

## sg13g2\_stdcell\_slow\_1p35V\_125C Library

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Cell Groups
A21OIx
A221OI
A22OI
AND2x
AND3x
AND4x
AO21x
BTLx
BUx
DECAPx
DFFRRx
DLHQ
DLHRQ
DLHR
DLLRQ
DLLR
DLY1
DLY2
DLY4
EINVINx
FILLx
GCLK
INx

<b>ITL</b>
<b>KEEPSTATE</b>
<b>MUX2x</b>
<b>MUX4</b>
<b>NAND2B1</b>
<b>NAND2B2</b>
<b>NAND2x</b>
<b>NAND3B1</b>
<b>NAND3</b>
<b>NAND4</b>
<b>NOR2Bx</b>
<b>NOR2x</b>
<b>NOR3x</b>
<b>NOR4x</b>
<b>NP_ANT</b>
<b>O21AI</b>
<b>OR2x</b>
<b>OR3x</b>
<b>OR4x</b>
<b>SDFRRS</b>
<b>SGCLK</b>
<b>TIE0</b>
<b>TIE1</b>
<b>XNOR2_1</b>
<b>XOR2_1</b>

# A21OIx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

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

## Footprint

Cell Name	Area
sg13g2_a21oi_2	14.51520
sg13g2_a21oi_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_a21oi_2	0.00536	0.00587	0.00525	0.60000
sg13g2_a21oi_1	0.00280	0.00292	0.00268	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	570.11100	1407.60000	3188.44000
sg13g2_a21oi_1	285.05500	703.80500	1594.23000

## 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_a21oi_2	A1->Y (FR)	0.01860	0.00100	<b>0.04247</b>	0.32940	0.12960	<b>0.53587</b>	2.50740	0.60000	<b>2.61561</b>
	A2->Y (FR)	0.01860	0.00100	<b>0.05143</b>	0.32940	0.12960	<b>0.54415</b>	2.50740	0.60000	<b>2.62135</b>
	B1->Y (FR)	0.01860	0.00100	<b>0.04037</b>	0.32940	0.12960	<b>0.56341</b>	2.50740	0.60000	<b>2.86694</b>
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	<b>0.04703</b>	0.32940	0.06480	<b>0.53556</b>	2.50740	0.30000	<b>2.61039</b>
	A2->Y (FR)	0.01860	0.00100	<b>0.05560</b>	0.32940	0.06480	<b>0.54511</b>	2.50740	0.30000	<b>2.62268</b>
	B1->Y (FR)	0.01860	0.00100	<b>0.04464</b>	0.32940	0.06480	<b>0.56431</b>	2.50740	0.30000	<b>2.86883</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_a21oi_2	A1->Y (RF)	0.01860	0.00100	<b>0.03636</b>	0.32940	0.12960	<b>0.46559</b>	2.50740	0.60000	<b>2.41053</b>
	A2->Y (RF)	0.01860	0.00100	<b>0.04134</b>	0.32940	0.12960	<b>0.44671</b>	2.50740	0.60000	<b>2.24366</b>
	B1->Y (RF)	0.01860	0.00100	<b>0.02007</b>	0.32940	0.12960	<b>0.34238</b>	2.50740	0.60000	<b>1.86845</b>
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	<b>0.04008</b>	0.32940	0.06480	<b>0.46622</b>	2.50740	0.30000	<b>2.41033</b>
	A2->Y (RF)	0.01860	0.00100	<b>0.04467</b>	0.32940	0.06480	<b>0.44688</b>	2.50740	0.30000	<b>2.24202</b>
	B1->Y (RF)	0.01860	0.00100	<b>0.02254</b>	0.32940	0.06480	<b>0.34332</b>	2.50740	0.30000	<b>1.87097</b>

Delay(ns) to Y 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_a21oi_2	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	<b>0.04037</b>	0.32940	0.12960	<b>0.56341</b>	2.50740	0.60000	<b>2.86694</b>
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.03025</b>	0.32940	0.12960	<b>0.55376</b>	2.50740	0.60000	<b>2.86115</b>
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	<b>0.02523</b>	0.32940	0.12960	<b>0.45741</b>	2.50740	0.60000	<b>2.42374</b>
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	<b>0.04464</b>	0.32940	0.06480	<b>0.56431</b>	2.50740	0.30000	<b>2.86883</b>
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.03465</b>	0.32940	0.06480	<b>0.55300</b>	2.50740	0.30000	<b>2.85310</b>
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	<b>0.02857</b>	0.32940	0.06480	<b>0.45747</b>	2.50740	0.30000	<b>2.42150</b>

**Delay(ns) to Y 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_a21oi_2	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	<b>0.02007</b>	0.32940	0.12960	<b>0.34238</b>	2.50740	0.60000	<b>1.86845</b>
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.01976</b>	0.32940	0.12960	<b>0.34102</b>	2.50740	0.60000	<b>1.86464</b>
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	<b>0.01948</b>	0.32940	0.12960	<b>0.34070</b>	2.50740	0.60000	<b>1.86582</b>
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	<b>0.02254</b>	0.32940	0.06480	<b>0.34332</b>	2.50740	0.30000	<b>1.87097</b>
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.02223</b>	0.32940	0.06480	<b>0.34194</b>	2.50740	0.30000	<b>1.86706</b>
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	<b>0.02195</b>	0.32940	0.06480	<b>0.34158</b>	2.50740	0.30000	<b>1.86795</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_a21oi_2	A1	0.01860	0.00100	<b>0.00890</b>	0.32940	0.12960	<b>0.00902</b>	2.50740	0.60000	<b>0.01413</b>
	A2	0.01860	0.00100	<b>0.01087</b>	0.32940	0.12960	<b>0.01079</b>	2.50740	0.60000	<b>0.01603</b>
	B1	0.01860	0.00100	<b>0.00625</b>	0.32940	0.12960	<b>0.00738</b>	2.50740	0.60000	<b>0.01456</b>
sg13g2_a21oi_1	A1	0.01860	0.00100	<b>0.00455</b>	0.32940	0.06480	<b>0.00454</b>	2.50740	0.30000	<b>0.00698</b>
	A2	0.01860	0.00100	<b>0.00540</b>	0.32940	0.06480	<b>0.00539</b>	2.50740	0.30000	<b>0.00798</b>
	B1	0.01860	0.00100	<b>0.00324</b>	0.32940	0.06480	<b>0.00375</b>	2.50740	0.30000	<b>0.00738</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_a21oi_2	A1	0.01860	0.00100	<b>0.00856</b>	0.32940	0.12960	<b>0.00854</b>	2.50740	0.60000	<b>0.01401</b>
	A2	0.01860	0.00100	<b>0.01217</b>	0.32940	0.12960	<b>0.01190</b>	2.50740	0.60000	<b>0.01688</b>
	B1	0.01860	0.00100	<b>0.00270</b>	0.32940	0.12960	<b>0.00376</b>	2.50740	0.60000	<b>0.01155</b>
sg13g2_a21oi_1	A1	0.01860	0.00100	<b>0.00474</b>	0.32940	0.06480	<b>0.00472</b>	2.50740	0.30000	<b>0.00747</b>
	A2	0.01860	0.00100	<b>0.00643</b>	0.32940	0.06480	<b>0.00630</b>	2.50740	0.30000	<b>0.00876</b>
	B1	0.01860	0.00100	<b>0.00178</b>	0.32940	0.06480	<b>0.00223</b>	2.50740	0.30000	<b>0.00610</b>

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00747</b>	0.32940	0.12960	<b>0.00801</b>	2.50740	0.60000	<b>0.01512</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00624</b>	0.32940	0.12960	<b>0.00702</b>	2.50740	0.60000	<b>0.01439</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00625</b>	0.32940	0.12960	<b>0.00738</b>	2.50740	0.60000	<b>0.01456</b>
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00372</b>	0.32940	0.06480	<b>0.00396</b>	2.50740	0.30000	<b>0.00752</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00324</b>	0.32940	0.06480	<b>0.00359</b>	2.50740	0.30000	<b>0.00725</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00324</b>	0.32940	0.06480	<b>0.00375</b>	2.50740	0.30000	<b>0.00738</b>

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00690</b>	0.32940	0.12960	<b>0.00798</b>	2.50740	0.60000	<b>0.01530</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00288</b>	0.32940	0.12960	<b>0.00393</b>	2.50740	0.60000	<b>0.01122</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00270</b>	0.32940	0.12960	<b>0.00376</b>	2.50740	0.60000	<b>0.01155</b>
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00388</b>	0.32940	0.06480	<b>0.00433</b>	2.50740	0.30000	<b>0.00800</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00187</b>	0.32940	0.06480	<b>0.00236</b>	2.50740	0.30000	<b>0.00590</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00178</b>	0.32940	0.06480	<b>0.00223</b>	2.50740	0.30000	<b>0.00610</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>-0.00108</b>	0.32940	<b>-0.00105</b>	2.50740	<b>-0.00106</b>
sg13g2_a21oi_1	0.01860	<b>-0.00054</b>	0.32940	<b>-0.00053</b>	2.50740	<b>-0.00053</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>0.00207</b>	0.32940	<b>0.00209</b>	2.50740	<b>0.00209</b>
sg13g2_a21oi_1	0.01860	<b>0.00094</b>	0.32940	<b>0.00095</b>	2.50740	<b>0.00095</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	<b>-0.00023</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>
	(!A2 * !B1)	0.01860	<b>-0.00108</b>	0.32940	<b>-0.00105</b>	2.50740	<b>-0.00106</b>
sg13g2_a21oi_1	B1	0.01860	<b>-0.00000</b>	0.32940	<b>-0.00000</b>	2.50740	<b>-0.00000</b>
	(!A2 * !B1)	0.01860	<b>-0.00054</b>	0.32940	<b>-0.00053</b>	2.50740	<b>-0.00053</b>



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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	<b>0.00023</b>	0.32940	<b>0.00023</b>	2.50740	<b>0.00023</b>
	(!A2 * !B1)	0.01860	<b>0.00207</b>	0.32940	<b>0.00209</b>	2.50740	<b>0.00209</b>
sg13g2_a21oi_1	B1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
	(!A2 * !B1)	0.01860	<b>0.00094</b>	0.32940	<b>0.00095</b>	2.50740	<b>0.00095</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>-0.00052</b>	0.32940	<b>-0.00054</b>	2.50740	<b>-0.00053</b>
sg13g2_a21oi_1	0.01860	<b>-0.00027</b>	0.32940	<b>-0.00028</b>	2.50740	<b>-0.00027</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>0.00098</b>	0.32940	<b>0.00069</b>	2.50740	<b>0.00058</b>
sg13g2_a21oi_1	0.01860	<b>0.00049</b>	0.32940	<b>0.00034</b>	2.50740	<b>0.00029</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	<b>-0.00013</b>	0.32940	<b>-0.00013</b>	2.50740	<b>-0.00012</b>
	(!A1 * !B1)	0.01860	<b>-0.00052</b>	0.32940	<b>-0.00054</b>	2.50740	<b>-0.00053</b>
sg13g2_a21oi_1	B1	0.01860	<b>-0.00007</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00007</b>
	(!A1 * !B1)	0.01860	<b>-0.00027</b>	0.32940	<b>-0.00028</b>	2.50740	<b>-0.00027</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	<b>0.00013</b>	0.32940	<b>0.00013</b>	2.50740	<b>0.00012</b>
	(!A1 * !B1)	0.01860	<b>0.00098</b>	0.32940	<b>0.00069</b>	2.50740	<b>0.00058</b>
sg13g2_a21oi_1	B1	0.01860	<b>0.00007</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00007</b>
	(!A1 * !B1)	0.01860	<b>0.00049</b>	0.32940	<b>0.00034</b>	2.50740	<b>0.00029</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>0.00086</b>	0.32940	<b>0.00086</b>	2.50740	<b>0.00087</b>
sg13g2_a21oi_1	0.01860	<b>0.00048</b>	0.32940	<b>0.00048</b>	2.50740	<b>0.00049</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	<b>-0.00086</b>	0.32940	<b>-0.00086</b>	2.50740	<b>-0.00087</b>
sg13g2_a21oi_1	0.01860	<b>-0.00048</b>	0.32940	<b>-0.00048</b>	2.50740	<b>-0.00049</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	(A1 * A2)	0.01860	<b>0.00086</b>	0.32940	<b>0.00086</b>	2.50740	<b>0.00087</b>
sg13g2_a21oi_1	(A1 * A2)	0.01860	<b>0.00048</b>	0.32940	<b>0.00048</b>	2.50740	<b>0.00049</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	(A1 * A2)	0.01860	<b>-0.00086</b>	0.32940	<b>-0.00086</b>	2.50740	<b>-0.00087</b>
sg13g2_a21oi_1	(A1 * A2)	0.01860	<b>-0.00048</b>	0.32940	<b>-0.00048</b>	2.50740	<b>-0.00049</b>

# A221OI



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

## Truth Table

INPUT					OUTPUT
A1	A2	B1	B2	C1	Y
0	x	0	x	0	1
0	x	x	x	1	0
0	x	1	0	0	1
x	x	1	1	x	0
1	0	0	x	0	1
1	0	x	x	1	0
1	0	1	0	0	1
1	1	x	x	x	0

## Footprint

Cell Name	Area
sg13g2_a221oi_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	A1	A2	B1	B2	C1	Y
sg13g2_a221oi_1	0.00289	0.00293	0.00270	0.00278	0.00248	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	364.95500	899.55700	2189.63000

## 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_a221oi_1	A1->Y (FR)	0.01860	0.00100	<b>0.10843</b>	0.32940	0.12960	<b>1.36123</b>	2.50740	0.60000	<b>6.08469</b>
	A2->Y (FR)	0.01860	0.00100	<b>0.12116</b>	0.32940	0.12960	<b>1.37256</b>	2.50740	0.60000	<b>6.09186</b>
	B1->Y (FR)	0.01860	0.00100	<b>0.09711</b>	0.32940	0.12960	<b>1.36670</b>	2.50740	0.60000	<b>6.29546</b>
	B2->Y (FR)	0.01860	0.00100	<b>0.10972</b>	0.32940	0.12960	<b>1.37645</b>	2.50740	0.60000	<b>6.29771</b>
	C1->Y (FR)	0.01860	0.00100	<b>0.07043</b>	0.32940	0.12960	<b>1.35777</b>	2.50740	0.60000	<b>6.43503</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_a221oi_1	A1->Y (RF)	0.01860	0.00100	<b>0.05288</b>	0.32940	0.12960	<b>0.77368</b>	2.50740	0.60000	<b>3.84795</b>
	A2->Y (RF)	0.01860	0.00100	<b>0.05716</b>	0.32940	0.12960	<b>0.75445</b>	2.50740	0.60000	<b>3.65350</b>
	B1->Y (RF)	0.01860	0.00100	<b>0.04701</b>	0.32940	0.12960	<b>0.76145</b>	2.50740	0.60000	<b>3.83351</b>
	B2->Y (RF)	0.01860	0.00100	<b>0.05160</b>	0.32940	0.12960	<b>0.74236</b>	2.50740	0.60000	<b>3.63941</b>
	C1->Y (RF)	0.01860	0.00100	<b>0.02593</b>	0.32940	0.12960	<b>0.52880</b>	2.50740	0.60000	<b>2.83602</b>

Delay(ns) to Y 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_a221oi_1	A1->Y (FR)	(B1 * !B2)	0.01860	0.00100	<b>0.10843</b>	0.32940	0.12960	<b>1.36123</b>	2.50740	0.60000	<b>6.08469</b>
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	<b>0.09312</b>	0.32940	0.12960	<b>1.34796</b>	2.50740	0.60000	<b>6.07961</b>
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	<b>0.08349</b>	0.32940	0.12960	<b>1.14810</b>	2.50740	0.60000	<b>5.24308</b>
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	<b>0.12116</b>	0.32940	0.12960	<b>1.37256</b>	2.50740	0.60000	<b>6.09186</b>
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	<b>0.10598</b>	0.32940	0.12960	<b>1.35935</b>	2.50740	0.60000	<b>6.08705</b>
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	<b>0.09404</b>	0.32940	0.12960	<b>1.15772</b>	2.50740	0.60000	<b>5.24686</b>
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	<b>0.09711</b>	0.32940	0.12960	<b>1.36670</b>	2.50740	0.60000	<b>6.29546</b>
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.08177</b>	0.32940	0.12960	<b>1.35225</b>	2.50740	0.60000	<b>6.28595</b>
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	<b>0.06851</b>	0.32940	0.12960	<b>1.14219</b>	2.50740	0.60000	<b>5.36224</b>
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	<b>0.10972</b>	0.32940	0.12960	<b>1.37645</b>	2.50740	0.60000	<b>6.29771</b>
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.09462</b>	0.32940	0.12960	<b>1.36208</b>	2.50740	0.60000	<b>6.28835</b>
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	<b>0.07893</b>	0.32940	0.12960	<b>1.14941</b>	2.50740	0.60000	<b>5.36233</b>
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.07043</b>	0.32940	0.12960	<b>1.35777</b>	2.50740	0.60000	<b>6.43503</b>

**Delay(ns) to Y 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_a221oi_1	A1->Y (RF)	(B1 * !B2)	0.01860	0.00100	<b>0.05161</b>	0.32940	0.12960	<b>0.77377</b>	2.50740	0.60000	<b>3.84758</b>
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	<b>0.05063</b>	0.32940	0.12960	<b>0.77015</b>	2.50740	0.60000	<b>3.84364</b>
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	<b>0.05288</b>	0.32940	0.12960	<b>0.77368</b>	2.50740	0.60000	<b>3.84795</b>
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	<b>0.05592</b>	0.32940	0.12960	<b>0.75456</b>	2.50740	0.60000	<b>3.65317</b>
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	<b>0.05491</b>	0.32940	0.12960	<b>0.75096</b>	2.50740	0.60000	<b>3.64922</b>
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	<b>0.05716</b>	0.32940	0.12960	<b>0.75445</b>	2.50740	0.60000	<b>3.65350</b>
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	<b>0.04701</b>	0.32940	0.12960	<b>0.76145</b>	2.50740	0.60000	<b>3.83351</b>
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.04630</b>	0.32940	0.12960	<b>0.75798</b>	2.50740	0.60000	<b>3.82927</b>
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	<b>0.04595</b>	0.32940	0.12960	<b>0.75741</b>	2.50740	0.60000	<b>3.82969</b>
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	<b>0.05160</b>	0.32940	0.12960	<b>0.74236</b>	2.50740	0.60000	<b>3.63941</b>
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.05085</b>	0.32940	0.12960	<b>0.73876</b>	2.50740	0.60000	<b>3.63522</b>
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	<b>0.05048</b>	0.32940	0.12960	<b>0.73825</b>	2.50740	0.60000	<b>3.63543</b>
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.02593</b>	0.32940	0.12960	<b>0.52880</b>	2.50740	0.60000	<b>2.83602</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_a221oi_1	A1	0.01860	0.00100	<b>0.01022</b>	0.32940	0.12960	<b>0.00989</b>	2.50740	0.60000	<b>0.01285</b>
	A2	0.01860	0.00100	<b>0.01044</b>	0.32940	0.12960	<b>0.01000</b>	2.50740	0.60000	<b>0.01101</b>
	B1	0.01860	0.00100	<b>0.00945</b>	0.32940	0.12960	<b>0.00927</b>	2.50740	0.60000	<b>0.01053</b>
	B2	0.01860	0.00100	<b>0.00976</b>	0.32940	0.12960	<b>0.00933</b>	2.50740	0.60000	<b>0.01075</b>
	C1	0.01860	0.00100	<b>0.00449</b>	0.32940	0.12960	<b>0.00434</b>	2.50740	0.60000	<b>0.00572</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_a221oi_1	A1	0.01860	0.00100	<b>0.00677</b>	0.32940	0.12960	<b>0.00629</b>	2.50740	0.60000	<b>0.00779</b>
	A2	0.01860	0.00100	<b>0.00873</b>	0.32940	0.12960	<b>0.00821</b>	2.50740	0.60000	<b>0.00926</b>
	B1	0.01860	0.00100	<b>0.00260</b>	0.32940	0.12960	<b>0.00230</b>	2.50740	0.60000	<b>0.00384</b>
	B2	0.01860	0.00100	<b>0.00461</b>	0.32940	0.12960	<b>0.00446</b>	2.50740	0.60000	<b>0.00532</b>
	C1	0.01860	0.00100	<b>0.00406</b>	0.32940	0.12960	<b>0.00445</b>	2.50740	0.60000	<b>0.00477</b>

