b>-0.03508</b>	2.50740	2.50740	<b>-0.00590</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.09292</b>	1.26300	1.26300	<b>0.05127</b>	2.50740	2.50740	<b>0.02656</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>-0.00978</b>	1.26300	1.26300	<b>-0.08635</b>	2.50740	2.50740	<b>-0.14167</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.03912</b>	1.26300	1.26300	<b>0.15651</b>	2.50740	2.50740	<b>0.20956</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>0.00193</b>	0.32940	0.06480	<b>0.00101</b>	2.50740	0.30000	<b>0.00075</b>
	GATE	0.01860	0.00100	<b>0.00912</b>	0.32940	0.06480	<b>0.00915</b>	2.50740	0.30000	<b>0.00929</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>0.00498</b>	0.32940	0.06480	<b>-0.00101</b>	2.50740	0.30000	<b>-0.00075</b>
	GATE	0.01860	0.00100	<b>0.00892</b>	0.32940	0.06480	<b>0.00935</b>	2.50740	0.30000	<b>0.00908</b>
	RESET_B	0.01860	0.00100	<b>0.00526</b>	0.32940	0.06480	<b>0.00531</b>	2.50740	0.30000	<b>0.00744</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>0.01178</b>	0.32940	<b>0.01273</b>	2.50740	<b>0.01502</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>0.00820</b>	0.32940	<b>0.01871</b>	2.50740	<b>0.02082</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>0.00096</b>	0.32940	<b>0.00082</b>	2.50740	<b>0.00305</b>
	!RESET_B	0.01860	<b>0.01178</b>	0.32940	<b>0.01273</b>	2.50740	<b>0.01502</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>0.00350</b>	0.32940	<b>0.00343</b>	2.50740	<b>0.00555</b>
	!RESET_B	0.01860	<b>0.00820</b>	0.32940	<b>0.01871</b>	2.50740	<b>0.02082</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>-0.00003</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00005</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>0.00036</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00023</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>-0.00003</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00005</b>
	(!D * !GATE * !Q)	0.01860	<b>-0.00003</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00005</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>0.00036</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00024</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00036</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00023</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>0.00680</b>	0.32940	<b>0.00657</b>	2.50740	<b>0.00939</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>0.00167</b>	0.32940	<b>0.01124</b>	2.50740	<b>0.01396</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>0.00866</b>	0.32940	<b>0.00824</b>	2.50740	<b>0.01126</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00680</b>	0.32940	<b>0.00657</b>	2.50740	<b>0.00939</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>0.00883</b>	0.32940	<b>0.00848</b>	2.50740	<b>0.01142</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00167</b>	0.32940	<b>0.01124</b>	2.50740	<b>0.01396</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00172</b>	0.32940	<b>0.01128</b>	2.50740	<b>0.01401</b>



# DLHR



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00183	0.00261	0.00198	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	2052.80000	2357.21000	2640.87000

## 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_dlhr_1	D->Q (RR)	0.01860	0.00100	<b>0.29584</b>	0.32940	0.06480	<b>0.71285</b>	2.50740	0.30000	<b>2.01648</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.26809</b>	0.32940	0.06480	<b>0.68680</b>	2.50740	0.30000	<b>1.98936</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>0.25261</b>	0.32940	0.06480	<b>0.61813</b>	2.50740	0.30000	<b>1.72013</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.25795</b>	0.32940	0.06480	<b>0.63115</b>	2.50740	0.30000	<b>1.74997</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.10058</b>	0.32940	0.06480	<b>0.49506</b>	2.50740	0.30000	<b>1.73469</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>0.31055</b>	0.32940	0.06480	<b>0.69815</b>	2.50740	0.30000	<b>1.95442</b>
	GATE->Q_N (RR)	0.01860	0.00100	<b>0.31615</b>	0.32940	0.06480	<b>0.71122</b>	2.50740	0.30000	<b>1.98215</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.15822</b>	0.32940	0.06480	<b>0.56992</b>	2.50740	0.30000	<b>1.91536</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>0.36089</b>	0.32940	0.06480	<b>0.71247</b>	2.50740	0.30000	<b>1.86369</b>
	GATE->Q_N (RF)	0.01860	0.00100	<b>0.33353</b>	0.32940	0.06480	<b>0.68663</b>	2.50740	0.30000	<b>1.83759</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>-0.12470</b>	1.26300	1.26300	<b>-0.31301</b>	2.50740	2.50740	<b>-0.39255</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.16383</b>	1.26300	1.26300	<b>0.39126</b>	2.50740	2.50740	<b>0.51652</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>-0.07091</b>	1.26300	1.26300	<b>-0.03508</b>	2.50740	2.50740	<b>-0.00590</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.10025</b>	1.26300	1.26300	<b>0.05127</b>	2.50740	2.50740	<b>0.02361</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>0.00489</b>	1.26300	1.26300	<b>-0.03238</b>	2.50740	2.50740	<b>-0.05313</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.02934</b>	1.26300	1.26300	<b>0.10524</b>	2.50740	2.50740	<b>0.13282</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>0.00409</b>	0.32940	0.06480	<b>0.00387</b>	2.50740	0.30000	<b>0.00368</b>
	GATE	0.01860	0.00100	<b>0.00757</b>	0.32940	0.06480	<b>0.00777</b>	2.50740	0.30000	<b>0.00769</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>0.00555</b>	0.32940	0.06480	<b>0.00040</b>	2.50740	0.30000	<b>-0.00019</b>
	GATE	0.01860	0.00100	<b>0.00747</b>	0.32940	0.06480	<b>0.00773</b>	2.50740	0.30000	<b>0.00729</b>
	RESET_B	0.01860	0.00100	<b>0.00553</b>	0.32940	0.06480	<b>0.00560</b>	2.50740	0.30000	<b>0.00654</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>0.00556</b>	0.32940	0.06480	<b>0.00053</b>	2.50740	0.30000	<b>0.00054</b>
	GATE	0.01860	0.00100	<b>0.01073</b>	0.32940	0.06480	<b>0.01102</b>	2.50740	0.30000	<b>0.01225</b>
	RESET_B	0.01860	0.00100	<b>0.00553</b>	0.32940	0.06480	<b>0.00563</b>	2.50740	0.30000	<b>0.00729</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>0.00409</b>	0.32940	0.06480	<b>0.00377</b>	2.50740	0.30000	<b>0.00339</b>
	GATE	0.01860	0.00100	<b>0.00756</b>	0.32940	0.06480	<b>0.00767</b>	2.50740	0.30000	<b>0.00747</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>0.01147</b>	0.32940	<b>0.01238</b>	2.50740	<b>0.01468</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>0.00791</b>	0.32940	<b>0.01842</b>	2.50740	<b>0.02052</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>0.00267</b>	0.32940	<b>0.00253</b>	2.50740	<b>0.00479</b>
	!RESET_B	0.01860	<b>0.01147</b>	0.32940	<b>0.01238</b>	2.50740	<b>0.01468</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>0.00505</b>	0.32940	<b>0.00499</b>	2.50740	<b>0.00713</b>
	!RESET_B	0.01860	<b>0.00791</b>	0.32940	<b>0.01842</b>	2.50740	<b>0.02052</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>-0.00012</b>	0.32940	<b>-0.00014</b>	2.50740	<b>-0.00015</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>0.00044</b>	0.32940	<b>0.00036</b>	2.50740	<b>0.00032</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>-0.00012</b>	0.32940	<b>-0.00014</b>	2.50740	<b>-0.00015</b>
	(!D * !GATE * !Q)	0.01860	<b>-0.00012</b>	0.32940	<b>-0.00014</b>	2.50740	<b>-0.00015</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>0.00044</b>	0.32940	<b>0.00036</b>	2.50740	<b>0.00033</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00044</b>	0.32940	<b>0.00036</b>	2.50740	<b>0.00032</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>0.00651</b>	0.32940	<b>0.00629</b>	2.50740	<b>0.00911</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>0.00169</b>	0.32940	<b>0.01102</b>	2.50740	<b>0.01375</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>0.00836</b>	0.32940	<b>0.00796</b>	2.50740	<b>0.01097</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00651</b>	0.32940	<b>0.00629</b>	2.50740	<b>0.00911</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>0.00907</b>	0.32940	<b>0.00868</b>	2.50740	<b>0.01165</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00169</b>	0.32940	<b>0.01102</b>	2.50740	<b>0.01375</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00174</b>	0.32940	<b>0.01107</b>	2.50740	<b>0.01380</b>



# DLLRQ



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00180	0.00247	0.00192	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1451.71000	1806.12000	2128.09000