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



Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a22loi_1	A1	(B1 * !B2)	0.01860	0.00100	<b>0.01022</b>	0.32940	0.12960	<b>0.00989</b>	2.50740	0.60000	<b>0.01285</b>
	A1	(!B1 * B2)	0.01860	0.00100	<b>0.00976</b>	0.32940	0.12960	<b>0.00953</b>	2.50740	0.60000	<b>0.01137</b>
	A1	(!B1 * !B2)	0.01860	0.00100	<b>0.01201</b>	0.32940	0.12960	<b>0.01191</b>	2.50740	0.60000	<b>0.01267</b>
	A2	(B1 * !B2)	0.01860	0.00100	<b>0.01044</b>	0.32940	0.12960	<b>0.01000</b>	2.50740	0.60000	<b>0.01101</b>
	A2	(!B1 * B2)	0.01860	0.00100	<b>0.01003</b>	0.32940	0.12960	<b>0.00963</b>	2.50740	0.60000	<b>0.01108</b>
	A2	(!B1 * !B2)	0.01860	0.00100	<b>0.01227</b>	0.32940	0.12960	<b>0.01182</b>	2.50740	0.60000	<b>0.01296</b>
	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00991</b>	0.32940	0.12960	<b>0.00960</b>	2.50740	0.60000	<b>0.01080</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00944</b>	0.32940	0.12960	<b>0.00927</b>	2.50740	0.60000	<b>0.01066</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00945</b>	0.32940	0.12960	<b>0.00927</b>	2.50740	0.60000	<b>0.01053</b>
	B2	(A1 * !A2)	0.01860	0.00100	<b>0.01013</b>	0.32940	0.12960	<b>0.00970</b>	2.50740	0.60000	<b>0.01079</b>
	B2	(!A1 * A2)	0.01860	0.00100	<b>0.00973</b>	0.32940	0.12960	<b>0.00933</b>	2.50740	0.60000	<b>0.01033</b>
	B2	(!A1 * !A2)	0.01860	0.00100	<b>0.00976</b>	0.32940	0.12960	<b>0.00933</b>	2.50740	0.60000	<b>0.01075</b>
	C1	(!A1 * A2)	0.01860	0.00100	<b>0.00449</b>	0.32940	0.12960	<b>0.00434</b>	2.50740	0.60000	<b>0.00572</b>

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a221oi_1	A1	(B1 * !B2)	0.01860	0.00100	<b>0.00878</b>	0.32940	0.12960	<b>0.00821</b>	2.50740	0.60000	<b>0.00978</b>
	A1	(!B1 * B2)	0.01860	0.00100	<b>0.00677</b>	0.32940	0.12960	<b>0.00629</b>	2.50740	0.60000	<b>0.00779</b>
	A1	(!B1 * !B2)	0.01860	0.00100	<b>0.00565</b>	0.32940	0.12960	<b>0.00517</b>	2.50740	0.60000	<b>0.00680</b>
	A2	(B1 * !B2)	0.01860	0.00100	<b>0.01077</b>	0.32940	0.12960	<b>0.01019</b>	2.50740	0.60000	<b>0.01136</b>
	A2	(!B1 * B2)	0.01860	0.00100	<b>0.00873</b>	0.32940	0.12960	<b>0.00821</b>	2.50740	0.60000	<b>0.00926</b>
	A2	(!B1 * !B2)	0.01860	0.00100	<b>0.00762</b>	0.32940	0.12960	<b>0.00709</b>	2.50740	0.60000	<b>0.00832</b>
	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00461</b>	0.32940	0.12960	<b>0.00430</b>	2.50740	0.60000	<b>0.00578</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00260</b>	0.32940	0.12960	<b>0.00230</b>	2.50740	0.60000	<b>0.00384</b>
	B1	(!A1 * !A2)	0.01860	0.00100	<b>0.00252</b>	0.32940	0.12960	<b>0.00216</b>	2.50740	0.60000	<b>0.00376</b>
	B2	(A1 * !A2)	0.01860	0.00100	<b>0.00662</b>	0.32940	0.12960	<b>0.00628</b>	2.50740	0.60000	<b>0.00726</b>
	B2	(!A1 * A2)	0.01860	0.00100	<b>0.00461</b>	0.32940	0.12960	<b>0.00446</b>	2.50740	0.60000	<b>0.00532</b>
	B2	(!A1 * !A2)	0.01860	0.00100	<b>0.00452</b>	0.32940	0.12960	<b>0.00412</b>	2.50740	0.60000	<b>0.00525</b>
	C1	(!A1 * A2)	0.01860	0.00100	<b>0.00406</b>	0.32940	0.12960	<b>0.00445</b>	2.50740	0.60000	<b>0.00477</b>

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>-0.00007</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00007</b>

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>0.00007</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00007</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>-0.00010</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00009</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>0.00010</b>	0.32940	<b>0.00009</b>	2.50740	<b>0.00009</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2 * !C1)	0.01860	<b>-0.00010</b>	0.32940	<b>-0.00009</b>	2.50740	<b>-0.00009</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2 * !C1)	0.01860	<b>0.00010</b>	0.32940	<b>0.00009</b>	2.50740	<b>0.00009</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>0.00183</b>	0.32940	<b>0.00186</b>	2.50740	<b>0.00186</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>-0.00183</b>	0.32940	<b>-0.00186</b>	2.50740	<b>-0.00186</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	-0.00006	0.32940	-0.00007	2.50740	-0.00007
	(A1 * A2 * !C1)	0.01860	0.00183	0.32940	0.00186	2.50740	0.00186

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	0.00006	0.32940	0.00007	2.50740	0.00007
	(A1 * A2 * !C1)	0.01860	-0.00183	0.32940	-0.00186	2.50740	-0.00186

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00186	0.32940	0.00188	2.50740	0.00190

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00186	0.32940	-0.00188	2.50740	-0.00190

Passive power(pJ) for B2 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	-0.00004	0.32940	-0.00004	2.50740	-0.00005
	(A1 * A2 * !C1)	0.01860	0.00186	0.32940	0.00188	2.50740	0.00190

Passive power(pJ) for B2 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	<b>0.00004</b>	0.32940	<b>0.00004</b>	2.50740	<b>0.00005</b>
	(A1 * A2 * !C1)	0.01860	<b>-0.00186</b>	0.32940	<b>-0.00188</b>	2.50740	<b>-0.00190</b>

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>0.00047</b>	0.32940	<b>0.00047</b>	2.50740	<b>0.00048</b>

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	<b>0.00083</b>	0.32940	<b>0.00086</b>	2.50740	<b>0.00087</b>

Passive power(pJ) for C1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2)	0.01860	<b>0.00047</b>	0.32940	<b>0.00047</b>	2.50740	<b>0.00048</b>

Passive power(pJ) for C1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2)	0.01860	<b>0.00083</b>	0.32940	<b>0.00086</b>	2.50740	<b>0.00087</b>

# A22OI



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

INPUT				OUTPUT
A1	A2	B1	B2	Y
0	x	0	x	1
0	x	1	0	1
x	x	1	1	0
1	0	0	x	1
1	0	1	0	1
1	1	x	x	0

## Footprint

Cell Name	Area
sg13g2_a22oi_1	10.84860

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A1	A2	B1	B2	Y
sg13g2_a22oi_1	0.00269	0.00301	0.00348	0.00352	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	158.84500	900.80100	1968.87000

## 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_a22oi_1	A1->Y (FR)	0.01860	0.00100	<b>0.04814</b>	0.32940	0.06480	<b>0.46866</b>	2.50740	0.30000	<b>2.34170</b>
	A2->Y (FR)	0.01860	0.00100	<b>0.05406</b>	0.32940	0.06480	<b>0.47502</b>	2.50740	0.30000	<b>2.34961</b>
	B1->Y (FR)	0.01860	0.00100	<b>0.03882</b>	0.32940	0.06480	<b>0.46668</b>	2.50740	0.30000	<b>2.42555</b>
	B2->Y (FR)	0.01860	0.00100	<b>0.03268</b>	0.32940	0.06480	<b>0.46027</b>	2.50740	0.30000	<b>2.41760</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_a22oi_1	A1->Y (RF)	0.01860	0.00100	<b>0.05083</b>	0.32940	0.06480	<b>0.47702</b>	2.50740	0.30000	<b>2.42350</b>
	A2->Y (RF)	0.01860	0.00100	<b>0.05505</b>	0.32940	0.06480	<b>0.45719</b>	2.50740	0.30000	<b>2.25402</b>
	B1->Y (RF)	0.01860	0.00100	<b>0.03893</b>	0.32940	0.06480	<b>0.43832</b>	2.50740	0.30000	<b>2.23230</b>
	B2->Y (RF)	0.01860	0.00100	<b>0.03396</b>	0.32940	0.06480	<b>0.45759</b>	2.50740	0.30000	<b>2.40056</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_a22oi_1	A1	0.01860	0.00100	<b>0.00315</b>	0.32940	0.06480	<b>0.00325</b>	2.50740	0.30000	<b>0.00540</b>
	A2	0.01860	0.00100	<b>0.00420</b>	0.32940	0.06480	<b>0.00415</b>	2.50740	0.30000	<b>0.00641</b>
	B1	0.01860	0.00100	<b>0.00183</b>	0.32940	0.06480	<b>0.00203</b>	2.50740	0.30000	<b>0.00508</b>
	B2	0.01860	0.00100	<b>0.00150</b>	0.32940	0.06480	<b>0.00196</b>	2.50740	0.30000	<b>0.00481</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_a22oi_1	A1	0.01860	0.00100	<b>0.00041</b>	0.32940	0.06480	<b>0.00069</b>	2.50740	0.30000	<b>0.00361</b>
	A2	0.01860	0.00100	<b>0.00183</b>	0.32940	0.06480	<b>0.00203</b>	2.50740	0.30000	<b>0.00472</b>
	B1	0.01860	0.00100	<b>-0.00183</b>	0.32940	0.06480	<b>-0.00203</b>	2.50740	0.30000	<b>-0.00117</b>
	B2	0.01860	0.00100	<b>-0.00150</b>	0.32940	0.06480	<b>-0.00196</b>	2.50740	0.30000	<b>-0.00086</b>

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00449</b>	0.32940	<b>0.00415</b>	2.50740	<b>0.00409</b>

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00524</b>	0.32940	<b>0.00519</b>	2.50740	<b>0.00520</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00502</b>	0.32940	<b>0.00466</b>	2.50740	<b>0.00456</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00441</b>	0.32940	<b>0.00436</b>	2.50740	<b>0.00436</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00879</b>	0.32940	<b>0.00901</b>	2.50740	<b>0.00930</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00187</b>	0.32940	<b>0.00190</b>	2.50740	<b>0.00191</b>

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00692</b>	0.32940	<b>0.00715</b>	2.50740	<b>0.00746</b>

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	<b>0.00180</b>	0.32940	<b>0.00183</b>	2.50740	<b>0.00186</b>

# AND2x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	10.88640
sg13g2_and2_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_2	0.00251	0.00253	0.60000
sg13g2_and2_1	0.00252	0.00254	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	1558.27000	1632.70000	1710.07000
sg13g2_and2_1	823.86300	1010.75000	1352.74000

## 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_2	A->X (RR)	0.01860	0.00100	<b>0.08158</b>	0.32940	0.12960	<b>0.37715</b>	2.50740	0.60000	<b>1.28815</b>
	B->X (RR)	0.01860	0.00100	<b>0.08626</b>	0.32940	0.12960	<b>0.37317</b>	2.50740	0.60000	<b>1.26991</b>
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	<b>0.06628</b>	0.32940	0.06480	<b>0.33547</b>	2.50740	0.30000	<b>1.20035</b>
	B->X (RR)	0.01860	0.00100	<b>0.07121</b>	0.32940	0.06480	<b>0.33589</b>	2.50740	0.30000	<b>1.19408</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_2	A->X (FF)	0.01860	0.00100	<b>0.06855</b>	0.32940	0.12960	<b>0.34536</b>	2.50740	0.60000	<b>1.16979</b>
	B->X (FF)	0.01860	0.00100	<b>0.07373</b>	0.32940	0.12960	<b>0.35829</b>	2.50740	0.60000	<b>1.20447</b>
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	<b>0.05639</b>	0.32940	0.06480	<b>0.30553</b>	2.50740	0.30000	<b>1.08414</b>
	B->X (FF)	0.01860	0.00100	<b>0.06180</b>	0.32940	0.06480	<b>0.32078</b>	2.50740	0.30000	<b>1.12074</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_2	A	0.01860	0.00100	<b>0.01319</b>	0.32940	0.12960	<b>0.01389</b>	2.50740	0.60000	<b>0.02626</b>
	B	0.01860	0.00100	<b>0.01486</b>	0.32940	0.12960	<b>0.01522</b>	2.50740	0.60000	<b>0.02604</b>
sg13g2_and2_1	A	0.01860	0.00100	<b>0.00816</b>	0.32940	0.06480	<b>0.00918</b>	2.50740	0.30000	<b>0.02161</b>
	B	0.01860	0.00100	<b>0.00993</b>	0.32940	0.06480	<b>0.01038</b>	2.50740	0.30000	<b>0.02187</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_2	A	0.01860	0.00100	<b>0.01179</b>	0.32940	0.12960	<b>0.01271</b>	2.50740	0.60000	<b>0.02531</b>
	B	0.01860	0.00100	<b>0.01205</b>	0.32940	0.12960	<b>0.01311</b>	2.50740	0.60000	<b>0.02611</b>
sg13g2_and2_1	A	0.01860	0.00100	<b>0.00715</b>	0.32940	0.06480	<b>0.00813</b>	2.50740	0.30000	<b>0.02144</b>
	B	0.01860	0.00100	<b>0.00738</b>	0.32940	0.06480	<b>0.00836</b>	2.50740	0.30000	<b>0.02143</b>

# AND3x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	12.70080
sg13g2_and3_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_2	0.00235	0.00248	0.00251	0.60000
sg13g2_and3_1	0.00236	0.00249	0.00250	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	1583.02000	1700.64000	2131.76000
sg13g2_and3_1	822.26200	1009.29000	1926.23000



## 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_2	A->X (RR)	0.01860	0.00100	<b>0.10984</b>	0.32940	0.12960	<b>0.42269</b>	2.50740	0.60000	<b>1.38255</b>
	B->X (RR)	0.01860	0.00100	<b>0.11899</b>	0.32940	0.12960	<b>0.42356</b>	2.50740	0.60000	<b>1.37543</b>
	C->X (RR)	0.01860	0.00100	<b>0.12332</b>	0.32940	0.12960	<b>0.41586</b>	2.50740	0.60000	<b>1.33104</b>
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	<b>0.08835</b>	0.32940	0.06480	<b>0.37161</b>	2.50740	0.30000	<b>1.28182</b>
	B->X (RR)	0.01860	0.00100	<b>0.09775</b>	0.32940	0.06480	<b>0.37631</b>	2.50740	0.30000	<b>1.28254</b>
	C->X (RR)	0.01860	0.00100	<b>0.10202</b>	0.32940	0.06480	<b>0.37195</b>	2.50740	0.30000	<b>1.24965</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_2	A->X (FF)	0.01860	0.00100	<b>0.07215</b>	0.32940	0.12960	<b>0.35311</b>	2.50740	0.60000	<b>1.17273</b>
	B->X (FF)	0.01860	0.00100	<b>0.07773</b>	0.32940	0.12960	<b>0.36519</b>	2.50740	0.60000	<b>1.20440</b>
	C->X (FF)	0.01860	0.00100	<b>0.08153</b>	0.32940	0.12960	<b>0.37492</b>	2.50740	0.60000	<b>1.23584</b>
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	<b>0.06040</b>	0.32940	0.06480	<b>0.31512</b>	2.50740	0.30000	<b>1.08699</b>
	B->X (FF)	0.01860	0.00100	<b>0.06605</b>	0.32940	0.06480	<b>0.32905</b>	2.50740	0.30000	<b>1.12348</b>
	C->X (FF)	0.01860	0.00100	<b>0.06974</b>	0.32940	0.06480	<b>0.34011</b>	2.50740	0.30000	<b>1.15752</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_2	A	0.01860	0.00100	<b>0.01556</b>	0.32940	0.12960	<b>0.01588</b>	2.50740	0.60000	<b>0.02742</b>
	B	0.01860	0.00100	<b>0.01651</b>	0.32940	0.12960	<b>0.01632</b>	2.50740	0.60000	<b>0.02664</b>
	C	0.01860	0.00100	<b>0.01812</b>	0.32940	0.12960	<b>0.01786</b>	2.50740	0.60000	<b>0.02775</b>
sg13g2_and3_1	A	0.01860	0.00100	<b>0.01024</b>	0.32940	0.06480	<b>0.01084</b>	2.50740	0.30000	<b>0.02273</b>
	B	0.01860	0.00100	<b>0.01111</b>	0.32940	0.06480	<b>0.01131</b>	2.50740	0.30000	<b>0.02219</b>
	C	0.01860	0.00100	<b>0.01272</b>	0.32940	0.06480	<b>0.01278</b>	2.50740	0.30000	<b>0.02327</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_2	A	0.01860	0.00100	<b>0.01121</b>	0.32940	0.12960	<b>0.01188</b>	2.50740	0.60000	<b>0.02343</b>
	B	0.01860	0.00100	<b>0.01232</b>	0.32940	0.12960	<b>0.01312</b>	2.50740	0.60000	<b>0.02481</b>
	C	0.01860	0.00100	<b>0.01255</b>	0.32940	0.12960	<b>0.01331</b>	2.50740	0.60000	<b>0.02543</b>
sg13g2_and3_1	A	0.01860	0.00100	<b>0.00650</b>	0.32940	0.06480	<b>0.00725</b>	2.50740	0.30000	<b>0.01939</b>
	B	0.01860	0.00100	<b>0.00759</b>	0.32940	0.06480	<b>0.00834</b>	2.50740	0.30000	<b>0.02055</b>
	C	0.01860	0.00100	<b>0.00784</b>	0.32940	0.06480	<b>0.00858</b>	2.50740	0.30000	<b>0.02083</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	<b>-0.00074</b>	0.32940	<b>-0.00075</b>	2.50740	<b>-0.00083</b>
sg13g2_and3_1	0.01860	<b>-0.00075</b>	0.32940	<b>-0.00076</b>	2.50740	<b>-0.00083</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	<b>0.00074</b>	0.32940	<b>0.00075</b>	2.50740	<b>0.00083</b>
sg13g2_and3_1	0.01860	<b>0.00075</b>	0.32940	<b>0.00076</b>	2.50740	<b>0.00083</b>

# AND4x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	16.32960
sg13g2_and4_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_2	0.00224	0.00226	0.00256	0.00253	0.60000
sg13g2_and4_1	0.00225	0.00226	0.00256	0.00253	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	1585.12000	1695.98000	2705.25000
sg13g2_and4_1	824.35200	969.92100	2499.70000