## 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>0.27258</b>	0.32940	0.06480	<b>0.67738</b>	2.50740	0.30000	<b>1.98186</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.30333</b>	0.32940	0.06480	<b>0.71680</b>	2.50740	0.30000	<b>2.02781</b>
	RESET_B->Q (RR)	0.01860	0.00100	<b>0.12219</b>	0.32940	0.06480	<b>0.52375</b>	2.50740	0.30000	<b>1.89011</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>0.24225</b>	0.32940	0.06480	<b>0.59991</b>	2.50740	0.30000	<b>1.70308</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.22874</b>	0.32940	0.06480	<b>0.60384</b>	2.50740	0.30000	<b>1.80653</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.09360</b>	0.32940	0.06480	<b>0.47296</b>	2.50740	0.30000	<b>1.67184</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>-0.11492</b>	1.26300	1.26300	<b>-0.12682</b>	2.50740	2.50740	<b>-0.16234</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.12715</b>	1.26300	1.26300	<b>0.14841</b>	2.50740	2.50740	<b>0.18299</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>-0.12715</b>	1.26300	1.26300	<b>-0.32110</b>	2.50740	2.50740	<b>-0.40731</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.14427</b>	1.26300	1.26300	<b>0.39126</b>	2.50740	2.50740	<b>0.52537</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>-0.03668</b>	1.26300	1.26300	<b>-0.11603</b>	2.50740	2.50740	<b>-0.13872</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.06847</b>	1.26300	1.26300	<b>0.15920</b>	2.50740	2.50740	<b>0.18004</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>0.00475</b>	0.32940	0.06480	<b>0.00509</b>	2.50740	0.30000	<b>0.00474</b>
	GATE_N	0.01860	0.00100	<b>0.01466</b>	0.32940	0.06480	<b>0.00517</b>	2.50740	0.30000	<b>0.00514</b>
	RESET_B	0.01860	0.00100	<b>0.00620</b>	0.32940	0.06480	<b>0.00620</b>	2.50740	0.30000	<b>0.00810</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>0.01193</b>	0.32940	0.06480	<b>0.00005</b>	2.50740	0.30000	<b>-0.00024</b>
	GATE_N	0.01860	0.00100	<b>0.01364</b>	0.32940	0.06480	<b>0.00407</b>	2.50740	0.30000	<b>0.00391</b>
	RESET_B	0.01860	0.00100	<b>0.00437</b>	0.32940	0.06480	<b>0.00442</b>	2.50740	0.30000	<b>0.00691</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>0.00894</b>	0.32940	<b>0.00864</b>	2.50740	<b>0.01086</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>0.00131</b>	0.32940	<b>0.01325</b>	2.50740	<b>0.01541</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>0.00094</b>	0.32940	<b>0.00081</b>	2.50740	<b>0.00305</b>
	!RESET_B	0.01860	<b>0.00894</b>	0.32940	<b>0.00864</b>	2.50740	<b>0.01086</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>0.00443</b>	0.32940	<b>0.00435</b>	2.50740	<b>0.00650</b>
	!RESET_B	0.01860	<b>0.00131</b>	0.32940	<b>0.01325</b>	2.50740	<b>0.01541</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>0.00102</b>	0.32940	<b>0.00101</b>	2.50740	<b>0.00100</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>0.00141</b>	0.32940	<b>0.00132</b>	2.50740	<b>0.00129</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>-0.00003</b>	0.32940	<b>-0.00004</b>	2.50740	<b>-0.00005</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00102</b>	0.32940	<b>0.00101</b>	2.50740	<b>0.00100</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>0.00036</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00024</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00141</b>	0.32940	<b>0.00132</b>	2.50740	<b>0.00129</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>0.00665</b>	0.32940	<b>0.00644</b>	2.50740	<b>0.00925</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>0.00166</b>	0.32940	<b>0.01111</b>	2.50740	<b>0.01389</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>0.00991</b>	0.32940	<b>0.00960</b>	2.50740	<b>0.01225</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00665</b>	0.32940	<b>0.00644</b>	2.50740	<b>0.00925</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>0.00909</b>	0.32940	<b>0.00881</b>	2.50740	<b>0.01153</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00166</b>	0.32940	<b>0.01111</b>	2.50740	<b>0.01389</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00171</b>	0.32940	<b>0.01116</b>	2.50740	<b>0.01393</b>

# DLLR



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00184	0.00261	0.00199	0.30000	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1946.82000	2405.38000	2656.31000

## 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_dllr_1	D->Q (RR)	0.01860	0.00100	<b>0.29975</b>	0.32940	0.06480	<b>0.71654</b>	2.50740	0.30000	<b>2.02058</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.33103</b>	0.32940	0.06480	<b>0.75740</b>	2.50740	0.30000	<b>2.07072</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>0.25591</b>	0.32940	0.06480	<b>0.62129</b>	2.50740	0.30000	<b>1.72345</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.24385</b>	0.32940	0.06480	<b>0.62753</b>	2.50740	0.30000	<b>1.83403</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.10073</b>	0.32940	0.06480	<b>0.50251</b>	2.50740	0.30000	<b>1.74248</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>0.31377</b>	0.32940	0.06480	<b>0.70120</b>	2.50740	0.30000	<b>1.95615</b>
	GATE_N->Q_N (FR)	0.01860	0.00100	<b>0.30193</b>	0.32940	0.06480	<b>0.70717</b>	2.50740	0.30000	<b>2.06443</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.15963</b>	0.32940	0.06480	<b>0.57215</b>	2.50740	0.30000	<b>1.92520</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>0.36457</b>	0.32940	0.06480	<b>0.71637</b>	2.50740	0.30000	<b>1.86889</b>
	GATE_N->Q_N (FF)	0.01860	0.00100	<b>0.39629</b>	0.32940	0.06480	<b>0.75723</b>	2.50740	0.30000	<b>1.91771</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>-0.12959</b>	1.26300	1.26300	<b>-0.13492</b>	2.50740	2.50740	<b>-0.16824</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.14427</b>	1.26300	1.26300	<b>0.15920</b>	2.50740	2.50740	<b>0.19480</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>-0.13204</b>	1.26300	1.26300	<b>-0.32380</b>	2.50740	2.50740	<b>-0.41321</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.15405</b>	1.26300	1.26300	<b>0.39666</b>	2.50740	2.50740	<b>0.53128</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>-0.01956</b>	1.26300	1.26300	<b>-0.07286</b>	2.50740	2.50740	<b>-0.06789</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.06113</b>	1.26300	1.26300	<b>0.11873</b>	2.50740	2.50740	<b>0.11216</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>0.00786</b>	0.32940	0.06480	<b>0.04533</b>	2.50740	0.30000	<b>0.18206</b>
	GATE_N	0.01860	0.00100	<b>0.01695</b>	0.32940	0.06480	<b>0.05479</b>	2.50740	0.30000	<b>0.19167</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>0.01173</b>	0.32940	0.06480	<b>0.03790</b>	2.50740	0.30000	<b>0.17379</b>
	GATE_N	0.01860	0.00100	<b>0.01558</b>	0.32940	0.06480	<b>0.05302</b>	2.50740	0.30000	<b>0.18954</b>
	RESET_B	0.01860	0.00100	<b>0.01675</b>	0.32940	0.06480	<b>0.05373</b>	2.50740	0.30000	<b>0.19189</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>0.01175</b>	0.32940	0.06480	<b>0.03817</b>	2.50740	0.30000	<b>0.17489</b>
	GATE_N	0.01860	0.00100	<b>0.02189</b>	0.32940	0.06480	<b>0.05938</b>	2.50740	0.30000	<b>0.19926</b>
	RESET_B	0.01860	0.00100	<b>0.01781</b>	0.32940	0.06480	<b>0.05487</b>	2.50740	0.30000	<b>0.19414</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>0.00786</b>	0.32940	0.06480	<b>0.04514</b>	2.50740	0.30000	<b>0.18188</b>
	GATE_N	0.01860	0.00100	<b>0.01694</b>	0.32940	0.06480	<b>0.05461</b>	2.50740	0.30000	<b>0.19095</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>0.01270</b>	0.32940	<b>0.01289</b>	2.50740	<b>0.01527</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>0.00792</b>	0.32940	<b>0.01916</b>	2.50740	<b>0.02140</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>0.00268</b>	0.32940	<b>0.00251</b>	2.50740	<b>0.00479</b>
	!RESET_B	0.01860	<b>0.01270</b>	0.32940	<b>0.01289</b>	2.50740	<b>0.01527</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>0.00246</b>	0.32940	<b>0.00239</b>	2.50740	<b>0.00453</b>
	!RESET_B	0.01860	<b>0.00792</b>	0.32940	<b>0.01916</b>	2.50740	<b>0.02140</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>-0.00012</b>	0.32940	<b>-0.00014</b>	2.50740	<b>-0.00015</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>0.00150</b>	0.32940	<b>0.00142</b>	2.50740	<b>0.00139</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>0.00206</b>	0.32940	<b>0.00204</b>	2.50740	<b>0.00203</b>
	(!D * GATE_N * !Q)	0.01860	<b>-0.00012</b>	0.32940	<b>-0.00014</b>	2.50740	<b>-0.00015</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>0.00044</b>	0.32940	<b>0.00036</b>	2.50740	<b>0.00033</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00150</b>	0.32940	<b>0.00142</b>	2.50740	<b>0.00139</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>0.01002</b>	0.32940	<b>0.00967</b>	2.50740	<b>0.01233</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>0.00631</b>	0.32940	<b>0.00605</b>	2.50740	<b>0.00885</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>0.01002</b>	0.32940	<b>0.00967</b>	2.50740	<b>0.01233</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.00128</b>	0.32940	<b>0.01131</b>	2.50740	<b>0.01413</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00239</b>	0.32940	<b>0.01243</b>	2.50740	<b>0.01524</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>0.00942</b>	0.32940	<b>0.00911</b>	2.50740	<b>0.01188</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.00631</b>	0.32940	<b>0.00605</b>	2.50740	<b>0.00885</b>

# DLY1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00120	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	797.64000	914.88000	1032.12000



## 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>0.17104</b>	0.32940	0.06480	<b>0.57385</b>	2.50740	0.30000	<b>1.85370</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>0.19986</b>	0.32940	0.06480	<b>0.58189</b>	2.50740	0.30000	<b>1.82547</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>0.00968</b>	0.32940	0.06480	<b>0.00957</b>	2.50740	0.30000	<b>0.01098</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>0.00919</b>	0.32940	0.06480	<b>0.00920</b>	2.50740	0.30000	<b>0.01020</b>

# DLY2



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00121	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	840.62500	957.87200	1075.12000

## 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>0.24572</b>	0.32940	0.06480	<b>0.65936</b>	2.50740	0.30000	<b>1.99606</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>0.28033</b>	0.32940	0.06480	<b>0.68244</b>	2.50740	0.30000	<b>1.99333</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>0.01130</b>	0.32940	0.06480	<b>0.01124</b>	2.50740	0.30000	<b>0.01209</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>0.01087</b>	0.32940	0.06480	<b>0.01087</b>	2.50740	0.30000	<b>0.01156</b>