## 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_and4_2	A->X (RR)	0.01860	0.00100	<b>0.13928</b>	0.32940	0.12960	<b>0.46722</b>	2.50740	0.60000	<b>1.46211</b>
	B->X (RR)	0.01860	0.00100	<b>0.15212</b>	0.32940	0.12960	<b>0.47179</b>	2.50740	0.60000	<b>1.46266</b>
	C->X (RR)	0.01860	0.00100	<b>0.15987</b>	0.32940	0.12960	<b>0.46780</b>	2.50740	0.60000	<b>1.42854</b>
	D->X (RR)	0.01860	0.00100	<b>0.16439</b>	0.32940	0.12960	<b>0.46371</b>	2.50740	0.60000	<b>1.38153</b>
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	<b>0.11222</b>	0.32940	0.06480	<b>0.40914</b>	2.50740	0.30000	<b>1.36300</b>
	B->X (RR)	0.01860	0.00100	<b>0.12523</b>	0.32940	0.06480	<b>0.41669</b>	2.50740	0.30000	<b>1.36794</b>
	C->X (RR)	0.01860	0.00100	<b>0.13301</b>	0.32940	0.06480	<b>0.41579</b>	2.50740	0.30000	<b>1.33915</b>
	D->X (RR)	0.01860	0.00100	<b>0.13734</b>	0.32940	0.06480	<b>0.41371</b>	2.50740	0.30000	<b>1.30043</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_2	A->X (FF)	0.01860	0.00100	<b>0.07514</b>	0.32940	0.12960	<b>0.35801</b>	2.50740	0.60000	<b>1.17118</b>
	B->X (FF)	0.01860	0.00100	<b>0.08061</b>	0.32940	0.12960	<b>0.36976</b>	2.50740	0.60000	<b>1.19986</b>
	C->X (FF)	0.01860	0.00100	<b>0.08471</b>	0.32940	0.12960	<b>0.37909</b>	2.50740	0.60000	<b>1.22826</b>
	D->X (FF)	0.01860	0.00100	<b>0.08785</b>	0.32940	0.12960	<b>0.38773</b>	2.50740	0.60000	<b>1.25787</b>
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	<b>0.06417</b>	0.32940	0.06480	<b>0.32120</b>	2.50740	0.30000	<b>1.08532</b>
	B->X (FF)	0.01860	0.00100	<b>0.06979</b>	0.32940	0.06480	<b>0.33459</b>	2.50740	0.30000	<b>1.11829</b>
	C->X (FF)	0.01860	0.00100	<b>0.07376</b>	0.32940	0.06480	<b>0.34482</b>	2.50740	0.30000	<b>1.14938</b>
	D->X (FF)	0.01860	0.00100	<b>0.07658</b>	0.32940	0.06480	<b>0.35398</b>	2.50740	0.30000	<b>1.18378</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_2	A	0.01860	0.00100	<b>0.01661</b>	0.32940	0.12960	<b>0.01624</b>	2.50740	0.60000	<b>0.02681</b>
	B	0.01860	0.00100	<b>0.01874</b>	0.32940	0.12960	<b>0.01803</b>	2.50740	0.60000	<b>0.02740</b>
	C	0.01860	0.00100	<b>0.01977</b>	0.32940	0.12960	<b>0.01898</b>	2.50740	0.60000	<b>0.02871</b>
	D	0.01860	0.00100	<b>0.01983</b>	0.32940	0.12960	<b>0.01886</b>	2.50740	0.60000	<b>0.02817</b>
sg13g2_and4_1	A	0.01860	0.00100	<b>0.01068</b>	0.32940	0.06480	<b>0.01118</b>	2.50740	0.30000	<b>0.02237</b>
	B	0.01860	0.00100	<b>0.01282</b>	0.32940	0.06480	<b>0.01288</b>	2.50740	0.30000	<b>0.02301</b>
	C	0.01860	0.00100	<b>0.01387</b>	0.32940	0.06480	<b>0.01379</b>	2.50740	0.30000	<b>0.02386</b>
	D	0.01860	0.00100	<b>0.01388</b>	0.32940	0.06480	<b>0.01376</b>	2.50740	0.30000	<b>0.02316</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_2	A	0.01860	0.00100	<b>0.01162</b>	0.32940	0.12960	<b>0.01211</b>	2.50740	0.60000	<b>0.02329</b>
	B	0.01860	0.00100	<b>0.01209</b>	0.32940	0.12960	<b>0.01276</b>	2.50740	0.60000	<b>0.02381</b>
	C	0.01860	0.00100	<b>0.01290</b>	0.32940	0.12960	<b>0.01364</b>	2.50740	0.60000	<b>0.02420</b>
	D	0.01860	0.00100	<b>0.01344</b>	0.32940	0.12960	<b>0.01424</b>	2.50740	0.60000	<b>0.02573</b>
sg13g2_and4_1	A	0.01860	0.00100	<b>0.00695</b>	0.32940	0.06480	<b>0.00753</b>	2.50740	0.30000	<b>0.01908</b>
	B	0.01860	0.00100	<b>0.00737</b>	0.32940	0.06480	<b>0.00794</b>	2.50740	0.30000	<b>0.01926</b>
	C	0.01860	0.00100	<b>0.00817</b>	0.32940	0.06480	<b>0.00874</b>	2.50740	0.30000	<b>0.02021</b>
	D	0.01860	0.00100	<b>0.00872</b>	0.32940	0.06480	<b>0.00932</b>	2.50740	0.30000	<b>0.02118</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00027</b>	2.50740	<b>-0.00027</b>
sg13g2_and4_1	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00026</b>	2.50740	<b>-0.00027</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>0.00088</b>	0.32940	<b>0.00089</b>	2.50740	<b>0.00090</b>
sg13g2_and4_1	0.01860	<b>0.00089</b>	0.32940	<b>0.00089</b>	2.50740	<b>0.00090</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(B * C * !D) + (B * !C)$	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00027</b>	2.50740	<b>-0.00027</b>
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00026</b>	2.50740	<b>-0.00027</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(B * C * !D) + (B * !C)$	0.01860	<b>0.00088</b>	0.32940	<b>0.00089</b>	2.50740	<b>0.00090</b>
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	<b>0.00089</b>	0.32940	<b>0.00089</b>	2.50740	<b>0.00090</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>-0.00057</b>	0.32940	<b>-0.00057</b>	2.50740	<b>-0.00057</b>
sg13g2_and4_1	0.01860	<b>-0.00057</b>	0.32940	<b>-0.00057</b>	2.50740	<b>-0.00056</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>0.00059</b>	0.32940	<b>0.00061</b>	2.50740	<b>0.00062</b>
sg13g2_and4_1	0.01860	<b>0.00060</b>	0.32940	<b>0.00061</b>	2.50740	<b>0.00062</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * C * !D) + (A * !C)$	0.01860	<b>-0.00057</b>	0.32940	<b>-0.00057</b>	2.50740	<b>-0.00057</b>
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	<b>-0.00057</b>	0.32940	<b>-0.00057</b>	2.50740	<b>-0.00056</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * C * !D) + (A * !C)$	0.01860	<b>0.00059</b>	0.32940	<b>0.00061</b>	2.50740	<b>0.00062</b>
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	<b>0.00060</b>	0.32940	<b>0.00061</b>	2.50740	<b>0.00062</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_and4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_and4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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



Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>0.00151</b>	0.32940	<b>0.00150</b>	2.50740	<b>0.00151</b>
sg13g2_and4_1	0.01860	<b>0.00151</b>	0.32940	<b>0.00150</b>	2.50740	<b>0.00151</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	<b>-0.00024</b>	0.32940	<b>-0.00034</b>	2.50740	<b>-0.00036</b>
sg13g2_and4_1	0.01860	<b>-0.00023</b>	0.32940	<b>-0.00034</b>	2.50740	<b>-0.00036</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * C) + (!A * C)$	0.01860	<b>0.00151</b>	0.32940	<b>0.00150</b>	2.50740	<b>0.00151</b>
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	<b>0.00151</b>	0.32940	<b>0.00150</b>	2.50740	<b>0.00151</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * C) + (!A * C)$	0.01860	<b>-0.00024</b>	0.32940	<b>-0.00034</b>	2.50740	<b>-0.00036</b>
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	<b>-0.00023</b>	0.32940	<b>-0.00034</b>	2.50740	<b>-0.00036</b>

# A021x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	14.51520
sg13g2_a21o_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_2	0.00285	0.00281	0.00257	0.60000
sg13g2_a21o_1	0.00267	0.00273	0.00244	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	879.74500	1473.21000	1953.94000
sg13g2_a21o_1	661.78600	1032.44000	1628.01000

## 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_2	A1->X (RR)	0.01860	0.00100	<b>0.08681</b>	0.32940	0.12960	<b>0.38455</b>	2.50740	0.60000	<b>1.28940</b>
	A2->X (RR)	0.01860	0.00100	<b>0.09080</b>	0.32940	0.12960	<b>0.37946</b>	2.50740	0.60000	<b>1.27271</b>
	B1->X (RR)	0.01860	0.00100	<b>0.05745</b>	0.32940	0.12960	<b>0.34088</b>	2.50740	0.60000	<b>1.18935</b>
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	<b>0.08175</b>	0.32940	0.06480	<b>0.36609</b>	2.50740	0.30000	<b>1.26982</b>
	A2->X (RR)	0.01860	0.00100	<b>0.08591</b>	0.32940	0.06480	<b>0.36296</b>	2.50740	0.30000	<b>1.25650</b>
	B1->X (RR)	0.01860	0.00100	<b>0.05430</b>	0.32940	0.06480	<b>0.32350</b>	2.50740	0.30000	<b>1.16882</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_2	A1->X (FF)	0.01860	0.00100	<b>0.11402</b>	0.32940	0.12960	<b>0.38821</b>	2.50740	0.60000	<b>1.22973</b>
	A2->X (FF)	0.01860	0.00100	<b>0.12394</b>	0.32940	0.12960	<b>0.40429</b>	2.50740	0.60000	<b>1.26365</b>
	B1->X (FF)	0.01860	0.00100	<b>0.11378</b>	0.32940	0.12960	<b>0.41215</b>	2.50740	0.60000	<b>1.31777</b>
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	<b>0.09113</b>	0.32940	0.06480	<b>0.34153</b>	2.50740	0.30000	<b>1.12396</b>
	A2->X (FF)	0.01860	0.00100	<b>0.09999</b>	0.32940	0.06480	<b>0.35654</b>	2.50740	0.30000	<b>1.15733</b>
	B1->X (FF)	0.01860	0.00100	<b>0.08932</b>	0.32940	0.06480	<b>0.35782</b>	2.50740	0.30000	<b>1.20018</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_2	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	<b>0.05745</b>	0.32940	0.12960	<b>0.34088</b>	2.50740	0.60000	<b>1.18935</b>
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	<b>0.05506</b>	0.32940	0.12960	<b>0.33040</b>	2.50740	0.60000	<b>1.15676</b>
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	<b>0.05430</b>	0.32940	0.06480	<b>0.32350</b>	2.50740	0.30000	<b>1.16882</b>
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	<b>0.05111</b>	0.32940	0.06480	<b>0.31121</b>	2.50740	0.30000	<b>1.13125</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_2	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	<b>0.11378</b>	0.32940	0.12960	<b>0.41215</b>	2.50740	0.60000	<b>1.31777</b>
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	<b>0.10153</b>	0.32940	0.12960	<b>0.39348</b>	2.50740	0.60000	<b>1.28596</b>
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	<b>0.08932</b>	0.32940	0.06480	<b>0.35782</b>	2.50740	0.30000	<b>1.20018</b>
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	<b>0.07872</b>	0.32940	0.06480	<b>0.33840</b>	2.50740	0.30000	<b>1.16343</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_2	A1	0.01860	0.00100	<b>0.01434</b>	0.32940	0.12960	<b>0.01487</b>	2.50740	0.60000	<b>0.02845</b>
	A2	0.01860	0.00100	<b>0.01634</b>	0.32940	0.12960	<b>0.01662</b>	2.50740	0.60000	<b>0.02854</b>
	B1	0.01860	0.00100	<b>0.01205</b>	0.32940	0.12960	<b>0.01336</b>	2.50740	0.60000	<b>0.02707</b>
sg13g2_a21o_1	A1	0.01860	0.00100	<b>0.00930</b>	0.32940	0.06480	<b>0.00991</b>	2.50740	0.30000	<b>0.02232</b>
	A2	0.01860	0.00100	<b>0.01078</b>	0.32940	0.06480	<b>0.01125</b>	2.50740	0.30000	<b>0.02269</b>
	B1	0.01860	0.00100	<b>0.00732</b>	0.32940	0.06480	<b>0.00824</b>	2.50740	0.30000	<b>0.02157</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_2	A1	0.01860	0.00100	<b>0.01575</b>	0.32940	0.12960	<b>0.01560</b>	2.50740	0.60000	<b>0.02843</b>
	A2	0.01860	0.00100	<b>0.01593</b>	0.32940	0.12960	<b>0.01588</b>	2.50740	0.60000	<b>0.02860</b>
	B1	0.01860	0.00100	<b>0.01260</b>	0.32940	0.12960	<b>0.01339</b>	2.50740	0.60000	<b>0.02737</b>
sg13g2_a21o_1	A1	0.01860	0.00100	<b>0.01038</b>	0.32940	0.06480	<b>0.01058</b>	2.50740	0.30000	<b>0.02299</b>
	A2	0.01860	0.00100	<b>0.01042</b>	0.32940	0.06480	<b>0.01076</b>	2.50740	0.30000	<b>0.02266</b>
	B1	0.01860	0.00100	<b>0.00716</b>	0.32940	0.06480	<b>0.00820</b>	2.50740	0.30000	<b>0.02187</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_2	B1	(A1 * !A2)	0.01860	0.00100	<b>0.01408</b>	0.32940	0.12960	<b>0.01538</b>	2.50740	0.60000	<b>0.02985</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.01205</b>	0.32940	0.12960	<b>0.01336</b>	2.50740	0.60000	<b>0.02707</b>
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00906</b>	0.32940	0.06480	<b>0.01002</b>	2.50740	0.30000	<b>0.02377</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00732</b>	0.32940	0.06480	<b>0.00824</b>	2.50740	0.30000	<b>0.02157</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_2	B1	(A1 * !A2)	0.01860	0.00100	<b>0.01305</b>	0.32940	0.12960	<b>0.01356</b>	2.50740	0.60000	<b>0.02692</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.01260</b>	0.32940	0.12960	<b>0.01339</b>	2.50740	0.60000	<b>0.02737</b>
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00741</b>	0.32940	0.06480	<b>0.00846</b>	2.50740	0.30000	<b>0.02195</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00716</b>	0.32940	0.06480	<b>0.00820</b>	2.50740	0.30000	<b>0.02187</b>

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>0.00006</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00007</b>
sg13g2_a21o_1	0.01860	<b>-0.00001</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>-0.00006</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00007</b>
sg13g2_a21o_1	0.01860	<b>0.00001</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A2 * B1)	0.01860	<b>0.00042</b>	0.32940	<b>0.00019</b>	2.50740	<b>0.00014</b>
	(!A2 * B1)	0.01860	<b>0.00006</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00007</b>
sg13g2_a21o_1	(A2 * B1)	0.01860	<b>0.00027</b>	0.32940	<b>0.00004</b>	2.50740	<b>-0.00002</b>
	(!A2 * B1)	0.01860	<b>-0.00001</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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



Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A2 * B1)	0.01860	<b>-0.00015</b>	0.32940	<b>-0.00015</b>	2.50740	<b>-0.00014</b>
	(!A2 * B1)	0.01860	<b>-0.00006</b>	0.32940	<b>-0.00007</b>	2.50740	<b>-0.00007</b>
sg13g2_a21o_1	(A2 * B1)	0.01860	<b>0.00002</b>	0.32940	<b>0.00001</b>	2.50740	<b>0.00002</b>
	(!A2 * B1)	0.01860	<b>0.00001</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_a21o_1	0.01860	<b>0.00030</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00001</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>0.00000</b>	0.32940	<b>-0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_a21o_1	0.01860	<b>-0.00001</b>	0.32940	<b>-0.00001</b>	2.50740	<b>-0.00001</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * B1)	0.01860	<b>0.00035</b>	0.32940	<b>0.00012</b>	2.50740	<b>0.00006</b>
	(!A1 * B1)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_a21o_1	(A1 * B1)	0.01860	<b>0.00030</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00001</b>
	(!A1 * B1)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * B1)	0.01860	<b>-0.00008</b>	0.32940	<b>-0.00008</b>	2.50740	<b>-0.00006</b>
	(!A1 * B1)	0.01860	<b>0.00000</b>	0.32940	<b>-0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_a21o_1	(A1 * B1)	0.01860	<b>-0.00001</b>	0.32940	<b>-0.00001</b>	2.50740	<b>-0.00001</b>
	(!A1 * B1)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>0.00056</b>	0.32940	<b>0.00056</b>	2.50740	<b>0.00057</b>
sg13g2_a21o_1	0.01860	<b>0.00045</b>	0.32940	<b>0.00045</b>	2.50740	<b>0.00046</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	<b>0.00066</b>	0.32940	<b>0.00066</b>	2.50740	<b>0.00067</b>
sg13g2_a21o_1	0.01860	<b>0.00078</b>	0.32940	<b>0.00079</b>	2.50740	<b>0.00080</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * A2)	0.01860	<b>0.00056</b>	0.32940	<b>0.00056</b>	2.50740	<b>0.00057</b>
sg13g2_a21o_1	(A1 * A2)	0.01860	<b>0.00045</b>	0.32940	<b>0.00045</b>	2.50740	<b>0.00046</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * A2)	0.01860	<b>0.00066</b>	0.32940	<b>0.00066</b>	2.50740	<b>0.00067</b>
sg13g2_a21o_1	(A1 * A2)	0.01860	<b>0.00078</b>	0.32940	<b>0.00079</b>	2.50740	<b>0.00080</b>

# BTLx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00571	0.01657	2.40000
sg13g2_ebufn_4	0.00293	0.00999	1.20000
sg13g2_ebufn_2	0.00259	0.00614	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	2462.44000	3998.39000	7045.57000
sg13g2_ebufn_4	1611.82000	2240.93000	3625.90000
sg13g2_ebufn_2	1171.82000	1486.28000	1947.78000