# DLY4



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00119	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1694.06000	1811.32000	1928.58000

## 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>0.52348</b>	0.32940	0.06480	<b>0.97406</b>	2.50740	0.30000	<b>2.43679</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>0.55410</b>	0.32940	0.06480	<b>0.99535</b>	2.50740	0.30000	<b>2.44648</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>0.01591</b>	0.32940	0.06480	<b>0.01584</b>	2.50740	0.30000	<b>0.01649</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>0.01574</b>	0.32940	0.06480	<b>0.01563</b>	2.50740	0.30000	<b>0.01600</b>



# EINVIN<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00733	0.00806	1.20000
sg13g2_einvn_2	0.00368	0.00422	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	717.43400	1402.48000	2087.53000
sg13g2_einvn_2	355.00100	697.53100	1040.06000

## 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	0.00876	<b>0.03449</b>	0.32940	0.26696	<b>0.75717</b>	2.50740	1.20776	<b>3.85313</b>
	TE_B->Z (RR)	0.01860	0.00876	<b>0.07185</b>	0.32940	0.26696	<b>0.17701</b>	2.50740	1.20776	<b>0.40326</b>
	TE_B->Z (FR)	0.01860	0.00876	<b>0.04422</b>	0.32940	0.26696	<b>0.75870</b>	2.50740	1.20776	<b>3.73492</b>
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00490	<b>0.03669</b>	0.32940	0.13350	<b>0.75644</b>	2.50740	0.60390	<b>3.84457</b>
	TE_B->Z (RR)	0.01860	0.00490	<b>0.07085</b>	0.32940	0.13350	<b>0.17633</b>	2.50740	0.60390	<b>0.41663</b>
	TE_B->Z (FR)	0.01860	0.00490	<b>0.04682</b>	0.32940	0.13350	<b>0.75872</b>	2.50740	0.60390	<b>3.73413</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	0.01536	<b>0.03358</b>	0.32940	0.27356	<b>0.61942</b>	2.50740	1.21436	<b>3.23907</b>
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00838	<b>0.03571</b>	0.32940	0.13698	<b>0.61975</b>	2.50740	0.60738	<b>3.23959</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	0.00876	<b>0.00764</b>	0.32940	0.26696	<b>0.00722</b>	2.50740	1.20776	<b>0.00721</b>
	TE_B	0.01860	0.00876	<b>0.01744</b>	0.32940	0.26696	<b>0.01092</b>	2.50740	1.20776	<b>0.00923</b>
sg13g2_einvn_2	A	0.01860	0.00490	<b>0.00383</b>	0.32940	0.13350	<b>0.00356</b>	2.50740	0.60390	<b>0.00305</b>
	TE_B	0.01860	0.00490	<b>0.00870</b>	0.32940	0.13350	<b>0.00536</b>	2.50740	0.60390	<b>0.00453</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	0.01536	<b>0.00734</b>	0.32940	0.27356	<b>0.00826</b>	2.50740	1.21436	<b>0.00575</b>
sg13g2_einvn_2	A	0.01860	0.00838	<b>0.00377</b>	0.32940	0.13698	<b>0.00415</b>	2.50740	0.60738	<b>0.00285</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>-0.00522</b>	0.32940	<b>-0.00899</b>	2.50740	<b>-0.00614</b>
sg13g2_einvn_2	0.01860	<b>-0.00265</b>	0.32940	<b>-0.00402</b>	2.50740	<b>-0.00260</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>0.00522</b>	0.32940	<b>0.01114</b>	2.50740	<b>0.01436</b>
<b>sg13g2_einvn_2</b>	0.01860	<b>0.00265</b>	0.32940	<b>0.00564</b>	2.50740	<b>0.00724</b>

# FILLx



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00209	0.00462	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	1635.27000	1811.97000	1934.01000

## 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>0.11072</b>	0.32940	0.06480	<b>0.51236</b>	2.50740	0.30000	<b>1.86448</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>0.08879</b>	0.32940	0.06480	<b>0.46544</b>	2.50740	0.30000	<b>1.64955</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>-0.06025</b>	1.26300	1.26300	<b>-0.23476</b>	2.50740	2.50740	<b>-0.35031</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.09451</b>	1.26300	1.26300	<b>0.32110</b>	2.50740	2.50740	<b>0.46185</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>-0.03113</b>	1.26300	1.26300	<b>-0.02698</b>	2.50740	2.50740	<b>-0.02134</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07321</b>	1.26300	1.26300	<b>0.08905</b>	2.50740	2.50740	<b>0.10040</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>0.00805</b>	0.32940	0.06480	<b>0.00802</b>	2.50740	0.30000	<b>0.00977</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>0.00630</b>	0.32940	0.06480	<b>0.00641</b>	2.50740	0.30000	<b>0.00836</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>0.01319</b>	0.32940	<b>0.01422</b>	2.50740	<b>0.01607</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>0.00699</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.02272</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>0.01319</b>	0.32940	<b>0.01422</b>	2.50740	<b>0.01607</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>0.00699</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.02272</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>0.00391</b>	0.32940	<b>0.00367</b>	2.50740	<b>0.00649</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>0.00445</b>	0.32940	<b>0.00416</b>	2.50740	<b>0.00695</b>

# INx



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.04278	4.80000
sg13g2_inv_8	0.02079	2.40000
sg13g2_inv_4	0.01040	1.20000
sg13g2_inv_2	0.00520	0.60000
sg13g2_inv_1	0.00261	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	2162.55000	4902.83000	7643.12000
sg13g2_inv_8	1081.28000	2451.42000	3821.56000
sg13g2_inv_4	540.63900	1225.71000	1910.78000
sg13g2_inv_2	270.32000	612.85500	955.39000
sg13g2_inv_1	135.29100	306.49600	477.70200

## 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>0.02221</b>	0.32940	1.03680	<b>0.46699</b>	2.50740	4.80000	<b>2.62669</b>
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	<b>0.02207</b>	0.32940	0.51840	<b>0.46515</b>	2.50740	2.40000	<b>2.62474</b>
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	<b>0.02256</b>	0.32940	0.25920	<b>0.46478</b>	2.50740	1.20000	<b>2.62477</b>
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	<b>0.02397</b>	0.32940	0.12960	<b>0.46430</b>	2.50740	0.60000	<b>2.62190</b>
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	<b>0.02798</b>	0.32940	0.06480	<b>0.46659</b>	2.50740	0.30000	<b>2.62285</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>0.02128</b>	0.32940	1.03680	<b>0.42857</b>	2.50740	4.80000	<b>2.46056</b>
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	<b>0.02117</b>	0.32940	0.51840	<b>0.42873</b>	2.50740	2.40000	<b>2.46176</b>
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	<b>0.02161</b>	0.32940	0.25920	<b>0.42820</b>	2.50740	1.20000	<b>2.46133</b>
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	<b>0.02276</b>	0.32940	0.12960	<b>0.42667</b>	2.50740	0.60000	<b>2.45787</b>
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	<b>0.02628</b>	0.32940	0.06480	<b>0.42775</b>	2.50740	0.30000	<b>2.45230</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>0.01818</b>	0.32940	1.03680	<b>0.01910</b>	2.50740	4.80000	<b>0.01668</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.00868</b>	0.32940	0.51840	<b>0.00843</b>	2.50740	2.40000	<b>0.00771</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00439</b>	0.32940	0.25920	<b>0.00417</b>	2.50740	1.20000	<b>0.00408</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00226</b>	0.32940	0.12960	<b>0.00212</b>	2.50740	0.60000	<b>0.00200</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00137</b>	0.32940	0.06480	<b>0.00128</b>	2.50740	0.30000	<b>0.00091</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>0.01562</b>	0.32940	1.03680	<b>0.01697</b>	2.50740	4.80000	<b>0.00046</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.00744</b>	0.32940	0.51840	<b>0.00829</b>	2.50740	2.40000	<b>-0.00031</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00379</b>	0.32940	0.25920	<b>0.00400</b>	2.50740	1.20000	<b>-0.00016</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00197</b>	0.32940	0.12960	<b>0.00200</b>	2.50740	0.60000	<b>0.00040</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00131</b>	0.32940	0.06480	<b>0.00124</b>	2.50740	0.30000	<b>-0.00007</b>

# ITL



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.01458	0.01380	2.40000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	1299.58000	2669.69000	4039.80000

## 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	0.01651	<b>0.03344</b>	0.32940	0.53392	<b>0.75820</b>	2.50740	2.41551	<b>3.85712</b>
	TE_B->Z (RR)	0.01860	0.01651	<b>0.08898</b>	0.32940	0.53392	<b>0.22048</b>	2.50740	2.41551	<b>0.54795</b>
	TE_B->Z (FR)	0.01860	0.01651	<b>0.04482</b>	0.32940	0.53392	<b>0.76156</b>	2.50740	2.41551	<b>3.74288</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	0.02960	<b>0.03498</b>	0.32940	0.54700	<b>0.62070</b>	2.50740	2.42860	<b>3.24687</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	0.01651	<b>0.01514</b>	0.32940	0.53392	<b>0.01436</b>	2.50740	2.41551	<b>0.01540</b>
	TE_B	0.01860	0.01651	<b>0.03526</b>	0.32940	0.53392	<b>0.02282</b>	2.50740	2.41551	<b>0.02012</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	0.02960	<b>0.01423</b>	0.32940	0.54700	<b>0.01647</b>	2.50740	2.42860	<b>0.01152</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>-0.00849</b>	0.32940	<b>-0.01957</b>	2.50740	<b>-0.02039</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>0.00849</b>	0.32940	<b>0.01957</b>	2.50740	<b>0.02263</b>

# KEEPSTATE



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell*  
*Library: Process*  
*sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage*  
*1.08, Temp 125.00*

## 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	140.46200	162.95500	185.44700

## 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	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for SH falling :

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

# MUX2



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00179	0.00177	0.00447	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	751.57700	1057.00000	1491.98000

## 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>0.11229</b>	0.32940	0.06480	<b>0.52390</b>	2.50740	0.30000	<b>1.88993</b>
	A1->X (RR)	0.01860	0.00100	<b>0.07650</b>	0.32940	0.06480	<b>0.53079</b>	2.50740	0.30000	<b>1.91238</b>
	S->X (-R)	0.01860	0.00100	<b>0.12260</b>	0.32940	0.06480	<b>0.53459</b>	2.50740	0.30000	<b>1.91948</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>0.08442</b>	0.32940	0.06480	<b>0.53603</b>	2.50740	0.30000	<b>1.78223</b>
	A1->X (FF)	0.01860	0.00100	<b>0.14970</b>	0.32940	0.06480	<b>0.54592</b>	2.50740	0.30000	<b>1.80436</b>
	S->X (-F)	0.01860	0.00100	<b>0.16178</b>	0.32940	0.06480	<b>0.54193</b>	2.50740	0.30000	<b>1.76727</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>0.12260</b>	0.32940	0.06480	<b>0.53459</b>	2.50740	0.30000	<b>1.91948</b>
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	<b>0.17785</b>	0.32940	0.06480	<b>0.58149</b>	2.50740	0.30000	<b>1.85009</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>0.16178</b>	0.32940	0.06480	<b>0.54193</b>	2.50740	0.30000	<b>1.76727</b>
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	<b>0.21021</b>	0.32940	0.06480	<b>0.59091</b>	2.50740	0.30000	<b>1.76252</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>0.00774</b>	0.32940	0.06480	<b>0.00762</b>	2.50740	0.30000	<b>0.01052</b>
	A1	0.01860	0.00100	<b>0.00640</b>	0.32940	0.06480	<b>0.00955</b>	2.50740	0.30000	<b>0.01225</b>
	S	0.01860	0.00100	<b>0.00670</b>	0.32940	0.06480	<b>0.00703</b>	2.50740	0.30000	<b>0.00874</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>0.00608</b>	0.32940	0.06480	<b>0.00963</b>	2.50740	0.30000	<b>0.01166</b>
	A1	0.01860	0.00100	<b>0.00773</b>	0.32940	0.06480	<b>0.00771</b>	2.50740	0.30000	<b>0.00998</b>
	S	0.01860	0.00100	<b>0.00688</b>	0.32940	0.06480	<b>0.00729</b>	2.50740	0.30000	<b>0.00846</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>0.00756</b>	0.32940	0.06480	<b>0.00775</b>	2.50740	0.30000	<b>0.00786</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.00670</b>	0.32940	0.06480	<b>0.00703</b>	2.50740	0.30000	<b>0.00874</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>0.00672</b>	0.32940	0.06480	<b>0.00699</b>	2.50740	0.30000	<b>0.00670</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.00688</b>	0.32940	0.06480	<b>0.00729</b>	2.50740	0.30000	<b>0.00846</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>0.00386</b>	0.32940	<b>0.00360</b>	2.50740	<b>0.00580</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>0.00320</b>	0.32940	<b>0.00298</b>	2.50740	<b>0.00508</b>

# MUX4



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00237	0.00237	0.00237	0.00238	0.00698	0.00440	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	997.59000	2353.51000	3423.66000

## 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>0.21571</b>	0.32940	0.06480	<b>0.65133</b>	2.50740	0.30000	<b>2.17907</b>
	A1->X (RR)	0.01860	0.00100	<b>0.20925</b>	0.32940	0.06480	<b>0.64875</b>	2.50740	0.30000	<b>2.17361</b>
	A2->X (RR)	0.01860	0.00100	<b>0.22572</b>	0.32940	0.06480	<b>0.66450</b>	2.50740	0.30000	<b>2.21151</b>
	A3->X (RR)	0.01860	0.00100	<b>0.21941</b>	0.32940	0.06480	<b>0.66096</b>	2.50740	0.30000	<b>2.20808</b>
	S0->X (-R)	0.01860	0.00100	<b>0.18757</b>	0.32940	0.06480	<b>0.63376</b>	2.50740	0.30000	<b>2.14658</b>
	S1->X (-R)	0.01860	0.00100	<b>0.00676</b>	0.32940	0.06480	<b>0.44868</b>	2.50740	0.30000	<b>1.85931</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>0.24685</b>	0.32940	0.06480	<b>0.65957</b>	2.50740	0.30000	<b>1.95970</b>
	A1->X (FF)	0.01860	0.00100	<b>0.24744</b>	0.32940	0.06480	<b>0.65842</b>	2.50740	0.30000	<b>1.95832</b>
	A2->X (FF)	0.01860	0.00100	<b>0.26403</b>	0.32940	0.06480	<b>0.68032</b>	2.50740	0.30000	<b>2.00158</b>
	A3->X (FF)	0.01860	0.00100	<b>0.26411</b>	0.32940	0.06480	<b>0.67952</b>	2.50740	0.30000	<b>1.99854</b>
	S0->X (-F)	0.01860	0.00100	<b>0.22592</b>	0.32940	0.06480	<b>0.64809</b>	2.50740	0.30000	<b>1.97134</b>
	S1->X (-F)	0.01860	0.00100	<b>0.00680</b>	0.32940	0.06480	<b>0.55368</b>	2.50740	0.30000	<b>1.70213</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>0.18757</b>	0.32940	0.06480	<b>0.63376</b>	2.50740	0.30000	<b>2.14658</b>
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.17508</b>	0.32940	0.06480	<b>0.61485</b>	2.50740	0.30000	<b>2.09387</b>
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.26954</b>	0.32940	0.06480	<b>0.70640</b>	2.50740	0.30000	<b>2.03995</b>
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.25945</b>	0.32940	0.06480	<b>0.69347</b>	2.50740	0.30000	<b>2.02117</b>
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	<b>-0.00147</b>	0.32940	0.06480	<b>0.41239</b>	2.50740	0.30000	<b>1.85864</b>
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.00676</b>	0.32940	0.06480	<b>0.44868</b>	2.50740	0.30000	<b>1.85931</b>
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	<b>-0.00255</b>	0.32940	0.06480	<b>0.51985</b>	2.50740	0.30000	<b>1.80168</b>
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.00155</b>	0.32940	0.06480	<b>0.53577</b>	2.50740	0.30000	<b>1.80206</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>0.22592</b>	0.32940	0.06480	<b>0.64809</b>	2.50740	0.30000	<b>1.97134</b>
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.20553</b>	0.32940	0.06480	<b>0.62065</b>	2.50740	0.30000	<b>1.91153</b>
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	<b>0.29119</b>	0.32940	0.06480	<b>0.71843</b>	2.50740	0.30000	<b>1.94282</b>
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.27481</b>	0.32940	0.06480	<b>0.69583</b>	2.50740	0.30000	<b>1.91584</b>
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.05250</b>	0.32940	0.06480	<b>0.48266</b>	2.50740	0.30000	<b>1.68211</b>
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	<b>-0.00330</b>	0.32940	0.06480	<b>0.40795</b>	2.50740	0.30000	<b>1.67770</b>
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.00680</b>	0.32940	0.06480	<b>0.55368</b>	2.50740	0.30000	<b>1.70213</b>
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	<b>-0.00419</b>	0.32940	0.06480	<b>0.53733</b>	2.50740	0.30000	<b>1.69975</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>0.00951</b>	0.32940	0.06480	<b>0.00945</b>	2.50740	0.30000	<b>0.01057</b>
	A1	0.01860	0.00100	<b>0.00911</b>	0.32940	0.06480	<b>0.00903</b>	2.50740	0.30000	<b>0.01013</b>
	A2	0.01860	0.00100	<b>0.00972</b>	0.32940	0.06480	<b>0.00964</b>	2.50740	0.30000	<b>0.01058</b>
	A3	0.01860	0.00100	<b>0.00959</b>	0.32940	0.06480	<b>0.00952</b>	2.50740	0.30000	<b>0.01052</b>
	S0	0.01860	0.00100	<b>0.00604</b>	0.32940	0.06480	<b>0.00617</b>	2.50740	0.30000	<b>0.00869</b>
	S1	0.01860	0.00100	<b>0.00734</b>	0.32940	0.06480	<b>0.01218</b>	2.50740	0.30000	<b>0.02341</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>0.00919</b>	0.32940	0.06480	<b>0.00927</b>	2.50740	0.30000	<b>0.00963</b>
	A1	0.01860	0.00100	<b>0.01253</b>	0.32940	0.06480	<b>0.01264</b>	2.50740	0.30000	<b>0.01334</b>
	A2	0.01860	0.00100	<b>0.01382</b>	0.32940	0.06480	<b>0.01398</b>	2.50740	0.30000	<b>0.01451</b>
	A3	0.01860	0.00100	<b>0.01281</b>	0.32940	0.06480	<b>0.01293</b>	2.50740	0.30000	<b>0.01350</b>
	S0	0.01860	0.00100	<b>0.00627</b>	0.32940	0.06480	<b>0.00647</b>	2.50740	0.30000	<b>0.00832</b>
	S1	0.01860	0.00100	<b>0.00925</b>	0.32940	0.06480	<b>0.01910</b>	2.50740	0.30000	<b>0.02159</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>0.00874</b>	0.32940	0.06480	<b>0.00909</b>	2.50740	0.30000	<b>0.00872</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.00872</b>	0.32940	0.06480	<b>0.00913</b>	2.50740	0.30000	<b>0.00885</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.00604</b>	0.32940	0.06480	<b>0.00617</b>	2.50740	0.30000	<b>0.00869</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.00610</b>	0.32940	0.06480	<b>0.00617</b>	2.50740	0.30000	<b>0.00822</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.00760</b>	0.32940	0.06480	<b>0.02279</b>	2.50740	0.30000	<b>0.02878</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.00868</b>	0.32940	0.06480	<b>0.02176</b>	2.50740	0.30000	<b>0.02584</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.00734</b>	0.32940	0.06480	<b>0.01218</b>	2.50740	0.30000	<b>0.02341</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.00805</b>	0.32940	0.06480	<b>0.01331</b>	2.50740	0.30000	<b>0.02109</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>0.00978</b>	0.32940	0.06480	<b>0.01449</b>	2.50740	0.30000	<b>0.01192</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.00955</b>	0.32940	0.06480	<b>0.01519</b>	2.50740	0.30000	<b>0.01247</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.00627</b>	0.32940	0.06480	<b>0.00647</b>	2.50740	0.30000	<b>0.00832</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.00551</b>	0.32940	0.06480	<b>0.00583</b>	2.50740	0.30000	<b>0.00772</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.00925</b>	0.32940	0.06480	<b>0.01910</b>	2.50740	0.30000	<b>0.02159</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.00879</b>	0.32940	0.06480	<b>0.02452</b>	2.50740	0.30000	<b>0.02861</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.00841</b>	0.32940	0.06480	<b>0.01354</b>	2.50740	0.30000	<b>0.01778</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.00794</b>	0.32940	0.06480	<b>0.01366</b>	2.50740	0.30000	<b>0.02385</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>0.00677</b>	0.32940	<b>0.00642</b>	2.50740	<b>0.01169</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>0.00984</b>	0.32940	<b>0.00945</b>	2.50740	<b>0.01183</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>0.00588</b>	0.32940	<b>0.00557</b>	2.50740	<b>0.01101</b>
	(A0 * A1 * !S1)	0.01860	<b>0.00649</b>	0.32940	<b>0.01350</b>	2.50740	<b>0.01625</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.00597</b>	0.32940	<b>0.00571</b>	2.50740	<b>0.01114</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.00677</b>	0.32940	<b>0.00642</b>	2.50740	<b>0.01169</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>0.00940</b>	0.32940	<b>0.00899</b>	2.50740	<b>0.01134</b>
	(A0 * A1 * !S1)	0.01860	<b>0.00984</b>	0.32940	<b>0.00945</b>	2.50740	<b>0.01183</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.00932</b>	0.32940	<b>0.00887</b>	2.50740	<b>0.01122</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.00713</b>	0.32940	<b>0.01409</b>	2.50740	<b>0.01659</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>0.00305</b>	0.32940	<b>0.00303</b>	2.50740	<b>0.00593</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>0.00309</b>	0.32940	<b>0.00302</b>	2.50740	<b>0.00579</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>0.00236</b>	0.32940	<b>0.00226</b>	2.50740	<b>0.00517</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00236</b>	0.32940	<b>0.00226</b>	2.50740	<b>0.00517</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00305</b>	0.32940	<b>0.00303</b>	2.50740	<b>0.00593</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00310</b>	0.32940	<b>0.00307</b>	2.50740	<b>0.00596</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>0.00233</b>	0.32940	<b>0.00238</b>	2.50740	<b>0.00512</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00232</b>	0.32940	<b>0.00238</b>	2.50740	<b>0.00512</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00309</b>	0.32940	<b>0.00302</b>	2.50740	<b>0.00579</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00312</b>	0.32940	<b>0.00306</b>	2.50740	<b>0.00583</b>