## 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	0.01976	<b>0.07423</b>	0.32940	0.53716	<b>0.57247</b>	2.50740	2.41876	<b>2.19861</b>
	TE_B->Z (RR)	0.01860	0.01976	<b>0.07365</b>	0.32940	0.53716	<b>0.16600</b>	2.50740	2.41876	<b>0.34441</b>
	TE_B->Z (FR)	0.01860	0.01976	<b>0.03472</b>	0.32940	0.53716	<b>0.52900</b>	2.50740	2.41876	<b>2.59475</b>
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01052	<b>0.07657</b>	0.32940	0.26872	<b>0.57394</b>	2.50740	1.20952	<b>2.20157</b>
	TE_B->Z (RR)	0.01860	0.01052	<b>0.05676</b>	0.32940	0.26872	<b>0.12459</b>	2.50740	1.20952	<b>0.24420</b>
	TE_B->Z (FR)	0.01860	0.01052	<b>0.03487</b>	0.32940	0.26872	<b>0.52744</b>	2.50740	1.20952	<b>2.59075</b>
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00587	<b>0.06457</b>	0.32940	0.13447	<b>0.53758</b>	2.50740	0.60487	<b>2.11638</b>
	TE_B->Z (RR)	0.01860	0.00587	<b>0.04925</b>	0.32940	0.13447	<b>0.10433</b>	2.50740	0.60487	<b>0.20177</b>
	TE_B->Z (FR)	0.01860	0.00587	<b>0.03520</b>	0.32940	0.13447	<b>0.52368</b>	2.50740	0.60487	<b>2.57792</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	0.02961	<b>0.08241</b>	0.32940	0.54701	<b>0.48577</b>	2.50740	2.42861	<b>1.75046</b>
	TE_B->Z (RF)	0.01860	0.02961	<b>0.03132</b>	0.32940	0.54701	<b>0.05557</b>	2.50740	2.42861	<b>0.24582</b>
	TE_B->Z (FF)	0.01860	0.02961	<b>0.09508</b>	0.32940	0.54701	<b>0.62990</b>	2.50740	2.42861	<b>2.36469</b>
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01557	<b>0.08500</b>	0.32940	0.27376	<b>0.48842</b>	2.50740	1.21457	<b>1.75517</b>
	TE_B->Z (RF)	0.01860	0.01557	<b>0.03042</b>	0.32940	0.27376	<b>0.05457</b>	2.50740	1.21457	<b>0.24260</b>
	TE_B->Z (FF)	0.01860	0.01557	<b>0.07261</b>	0.32940	0.27376	<b>0.57539</b>	2.50740	1.21457	<b>2.23904</b>
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00846	<b>0.06548</b>	0.32940	0.13706	<b>0.44188</b>	2.50740	0.60746	<b>1.64973</b>
	TE_B->Z (RF)	0.01860	0.00846	<b>0.02950</b>	0.32940	0.13706	<b>0.05400</b>	2.50740	0.60746	<b>0.24161</b>
	TE_B->Z (FF)	0.01860	0.00846	<b>0.06251</b>	0.32940	0.13706	<b>0.54009</b>	2.50740	0.60746	<b>2.15478</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	0.01976	<b>0.02267</b>	0.32940	0.53716	<b>0.02826</b>	2.50740	2.41876	<b>0.02542</b>
	TE_B	0.01860	0.01976	<b>0.01296</b>	0.32940	0.53716	<b>0.01127</b>	2.50740	2.41876	<b>0.00905</b>
sg13g2_ebufn_4	A	0.01860	0.01052	<b>0.01152</b>	0.32940	0.26872	<b>0.01384</b>	2.50740	1.20952	<b>0.01201</b>
	TE_B	0.01860	0.01052	<b>0.00631</b>	0.32940	0.26872	<b>0.00560</b>	2.50740	1.20952	<b>0.00445</b>
sg13g2_ebufn_2	A	0.01860	0.00587	<b>0.00620</b>	0.32940	0.13447	<b>0.00724</b>	2.50740	0.60487	<b>0.00544</b>
	TE_B	0.01860	0.00587	<b>0.00321</b>	0.32940	0.13447	<b>0.00280</b>	2.50740	0.60487	<b>0.00208</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	0.02961	<b>0.04019</b>	0.32940	0.54701	<b>0.04380</b>	2.50740	2.42861	<b>0.03576</b>
	TE_B	0.01860	0.02961	<b>0.01371</b>	0.32940	0.54701	<b>0.11718</b>	2.50740	2.42861	<b>0.48467</b>
sg13g2_ebufn_4	A	0.01860	0.01557	<b>0.02010</b>	0.32940	0.27376	<b>0.02188</b>	2.50740	1.21457	<b>0.01679</b>
	TE_B	0.01860	0.01557	<b>0.00694</b>	0.32940	0.27376	<b>0.05796</b>	2.50740	1.21457	<b>0.24242</b>
sg13g2_ebufn_2	A	0.01860	0.00846	<b>0.00983</b>	0.32940	0.13706	<b>0.01067</b>	2.50740	0.60746	<b>0.00870</b>
	TE_B	0.01860	0.00846	<b>0.00367</b>	0.32940	0.13706	<b>0.02908</b>	2.50740	0.60746	<b>0.12153</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>0.03536</b>	0.32940	<b>0.03746</b>	2.50740	<b>0.07288</b>
sg13g2_ebufn_4	0.01860	<b>0.01805</b>	0.32940	<b>0.01902</b>	2.50740	<b>0.03660</b>
sg13g2_ebufn_2	0.01860	<b>0.00976</b>	0.32940	<b>0.01082</b>	2.50740	<b>0.02654</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>0.01231</b>	0.32940	<b>0.01494</b>	2.50740	<b>0.05198</b>
sg13g2_ebufn_4	0.01860	<b>0.00666</b>	0.32940	<b>0.00792</b>	2.50740	<b>0.02630</b>
sg13g2_ebufn_2	0.01860	<b>0.00422</b>	0.32940	<b>0.00555</b>	2.50740	<b>0.02191</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>-0.00451</b>	0.32940	<b>-0.00532</b>	2.50740	<b>0.01012</b>
sg13g2_ebufn_4	0.01860	<b>-0.00080</b>	0.32940	<b>-0.00075</b>	2.50740	<b>0.01642</b>
sg13g2_ebufn_2	0.01860	<b>0.00049</b>	0.32940	<b>0.00104</b>	2.50740	<b>0.01652</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>0.05821</b>	0.32940	<b>0.05918</b>	2.50740	<b>0.07617</b>
sg13g2_ebufn_4	0.01860	<b>0.03035</b>	0.32940	<b>0.03142</b>	2.50740	<b>0.04970</b>
sg13g2_ebufn_2	0.01860	<b>0.01608</b>	0.32940	<b>0.01738</b>	2.50740	<b>0.03361</b>

# BU<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	7.25760

## Pin Capacitance Information



Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01690	4.80000
sg13g2_buf_8	0.00848	2.40000
sg13g2_buf_4	0.00367	1.20000
sg13g2_buf_2	0.00259	0.60000
sg13g2_buf_1	0.00230	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7855.65000	10631.10000	13406.50000
sg13g2_buf_8	3927.85000	5315.64000	6703.42000
sg13g2_buf_4	1952.92000	2605.02000	3257.12000
sg13g2_buf_2	1090.12000	1391.01000	1691.89000
sg13g2_buf_1	775.62500	837.74700	899.87000

## 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>0.05764</b>	0.32940	1.03680	<b>0.34525</b>	2.50740	4.80000	<b>1.23201</b>
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	<b>0.05724</b>	0.32940	0.51840	<b>0.34427</b>	2.50740	2.40000	<b>1.23046</b>
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	<b>0.07349</b>	0.32940	0.25920	<b>0.38025</b>	2.50740	1.20000	<b>1.35377</b>
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	<b>0.05752</b>	0.32940	0.12960	<b>0.34034</b>	2.50740	0.60000	<b>1.22674</b>
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	<b>0.05126</b>	0.32940	0.06480	<b>0.31626</b>	2.50740	0.30000	<b>1.17149</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>0.06248</b>	0.32940	1.03680	<b>0.33699</b>	2.50740	4.80000	<b>1.15303</b>
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	<b>0.06196</b>	0.32940	0.51840	<b>0.33649</b>	2.50740	2.40000	<b>1.15332</b>
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	<b>0.06102</b>	0.32940	0.25920	<b>0.33086</b>	2.50740	1.20000	<b>1.09762</b>
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	<b>0.06015</b>	0.32940	0.12960	<b>0.32501</b>	2.50740	0.60000	<b>1.12185</b>
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	<b>0.05306</b>	0.32940	0.06480	<b>0.29858</b>	2.50740	0.30000	<b>1.06430</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>0.09358</b>	0.32940	1.03680	<b>0.10381</b>	2.50740	4.80000	<b>0.20308</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.04614</b>	0.32940	0.51840	<b>0.05103</b>	2.50740	2.40000	<b>0.10163</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.02278</b>	0.32940	0.25920	<b>0.02415</b>	2.50740	1.20000	<b>0.04524</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.01208</b>	0.32940	0.12960	<b>0.01334</b>	2.50740	0.60000	<b>0.02756</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00717</b>	0.32940	0.06480	<b>0.00825</b>	2.50740	0.30000	<b>0.02038</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>0.09206</b>	0.32940	1.03680	<b>0.10117</b>	2.50740	4.80000	<b>0.20587</b>
sg13g2_buf_8	A	0.01860	0.00100	<b>0.04528</b>	0.32940	0.51840	<b>0.05011</b>	2.50740	2.40000	<b>0.10208</b>
sg13g2_buf_4	A	0.01860	0.00100	<b>0.02281</b>	0.32940	0.25920	<b>0.02457</b>	2.50740	1.20000	<b>0.04516</b>
sg13g2_buf_2	A	0.01860	0.00100	<b>0.01191</b>	0.32940	0.12960	<b>0.01323</b>	2.50740	0.60000	<b>0.02848</b>
sg13g2_buf_1	A	0.01860	0.00100	<b>0.00712</b>	0.32940	0.06480	<b>0.00823</b>	2.50740	0.30000	<b>0.02104</b>

# DECAP<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp  
125.00*

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## Footprint

Cell Name	Area
sg13g2_decap_8	12.70080
sg13g2_decap_4	7.25760

## Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_8	850.82400	850.82400	850.82400
sg13g2_decap_4	425.38900	425.38900	425.38900

# DFFRRx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00162	0.00588	0.00295	0.60000	0.60000
sg13g2_dfrbp_1	0.00174	0.00636	0.00272	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4377.29000	5083.69000	5903.94000
sg13g2_dfrbp_1	3291.05000	3958.96000	4709.15000

## 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>0.24066</b>	0.32940	0.12960	<b>0.50578</b>	2.50740	0.60000	<b>1.38054</b>
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	<b>0.19588</b>	0.32940	0.06480	<b>0.46604</b>	2.50740	0.30000	<b>1.32112</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>0.20954</b>	0.32940	0.12960	<b>0.45863</b>	2.50740	0.60000	<b>1.21261</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.28240</b>	0.32940	0.12960	<b>0.57276</b>	2.50740	0.60000	<b>1.50385</b>
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	<b>0.18693</b>	0.32940	0.06480	<b>0.43647</b>	2.50740	0.30000	<b>1.17904</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.24890</b>	0.32940	0.06480	<b>0.53629</b>	2.50740	0.30000	<b>1.45472</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>0.14119</b>	0.32940	0.12960	<b>0.44600</b>	2.50740	0.60000	<b>1.29254</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.21519</b>	0.32940	0.12960	<b>0.55863</b>	2.50740	0.60000	<b>1.58356</b>
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	<b>0.14449</b>	0.32940	0.06480	<b>0.43983</b>	2.50740	0.30000	<b>1.27598</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.20660</b>	0.32940	0.06480	<b>0.53776</b>	2.50740	0.30000	<b>1.54913</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>0.15647</b>	0.32940	0.12960	<b>0.46904</b>	2.50740	0.60000	<b>1.25312</b>
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	<b>0.14774</b>	0.32940	0.06480	<b>0.43864</b>	2.50740	0.30000	<b>1.20706</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>-0.06113</b>	1.26300	1.26300	<b>-0.19158</b>	2.50740	2.50740	<b>-0.24498</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11003</b>	1.26300	1.26300	<b>0.23746</b>	2.50740	2.50740	<b>0.29515</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.06113</b>	1.26300	1.26300	<b>-0.19428</b>	2.50740	2.50740	<b>-0.25678</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.10514</b>	1.26300	1.26300	<b>0.23476</b>	2.50740	2.50740	<b>0.29811</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>-0.03668</b>	1.26300	1.26300	<b>-0.18079</b>	2.50740	2.50740	<b>-0.26859</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11003</b>	1.26300	1.26300	<b>0.25365</b>	2.50740	2.50740	<b>0.34828</b>
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	<b>-0.03423</b>	1.26300	1.26300	<b>-0.18079</b>	2.50740	2.50740	<b>-0.27449</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.10270</b>	1.26300	1.26300	<b>0.25095</b>	2.50740	2.50740	<b>0.35123</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>0.11737</b>	1.26300	1.26300	<b>0.25904</b>	2.50740	2.50740	<b>0.36599</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.10514</b>	1.26300	1.26300	<b>-0.25095</b>	2.50740	2.50740	<b>-0.35419</b>
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	<b>0.11248</b>	1.26300	1.26300	<b>0.25904</b>	2.50740	2.50740	<b>0.37189</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.09781</b>	1.26300	1.26300	<b>-0.24825</b>	2.50740	2.50740	<b>-0.36304</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>0.04902</b>	0.32940	0.12960	<b>0.16698</b>	2.50740	0.60000	<b>0.61540</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.03874</b>	0.32940	0.06480	<b>0.09827</b>	2.50740	0.30000	<b>0.33080</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>0.04858</b>	0.32940	0.12960	<b>0.16759</b>	2.50740	0.60000	<b>0.61573</b>
	RESET_B	0.01860	0.00100	<b>0.03678</b>	0.32940	0.12960	<b>0.15492</b>	2.50740	0.60000	<b>0.59267</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.03763</b>	0.32940	0.06480	<b>0.09742</b>	2.50740	0.30000	<b>0.33002</b>
	RESET_B	0.01860	0.00100	<b>0.02551</b>	0.32940	0.06480	<b>0.08458</b>	2.50740	0.30000	<b>0.30794</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>0.04864</b>	0.32940	0.12960	<b>0.16826</b>	2.50740	0.60000	<b>0.61660</b>
	RESET_B	0.01860	0.00100	<b>0.03679</b>	0.32940	0.12960	<b>0.15565</b>	2.50740	0.60000	<b>0.59302</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.03769</b>	0.32940	0.06480	<b>0.09779</b>	2.50740	0.30000	<b>0.33039</b>
	RESET_B	0.01860	0.00100	<b>0.02550</b>	0.32940	0.06480	<b>0.08496</b>	2.50740	0.30000	<b>0.30785</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>0.04903</b>	0.32940	0.12960	<b>0.16622</b>	2.50740	0.60000	<b>0.61447</b>
sg13g2_dfrbp_1	CLK	0.01860	0.00100	<b>0.03876</b>	0.32940	0.06480	<b>0.09796</b>	2.50740	0.30000	<b>0.33032</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>0.00222</b>	0.32940	<b>0.00267</b>	2.50740	<b>0.00950</b>
sg13g2_dfrbp_1	0.01860	<b>0.00235</b>	0.32940	<b>0.00278</b>	2.50740	<b>0.00952</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>0.00169</b>	0.32940	<b>0.00218</b>	2.50740	<b>0.00932</b>
sg13g2_dfrbp_1	0.01860	<b>0.00186</b>	0.32940	<b>0.00234</b>	2.50740	<b>0.00944</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>0.00222</b>	0.32940	<b>0.00267</b>	2.50740	<b>0.00950</b>
	(!CLK * RESET_B)	0.01860	<b>0.01505</b>	0.32940	<b>0.01554</b>	2.50740	<b>0.02306</b>
	(!CLK * !RESET_B)	0.01860	<b>-0.00005</b>	0.32940	<b>-0.00006</b>	2.50740	<b>-0.00006</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00235</b>	0.32940	<b>0.00278</b>	2.50740	<b>0.00952</b>
	(!CLK * RESET_B)	0.01860	<b>0.01287</b>	0.32940	<b>0.01339</b>	2.50740	<b>0.02095</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00013</b>	0.32940	<b>0.00013</b>	2.50740	<b>0.00013</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>0.00169</b>	0.32940	<b>0.00218</b>	2.50740	<b>0.00932</b>
	(!CLK * RESET_B)	0.01860	<b>0.01184</b>	0.32940	<b>0.01229</b>	2.50740	<b>0.02068</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00005</b>	0.32940	<b>0.00006</b>	2.50740	<b>0.00006</b>
sg13g2_dfrbp_1	CLK	0.01860	<b>0.00186</b>	0.32940	<b>0.00234</b>	2.50740	<b>0.00944</b>
	(!CLK * RESET_B)	0.01860	<b>0.01097</b>	0.32940	<b>0.01143</b>	2.50740	<b>0.01973</b>
	(!CLK * !RESET_B)	0.01860	<b>0.00002</b>	0.32940	<b>0.00003</b>	2.50740	<b>0.00004</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>0.00507</b>	0.32940	<b>0.00518</b>	2.50740	<b>0.01136</b>
sg13g2_dfrbp_1	0.01860	<b>0.00555</b>	0.32940	<b>0.00565</b>	2.50740	<b>0.01174</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>0.01127</b>	0.32940	<b>0.01119</b>	2.50740	<b>0.02142</b>
sg13g2_dfrbp_1	0.01860	<b>0.01003</b>	0.32940	<b>0.00992</b>	2.50740	<b>0.02020</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>0.00507</b>	0.32940	<b>0.00518</b>	2.50740	<b>0.01136</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00210</b>	0.32940	<b>0.00209</b>	2.50740	<b>0.00210</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01832</b>	0.32940	<b>0.01847</b>	2.50740	<b>0.02758</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00207</b>	0.32940	<b>0.00207</b>	2.50740	<b>0.00208</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.00555</b>	0.32940	<b>0.00565</b>	2.50740	<b>0.01174</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>0.00256</b>	0.32940	<b>0.00256</b>	2.50740	<b>0.00256</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01655</b>	0.32940	<b>0.01669</b>	2.50740	<b>0.02586</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>0.00258</b>	0.32940	<b>0.00258</b>	2.50740	<b>0.00259</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>0.04749</b>	0.32940	<b>0.04800</b>	2.50740	<b>0.06819</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00158</b>	0.32940	<b>-0.00181</b>	2.50740	<b>-0.00189</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01127</b>	0.32940	<b>0.01119</b>	2.50740	<b>0.02142</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00190</b>	0.32940	<b>-0.00207</b>	2.50740	<b>-0.00208</b>
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	<b>0.03461</b>	0.32940	<b>0.03508</b>	2.50740	<b>0.05490</b>
	(CLK * !D * !Q * Q_N)	0.01860	<b>-0.00203</b>	0.32940	<b>-0.00226</b>	2.50740	<b>-0.00234</b>
	(!CLK * D * !Q * Q_N)	0.01860	<b>0.01003</b>	0.32940	<b>0.00992</b>	2.50740	<b>0.02020</b>
	(!CLK * !D * !Q * Q_N)	0.01860	<b>-0.00213</b>	0.32940	<b>-0.00234</b>	2.50740	<b>-0.00240</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>0.01419</b>	0.32940	<b>0.01517</b>	2.50740	<b>0.03398</b>
sg13g2_dfrbp_1	0.01860	<b>0.01403</b>	0.32940	<b>0.01490</b>	2.50740	<b>0.03237</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>0.02625</b>	0.32940	<b>0.02727</b>	2.50740	<b>0.04775</b>
sg13g2_dfrbp_1	0.01860	<b>0.02431</b>	0.32940	<b>0.02528</b>	2.50740	<b>0.04426</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>0.01419</b>	0.32940	<b>0.01517</b>	2.50740	<b>0.03398</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01481</b>	0.32940	<b>0.01577</b>	2.50740	<b>0.03458</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01401</b>	0.32940	<b>0.01498</b>	2.50740	<b>0.03380</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01464</b>	0.32940	<b>0.01559</b>	2.50740	<b>0.03440</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.01450</b>	0.32940	<b>0.01538</b>	2.50740	<b>0.03281</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01403</b>	0.32940	<b>0.01490</b>	2.50740	<b>0.03237</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01385</b>	0.32940	<b>0.01472</b>	2.50740	<b>0.03220</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01384</b>	0.32940	<b>0.01469</b>	2.50740	<b>0.03215</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>0.02789</b>	0.32940	<b>0.02892</b>	2.50740	<b>0.04940</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.02625</b>	0.32940	<b>0.02727</b>	2.50740	<b>0.04775</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01361</b>	0.32940	<b>0.01467</b>	2.50740	<b>0.03452</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.06081</b>	0.32940	<b>0.04981</b>	2.50740	<b>0.06943</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01354</b>	0.32940	<b>0.01459</b>	2.50740	<b>0.03445</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01356</b>	0.32940	<b>0.01460</b>	2.50740	<b>0.03446</b>
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	<b>0.02640</b>	0.32940	<b>0.02737</b>	2.50740	<b>0.04635</b>
	(D * RESET_B * !Q * Q_N)	0.01860	<b>0.02431</b>	0.32940	<b>0.02528</b>	2.50740	<b>0.04426</b>
	(D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01398</b>	0.32940	<b>0.01501</b>	2.50740	<b>0.03331</b>
	(!D * RESET_B * Q * !Q_N)	0.01860	<b>0.05605</b>	0.32940	<b>0.04017</b>	2.50740	<b>0.05833</b>
	(!D * RESET_B * !Q * Q_N)	0.01860	<b>0.01388</b>	0.32940	<b>0.01491</b>	2.50740	<b>0.03323</b>
	(!D * !RESET_B * !Q * Q_N)	0.01860	<b>0.01390</b>	0.32940	<b>0.01494</b>	2.50740	<b>0.03323</b>