# NAND2B1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00205	0.00276	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	215.66200	541.40500	1046.65000

## 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>0.07506</b>	0.32940	0.06480	<b>0.47866</b>	2.50740	0.30000	<b>1.80566</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03518</b>	0.32940	0.06480	<b>0.47448</b>	2.50740	0.30000	<b>2.63386</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>0.09254</b>	0.32940	0.06480	<b>0.64440</b>	2.50740	0.30000	<b>2.47198</b>
	B->Y (RF)	0.01860	0.00100	<b>0.05619</b>	0.32940	0.06480	<b>0.62713</b>	2.50740	0.30000	<b>3.16903</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>0.00174</b>	0.32940	0.06480	<b>0.00179</b>	2.50740	0.30000	<b>0.00116</b>
	B	0.01860	0.00100	<b>0.00167</b>	0.32940	0.06480	<b>0.00138</b>	2.50740	0.30000	<b>0.00109</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>0.00335</b>	0.32940	0.06480	<b>0.00341</b>	2.50740	0.30000	<b>0.00277</b>
	B	0.01860	0.00100	<b>0.00337</b>	0.32940	0.06480	<b>0.00328</b>	2.50740	0.30000	<b>0.00236</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>0.00306</b>	0.32940	<b>0.00296</b>	2.50740	<b>0.00525</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>0.00177</b>	0.32940	<b>0.00168</b>	2.50740	<b>0.00381</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>0.00306</b>	0.32940	<b>0.00296</b>	2.50740	<b>0.00525</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>0.00177</b>	0.32940	<b>0.00168</b>	2.50740	<b>0.00381</b>

# NAND2



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00258	0.00263	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	124.40000	406.41300	955.38800

## 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>0.03079</b>	0.32940	0.06480	<b>0.46843</b>	2.50740	0.30000	<b>2.62542</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03551</b>	0.32940	0.06480	<b>0.47347</b>	2.50740	0.30000	<b>2.63119</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>0.04293</b>	0.32940	0.06480	<b>0.61923</b>	2.50740	0.30000	<b>3.23151</b>
	B->Y (RF)	0.01860	0.00100	<b>0.04971</b>	0.32940	0.06480	<b>0.62083</b>	2.50740	0.30000	<b>3.16984</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>0.00149</b>	0.32940	0.06480	<b>0.00134</b>	2.50740	0.30000	<b>0.00100</b>
	B	0.01860	0.00100	<b>0.00159</b>	0.32940	0.06480	<b>0.00128</b>	2.50740	0.30000	<b>0.00098</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>0.00191</b>	0.32940	0.06480	<b>0.00182</b>	2.50740	0.30000	<b>0.00152</b>
	B	0.01860	0.00100	<b>0.00320</b>	0.32940	0.06480	<b>0.00307</b>	2.50740	0.30000	<b>0.00244</b>

# NAND3B1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00196	0.00263	0.00264	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	138.75200	476.72400	1524.34000

## 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>0.07916</b>	0.32940	0.06480	<b>0.48015</b>	2.50740	0.30000	<b>1.80129</b>
	B->Y (FR)	0.01860	0.00100	<b>0.04006</b>	0.32940	0.06480	<b>0.47906</b>	2.50740	0.30000	<b>2.63857</b>
	C->Y (FR)	0.01860	0.00100	<b>0.04361</b>	0.32940	0.06480	<b>0.48398</b>	2.50740	0.30000	<b>2.64332</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>0.11485</b>	0.32940	0.06480	<b>0.86123</b>	2.50740	0.30000	<b>3.40673</b>
	B->Y (RF)	0.01860	0.00100	<b>0.08753</b>	0.32940	0.06480	<b>0.84838</b>	2.50740	0.30000	<b>4.06397</b>
	C->Y (RF)	0.01860	0.00100	<b>0.09576</b>	0.32940	0.06480	<b>0.84983</b>	2.50740	0.30000	<b>3.95964</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>0.00255</b>	0.32940	0.06480	<b>0.00258</b>	2.50740	0.30000	<b>0.00198</b>
	B	0.01860	0.00100	<b>0.00193</b>	0.32940	0.06480	<b>0.00162</b>	2.50740	0.30000	<b>0.00137</b>
	C	0.01860	0.00100	<b>0.00220</b>	0.32940	0.06480	<b>0.00181</b>	2.50740	0.30000	<b>0.00154</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>0.00794</b>	0.32940	0.06480	<b>0.00797</b>	2.50740	0.30000	<b>0.00743</b>
	B	0.01860	0.00100	<b>0.00437</b>	0.32940	0.06480	<b>0.00426</b>	2.50740	0.30000	<b>0.00350</b>
	C	0.01860	0.00100	<b>0.00566</b>	0.32940	0.06480	<b>0.00555</b>	2.50740	0.30000	<b>0.00503</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>0.00230</b>	0.32940	<b>0.00218</b>	2.50740	<b>0.00450</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>-0.00177</b>	0.32940	<b>-0.00187</b>	2.50740	<b>0.00028</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>0.00230</b>	0.32940	<b>0.00218</b>	2.50740	<b>0.00450</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	-0.00177	0.32940	-0.00187	2.50740	0.00028

# NOR2



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00264	0.00258	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	250.89900	408.93800	630.62400

## 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>0.06084</b>	0.32940	0.06480	<b>0.76425</b>	2.50740	0.30000	<b>3.73200</b>
	B->Y (FR)	0.01860	0.00100	<b>0.05201</b>	0.32940	0.06480	<b>0.76705</b>	2.50740	0.30000	<b>3.84565</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>0.03311</b>	0.32940	0.06480	<b>0.43605</b>	2.50740	0.30000	<b>2.46392</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02868</b>	0.32940	0.06480	<b>0.43013</b>	2.50740	0.30000	<b>2.45509</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>0.00349</b>	0.32940	0.06480	<b>0.00338</b>	2.50740	0.30000	<b>0.00297</b>
	B	0.01860	0.00100	<b>0.00190</b>	0.32940	0.06480	<b>0.00186</b>	2.50740	0.30000	<b>0.00146</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>0.00163</b>	0.32940	0.06480	<b>0.00139</b>	2.50740	0.30000	<b>0.00024</b>
	B	0.01860	0.00100	<b>0.00146</b>	0.32940	0.06480	<b>0.00140</b>	2.50740	0.30000	<b>0.00010</b>

# NOR3



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00262	0.00258	0.00254	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	217.83200	468.13000	814.90800



## 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>0.11267</b>	0.32940	0.06480	<b>1.10139</b>	2.50740	0.30000	<b>4.98143</b>
	B->Y (FR)	0.01860	0.00100	<b>0.10604</b>	0.32940	0.06480	<b>1.10156</b>	2.50740	0.30000	<b>5.12249</b>
	C->Y (FR)	0.01860	0.00100	<b>0.08364</b>	0.32940	0.06480	<b>1.08316</b>	2.50740	0.30000	<b>5.17174</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>0.03788</b>	0.32940	0.06480	<b>0.44486</b>	2.50740	0.30000	<b>2.47464</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03711</b>	0.32940	0.06480	<b>0.44134</b>	2.50740	0.30000	<b>2.47403</b>
	C->Y (RF)	0.01860	0.00100	<b>0.03186</b>	0.32940	0.06480	<b>0.43390</b>	2.50740	0.30000	<b>2.46641</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>0.00576</b>	0.32940	0.06480	<b>0.00565</b>	2.50740	0.30000	<b>0.00529</b>
	B	0.01860	0.00100	<b>0.00441</b>	0.32940	0.06480	<b>0.00426</b>	2.50740	0.30000	<b>0.00382</b>
	C	0.01860	0.00100	<b>0.00283</b>	0.32940	0.06480	<b>0.00274</b>	2.50740	0.30000	<b>0.00240</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>0.00210</b>	0.32940	0.06480	<b>0.00177</b>	2.50740	0.30000	<b>0.00067</b>
	B	0.01860	0.00100	<b>0.00187</b>	0.32940	0.06480	<b>0.00168</b>	2.50740	0.30000	<b>0.00065</b>
	C	0.01860	0.00100	<b>0.00154</b>	0.32940	0.06480	<b>0.00146</b>	2.50740	0.30000	<b>0.00045</b>

# NOR4



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00262	0.00257	0.00226	0.00234	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	209.17800	447.99400	995.89200

## 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>0.17605</b>	0.32940	0.06480	<b>1.46070</b>	2.50740	0.30000	<b>6.32503</b>
	B->Y (FR)	0.01860	0.00100	<b>0.17024</b>	0.32940	0.06480	<b>1.45751</b>	2.50740	0.30000	<b>6.42925</b>
	C->Y (FR)	0.01860	0.00100	<b>0.15040</b>	0.32940	0.06480	<b>1.43901</b>	2.50740	0.30000	<b>6.52789</b>
	D->Y (FR)	0.01860	0.00100	<b>0.11059</b>	0.32940	0.06480	<b>1.40139</b>	2.50740	0.30000	<b>6.53195</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>0.03960</b>	0.32940	0.06480	<b>0.45005</b>	2.50740	0.30000	<b>2.48103</b>
	B->Y (RF)	0.01860	0.00100	<b>0.04084</b>	0.32940	0.06480	<b>0.44848</b>	2.50740	0.30000	<b>2.48106</b>
	C->Y (RF)	0.01860	0.00100	<b>0.03921</b>	0.32940	0.06480	<b>0.44228</b>	2.50740	0.30000	<b>2.48055</b>
	D->Y (RF)	0.01860	0.00100	<b>0.03356</b>	0.32940	0.06480	<b>0.43579</b>	2.50740	0.30000	<b>2.46843</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>0.00739</b>	0.32940	0.06480	<b>0.00722</b>	2.50740	0.30000	<b>0.00688</b>
	B	0.01860	0.00100	<b>0.00611</b>	0.32940	0.06480	<b>0.00595</b>	2.50740	0.30000	<b>0.00560</b>
	C	0.01860	0.00100	<b>0.00502</b>	0.32940	0.06480	<b>0.00486</b>	2.50740	0.30000	<b>0.00441</b>
	D	0.01860	0.00100	<b>0.00296</b>	0.32940	0.06480	<b>0.00282</b>	2.50740	0.30000	<b>0.00247</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>0.00261</b>	0.32940	0.06480	<b>0.00225</b>	2.50740	0.30000	<b>0.00111</b>
	B	0.01860	0.00100	<b>0.00243</b>	0.32940	0.06480	<b>0.00220</b>	2.50740	0.30000	<b>0.00110</b>
	C	0.01860	0.00100	<b>0.00161</b>	0.32940	0.06480	<b>0.00134</b>	2.50740	0.30000	<b>0.00076</b>
	D	0.01860	0.00100	<b>0.00046</b>	0.32940	0.06480	<b>0.00040</b>	2.50740	0.30000	<b>-0.00057</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>0.00002</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00013</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>0.00017</b>	0.32940	<b>0.00018</b>	2.50740	<b>0.00019</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>0.00002</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00013</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>0.00017</b>	0.32940	<b>0.00018</b>	2.50740	<b>0.00019</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>-0.00009</b>	2.50740	<b>-0.00012</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>0.00014</b>	0.32940	<b>0.00015</b>	2.50740	<b>0.00015</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>-0.00009</b>	2.50740	<b>-0.00012</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>0.00014</b>	0.32940	<b>0.00015</b>	2.50740	<b>0.00015</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>0.00044</b>	0.32940	<b>0.00045</b>	2.50740	<b>0.00045</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	<b>-0.00012</b>	0.32940	<b>-0.00013</b>	2.50740	<b>-0.00012</b>

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	<b>0.00044</b>	0.32940	<b>0.00045</b>	2.50740	<b>0.00045</b>

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	<b>-0.00012</b>	0.32940	<b>-0.00013</b>	2.50740	<b>-0.00012</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>0.00113</b>	0.32940	<b>0.00114</b>	2.50740	<b>0.00114</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	<b>0.00037</b>	0.32940	<b>0.00037</b>	2.50740	<b>0.00039</b>

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	<b>0.00113</b>	0.32940	<b>0.00114</b>	2.50740	<b>0.00114</b>



**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>0.00037</b>	0.32940	<b>0.00037</b>	2.50740	<b>0.00039</b>

# NP\_ANT



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## Truth Table

INPUT
A
x

## Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

## Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00113

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	3.56330	3.56330	3.56330

## 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>-0.00028</b>	0.32940	<b>-0.00028</b>	2.50740	<b>-0.00028</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>0.00028</b>	0.32940	<b>0.00028</b>	2.50740	<b>0.00028</b>

# OR2



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00197	0.00195	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	323.45700	522.72800	660.04400

## 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>0.08112</b>	0.32940	0.06480	<b>0.49516</b>	2.50740	0.30000	<b>1.86311</b>
	B->X (RR)	0.01860	0.00100	<b>0.07474</b>	0.32940	0.06480	<b>0.48045</b>	2.50740	0.30000	<b>1.80678</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>0.13763</b>	0.32940	0.06480	<b>0.50957</b>	2.50740	0.30000	<b>1.68785</b>
	B->X (FF)	0.01860	0.00100	<b>0.12946</b>	0.32940	0.06480	<b>0.50720</b>	2.50740	0.30000	<b>1.68864</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>0.00465</b>	0.32940	0.06480	<b>0.00449</b>	2.50740	0.30000	<b>0.00640</b>
	B	0.01860	0.00100	<b>0.00463</b>	0.32940	0.06480	<b>0.00451</b>	2.50740	0.30000	<b>0.00590</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>0.00594</b>	0.32940	0.06480	<b>0.00596</b>	2.50740	0.30000	<b>0.00667</b>
	B	0.01860	0.00100	<b>0.00476</b>	0.32940	0.06480	<b>0.00481</b>	2.50740	0.30000	<b>0.00624</b>

# OR3



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00217	0.00214	0.00210	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	327.27400	560.77000	862.18200

## 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>0.09533</b>	0.32940	0.06480	<b>0.52515</b>	2.50740	0.30000	<b>1.96750</b>
	B->X (RR)	0.01860	0.00100	<b>0.09034</b>	0.32940	0.06480	<b>0.51211</b>	2.50740	0.30000	<b>1.91582</b>
	C->X (RR)	0.01860	0.00100	<b>0.08190</b>	0.32940	0.06480	<b>0.49459</b>	2.50740	0.30000	<b>1.85801</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>0.20021</b>	0.32940	0.06480	<b>0.58268</b>	2.50740	0.30000	<b>1.75603</b>
	B->X (FF)	0.01860	0.00100	<b>0.19274</b>	0.32940	0.06480	<b>0.57853</b>	2.50740	0.30000	<b>1.77688</b>
	C->X (FF)	0.01860	0.00100	<b>0.17239</b>	0.32940	0.06480	<b>0.56019</b>	2.50740	0.30000	<b>1.75915</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>0.00510</b>	0.32940	0.06480	<b>0.00492</b>	2.50740	0.30000	<b>0.00651</b>
	B	0.01860	0.00100	<b>0.00483</b>	0.32940	0.06480	<b>0.00463</b>	2.50740	0.30000	<b>0.00642</b>
	C	0.01860	0.00100	<b>0.00468</b>	0.32940	0.06480	<b>0.00445</b>	2.50740	0.30000	<b>0.00638</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>0.00826</b>	0.32940	0.06480	<b>0.00827</b>	2.50740	0.30000	<b>0.00876</b>
	B	0.01860	0.00100	<b>0.00706</b>	0.32940	0.06480	<b>0.00699</b>	2.50740	0.30000	<b>0.00772</b>
	C	0.01860	0.00100	<b>0.00570</b>	0.32940	0.06480	<b>0.00567</b>	2.50740	0.30000	<b>0.00683</b>

# OR4



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00218	0.00213	0.00185	0.00193	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	318.49500	547.84600	1023.39000