# DLHQ



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00226	0.00228	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2192.03000	2672.94000	3355.58000



## 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>0.17857</b>	0.32940	0.06480	<b>0.44085</b>	2.50740	0.30000	<b>1.27119</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.15230</b>	0.32940	0.06480	<b>0.41548</b>	2.50740	0.30000	<b>1.21727</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>0.15605</b>	0.32940	0.06480	<b>0.39876</b>	2.50740	0.30000	<b>1.13359</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.16225</b>	0.32940	0.06480	<b>0.40177</b>	2.50740	0.30000	<b>1.08972</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>-0.09781</b>	1.26300	1.26300	<b>-0.17269</b>	2.50740	2.50740	<b>-0.19185</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.10514</b>	1.26300	1.26300	<b>0.19968</b>	2.50740	2.50740	<b>0.23908</b>

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	<b>-0.03912</b>	1.26300	1.26300	<b>0.00000</b>	2.50740	2.50740	<b>0.03837</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.04646</b>	1.26300	1.26300	<b>0.00540</b>	2.50740	2.50740	<b>-0.03247</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>0.01842</b>	0.32940	0.06480	<b>0.01871</b>	2.50740	0.30000	<b>0.01871</b>
	GATE	0.01860	0.00100	<b>0.01486</b>	0.32940	0.06480	<b>0.01517</b>	2.50740	0.30000	<b>0.01614</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>0.01887</b>	0.32940	0.06480	<b>0.01928</b>	2.50740	0.30000	<b>0.01943</b>
	GATE	0.01860	0.00100	<b>0.01623</b>	0.32940	0.06480	<b>0.01701</b>	2.50740	0.30000	<b>0.01716</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>0.00423</b>	0.32940	<b>0.00507</b>	2.50740	<b>0.01796</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>0.00484</b>	0.32940	<b>0.00570</b>	2.50740	<b>0.01910</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>0.00506</b>	0.32940	<b>0.00582</b>	2.50740	<b>0.01867</b>
	(!GATE * !Q)	0.01860	<b>0.00423</b>	0.32940	<b>0.00507</b>	2.50740	<b>0.01796</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>0.00442</b>	0.32940	<b>0.00536</b>	2.50740	<b>0.01883</b>
	(!GATE * !Q)	0.01860	<b>0.00484</b>	0.32940	<b>0.00570</b>	2.50740	<b>0.01910</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>0.01110</b>	0.32940	<b>0.01206</b>	2.50740	<b>0.02825</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>0.01894</b>	0.32940	<b>0.02048</b>	2.50740	<b>0.03764</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>0.01110</b>	0.32940	<b>0.01206</b>	2.50740	<b>0.02825</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>0.01894</b>	0.32940	<b>0.02048</b>	2.50740	<b>0.03764</b>

# DLHRQ



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00211	0.00288	0.00219	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2461.77000	2905.83000	3378.49000

## 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>0.18773</b>	0.32940	0.06480	<b>0.45478</b>	2.50740	0.30000	<b>1.28280</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.16924</b>	0.32940	0.06480	<b>0.43868</b>	2.50740	0.30000	<b>1.24037</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>0.16498</b>	0.32940	0.06480	<b>0.41001</b>	2.50740	0.30000	<b>1.15256</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.17358</b>	0.32940	0.06480	<b>0.41807</b>	2.50740	0.30000	<b>1.11726</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.06563</b>	0.32940	0.06480	<b>0.33118</b>	2.50740	0.30000	<b>1.14614</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>-0.08803</b>	1.26300	1.26300	<b>-0.15381</b>	2.50740	2.50740	<b>-0.16824</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.09781</b>	1.26300	1.26300	<b>0.18349</b>	2.50740	2.50740	<b>0.21546</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>-0.04401</b>	1.26300	1.26300	<b>0.00000</b>	2.50740	2.50740	<b>0.03837</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.05135</b>	1.26300	1.26300	<b>0.00540</b>	2.50740	2.50740	<b>-0.03247</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>-0.01712</b>	1.26300	1.26300	<b>-0.13492</b>	2.50740	2.50740	<b>-0.19185</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.02934</b>	1.26300	1.26300	<b>0.14841</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>0.00126</b>	0.32940	0.06480	<b>0.00120</b>	2.50740	0.30000	<b>0.00100</b>
	GATE	0.01860	0.00100	<b>0.01538</b>	0.32940	0.06480	<b>0.01556</b>	2.50740	0.30000	<b>0.01663</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>-0.00126</b>	0.32940	0.06480	<b>-0.00120</b>	2.50740	0.30000	<b>-0.00100</b>
	GATE	0.01860	0.00100	<b>0.01539</b>	0.32940	0.06480	<b>0.01611</b>	2.50740	0.30000	<b>0.01651</b>
	RESET_B	0.01860	0.00100	<b>0.00939</b>	0.32940	0.06480	<b>0.01072</b>	2.50740	0.30000	<b>0.02664</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>0.02142</b>	0.32940	<b>0.02253</b>	2.50740	<b>0.03579</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>0.02722</b>	0.32940	<b>0.03209</b>	2.50740	<b>0.04590</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>0.00144</b>	0.32940	<b>0.00224</b>	2.50740	<b>0.01517</b>
	!RESET_B	0.01860	<b>0.02142</b>	0.32940	<b>0.02253</b>	2.50740	<b>0.03579</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>0.00576</b>	0.32940	<b>0.00671</b>	2.50740	<b>0.02015</b>
	!RESET_B	0.01860	<b>0.02722</b>	0.32940	<b>0.03209</b>	2.50740	<b>0.04590</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>0.00008</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00008</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>0.00022</b>	0.32940	<b>0.00008</b>	2.50740	<b>0.00004</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	<b>0.00008</b>	0.32940	<b>0.00008</b>	2.50740	<b>0.00008</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00008</b>	0.32940	<b>0.00007</b>	2.50740	<b>0.00008</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>0.00022</b>	0.32940	<b>0.00009</b>	2.50740	<b>0.00004</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00022</b>	0.32940	<b>0.00008</b>	2.50740	<b>0.00004</b>

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	<b>0.01131</b>	0.32940	<b>0.01224</b>	2.50740	<b>0.02831</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>0.01902</b>	0.32940	<b>0.02062</b>	2.50740	<b>0.03758</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>0.01503</b>	0.32940	<b>0.01582</b>	2.50740	<b>0.03289</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01131</b>	0.32940	<b>0.01224</b>	2.50740	<b>0.02831</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>0.01490</b>	0.32940	<b>0.01601</b>	2.50740	<b>0.03429</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.01902</b>	0.32940	<b>0.02062</b>	2.50740	<b>0.03758</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01909</b>	0.32940	<b>0.02070</b>	2.50740	<b>0.03765</b>

# DLHR



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00206	0.00304	0.00224	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3241.38000	3729.76000	4179.22000

## 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>0.20292</b>	0.32940	0.06480	<b>0.47662</b>	2.50740	0.30000	<b>1.30383</b>
	GATE->Q (RR)	0.01860	0.00100	<b>0.18513</b>	0.32940	0.06480	<b>0.46215</b>	2.50740	0.30000	<b>1.26431</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>0.17096</b>	0.32940	0.06480	<b>0.41911</b>	2.50740	0.30000	<b>1.15628</b>
	GATE->Q (RF)	0.01860	0.00100	<b>0.17975</b>	0.32940	0.06480	<b>0.42829</b>	2.50740	0.30000	<b>1.12392</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.07140</b>	0.32940	0.06480	<b>0.34825</b>	2.50740	0.30000	<b>1.17500</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>0.21016</b>	0.32940	0.06480	<b>0.46961</b>	2.50740	0.30000	<b>1.30099</b>
	GATE->Q_N (RR)	0.01860	0.00100	<b>0.21908</b>	0.32940	0.06480	<b>0.47877</b>	2.50740	0.30000	<b>1.26807</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.11043</b>	0.32940	0.06480	<b>0.39381</b>	2.50740	0.30000	<b>1.26860</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>0.24563</b>	0.32940	0.06480	<b>0.47902</b>	2.50740	0.30000	<b>1.21198</b>
	GATE->Q_N (RF)	0.01860	0.00100	<b>0.22812</b>	0.32940	0.06480	<b>0.46441</b>	2.50740	0.30000	<b>1.17225</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>-0.09536</b>	1.26300	1.26300	<b>-0.15920</b>	2.50740	2.50740	<b>-0.17414</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.10759</b>	1.26300	1.26300	<b>0.18889</b>	2.50740	2.50740	<b>0.22137</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>-0.04401</b>	1.26300	1.26300	<b>0.00000</b>	2.50740	2.50740	<b>0.03837</b>
	setup	GATE (F)	0.01860	0.01860	<b>0.05379</b>	1.26300	1.26300	<b>0.00540</b>	2.50740	2.50740	<b>-0.02952</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>-0.00734</b>	1.26300	1.26300	<b>-0.09174</b>	2.50740	2.50740	<b>-0.13282</b>
	removal	GATE (F)	0.01860	0.01860	<b>0.02201</b>	1.26300	1.26300	<b>0.11063</b>	2.50740	2.50740	<b>0.15053</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>0.00581</b>	0.32940	0.06480	<b>0.00606</b>	2.50740	0.30000	<b>0.00594</b>
	GATE	0.01860	0.00100	<b>0.01267</b>	0.32940	0.06480	<b>0.01303</b>	2.50740	0.30000	<b>0.01347</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>0.00261</b>	0.32940	0.06480	<b>0.00085</b>	2.50740	0.30000	<b>0.00074</b>
	GATE	0.01860	0.00100	<b>0.01266</b>	0.32940	0.06480	<b>0.01310</b>	2.50740	0.30000	<b>0.01312</b>
	RESET_B	0.01860	0.00100	<b>0.00948</b>	0.32940	0.06480	<b>0.01021</b>	2.50740	0.30000	<b>0.01889</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>0.00263</b>	0.32940	0.06480	<b>0.00107</b>	2.50740	0.30000	<b>0.00093</b>
	GATE	0.01860	0.00100	<b>0.01813</b>	0.32940	0.06480	<b>0.01924</b>	2.50740	0.30000	<b>0.02733</b>
	RESET_B	0.01860	0.00100	<b>0.00949</b>	0.32940	0.06480	<b>0.01041</b>	2.50740	0.30000	<b>0.01905</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>0.00581</b>	0.32940	0.06480	<b>0.00589</b>	2.50740	0.30000	<b>0.00562</b>
	GATE	0.01860	0.00100	<b>0.01267</b>	0.32940	0.06480	<b>0.01284</b>	2.50740	0.30000	<b>0.01327</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>0.02086</b>	0.32940	<b>0.02197</b>	2.50740	<b>0.03532</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>0.02672</b>	0.32940	<b>0.03171</b>	2.50740	<b>0.04562</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>0.00413</b>	0.32940	<b>0.00494</b>	2.50740	<b>0.01791</b>
	!RESET_B	0.01860	<b>0.02086</b>	0.32940	<b>0.02197</b>	2.50740	<b>0.03532</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>0.00832</b>	0.32940	<b>0.00928</b>	2.50740	<b>0.02281</b>
	!RESET_B	0.01860	<b>0.02672</b>	0.32940	<b>0.03171</b>	2.50740	<b>0.04562</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>-0.00006</b>	0.32940	<b>-0.00008</b>	2.50740	<b>-0.00007</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>0.00034</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00017</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>-0.00006</b>	0.32940	<b>-0.00008</b>	2.50740	<b>-0.00007</b>
	(!D * !GATE * !Q)	0.01860	<b>-0.00006</b>	0.32940	<b>-0.00008</b>	2.50740	<b>-0.00007</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>0.00033</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00017</b>
	(!D * !GATE * !Q)	0.01860	<b>0.00034</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00017</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>0.01091</b>	0.32940	<b>0.01184</b>	2.50740	<b>0.02798</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>0.01876</b>	0.32940	<b>0.02031</b>	2.50740	<b>0.03739</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>0.01457</b>	0.32940	<b>0.01539</b>	2.50740	<b>0.03252</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01091</b>	0.32940	<b>0.01184</b>	2.50740	<b>0.02798</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>0.01528</b>	0.32940	<b>0.01640</b>	2.50740	<b>0.03469</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.01876</b>	0.32940	<b>0.02031</b>	2.50740	<b>0.03739</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01883</b>	0.32940	<b>0.02040</b>	2.50740	<b>0.03746</b>

# DLLRQ



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00202	0.00288	0.00216	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2319.70000	2868.84000	3378.58000

## 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>0.18661</b>	0.32940	0.06480	<b>0.45281</b>	2.50740	0.30000	<b>1.28030</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.20839</b>	0.32940	0.06480	<b>0.49153</b>	2.50740	0.30000	<b>1.38153</b>
	RESET_B->Q (RR)	0.01860	0.00100	<b>0.08235</b>	0.32940	0.06480	<b>0.34864</b>	2.50740	0.30000	<b>1.22184</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>0.16409</b>	0.32940	0.06480	<b>0.40745</b>	2.50740	0.30000	<b>1.14537</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.15712</b>	0.32940	0.06480	<b>0.41946</b>	2.50740	0.30000	<b>1.23974</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.06623</b>	0.32940	0.06480	<b>0.33059</b>	2.50740	0.30000	<b>1.14367</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>-0.06847</b>	1.26300	1.26300	<b>-0.08635</b>	2.50740	2.50740	<b>-0.11216</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.07580</b>	1.26300	1.26300	<b>0.09444</b>	2.50740	2.50740	<b>0.12101</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>-0.08314</b>	1.26300	1.26300	<b>-0.22666</b>	2.50740	2.50740	<b>-0.29811</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.09047</b>	1.26300	1.26300	<b>0.25095</b>	2.50740	2.50740	<b>0.33648</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>-0.03912</b>	1.26300	1.26300	<b>-0.08905</b>	2.50740	2.50740	<b>-0.08559</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.05135</b>	1.26300	1.26300	<b>0.09984</b>	2.50740	2.50740	<b>0.09445</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>0.00787</b>	0.32940	0.06480	<b>0.00834</b>	2.50740	0.30000	<b>0.00848</b>
	GATE_N	0.01860	0.00100	<b>0.00850</b>	0.32940	0.06480	<b>0.00842</b>	2.50740	0.30000	<b>0.00812</b>
	RESET_B	0.01860	0.00100	<b>0.01029</b>	0.32940	0.06480	<b>0.01079</b>	2.50740	0.30000	<b>0.02470</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>0.00505</b>	0.32940	0.06480	<b>0.00043</b>	2.50740	0.30000	<b>0.00027</b>
	GATE_N	0.01860	0.00100	<b>0.00710</b>	0.32940	0.06480	<b>0.00698</b>	2.50740	0.30000	<b>0.00807</b>
	RESET_B	0.01860	0.00100	<b>0.00815</b>	0.32940	0.06480	<b>0.00943</b>	2.50740	0.30000	<b>0.02548</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>0.01466</b>	0.32940	<b>0.01526</b>	2.50740	<b>0.02824</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>0.01731</b>	0.32940	<b>0.02319</b>	2.50740	<b>0.03697</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>0.00136</b>	0.32940	<b>0.00217</b>	2.50740	<b>0.01510</b>
	!RESET_B	0.01860	<b>0.01466</b>	0.32940	<b>0.01526</b>	2.50740	<b>0.02824</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>0.00711</b>	0.32940	<b>0.00807</b>	2.50740	<b>0.02157</b>
	!RESET_B	0.01860	<b>0.01731</b>	0.32940	<b>0.02319</b>	2.50740	<b>0.03697</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>0.00149</b>	0.32940	<b>0.00148</b>	2.50740	<b>0.00148</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>0.00165</b>	0.32940	<b>0.00152</b>	2.50740	<b>0.00147</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>0.00007</b>	0.32940	<b>0.00006</b>	2.50740	<b>0.00006</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00149</b>	0.32940	<b>0.00148</b>	2.50740	<b>0.00148</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>0.00023</b>	0.32940	<b>0.00010</b>	2.50740	<b>0.00006</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00165</b>	0.32940	<b>0.00152</b>	2.50740	<b>0.00147</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>0.01100</b>	0.32940	<b>0.01197</b>	2.50740	<b>0.02809</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>0.01892</b>	0.32940	<b>0.02054</b>	2.50740	<b>0.03764</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>0.01642</b>	0.32940	<b>0.01732</b>	2.50740	<b>0.03321</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01100</b>	0.32940	<b>0.01197</b>	2.50740	<b>0.02809</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>0.01582</b>	0.32940	<b>0.01692</b>	2.50740	<b>0.03391</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.01892</b>	0.32940	<b>0.02054</b>	2.50740	<b>0.03764</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01899</b>	0.32940	<b>0.02056</b>	2.50740	<b>0.03769</b>

# DLLR



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

## 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	0.00213	0.00300	0.00229	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3098.98000	3805.05000	4197.96000