## 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>0.09986</b>	0.32940	0.06480	<b>0.53897</b>	2.50740	0.30000	<b>2.01590</b>
	B->X (RR)	0.01860	0.00100	<b>0.09800</b>	0.32940	0.06480	<b>0.52963</b>	2.50740	0.30000	<b>1.97378</b>
	C->X (RR)	0.01860	0.00100	<b>0.09211</b>	0.32940	0.06480	<b>0.51654</b>	2.50740	0.30000	<b>1.92276</b>
	D->X (RR)	0.01860	0.00100	<b>0.08340</b>	0.32940	0.06480	<b>0.49850</b>	2.50740	0.30000	<b>1.86421</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>0.27816</b>	0.32940	0.06480	<b>0.68316</b>	2.50740	0.30000	<b>1.86601</b>
	B->X (FF)	0.01860	0.00100	<b>0.27137</b>	0.32940	0.06480	<b>0.67631</b>	2.50740	0.30000	<b>1.88747</b>
	C->X (FF)	0.01860	0.00100	<b>0.25136</b>	0.32940	0.06480	<b>0.65669</b>	2.50740	0.30000	<b>1.89629</b>
	D->X (FF)	0.01860	0.00100	<b>0.21591</b>	0.32940	0.06480	<b>0.62177</b>	2.50740	0.30000	<b>1.86185</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>0.00560</b>	0.32940	0.06480	<b>0.00550</b>	2.50740	0.30000	<b>0.00696</b>
	B	0.01860	0.00100	<b>0.00532</b>	0.32940	0.06480	<b>0.00516</b>	2.50740	0.30000	<b>0.00653</b>
	C	0.01860	0.00100	<b>0.00461</b>	0.32940	0.06480	<b>0.00444</b>	2.50740	0.30000	<b>0.00574</b>
	D	0.01860	0.00100	<b>0.00374</b>	0.32940	0.06480	<b>0.00354</b>	2.50740	0.30000	<b>0.00534</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>0.00901</b>	0.32940	0.06480	<b>0.00911</b>	2.50740	0.30000	<b>0.00951</b>
	B	0.01860	0.00100	<b>0.00839</b>	0.32940	0.06480	<b>0.00846</b>	2.50740	0.30000	<b>0.00886</b>
	C	0.01860	0.00100	<b>0.00730</b>	0.32940	0.06480	<b>0.00732</b>	2.50740	0.30000	<b>0.00810</b>
	D	0.01860	0.00100	<b>0.00523</b>	0.32940	0.06480	<b>0.00515</b>	2.50740	0.30000	<b>0.00656</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>-0.00008</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00021</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>0.00064</b>	0.32940	<b>0.00067</b>	2.50740	<b>0.00065</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>-0.00008</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00021</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>0.00064</b>	0.32940	<b>0.00067</b>	2.50740	<b>0.00065</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>-0.00005</b>	0.32940	<b>-0.00011</b>	2.50740	<b>-0.00011</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>0.00010</b>	0.32940	<b>0.00011</b>	2.50740	<b>0.00011</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>-0.00005</b>	0.32940	<b>-0.00011</b>	2.50740	<b>-0.00011</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>0.00010</b>	0.32940	<b>0.00011</b>	2.50740	<b>0.00011</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>0.00029</b>	0.32940	<b>0.00030</b>	2.50740	<b>0.00031</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	-0.00002	0.32940	-0.00002	2.50740	-0.00002

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	0.00029	0.32940	0.00030	2.50740	0.00031

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	-0.00002	0.32940	-0.00002	2.50740	-0.00002

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00095	0.32940	0.00096	2.50740	0.00096

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00069	0.32940	0.00069	2.50740	0.00071

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	0.00095	0.32940	0.00096	2.50740	0.00096

**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>0.00069</b>	0.32940	<b>0.00069</b>	2.50740	<b>0.00071</b>

# SDFRRS



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00157	0.00170	0.00301	0.00146	0.00451	0.00271	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	2642.51000	3706.55000	4660.47000

## 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>0.43707</b>	0.32940	0.06480	<b>0.83613</b>	2.50740	0.30000	<b>2.17462</b>
	SET_B->Q (FR)	0.01860	0.00100	<b>0.17783</b>	0.32940	0.06480	<b>0.59877</b>	2.50740	0.30000	<b>2.00702</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>0.36172</b>	0.32940	0.06480	<b>0.72484</b>	2.50740	0.30000	<b>1.93012</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.30161</b>	0.32940	0.06480	<b>0.68151</b>	2.50740	0.30000	<b>1.93840</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>0.43707</b>	0.32940	0.06480	<b>0.83613</b>	2.50740	0.30000	<b>2.17462</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>0.36172</b>	0.32940	0.06480	<b>0.72484</b>	2.50740	0.30000	<b>1.93012</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>0.29547</b>	0.32940	0.06480	<b>0.72700</b>	2.50740	0.30000	<b>2.08975</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.23393</b>	0.32940	0.06480	<b>0.69495</b>	2.50740	0.30000	<b>2.11725</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>0.36029</b>	0.32940	0.06480	<b>0.77926</b>	2.50740	0.30000	<b>1.96647</b>
	SET_B->Q_N (FF)	0.01860	0.00100	<b>0.11600</b>	0.32940	0.06480	<b>0.53221</b>	2.50740	0.30000	<b>1.83525</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>0.29547</b>	0.32940	0.06480	<b>0.72700</b>	2.50740	0.30000	<b>2.08975</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>0.36029</b>	0.32940	0.06480	<b>0.77926</b>	2.50740	0.30000	<b>1.96647</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>-0.14182</b>	1.26300	1.26300	<b>-0.38047</b>	2.50740	2.50740	<b>-0.52242</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.21273</b>	1.26300	1.26300	<b>0.42634</b>	2.50740	2.50740	<b>0.56965</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>-0.15160</b>	1.26300	1.26300	<b>-0.24555</b>	2.50740	2.50740	<b>-0.30106</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.27142</b>	1.26300	1.26300	<b>0.36158</b>	2.50740	2.50740	<b>0.46044</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>-0.18094</b>	1.26300	1.26300	<b>-0.46952</b>	2.50740	2.50740	<b>-0.65524</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.25430</b>	1.26300	1.26300	<b>0.50999</b>	2.50740	2.50740	<b>0.69951</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>-0.19806</b>	1.26300	1.26300	<b>-0.29682</b>	2.50740	2.50740	<b>-0.37484</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.32277</b>	1.26300	1.26300	<b>0.41015</b>	2.50740	2.50740	<b>0.52242</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>-0.15405</b>	1.26300	1.26300	<b>-0.42364</b>	2.50740	2.50740	<b>-0.58440</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.22740</b>	1.26300	1.26300	<b>0.46682</b>	2.50740	2.50740	<b>0.63458</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>-0.15160</b>	1.26300	1.26300	<b>-0.21047</b>	2.50740	2.50740	<b>-0.25678</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.27142</b>	1.26300	1.26300	<b>0.32920</b>	2.50740	2.50740	<b>0.41617</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>0.12226</b>	1.26300	1.26300	<b>0.22666</b>	2.50740	2.50740	<b>0.29515</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.06602</b>	1.26300	1.26300	<b>-0.17539</b>	2.50740	2.50740	<b>-0.23022</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>0.06358</b>	1.26300	1.26300	<b>0.17809</b>	2.50740	2.50740	<b>0.59621</b>
	removal	CLK (R)	0.01860	0.01860	<b>0.04646</b>	1.26300	1.26300	<b>0.11333</b>	2.50740	2.50740	<b>0.13872</b>
	hold	RESET_B (R)	0.01860	0.01860	<b>-0.11981</b>	1.26300	1.26300	<b>-0.31031</b>	2.50740	2.50740	<b>-0.39846</b>
	setup	RESET_B (R)	0.01860	0.01860	<b>0.15160</b>	1.26300	1.26300	<b>0.37777</b>	2.50740	2.50740	<b>0.49586</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>0.01204</b>	0.32940	0.06480	<b>0.01227</b>	2.50740	0.30000	<b>0.01419</b>
	SET_B	0.01860	0.00100	<b>0.02328</b>	0.32940	0.06480	<b>0.06022</b>	2.50740	0.30000	<b>0.20118</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>0.01211</b>	0.32940	0.06480	<b>0.01212</b>	2.50740	0.30000	<b>0.01330</b>
	RESET_B	0.01860	0.00100	<b>0.02646</b>	0.32940	0.06480	<b>0.06371</b>	2.50740	0.30000	<b>0.20125</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>0.01204</b>	0.32940	0.06480	<b>0.01227</b>	2.50740	0.30000	<b>0.01419</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>0.01211</b>	0.32940	0.06480	<b>0.01212</b>	2.50740	0.30000	<b>0.01330</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>0.01199</b>	0.32940	0.06480	<b>0.01209</b>	2.50740	0.30000	<b>0.01370</b>
	RESET_B	0.01860	0.00100	<b>0.02648</b>	0.32940	0.06480	<b>0.06390</b>	2.50740	0.30000	<b>0.20236</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>0.01204</b>	0.32940	0.06480	<b>0.01215</b>	2.50740	0.30000	<b>0.01350</b>
	SET_B	0.01860	0.00100	<b>0.02327</b>	0.32940	0.06480	<b>0.05999</b>	2.50740	0.30000	<b>0.19983</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>0.01199</b>	0.32940	0.06480	<b>0.01209</b>	2.50740	0.30000	<b>0.01370</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>0.01204</b>	0.32940	0.06480	<b>0.01215</b>	2.50740	0.30000	<b>0.01350</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>-0.00081</b>	0.32940	<b>-0.00103</b>	2.50740	<b>0.00011</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>0.00379</b>	0.32940	<b>0.00361</b>	2.50740	<b>0.00465</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>0.00802</b>	0.32940	<b>0.00777</b>	2.50740	<b>0.00901</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>-0.00081</b>	0.32940	<b>-0.00103</b>	2.50740	<b>0.00011</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>0.00856</b>	0.32940	<b>0.00833</b>	2.50740	<b>0.00953</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>0.00379</b>	0.32940	<b>0.00361</b>	2.50740	<b>0.00465</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>0.00425</b>	0.32940	<b>0.00410</b>	2.50740	<b>0.00474</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>-0.00241</b>	0.32940	<b>-0.00251</b>	2.50740	<b>-0.00192</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>0.00932</b>	0.32940	<b>0.00917</b>	2.50740	<b>0.00986</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>0.00425</b>	0.32940	<b>0.00410</b>	2.50740	<b>0.00474</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>0.01142</b>	0.32940	<b>0.01101</b>	2.50740	<b>0.01173</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>-0.00241</b>	0.32940	<b>-0.00251</b>	2.50740	<b>-0.00192</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>0.00603</b>	0.32940	<b>0.00529</b>	2.50740	<b>0.00689</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>0.00017</b>	0.32940	<b>0.00599</b>	2.50740	<b>0.01927</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>0.01057</b>	0.32940	<b>0.01046</b>	2.50740	<b>0.01206</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.00603</b>	0.32940	<b>0.00529</b>	2.50740	<b>0.00689</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.00953</b>	0.32940	<b>0.00926</b>	2.50740	<b>0.01223</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>0.00438</b>	0.32940	<b>0.00414</b>	2.50740	<b>0.00699</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>0.01084</b>	0.32940	<b>0.01072</b>	2.50740	<b>0.01217</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.00699</b>	0.32940	<b>0.01189</b>	2.50740	<b>0.01382</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.00017</b>	0.32940	<b>0.00599</b>	2.50740	<b>0.01927</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>-0.00414</b>	0.32940	<b>-0.00414</b>	2.50740	<b>-0.00200</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>0.00844</b>	0.32940	<b>0.00811</b>	2.50740	<b>0.01137</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>0.00728</b>	0.32940	<b>0.00697</b>	2.50740	<b>0.01018</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>0.00868</b>	0.32940	<b>0.00841</b>	2.50740	<b>0.01176</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.00844</b>	0.32940	<b>0.00811</b>	2.50740	<b>0.01137</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.00850</b>	0.32940	<b>0.00816</b>	2.50740	<b>0.01151</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.00868</b>	0.32940	<b>0.00841</b>	2.50740	<b>0.01176</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>0.00056</b>	0.32940	<b>0.00023</b>	2.50740	<b>0.00360</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.00849</b>	0.32940	<b>0.00815</b>	2.50740	<b>0.01151</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>0.00721</b>	0.32940	<b>0.00688</b>	2.50740	<b>0.01003</b>
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01368</b>	0.32940	<b>0.01326</b>	2.50740	<b>0.01642</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.00170</b>	0.32940	<b>0.00137</b>	2.50740	<b>0.00477</b>
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01521</b>	0.32940	<b>0.01487</b>	2.50740	<b>0.01828</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.00765</b>	0.32940	<b>0.00734</b>	2.50740	<b>0.01054</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.00721</b>	0.32940	<b>0.00688</b>	2.50740	<b>0.01003</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>-0.00056</b>	0.32940	<b>-0.00023</b>	2.50740	<b>0.00154</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.00728</b>	0.32940	<b>0.00697</b>	2.50740	<b>0.01018</b>