## 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>0.20463</b>	0.32940	0.06480	<b>0.47780</b>	2.50740	0.30000	<b>1.30419</b>
	GATE_N->Q (FR)	0.01860	0.00100	<b>0.22619</b>	0.32940	0.06480	<b>0.51760</b>	2.50740	0.30000	<b>1.40797</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>0.17297</b>	0.32940	0.06480	<b>0.42131</b>	2.50740	0.30000	<b>1.15820</b>
	GATE_N->Q (FF)	0.01860	0.00100	<b>0.16697</b>	0.32940	0.06480	<b>0.43495</b>	2.50740	0.30000	<b>1.25750</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.07129</b>	0.32940	0.06480	<b>0.35247</b>	2.50740	0.30000	<b>1.16026</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>0.21197</b>	0.32940	0.06480	<b>0.47160</b>	2.50740	0.30000	<b>1.30136</b>
	GATE_N->Q_N (FR)	0.01860	0.00100	<b>0.20606</b>	0.32940	0.06480	<b>0.48544</b>	2.50740	0.30000	<b>1.39945</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.11101</b>	0.32940	0.06480	<b>0.39513</b>	2.50740	0.30000	<b>1.27559</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>0.24710</b>	0.32940	0.06480	<b>0.48034</b>	2.50740	0.30000	<b>1.21263</b>
	GATE_N->Q_N (FF)	0.01860	0.00100	<b>0.26899</b>	0.32940	0.06480	<b>0.51988</b>	2.50740	0.30000	<b>1.31796</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>-0.07580</b>	1.26300	1.26300	<b>-0.09174</b>	2.50740	2.50740	<b>-0.11806</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.08803</b>	1.26300	1.26300	<b>0.09984</b>	2.50740	2.50740	<b>0.12692</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>-0.08803</b>	1.26300	1.26300	<b>-0.22936</b>	2.50740	2.50740	<b>-0.30106</b>
	setup	GATE_N (R)	0.01860	0.01860	<b>0.09536</b>	1.26300	1.26300	<b>0.25634</b>	2.50740	2.50740	<b>0.34533</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>-0.02934</b>	1.26300	1.26300	<b>-0.05397</b>	2.50740	2.50740	<b>-0.02952</b>
	removal	GATE_N (R)	0.01860	0.01860	<b>0.04401</b>	1.26300	1.26300	<b>0.06476</b>	2.50740	2.50740	<b>0.04132</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>0.01225</b>	0.32940	0.06480	<b>0.07056</b>	2.50740	0.30000	<b>0.28470</b>
	GATE_N	0.01860	0.00100	<b>0.02816</b>	0.32940	0.06480	<b>0.08721</b>	2.50740	0.30000	<b>0.30130</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>0.00889</b>	0.32940	0.06480	<b>0.05902</b>	2.50740	0.30000	<b>0.27315</b>
	GATE_N	0.01860	0.00100	<b>0.02613</b>	0.32940	0.06480	<b>0.08483</b>	2.50740	0.30000	<b>0.30005</b>
	RESET_B	0.01860	0.00100	<b>0.02809</b>	0.32940	0.06480	<b>0.08707</b>	2.50740	0.30000	<b>0.31617</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>0.00896</b>	0.32940	0.06480	<b>0.05949</b>	2.50740	0.30000	<b>0.27345</b>
	GATE_N	0.01860	0.00100	<b>0.03670</b>	0.32940	0.06480	<b>0.09696</b>	2.50740	0.30000	<b>0.32910</b>
	RESET_B	0.01860	0.00100	<b>0.02952</b>	0.32940	0.06480	<b>0.08890</b>	2.50740	0.30000	<b>0.31784</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>0.01226</b>	0.32940	0.06480	<b>0.07027</b>	2.50740	0.30000	<b>0.28421</b>
	GATE_N	0.01860	0.00100	<b>0.02817</b>	0.32940	0.06480	<b>0.08689</b>	2.50740	0.30000	<b>0.30117</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>0.02174</b>	0.32940	<b>0.02311</b>	2.50740	<b>0.03643</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>0.02384</b>	0.32940	<b>0.03332</b>	2.50740	<b>0.04717</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>0.00421</b>	0.32940	<b>0.00501</b>	2.50740	<b>0.01796</b>
	!RESET_B	0.01860	<b>0.02174</b>	0.32940	<b>0.02311</b>	2.50740	<b>0.03643</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>0.00406</b>	0.32940	<b>0.00503</b>	2.50740	<b>0.01855</b>
	!RESET_B	0.01860	<b>0.02384</b>	0.32940	<b>0.03332</b>	2.50740	<b>0.04717</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>-0.00009</b>	0.32940	<b>-0.00010</b>	2.50740	<b>-0.00010</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>0.00180</b>	0.32940	<b>0.00167</b>	2.50740	<b>0.00163</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>0.00342</b>	0.32940	<b>0.00341</b>	2.50740	<b>0.00341</b>
	(!D * GATE_N * !Q)	0.01860	<b>-0.00009</b>	0.32940	<b>-0.00010</b>	2.50740	<b>-0.00010</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>0.00038</b>	0.32940	<b>0.00025</b>	2.50740	<b>0.00021</b>
	(!D * GATE_N * !Q)	0.01860	<b>0.00180</b>	0.32940	<b>0.00167</b>	2.50740	<b>0.00163</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>0.01752</b>	0.32940	<b>0.02074</b>	2.50740	<b>0.03695</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>0.01057</b>	0.32940	<b>0.01167</b>	2.50740	<b>0.02883</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>0.01647</b>	0.32940	<b>0.01740</b>	2.50740	<b>0.03327</b>
	(!D * RESET_B * !Q)	0.01860	<b>0.01752</b>	0.32940	<b>0.02074</b>	2.50740	<b>0.03695</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01901</b>	0.32940	<b>0.02224</b>	2.50740	<b>0.03836</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>0.01612</b>	0.32940	<b>0.01716</b>	2.50740	<b>0.03423</b>
	(!D * !RESET_B * !Q)	0.01860	<b>0.01057</b>	0.32940	<b>0.01167</b>	2.50740	<b>0.02883</b>

# DLY1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00147	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	1250.77000	1439.16000	1627.55000

## 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>0.11895</b>	0.32940	0.06480	<b>0.38078</b>	2.50740	0.30000	<b>1.15523</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>0.13632</b>	0.32940	0.06480	<b>0.40313</b>	2.50740	0.30000	<b>1.25073</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>0.01574</b>	0.32940	0.06480	<b>0.01638</b>	2.50740	0.30000	<b>0.02435</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>0.01499</b>	0.32940	0.06480	<b>0.01579</b>	2.50740	0.30000	<b>0.02417</b>

# DLY2



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

## Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00147	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	1270.93000	1459.32000	1647.70000

## 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_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	<b>0.17607</b>	0.32940	0.06480	<b>0.45081</b>	2.50740	0.30000	<b>1.26564</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>0.19701</b>	0.32940	0.06480	<b>0.48485</b>	2.50740	0.30000	<b>1.36957</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>0.01866</b>	0.32940	0.06480	<b>0.01915</b>	2.50740	0.30000	<b>0.02648</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>0.01809</b>	0.32940	0.06480	<b>0.01875</b>	2.50740	0.30000	<b>0.02668</b>



# DLY4



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00148	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	2554.53000	2742.91000	2931.30000

## 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>0.38591</b>	0.32940	0.06480	<b>0.69614</b>	2.50740	0.30000	<b>1.59261</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>0.40437</b>	0.32940	0.06480	<b>0.73213</b>	2.50740	0.30000	<b>1.70142</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>0.02690</b>	0.32940	0.06480	<b>0.02691</b>	2.50740	0.30000	<b>0.03324</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>0.02665</b>	0.32940	0.06480	<b>0.02659</b>	2.50740	0.30000	<b>0.03328</b>

# EINVIN<sub>x</sub>



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00782	0.00902	1.20000
sg13g2_einvn_2	0.00399	0.00480	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1199.74000	2309.88000	3420.01000
sg13g2_einvn_2	594.23400	1149.30000	1704.37000

## 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	0.01059	<b>0.02525</b>	0.32940	0.26879	<b>0.54913</b>	2.50740	1.20959	<b>2.85092</b>
	TE_B->Z (RR)	0.01860	0.01059	<b>0.05492</b>	0.32940	0.26879	<b>0.12257</b>	2.50740	1.20959	<b>0.24289</b>
	TE_B->Z (FR)	0.01860	0.01059	<b>0.03175</b>	0.32940	0.26879	<b>0.52318</b>	2.50740	1.20959	<b>2.58136</b>
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00589	<b>0.02713</b>	0.32940	0.13449	<b>0.54796</b>	2.50740	0.60489	<b>2.84785</b>
	TE_B->Z (RR)	0.01860	0.00589	<b>0.05363</b>	0.32940	0.13449	<b>0.12152</b>	2.50740	0.60489	<b>0.24785</b>
	TE_B->Z (FR)	0.01860	0.00589	<b>0.03338</b>	0.32940	0.13449	<b>0.52345</b>	2.50740	0.60489	<b>2.58230</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	0.01560	<b>0.02212</b>	0.32940	0.27380	<b>0.45474</b>	2.50740	1.21460	<b>2.40671</b>
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00848	<b>0.02372</b>	0.32940	0.13708	<b>0.45462</b>	2.50740	0.60747	<b>2.40765</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	0.01059	<b>0.01237</b>	0.32940	0.26879	<b>0.01374</b>	2.50740	1.20959	<b>0.02789</b>
	TE_B	0.01860	0.01059	<b>0.01898</b>	0.32940	0.26879	<b>0.01776</b>	2.50740	1.20959	<b>0.01594</b>
sg13g2_einvn_2	A	0.01860	0.00589	<b>0.00625</b>	0.32940	0.13449	<b>0.00683</b>	2.50740	0.60489	<b>0.01354</b>
	TE_B	0.01860	0.00589	<b>0.00933</b>	0.32940	0.13449	<b>0.00876</b>	2.50740	0.60489	<b>0.00781</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	0.01560	<b>0.01195</b>	0.32940	0.27380	<b>0.01494</b>	2.50740	1.21460	<b>0.02541</b>
sg13g2_einvn_2	A	0.01860	0.00848	<b>0.00616</b>	0.32940	0.13708	<b>0.00753</b>	2.50740	0.60747	<b>0.01252</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>-0.01445</b>	0.32940	<b>-0.01387</b>	2.50740	<b>0.00353</b>
sg13g2_einvn_2	0.01860	<b>-0.00638</b>	0.32940	<b>-0.00608</b>	2.50740	<b>0.00301</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>0.01784</b>	0.32940	<b>0.01946</b>	2.50740	<b>0.03850</b>
<b>sg13g2_einvn_2</b>	0.01860	<b>0.00906</b>	0.32940	<b>0.00986</b>	2.50740	<b>0.01970</b>



# FILLx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_8	14.51520
sg13g2_fill_4	7.25760

## 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_8	0.00000	0.00000	0.00000
sg13g2_fill_4	0.00000	0.00000	0.00000

# GCLK



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00228	0.00486	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	2605.75000	2864.03000	3045.12000

## 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>0.07270</b>	0.32940	0.06480	<b>0.33459</b>	2.50740	0.30000	<b>1.19489</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>0.06105</b>	0.32940	0.06480	<b>0.31940</b>	2.50740	0.30000	<b>1.11802</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>-0.03971</b>	1.26300	1.26300	<b>-0.14841</b>	2.50740	2.50740	<b>-0.23843</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.07395</b>	1.26300	1.26300	<b>0.21317</b>	2.50740	2.50740	<b>0.30914</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>-0.01468</b>	1.26300	1.26300	<b>-0.02429</b>	2.50740	2.50740	<b>-0.03252</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.04249</b>	1.26300	1.26300	<b>0.06746</b>	2.50740	2.50740	<b>0.08526</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>0.01284</b>	0.32940	0.06480	<b>0.01330</b>	2.50740	0.30000	<b>0.02530</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>0.00997</b>	0.32940	0.06480	<b>0.01121</b>	2.50740	0.30000	<b>0.02436</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>0.02373</b>	0.32940	<b>0.02529</b>	2.50740	<b>0.03822</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>0.01611</b>	0.32940	<b>0.03600</b>	2.50740	<b>0.04964</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>0.02373</b>	0.32940	<b>0.02529</b>	2.50740	<b>0.03822</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>0.01611</b>	0.32940	<b>0.03600</b>	2.50740	<b>0.04964</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>0.00671</b>	0.32940	<b>0.00767</b>	2.50740	<b>0.02372</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>0.00804</b>	0.32940	<b>0.00904</b>	2.50740	<b>0.02617</b>

# INx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.04519	4.80000
sg13g2_inv_8	0.02204	2.40000
sg13g2_inv_4	0.01102	1.20000
sg13g2_inv_2	0.00553	0.60000
sg13g2_inv_1	0.00283	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3291.04000	7731.67000	12172.30000
sg13g2_inv_8	1645.52000	3865.86000	6086.21000
sg13g2_inv_4	822.76400	1932.92000	3043.07000
sg13g2_inv_2	411.38200	966.45100	1521.52000
sg13g2_inv_1	205.87300	483.32600	760.77900



## 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>0.01593</b>	0.32940	1.03680	<b>0.36126</b>	2.50740	4.80000	<b>1.98272</b>
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	<b>0.01582</b>	0.32940	0.51840	<b>0.36015</b>	2.50740	2.40000	<b>1.98091</b>
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	<b>0.01620</b>	0.32940	0.25920	<b>0.36059</b>	2.50740	1.20000	<b>1.98015</b>
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	<b>0.01729</b>	0.32940	0.12960	<b>0.36011</b>	2.50740	0.60000	<b>1.97746</b>
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	<b>0.02036</b>	0.32940	0.06480	<b>0.36084</b>	2.50740	0.30000	<b>1.97845</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>0.01557</b>	0.32940	1.03680	<b>0.33960</b>	2.50740	4.80000	<b>1.86859</b>
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	<b>0.01548</b>	0.32940	0.51840	<b>0.33953</b>	2.50740	2.40000	<b>1.86969</b>
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	<b>0.01587</b>	0.32940	0.25920	<b>0.33933</b>	2.50740	1.20000	<b>1.86871</b>
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	<b>0.01695</b>	0.32940	0.12960	<b>0.33810</b>	2.50740	0.60000	<b>1.86310</b>
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	<b>0.01995</b>	0.32940	0.06480	<b>0.33896</b>	2.50740	0.30000	<b>1.86339</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>0.02684</b>	0.32940	1.03680	<b>0.03711</b>	2.50740	4.80000	<b>0.10719</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.01280</b>	0.32940	0.51840	<b>0.01773</b>	2.50740	2.40000	<b>0.05167</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00643</b>	0.32940	0.25920	<b>0.00894</b>	2.50740	1.20000	<b>0.02581</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00324</b>	0.32940	0.12960	<b>0.00442</b>	2.50740	0.60000	<b>0.01335</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00191</b>	0.32940	0.06480	<b>0.00240</b>	2.50740	0.30000	<b>0.00687</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>0.02439</b>	0.32940	1.03680	<b>0.03556</b>	2.50740	4.80000	<b>0.10554</b>
sg13g2_inv_8	A	0.01860	0.00100	<b>0.01168</b>	0.32940	0.51840	<b>0.01756</b>	2.50740	2.40000	<b>0.05181</b>
sg13g2_inv_4	A	0.01860	0.00100	<b>0.00591</b>	0.32940	0.25920	<b>0.00869</b>	2.50740	1.20000	<b>0.02554</b>
sg13g2_inv_2	A	0.01860	0.00100	<b>0.00307</b>	0.32940	0.12960	<b>0.00423</b>	2.50740	0.60000	<b>0.01271</b>
sg13g2_inv_1	A	0.01860	0.00100	<b>0.00205</b>	0.32940	0.06480	<b>0.00254</b>	2.50740	0.30000	<b>0.00682</b>

# ITL



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	39.91680

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01536	0.01532	2.40000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2193.61000	4413.88000	6634.15000

## 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	0.02005	<b>0.02434</b>	0.32940	0.53745	<b>0.55048</b>	2.50740	2.41905	<b>2.85664</b>
	TE_B->Z (RR)	0.01860	0.02005	<b>0.07184</b>	0.32940	0.53745	<b>0.16500</b>	2.50740	2.41905	<b>0.33868</b>
	TE_B->Z (FR)	0.01860	0.02005	<b>0.03251</b>	0.32940	0.53745	<b>0.52583</b>	2.50740	2.41905	<b>2.58669</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	0.02998	<b>0.02170</b>	0.32940	0.54738	<b>0.45612</b>	2.50740	2.42898	<b>2.41633</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	0.02005	<b>0.02455</b>	0.32940	0.53745	<b>0.02797</b>	2.50740	2.41905	<b>0.05861</b>
	TE_B	0.01860	0.02005	<b>0.04185</b>	0.32940	0.53745	<b>0.03719</b>	2.50740	2.41905	<b>0.03359</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	0.02998	<b>0.02331</b>	0.32940	0.54738	<b>0.02960</b>	2.50740	2.42898	<b>0.04989</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>-0.02929</b>	0.32940	<b>-0.03311</b>	2.50740	<b>-0.02112</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>0.02929</b>	0.32940	<b>0.03311</b>	2.50740	<b>0.05147</b>

# KEEPSTATE



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell*  
*Library: Process*  
*sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage*  
*1.35, 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	290.17600	312.01100	333.84700

## 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



# MUX2x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	19.95840
sg13g2_mux2_1	18.14400

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_2	0.00197	0.00212	0.00497	0.60000
sg13g2_mux2_1	0.00198	0.00210	0.00497	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	1619.01000	2163.27000	2560.34000
sg13g2_mux2_1	1203.82000	1680.13000	2354.83000

## 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_2	A0->X (RR)	0.01860	0.00100	<b>0.09049</b>	0.32940	0.12960	<b>0.38929</b>	2.50740	0.60000	<b>1.28703</b>
	A1->X (RR)	0.01860	0.00100	<b>0.07018</b>	0.32940	0.12960	<b>0.38953</b>	2.50740	0.60000	<b>1.29576</b>
	S->X (-R)	0.01860	0.00100	<b>0.09348</b>	0.32940	0.12960	<b>0.38389</b>	2.50740	0.60000	<b>1.28282</b>
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	<b>0.07377</b>	0.32940	0.06480	<b>0.35135</b>	2.50740	0.30000	<b>1.21573</b>
	A1->X (RR)	0.01860	0.00100	<b>0.06897</b>	0.32940	0.06480	<b>0.35651</b>	2.50740	0.30000	<b>1.22874</b>
	S->X (-R)	0.01860	0.00100	<b>0.11857</b>	0.32940	0.06480	<b>0.38840</b>	2.50740	0.30000	<b>1.22392</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_2	A0->X (FF)	0.01860	0.00100	<b>0.10185</b>	0.32940	0.12960	<b>0.42219</b>	2.50740	0.60000	<b>1.33208</b>
	A1->X (FF)	0.01860	0.00100	<b>0.11506</b>	0.32940	0.12960	<b>0.42683</b>	2.50740	0.60000	<b>1.34258</b>
	S->X (-F)	0.01860	0.00100	<b>0.12781</b>	0.32940	0.12960	<b>0.40995</b>	2.50740	0.60000	<b>1.27810</b>
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	<b>0.09098</b>	0.32940	0.06480	<b>0.37591</b>	2.50740	0.30000	<b>1.25161</b>
	A1->X (FF)	0.01860	0.00100	<b>0.09598</b>	0.32940	0.06480	<b>0.38131</b>	2.50740	0.30000	<b>1.26119</b>
	S->X (-F)	0.01860	0.00100	<b>0.10823</b>	0.32940	0.06480	<b>0.36808</b>	2.50740	0.30000	<b>1.20473</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_2	S->X (RR)	(!A0 * A1)	0.01860	0.00100	<b>0.09348</b>	0.32940	0.12960	<b>0.38389</b>	2.50740	0.60000	<b>1.28282</b>
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	<b>0.13008</b>	0.32940	0.12960	<b>0.40971</b>	2.50740	0.60000	<b>1.24902</b>
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	<b>0.08215</b>	0.32940	0.06480	<b>0.35410</b>	2.50740	0.30000	<b>1.21834</b>
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	<b>0.11857</b>	0.32940	0.06480	<b>0.38840</b>	2.50740	0.30000	<b>1.22392</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_2	S->X (FF)	(!A0 * A1)	0.01860	0.00100	<b>0.12781</b>	0.32940	0.12960	<b>0.40995</b>	2.50740	0.60000	<b>1.27810</b>
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	<b>0.16211</b>	0.32940	0.12960	<b>0.43001</b>	2.50740	0.60000	<b>1.17597</b>
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	<b>0.10823</b>	0.32940	0.06480	<b>0.36808</b>	2.50740	0.30000	<b>1.20473</b>
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	<b>0.14232</b>	0.32940	0.06480	<b>0.39504</b>	2.50740	0.30000	<b>1.13914</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_2	A0	0.01860	0.00100	<b>0.01628</b>	0.32940	0.12960	<b>0.01665</b>	2.50740	0.60000	<b>0.02945</b>
	A1	0.01860	0.00100	<b>0.02034</b>	0.32940	0.12960	<b>0.02430</b>	2.50740	0.60000	<b>0.03778</b>
	S	0.01860	0.00100	<b>0.01740</b>	0.32940	0.12960	<b>0.01805</b>	2.50740	0.60000	<b>0.03016</b>
sg13g2_mux2_1	A0	0.01860	0.00100	<b>0.01256</b>	0.32940	0.06480	<b>0.01330</b>	2.50740	0.30000	<b>0.02721</b>
	A1	0.01860	0.00100	<b>0.01481</b>	0.32940	0.06480	<b>0.01686</b>	2.50740	0.30000	<b>0.03092</b>
	S	0.01860	0.00100	<b>0.01261</b>	0.32940	0.06480	<b>0.01309</b>	2.50740	0.30000	<b>0.02547</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_2	A0	0.01860	0.00100	<b>0.02287</b>	0.32940	0.12960	<b>0.02513</b>	2.50740	0.60000	<b>0.03945</b>
	A1	0.01860	0.00100	<b>0.01799</b>	0.32940	0.12960	<b>0.01817</b>	2.50740	0.60000	<b>0.03222</b>
	S	0.01860	0.00100	<b>0.01709</b>	0.32940	0.12960	<b>0.01738</b>	2.50740	0.60000	<b>0.02994</b>
sg13g2_mux2_1	A0	0.01860	0.00100	<b>0.01579</b>	0.32940	0.06480	<b>0.01731</b>	2.50740	0.30000	<b>0.03174</b>
	A1	0.01860	0.00100	<b>0.01242</b>	0.32940	0.06480	<b>0.01339</b>	2.50740	0.30000	<b>0.02790</b>
	S	0.01860	0.00100	<b>0.01191</b>	0.32940	0.06480	<b>0.01251</b>	2.50740	0.30000	<b>0.02564</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_2	S	(A0 * !A1)	0.01860	0.00100	<b>0.01691</b>	0.32940	0.12960	<b>0.01760</b>	2.50740	0.60000	<b>0.01713</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01740</b>	0.32940	0.12960	<b>0.01805</b>	2.50740	0.60000	<b>0.03016</b>
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	<b>0.01210</b>	0.32940	0.06480	<b>0.01242</b>	2.50740	0.30000	<b>0.01231</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01261</b>	0.32940	0.06480	<b>0.01309</b>	2.50740	0.30000	<b>0.02547</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_2	S	(A0 * !A1)	0.01860	0.00100	<b>0.01800</b>	0.32940	0.12960	<b>0.01784</b>	2.50740	0.60000	<b>0.01807</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01709</b>	0.32940	0.12960	<b>0.01738</b>	2.50740	0.60000	<b>0.02994</b>
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	<b>0.01271</b>	0.32940	0.06480	<b>0.01300</b>	2.50740	0.30000	<b>0.01307</b>
	S	(!A0 * A1)	0.01860	0.00100	<b>0.01191</b>	0.32940	0.06480	<b>0.01251</b>	2.50740	0.30000	<b>0.02564</b>

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	<b>0.00464</b>	0.32940	<b>0.00536</b>	2.50740	<b>0.01815</b>
sg13g2_mux2_1	0.01860	<b>0.00465</b>	0.32940	<b>0.00537</b>	2.50740	<b>0.01815</b>

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	<b>0.00508</b>	0.32940	<b>0.00583</b>	2.50740	<b>0.01924</b>
sg13g2_mux2_1	0.01860	<b>0.00507</b>	0.32940	<b>0.00584</b>	2.50740	<b>0.01924</b>

# MUX4



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00275	0.00273	0.00275	0.00284	0.00805	0.00495	0.30000



## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	1583.45000	3711.46000	5416.66000

## 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>0.13632</b>	0.32940	0.06480	<b>0.43594</b>	2.50740	0.30000	<b>1.38860</b>
	A1->X (RR)	0.01860	0.00100	<b>0.13330</b>	0.32940	0.06480	<b>0.43393</b>	2.50740	0.30000	<b>1.38582</b>
	A2->X (RR)	0.01860	0.00100	<b>0.14333</b>	0.32940	0.06480	<b>0.44638</b>	2.50740	0.30000	<b>1.41184</b>
	A3->X (RR)	0.01860	0.00100	<b>0.13879</b>	0.32940	0.06480	<b>0.44425</b>	2.50740	0.30000	<b>1.40817</b>
	S0->X (-R)	0.01860	0.00100	<b>0.12102</b>	0.32940	0.06480	<b>0.43277</b>	2.50740	0.30000	<b>1.38837</b>
	S1->X (-R)	0.01860	0.00100	<b>0.06953</b>	0.32940	0.06480	<b>0.35084</b>	2.50740	0.30000	<b>1.21481</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>0.15627</b>	0.32940	0.06480	<b>0.44460</b>	2.50740	0.30000	<b>1.29910</b>
	A1->X (FF)	0.01860	0.00100	<b>0.15923</b>	0.32940	0.06480	<b>0.44502</b>	2.50740	0.30000	<b>1.29891</b>
	A2->X (FF)	0.01860	0.00100	<b>0.16770</b>	0.32940	0.06480	<b>0.45961</b>	2.50740	0.30000	<b>1.32547</b>
	A3->X (FF)	0.01860	0.00100	<b>0.16872</b>	0.32940	0.06480	<b>0.45908</b>	2.50740	0.30000	<b>1.32411</b>
	S0->X (-F)	0.01860	0.00100	<b>0.14551</b>	0.32940	0.06480	<b>0.45164</b>	2.50740	0.30000	<b>1.34520</b>
	S1->X (-F)	0.01860	0.00100	<b>0.08336</b>	0.32940	0.06480	<b>0.35946</b>	2.50740	0.30000	<b>1.18937</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	0.12102	0.32940	0.06480	0.43277	2.50740	0.30000	1.38837
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.11329	0.32940	0.06480	0.41773	2.50740	0.30000	1.35582
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.17637	0.32940	0.06480	0.47468	2.50740	0.30000	1.36223
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.17055	0.32940	0.06480	0.46611	2.50740	0.30000	1.34918
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.06953	0.32940	0.06480	0.35084	2.50740	0.30000	1.21481
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.06937	0.32940	0.06480	0.35052	2.50740	0.30000	1.21452
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.09283	0.32940	0.06480	0.37321	2.50740	0.30000	1.20636
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.09256	0.32940	0.06480	0.37358	2.50740	0.30000	1.20639

**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	0.14551	0.32940	0.06480	0.45164	2.50740	0.30000	1.34520
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.13163	0.32940	0.06480	0.43111	2.50740	0.30000	1.30882
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.19410	0.32940	0.06480	0.48288	2.50740	0.30000	1.27556
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.18304	0.32940	0.06480	0.46865	2.50740	0.30000	1.25741
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.08336	0.32940	0.06480	0.35946	2.50740	0.30000	1.18937
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.08319	0.32940	0.06480	0.35936	2.50740	0.30000	1.18901
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.10303	0.32940	0.06480	0.37635	2.50740	0.30000	1.12525
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.10323	0.32940	0.06480	0.37624	2.50740	0.30000	1.12529

## 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>0.01588</b>	0.32940	0.06480	<b>0.01605</b>	2.50740	0.30000	<b>0.02645</b>
	A1	0.01860	0.00100	<b>0.02303</b>	0.32940	0.06480	<b>0.02311</b>	2.50740	0.30000	<b>0.03363</b>
	A2	0.01860	0.00100	<b>0.02343</b>	0.32940	0.06480	<b>0.02353</b>	2.50740	0.30000	<b>0.03386</b>
	A3	0.01860	0.00100	<b>0.01607</b>	0.32940	0.06480	<b>0.01622</b>	2.50740	0.30000	<b>0.02659</b>
	S0	0.01860	0.00100	<b>0.01191</b>	0.32940	0.06480	<b>0.01227</b>	2.50740	0.30000	<b>0.02360</b>
	S1	0.01860	0.00100	<b>0.00921</b>	0.32940	0.06480	<b>0.01068</b>	2.50740	0.30000	<b>0.01872</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>0.02280</b>	0.32940	0.06480	<b>0.02289</b>	2.50740	0.30000	<b>0.03415</b>
	A1	0.01860	0.00100	<b>0.01578</b>	0.32940	0.06480	<b>0.01583</b>	2.50740	0.30000	<b>0.02702</b>
	A2	0.01860	0.00100	<b>0.02382</b>	0.32940	0.06480	<b>0.02385</b>	2.50740	0.30000	<b>0.03484</b>
	A3	0.01860	0.00100	<b>0.02338</b>	0.32940	0.06480	<b>0.02337</b>	2.50740	0.30000	<b>0.03457</b>
	S0	0.01860	0.00100	<b>0.01075</b>	0.32940	0.06480	<b>0.01125</b>	2.50740	0.30000	<b>0.02423</b>
	S1	0.01860	0.00100	<b>0.00655</b>	0.32940	0.06480	<b>0.00754</b>	2.50740	0.30000	<b>0.01951</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>0.01660</b>	0.32940	0.06480	<b>0.01343</b>	2.50740	0.30000	<b>0.00062</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.01653</b>	0.32940	0.06480	<b>0.01344</b>	2.50740	0.30000	<b>0.00042</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.01197</b>	0.32940	0.06480	<b>0.01249</b>	2.50740	0.30000	<b>0.02467</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.01191</b>	0.32940	0.06480	<b>0.01227</b>	2.50740	0.30000	<b>0.02360</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.00921</b>	0.32940	0.06480	<b>0.01068</b>	2.50740	0.30000	<b>0.01872</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.01014</b>	0.32940	0.06480	<b>0.01166</b>	2.50740	0.30000	<b>0.02049</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.00581</b>	0.32940	0.06480	<b>0.00662</b>	2.50740	0.30000	<b>0.01756</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.00579</b>	0.32940	0.06480	<b>0.00665</b>	2.50740	0.30000	<b>0.01752</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>0.02595</b>	0.32940	0.06480	<b>0.02667</b>	2.50740	0.30000	<b>0.01364</b>
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	<b>0.02569</b>	0.32940	0.06480	<b>0.02713</b>	2.50740	0.30000	<b>0.01385</b>
	S0	(!A2 * A3 * S1)	0.01860	0.00100	<b>0.01125</b>	0.32940	0.06480	<b>0.01072</b>	2.50740	0.30000	<b>0.02364</b>
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	<b>0.01075</b>	0.32940	0.06480	<b>0.01125</b>	2.50740	0.30000	<b>0.02423</b>
	S1	(A1 * !A3 * S0)	0.01860	0.00100	<b>0.01023</b>	0.32940	0.06480	<b>0.01175</b>	2.50740	0.30000	<b>0.02009</b>
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	<b>0.01011</b>	0.32940	0.06480	<b>0.01161</b>	2.50740	0.30000	<b>0.01989</b>
	S1	(!A1 * A3 * S0)	0.01860	0.00100	<b>0.00655</b>	0.32940	0.06480	<b>0.00754</b>	2.50740	0.30000	<b>0.01951</b>
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	<b>0.00632</b>	0.32940	0.06480	<b>0.00730</b>	2.50740	0.30000	<b>0.01879</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>0.00981</b>	0.32940	<b>0.01169</b>	2.50740	<b>0.04112</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>0.01430</b>	0.32940	<b>0.01813</b>	2.50740	<b>0.04777</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>0.00957</b>	0.32940	<b>0.01133</b>	2.50740	<b>0.04036</b>
	(A0 * A1 * !S1)	0.01860	<b>0.01017</b>	0.32940	<b>0.01177</b>	2.50740	<b>0.04035</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.00981</b>	0.32940	<b>0.01169</b>	2.50740	<b>0.04112</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.01104</b>	0.32940	<b>0.01266</b>	2.50740	<b>0.04132</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>0.01276</b>	0.32940	<b>0.01564</b>	2.50740	<b>0.04566</b>
	(A0 * A1 * !S1)	0.01860	<b>0.01430</b>	0.32940	<b>0.01813</b>	2.50740	<b>0.04777</b>
	(!A2 * !A3 * S1)	0.01860	<b>0.01506</b>	0.32940	<b>0.01572</b>	2.50740	<b>0.03175</b>
	(!A0 * !A1 * !S1)	0.01860	<b>0.01968</b>	0.32940	<b>0.02436</b>	2.50740	<b>0.04060</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>0.00500</b>	0.32940	<b>0.00627</b>	2.50740	<b>0.02244</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>0.00478</b>	0.32940	<b>0.00622</b>	2.50740	<b>0.02309</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>0.00377</b>	0.32940	<b>0.00498</b>	2.50740	<b>0.02091</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00376</b>	0.32940	<b>0.00496</b>	2.50740	<b>0.02089</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00500</b>	0.32940	<b>0.00627</b>	2.50740	<b>0.02244</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00509</b>	0.32940	<b>0.00633</b>	2.50740	<b>0.02229</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>0.00368</b>	0.32940	<b>0.00514</b>	2.50740	<b>0.02177</b>
	(A0 * A2 * !S0)	0.01860	<b>0.00367</b>	0.32940	<b>0.00513</b>	2.50740	<b>0.02177</b>
	(!A1 * !A3 * S0)	0.01860	<b>0.00478</b>	0.32940	<b>0.00622</b>	2.50740	<b>0.02309</b>
	(!A0 * !A2 * !S0)	0.01860	<b>0.00483</b>	0.32940	<b>0.00632</b>	2.50740	<b>0.02316</b>

# NAND2B1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00228	0.00308	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	330.12200	860.14200	1660.53000

## 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>0.05331</b>	0.32940	0.06480	<b>0.31818</b>	2.50740	0.30000	<b>1.17423</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02546</b>	0.32940	0.06480	<b>0.36752</b>	2.50740	0.30000	<b>1.98481</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>0.06240</b>	0.32940	0.06480	<b>0.41561</b>	2.50740	0.30000	<b>1.58278</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03745</b>	0.32940	0.06480	<b>0.43636</b>	2.50740	0.30000	<b>2.23150</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>0.00256</b>	0.32940	0.06480	<b>0.00277</b>	2.50740	0.30000	<b>0.00210</b>
	B	0.01860	0.00100	<b>0.00221</b>	0.32940	0.06480	<b>0.00246</b>	2.50740	0.30000	<b>0.00621</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>0.00529</b>	0.32940	0.06480	<b>0.00548</b>	2.50740	0.30000	<b>0.00473</b>
	B	0.01860	0.00100	<b>0.00537</b>	0.32940	0.06480	<b>0.00554</b>	2.50740	0.30000	<b>0.00843</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>0.00484</b>	0.32940	<b>0.00575</b>	2.50740	<b>0.01884</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>0.00276</b>	0.32940	<b>0.00375</b>	2.50740	<b>0.01729</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>0.00484</b>	0.32940	<b>0.00575</b>	2.50740	<b>0.01884</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>0.00276</b>	0.32940	<b>0.00375</b>	2.50740	<b>0.01729</b>

# NAND2B2



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_2	0.00217	0.00527	0.60000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	585.23200	1357.38000	3178.72000

## 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_2	A_N->Y (RR)	0.01860	0.00100	<b>0.07048</b>	0.32940	0.12960	<b>0.35664</b>	2.50740	0.60000	<b>1.25635</b>
	B->Y (FR)	0.01860	0.00100	<b>0.01993</b>	0.32940	0.12960	<b>0.36134</b>	2.50740	0.60000	<b>1.97784</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_2	A_N->Y (FF)	0.01860	0.00100	<b>0.08483</b>	0.32940	0.12960	<b>0.47749</b>	2.50740	0.60000	<b>1.74519</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02720</b>	0.32940	0.12960	<b>0.46643</b>	2.50740	0.60000	<b>2.46040</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_2	A_N	0.01860	0.00100	<b>0.00498</b>	0.32940	0.12960	<b>0.00501</b>	2.50740	0.60000	<b>0.00503</b>
	B	0.01860	0.00100	<b>0.00649</b>	0.32940	0.12960	<b>0.00694</b>	2.50740	0.60000	<b>0.01478</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_2	A_N	0.01860	0.00100	<b>0.01094</b>	0.32940	0.12960	<b>0.01195</b>	2.50740	0.60000	<b>0.01075</b>
	B	0.01860	0.00100	<b>0.00832</b>	0.32940	0.12960	<b>0.00925</b>	2.50740	0.60000	<b>0.01527</b>

Passive power(pJ) for A\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	0.01860	<b>0.00817</b>	0.32940	<b>0.00865</b>	2.50740	<b>0.02063</b>

Passive power(pJ) for A\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	0.01860	<b>0.00728</b>	0.32940	<b>0.00788</b>	2.50740	<b>0.02057</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_2	!B	0.01860	<b>0.00817</b>	0.32940	<b>0.00865</b>	2.50740	<b>0.02063</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_2	!B	0.01860	<b>0.00728</b>	0.32940	<b>0.00788</b>	2.50740	<b>0.02057</b>

# NAND2x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp  
125.00*

## Truth Table

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

## Footprint

Cell Name	Area
sg13g2_nand2_2	10.88640
sg13g2_nand2_1	7.25760

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_2	0.00546	0.00563	0.60000
sg13g2_nand2_1	0.00288	0.00298	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	155.96400	1003.00000	3039.72000
sg13g2_nand2_1	79.47220	505.72300	1521.46000

## 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_2	A->Y (FR)	0.01860	0.00100	<b>0.02011</b>	0.32940	0.12960	<b>0.36297</b>	2.50740	0.60000	<b>1.97911</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02450</b>	0.32940	0.12960	<b>0.36734</b>	2.50740	0.60000	<b>1.98568</b>
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	<b>0.02250</b>	0.32940	0.06480	<b>0.36297</b>	2.50740	0.30000	<b>1.97771</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02623</b>	0.32940	0.06480	<b>0.36723</b>	2.50740	0.30000	<b>1.98336</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_2	A->Y (RF)	0.01860	0.00100	<b>0.02736</b>	0.32940	0.12960	<b>0.46573</b>	2.50740	0.60000	<b>2.45988</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03345</b>	0.32940	0.12960	<b>0.44722</b>	2.50740	0.60000	<b>2.29002</b>
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	<b>0.03006</b>	0.32940	0.06480	<b>0.45384</b>	2.50740	0.30000	<b>2.39830</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03456</b>	0.32940	0.06480	<b>0.43388</b>	2.50740	0.30000	<b>2.22890</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_2	A	0.01860	0.00100	<b>0.00368</b>	0.32940	0.12960	<b>0.00475</b>	2.50740	0.60000	<b>0.01182</b>
	B	0.01860	0.00100	<b>0.00498</b>	0.32940	0.12960	<b>0.00538</b>	2.50740	0.60000	<b>0.01263</b>
sg13g2_nand2_1	A	0.01860	0.00100	<b>0.00207</b>	0.32940	0.06480	<b>0.00255</b>	2.50740	0.30000	<b>0.00637</b>
	B	0.01860	0.00100	<b>0.00223</b>	0.32940	0.06480	<b>0.00246</b>	2.50740	0.30000	<b>0.00617</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_2	A	0.01860	0.00100	<b>0.00564</b>	0.32940	0.12960	<b>0.00655</b>	2.50740	0.60000	<b>0.01212</b>
	B	0.01860	0.00100	<b>0.00978</b>	0.32940	0.12960	<b>0.01014</b>	2.50740	0.60000	<b>0.01529</b>
sg13g2_nand2_1	A	0.01860	0.00100	<b>0.00304</b>	0.32940	0.06480	<b>0.00344</b>	2.50740	0.30000	<b>0.00666</b>
	B	0.01860	0.00100	<b>0.00516</b>	0.32940	0.06480	<b>0.00533</b>	2.50740	0.30000	<b>0.00828</b>

# NAND3B1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00221	0.00297	0.00298	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	221.51500	766.50000	2421.24000

## 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>0.05656</b>	0.32940	0.06480	<b>0.31974</b>	2.50740	0.30000	<b>1.17258</b>
	B->Y (FR)	0.01860	0.00100	<b>0.02928</b>	0.32940	0.06480	<b>0.37097</b>	2.50740	0.30000	<b>1.98678</b>
	C->Y (FR)	0.01860	0.00100	<b>0.03196</b>	0.32940	0.06480	<b>0.37541</b>	2.50740	0.30000	<b>1.99187</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>0.07616</b>	0.32940	0.06480	<b>0.54090</b>	2.50740	0.30000	<b>2.12240</b>
	B->Y (RF)	0.01860	0.00100	<b>0.05681</b>	0.32940	0.06480	<b>0.56582</b>	2.50740	0.30000	<b>2.79110</b>
	C->Y (RF)	0.01860	0.00100	<b>0.06267</b>	0.32940	0.06480	<b>0.55006</b>	2.50740	0.30000	<b>2.60520</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>0.00278</b>	0.32940	0.06480	<b>0.00291</b>	2.50740	0.30000	<b>0.00218</b>
	B	0.01860	0.00100	<b>0.00281</b>	0.32940	0.06480	<b>0.00295</b>	2.50740	0.30000	<b>0.00599</b>
	C	0.01860	0.00100	<b>0.00326</b>	0.32940	0.06480	<b>0.00329</b>	2.50740	0.30000	<b>0.00659</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>0.00709</b>	0.32940	0.06480	<b>0.00717</b>	2.50740	0.30000	<b>0.00632</b>
	B	0.01860	0.00100	<b>0.00698</b>	0.32940	0.06480	<b>0.00699</b>	2.50740	0.30000	<b>0.00913</b>
	C	0.01860	0.00100	<b>0.00907</b>	0.32940	0.06480	<b>0.00916</b>	2.50740	0.30000	<b>0.01109</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>0.00491</b>	0.32940	<b>0.00584</b>	2.50740	<b>0.01892</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>0.00257</b>	0.32940	<b>0.00356</b>	2.50740	<b>0.01711</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>0.00491</b>	0.32940	<b>0.00584</b>	2.50740	<b>0.01892</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	<b>0.00257</b>	0.32940	<b>0.00356</b>	2.50740	<b>0.01711</b>