# SGCLK



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00165	0.00201	0.00437	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	1673.76000	2008.85000	2370.61000



## 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>0.11026</b>	0.32940	0.06480	<b>0.51205</b>	2.50740	0.30000	<b>1.86467</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>0.08876</b>	0.32940	0.06480	<b>0.46527</b>	2.50740	0.30000	<b>1.64860</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>-0.06335</b>	1.26300	1.26300	<b>-0.27793</b>	2.50740	2.50740	<b>-0.39354</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.09648</b>	1.26300	1.26300	<b>0.38587</b>	2.50740	2.50740	<b>0.55998</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>-0.10571</b>	1.26300	1.26300	<b>-0.22127</b>	2.50740	2.50740	<b>-0.29435</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.17414</b>	1.26300	1.26300	<b>0.28873</b>	2.50740	2.50740	<b>0.40660</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>-0.06828</b>	1.26300	1.26300	<b>-0.31301</b>	2.50740	2.50740	<b>-0.43990</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>-0.11161</b>	1.26300	1.26300	<b>-0.20508</b>	2.50740	2.50740	<b>-0.27781</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.17900</b>	1.26300	1.26300	<b>0.26444</b>	2.50740	2.50740	<b>0.36522</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>0.00833</b>	0.32940	0.06480	<b>0.00830</b>	2.50740	0.30000	<b>0.01010</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>0.00732</b>	0.32940	0.06480	<b>0.00745</b>	2.50740	0.30000	<b>0.00939</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>0.01363</b>	0.32940	<b>0.01393</b>	2.50740	<b>0.01597</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>0.00618</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.02348</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>0.01363</b>	0.32940	<b>0.01393</b>	2.50740	<b>0.01597</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>0.00618</b>	0.32940	<b>0.01955</b>	2.50740	<b>0.02348</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>0.00418</b>	0.32940	<b>0.00397</b>	2.50740	<b>0.00594</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>0.00810</b>	0.32940	<b>0.01923</b>	2.50740	<b>0.02220</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>0.00375</b>	0.32940	<b>0.00352</b>	2.50740	<b>0.00635</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>0.00276</b>	0.32940	<b>0.00247</b>	2.50740	<b>0.00530</b>

# TIE0



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	12.59420	12.59420	12.59420

# TIE1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	14.33120	14.33120	14.33120

# XNOR2\_1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp  
125.00*

## 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	0.00478	0.00429	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	279.14600	857.20400	1222.54000



## 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>0.10922</b>	0.32940	0.06480	<b>0.51172</b>	2.50740	0.30000	<b>1.86441</b>
	A->Y (FR)	0.01860	0.00100	<b>0.07837</b>	0.32940	0.06480	<b>0.78643</b>	2.50740	0.30000	<b>3.75475</b>
	B->Y (RR)	0.01860	0.00100	<b>0.10189</b>	0.32940	0.06480	<b>0.50197</b>	2.50740	0.30000	<b>1.82842</b>
	B->Y (FR)	0.01860	0.00100	<b>0.06998</b>	0.32940	0.06480	<b>0.78737</b>	2.50740	0.30000	<b>3.87308</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>0.10409</b>	0.32940	0.06480	<b>0.67119</b>	2.50740	0.30000	<b>2.56041</b>
	A->Y (RF)	0.01860	0.00100	<b>0.06896</b>	0.32940	0.06480	<b>0.64696</b>	2.50740	0.30000	<b>3.20098</b>
	B->Y (FF)	0.01860	0.00100	<b>0.10633</b>	0.32940	0.06480	<b>0.65672</b>	2.50740	0.30000	<b>2.51787</b>
	B->Y (RF)	0.01860	0.00100	<b>0.05868</b>	0.32940	0.06480	<b>0.63410</b>	2.50740	0.30000	<b>3.18194</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>0.00594</b>	0.32940	0.06480	<b>0.00575</b>	2.50740	0.30000	<b>0.00767</b>
	B	0.01860	0.00100	<b>0.00594</b>	0.32940	0.06480	<b>0.00555</b>	2.50740	0.30000	<b>0.00758</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>0.00546</b>	0.32940	0.06480	<b>0.00550</b>	2.50740	0.30000	<b>0.00709</b>
	B	0.01860	0.00100	<b>0.00620</b>	0.32940	0.06480	<b>0.00512</b>	2.50740	0.30000	<b>0.00654</b>

# XOR2\_1



*sg13g2\_stdcell\_slow\_1p08V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p08V\_125C, Voltage 1.08, Temp 125.00*

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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	0.00496	0.00438	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	674.44000	861.65800	1243.38000

## 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>0.10644</b>	0.32940	0.06480	<b>0.82199</b>	2.50740	0.30000	<b>3.30549</b>
	A->X (FR)	0.01860	0.00100	<b>0.08712</b>	0.32940	0.06480	<b>0.79862</b>	2.50740	0.30000	<b>3.77510</b>
	B->X (RR)	0.01860	0.00100	<b>0.11131</b>	0.32940	0.06480	<b>0.80524</b>	2.50740	0.30000	<b>3.24628</b>
	B->X (FR)	0.01860	0.00100	<b>0.07584</b>	0.32940	0.06480	<b>0.78535</b>	2.50740	0.30000	<b>3.75466</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>0.13132</b>	0.32940	0.06480	<b>0.49608</b>	2.50740	0.30000	<b>1.63873</b>
	A->X (RF)	0.01860	0.00100	<b>0.06571</b>	0.32940	0.06480	<b>0.64307</b>	2.50740	0.30000	<b>3.18701</b>
	B->X (FF)	0.01860	0.00100	<b>0.12255</b>	0.32940	0.06480	<b>0.48902</b>	2.50740	0.30000	<b>1.63090</b>
	B->X (RF)	0.01860	0.00100	<b>0.05787</b>	0.32940	0.06480	<b>0.63818</b>	2.50740	0.30000	<b>3.24485</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>0.00540</b>	0.32940	0.06480	<b>0.00534</b>	2.50740	0.30000	<b>0.00714</b>
	B	0.01860	0.00100	<b>0.00575</b>	0.32940	0.06480	<b>0.00474</b>	2.50740	0.30000	<b>0.00684</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>0.00679</b>	0.32940	0.06480	<b>0.00675</b>	2.50740	0.30000	<b>0.00806</b>
	B	0.01860	0.00100	<b>0.00634</b>	0.32940	0.06480	<b>0.00602</b>	2.50740	0.30000	<b>0.00760</b>