# NAND3



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

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

## Footprint

Cell Name	Area
sg13g2_nand3_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nand3_1	0.00285	0.00298	0.00294	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	79.76380	412.19100	2282.30000

## 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_nand3_1	A->Y (FR)	0.01860	0.00100	<b>0.02605</b>	0.32940	0.06480	<b>0.36659</b>	2.50740	0.30000	<b>1.98104</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03008</b>	0.32940	0.06480	<b>0.37106</b>	2.50740	0.30000	<b>1.98681</b>
	C->Y (FR)	0.01860	0.00100	<b>0.03227</b>	0.32940	0.06480	<b>0.37548</b>	2.50740	0.30000	<b>1.99205</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_nand3_1	A->Y (RF)	0.01860	0.00100	<b>0.04446</b>	0.32940	0.06480	<b>0.57224</b>	2.50740	0.30000	<b>2.91586</b>
	B->Y (RF)	0.01860	0.00100	<b>0.05353</b>	0.32940	0.06480	<b>0.56322</b>	2.50740	0.30000	<b>2.78887</b>
	C->Y (RF)	0.01860	0.00100	<b>0.05806</b>	0.32940	0.06480	<b>0.54514</b>	2.50740	0.30000	<b>2.60111</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_nand3_1	A	0.01860	0.00100	<b>0.00252</b>	0.32940	0.06480	<b>0.00289</b>	2.50740	0.30000	<b>0.00613</b>
	B	0.01860	0.00100	<b>0.00280</b>	0.32940	0.06480	<b>0.00294</b>	2.50740	0.30000	<b>0.00619</b>
	C	0.01860	0.00100	<b>0.00327</b>	0.32940	0.06480	<b>0.00329</b>	2.50740	0.30000	<b>0.00649</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_nand3_1	A	0.01860	0.00100	<b>0.00471</b>	0.32940	0.06480	<b>0.00508</b>	2.50740	0.30000	<b>0.00766</b>
	B	0.01860	0.00100	<b>0.00685</b>	0.32940	0.06480	<b>0.00698</b>	2.50740	0.30000	<b>0.00905</b>
	C	0.01860	0.00100	<b>0.00867</b>	0.32940	0.06480	<b>0.00873</b>	2.50740	0.30000	<b>0.01085</b>

# NAND4



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

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

## Footprint

Cell Name	Area
sg13g2_nand4_1	10.88640

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nand4_1	0.00281	0.00294	0.00295	0.00294	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	82.11490	314.77600	3042.99000



## 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_nand4_1	A->Y (FR)	0.01860	0.00100	<b>0.02731</b>	0.32940	0.06480	<b>0.36798</b>	2.50740	0.30000	<b>1.98149</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03165</b>	0.32940	0.06480	<b>0.37277</b>	2.50740	0.30000	<b>1.98725</b>
	C->Y (FR)	0.01860	0.00100	<b>0.03408</b>	0.32940	0.06480	<b>0.37715</b>	2.50740	0.30000	<b>1.99384</b>
	D->Y (FR)	0.01860	0.00100	<b>0.03490</b>	0.32940	0.06480	<b>0.38088</b>	2.50740	0.30000	<b>1.99865</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_nand4_1	A->Y (RF)	0.01860	0.00100	<b>0.05619</b>	0.32940	0.06480	<b>0.68864</b>	2.50740	0.30000	<b>3.42067</b>
	B->Y (RF)	0.01860	0.00100	<b>0.07022</b>	0.32940	0.06480	<b>0.68896</b>	2.50740	0.30000	<b>3.32626</b>
	C->Y (RF)	0.01860	0.00100	<b>0.07850</b>	0.32940	0.06480	<b>0.67818</b>	2.50740	0.30000	<b>3.16466</b>
	D->Y (RF)	0.01860	0.00100	<b>0.08263</b>	0.32940	0.06480	<b>0.66921</b>	2.50740	0.30000	<b>3.02770</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_nand4_1	A	0.01860	0.00100	<b>0.00242</b>	0.32940	0.06480	<b>0.00278</b>	2.50740	0.30000	<b>0.00556</b>
	B	0.01860	0.00100	<b>0.00284</b>	0.32940	0.06480	<b>0.00296</b>	2.50740	0.30000	<b>0.00577</b>
	C	0.01860	0.00100	<b>0.00325</b>	0.32940	0.06480	<b>0.00319</b>	2.50740	0.30000	<b>0.00619</b>
	D	0.01860	0.00100	<b>0.00356</b>	0.32940	0.06480	<b>0.00348</b>	2.50740	0.30000	<b>0.00630</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_nand4_1	A	0.01860	0.00100	<b>0.00561</b>	0.32940	0.06480	<b>0.00585</b>	2.50740	0.30000	<b>0.00848</b>
	B	0.01860	0.00100	<b>0.00774</b>	0.32940	0.06480	<b>0.00765</b>	2.50740	0.30000	<b>0.00992</b>
	C	0.01860	0.00100	<b>0.00963</b>	0.32940	0.06480	<b>0.00957</b>	2.50740	0.30000	<b>0.01164</b>
	D	0.01860	0.00100	<b>0.01141</b>	0.32940	0.06480	<b>0.01132</b>	2.50740	0.30000	<b>0.01346</b>

# NOR2Bx



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp  
125.00*

## Truth Table

INPUT		OUTPUT
A	B_N	Y
x	0	0
0	1	1
1	1	0

## Footprint

Cell Name	Area
sg13g2_nor2b_2	12.70080
sg13g2_nor2b_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B_N	Y
sg13g2_nor2b_2	0.00556	0.00265	0.60000
sg13g2_nor2b_1	0.00287	0.00225	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	982.85400	1706.27000	2233.97000
sg13g2_nor2b_1	546.91200	999.46600	1348.18000

## 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_nor2b_2	A->Y (FR)	0.01860	0.00100	<b>0.03035</b>	0.32940	0.12960	<b>0.55125</b>	2.50740	0.60000	<b>2.84817</b>
	B_N->Y (RR)	0.01860	0.00100	<b>0.07983</b>	0.32940	0.12960	<b>0.55321</b>	2.50740	0.60000	<b>2.14057</b>
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	<b>0.03519</b>	0.32940	0.06480	<b>0.55301</b>	2.50740	0.30000	<b>2.85068</b>
	B_N->Y (RR)	0.01860	0.00100	<b>0.07297</b>	0.32940	0.06480	<b>0.52847</b>	2.50740	0.30000	<b>2.08223</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_nor2b_2	A->Y (RF)	0.01860	0.00100	<b>0.02004</b>	0.32940	0.12960	<b>0.34926</b>	2.50740	0.60000	<b>1.90747</b>
	B_N->Y (FF)	0.01860	0.00100	<b>0.07028</b>	0.32940	0.12960	<b>0.33745</b>	2.50740	0.60000	<b>1.15230</b>
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	<b>0.02210</b>	0.32940	0.06480	<b>0.34112</b>	2.50740	0.30000	<b>1.86341</b>
	B_N->Y (FF)	0.01860	0.00100	<b>0.05959</b>	0.32940	0.06480	<b>0.30411</b>	2.50740	0.30000	<b>1.07001</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_nor2b_2	A	0.01860	0.00100	<b>0.00525</b>	0.32940	0.12960	<b>0.00606</b>	2.50740	0.60000	<b>0.01308</b>
	B_N	0.01860	0.00100	<b>0.01159</b>	0.32940	0.12960	<b>0.01184</b>	2.50740	0.60000	<b>0.01107</b>
sg13g2_nor2b_1	A	0.01860	0.00100	<b>0.00265</b>	0.32940	0.06480	<b>0.00300</b>	2.50740	0.30000	<b>0.00663</b>
	B_N	0.01860	0.00100	<b>0.00600</b>	0.32940	0.06480	<b>0.00613</b>	2.50740	0.30000	<b>0.00554</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_nor2b_2	A	0.01860	0.00100	<b>0.00380</b>	0.32940	0.12960	<b>0.00488</b>	2.50740	0.60000	<b>0.01187</b>
	B_N	0.01860	0.00100	<b>0.00565</b>	0.32940	0.12960	<b>0.00549</b>	2.50740	0.60000	<b>0.00518</b>
sg13g2_nor2b_1	A	0.01860	0.00100	<b>0.00245</b>	0.32940	0.06480	<b>0.00294</b>	2.50740	0.30000	<b>0.00639</b>
	B_N	0.01860	0.00100	<b>0.00307</b>	0.32940	0.06480	<b>0.00286</b>	2.50740	0.30000	<b>0.00240</b>

Passive power(pJ) for B\_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	0.01860	<b>0.00783</b>	0.32940	<b>0.00860</b>	2.50740	<b>0.02356</b>
sg13g2_nor2b_1	0.01860	<b>0.00452</b>	0.32940	<b>0.00535</b>	2.50740	<b>0.01821</b>

Passive power(pJ) for B\_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	0.01860	<b>0.00773</b>	0.32940	<b>0.00858</b>	2.50740	<b>0.02406</b>
sg13g2_nor2b_1	0.01860	<b>0.00456</b>	0.32940	<b>0.00551</b>	2.50740	<b>0.01882</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	A	0.01860	<b>0.00783</b>	0.32940	<b>0.00860</b>	2.50740	<b>0.02356</b>
sg13g2_nor2b_1	A	0.01860	<b>0.00452</b>	0.32940	<b>0.00535</b>	2.50740	<b>0.01821</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	A	0.01860	<b>0.00773</b>	0.32940	<b>0.00858</b>	2.50740	<b>0.02406</b>
sg13g2_nor2b_1	A	0.01860	<b>0.00456</b>	0.32940	<b>0.00551</b>	2.50740	<b>0.01882</b>

# NOR2x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	10.88640
sg13g2_nor2_1	7.25760

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_2	0.00574	0.00552	0.30000
sg13g2_nor2_1	0.00299	0.00287	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	815.94400	1290.27000	1965.37000
sg13g2_nor2_1	407.95300	645.13900	982.70900

## 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_2	A->Y (FR)	0.01860	0.00100	<b>0.03915</b>	0.32940	0.06480	<b>0.33012</b>	2.50740	0.30000	<b>1.62802</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03068</b>	0.32940	0.06480	<b>0.35146</b>	2.50740	0.30000	<b>1.83597</b>
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	<b>0.04174</b>	0.32940	0.06480	<b>0.52746</b>	2.50740	0.30000	<b>2.60117</b>
	B->Y (FR)	0.01860	0.00100	<b>0.03533</b>	0.32940	0.06480	<b>0.55265</b>	2.50740	0.30000	<b>2.84953</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_2	A->Y (RF)	0.01860	0.00100	<b>0.02405</b>	0.32940	0.06480	<b>0.23843</b>	2.50740	0.30000	<b>1.25974</b>
	B->Y (RF)	0.01860	0.00100	<b>0.01976</b>	0.32940	0.06480	<b>0.23138</b>	2.50740	0.30000	<b>1.24937</b>
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	<b>0.02570</b>	0.32940	0.06480	<b>0.34574</b>	2.50740	0.30000	<b>1.86997</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02216</b>	0.32940	0.06480	<b>0.34110</b>	2.50740	0.30000	<b>1.86335</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_2	A	0.01860	0.00100	<b>0.01077</b>	0.32940	0.06480	<b>0.01095</b>	2.50740	0.30000	<b>0.02120</b>
	B	0.01860	0.00100	<b>0.00536</b>	0.32940	0.06480	<b>0.00652</b>	2.50740	0.30000	<b>0.01826</b>
sg13g2_nor2_1	A	0.01860	0.00100	<b>0.00533</b>	0.32940	0.06480	<b>0.00532</b>	2.50740	0.30000	<b>0.00829</b>
	B	0.01860	0.00100	<b>0.00265</b>	0.32940	0.06480	<b>0.00295</b>	2.50740	0.30000	<b>0.00660</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_2	A	0.01860	0.00100	<b>0.00544</b>	0.32940	0.06480	<b>0.00610</b>	2.50740	0.30000	<b>0.01748</b>
	B	0.01860	0.00100	<b>0.00374</b>	0.32940	0.06480	<b>0.00512</b>	2.50740	0.30000	<b>0.01616</b>
sg13g2_nor2_1	A	0.01860	0.00100	<b>0.00266</b>	0.32940	0.06480	<b>0.00280</b>	2.50740	0.30000	<b>0.00653</b>
	B	0.01860	0.00100	<b>0.00244</b>	0.32940	0.06480	<b>0.00294</b>	2.50740	0.30000	<b>0.00642</b>

# NOR3x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	16.32960
sg13g2_nor3_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_2	0.00569	0.00565	0.00547	0.60000
sg13g2_nor3_1	0.00301	0.00300	0.00286	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	762.66500	1487.97000	2547.71000
sg13g2_nor3_1	385.23600	750.30400	1275.16000

## 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_2	A->Y (FR)	0.01860	0.00100	<b>0.06968</b>	0.32940	0.12960	<b>0.73172</b>	2.50740	0.60000	<b>3.32842</b>
	B->Y (FR)	0.01860	0.00100	<b>0.06469</b>	0.32940	0.12960	<b>0.74792</b>	2.50740	0.60000	<b>3.54435</b>
	C->Y (FR)	0.01860	0.00100	<b>0.04581</b>	0.32940	0.12960	<b>0.74993</b>	2.50740	0.60000	<b>3.70623</b>
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	<b>0.07636</b>	0.32940	0.06480	<b>0.73014</b>	2.50740	0.30000	<b>3.32087</b>
	B->Y (FR)	0.01860	0.00100	<b>0.07164</b>	0.32940	0.06480	<b>0.74670</b>	2.50740	0.30000	<b>3.53307</b>
	C->Y (FR)	0.01860	0.00100	<b>0.05547</b>	0.32940	0.06480	<b>0.75076</b>	2.50740	0.30000	<b>3.69958</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_2	A->Y (RF)	0.01860	0.00100	<b>0.02706</b>	0.32940	0.12960	<b>0.35333</b>	2.50740	0.60000	<b>1.87901</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02671</b>	0.32940	0.12960	<b>0.34886</b>	2.50740	0.60000	<b>1.87178</b>
	C->Y (RF)	0.01860	0.00100	<b>0.02208</b>	0.32940	0.12960	<b>0.34299</b>	2.50740	0.60000	<b>1.86423</b>
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	<b>0.02879</b>	0.32940	0.06480	<b>0.34412</b>	2.50740	0.30000	<b>1.83061</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02828</b>	0.32940	0.06480	<b>0.34072</b>	2.50740	0.30000	<b>1.82746</b>
	C->Y (RF)	0.01860	0.00100	<b>0.02442</b>	0.32940	0.06480	<b>0.33564</b>	2.50740	0.30000	<b>1.82145</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_2	A	0.01860	0.00100	<b>0.01762</b>	0.32940	0.12960	<b>0.01768</b>	2.50740	0.60000	<b>0.02314</b>
	B	0.01860	0.00100	<b>0.01305</b>	0.32940	0.12960	<b>0.01326</b>	2.50740	0.60000	<b>0.01887</b>
	C	0.01860	0.00100	<b>0.00768</b>	0.32940	0.12960	<b>0.00861</b>	2.50740	0.60000	<b>0.01493</b>
sg13g2_nor3_1	A	0.01860	0.00100	<b>0.00910</b>	0.32940	0.06480	<b>0.00907</b>	2.50740	0.30000	<b>0.01216</b>
	B	0.01860	0.00100	<b>0.00681</b>	0.32940	0.06480	<b>0.00684</b>	2.50740	0.30000	<b>0.00931</b>
	C	0.01860	0.00100	<b>0.00421</b>	0.32940	0.06480	<b>0.00459</b>	2.50740	0.30000	<b>0.00811</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_2	A	0.01860	0.00100	<b>0.00681</b>	0.32940	0.12960	<b>0.00662</b>	2.50740	0.60000	<b>0.01334</b>
	B	0.01860	0.00100	<b>0.00608</b>	0.32940	0.12960	<b>0.00618</b>	2.50740	0.60000	<b>0.01274</b>
	C	0.01860	0.00100	<b>0.00415</b>	0.32940	0.12960	<b>0.00526</b>	2.50740	0.60000	<b>0.01144</b>
sg13g2_nor3_1	A	0.01860	0.00100	<b>0.00348</b>	0.32940	0.06480	<b>0.00342</b>	2.50740	0.30000	<b>0.00693</b>
	B	0.01860	0.00100	<b>0.00321</b>	0.32940	0.06480	<b>0.00336</b>	2.50740	0.30000	<b>0.00670</b>
	C	0.01860	0.00100	<b>0.00265</b>	0.32940	0.06480	<b>0.00305</b>	2.50740	0.30000	<b>0.00634</b>

# NOR4x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	21.77280
sg13g2_nor4_1	10.88640

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_2	0.00564	0.00557	0.00489	0.00497	0.60000
sg13g2_nor4_1	0.00294	0.00294	0.00257	0.00258	0.30000



## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	778.34300	1449.31000	3123.72000
sg13g2_nor4_1	389.19900	724.66700	1561.86000

## 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_2	A->Y (FR)	0.01860	0.00100	<b>0.11082</b>	0.32940	0.12960	<b>0.96088</b>	2.50740	0.60000	<b>4.14832</b>
	B->Y (FR)	0.01860	0.00100	<b>0.10622</b>	0.32940	0.12960	<b>0.96685</b>	2.50740	0.60000	<b>4.29573</b>
	C->Y (FR)	0.01860	0.00100	<b>0.09105</b>	0.32940	0.12960	<b>0.96626</b>	2.50740	0.60000	<b>4.46088</b>
	D->Y (FR)	0.01860	0.00100	<b>0.06099</b>	0.32940	0.12960	<b>0.95309</b>	2.50740	0.60000	<b>4.57066</b>
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	<b>0.11623</b>	0.32940	0.06480	<b>0.95462</b>	2.50740	0.30000	<b>4.12923</b>
	B->Y (FR)	0.01860	0.00100	<b>0.11198</b>	0.32940	0.06480	<b>0.96110</b>	2.50740	0.30000	<b>4.27781</b>
	C->Y (FR)	0.01860	0.00100	<b>0.09809</b>	0.32940	0.06480	<b>0.96246</b>	2.50740	0.30000	<b>4.44444</b>
	D->Y (FR)	0.01860	0.00100	<b>0.07029</b>	0.32940	0.06480	<b>0.95103</b>	2.50740	0.30000	<b>4.55268</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_2	A->Y (RF)	0.01860	0.00100	<b>0.02859</b>	0.32940	0.12960	<b>0.35967</b>	2.50740	0.60000	<b>1.88737</b>
	B->Y (RF)	0.01860	0.00100	<b>0.02956</b>	0.32940	0.12960	<b>0.35656</b>	2.50740	0.60000	<b>1.88265</b>
	C->Y (RF)	0.01860	0.00100	<b>0.02849</b>	0.32940	0.12960	<b>0.35131</b>	2.50740	0.60000	<b>1.87538</b>
	D->Y (RF)	0.01860	0.00100	<b>0.02390</b>	0.32940	0.12960	<b>0.34499</b>	2.50740	0.60000	<b>1.86551</b>
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	<b>0.03081</b>	0.32940	0.06480	<b>0.35937</b>	2.50740	0.30000	<b>1.88646</b>
	B->Y (RF)	0.01860	0.00100	<b>0.03170</b>	0.32940	0.06480	<b>0.35683</b>	2.50740	0.30000	<b>1.88379</b>
	C->Y (RF)	0.01860	0.00100	<b>0.03046</b>	0.32940	0.06480	<b>0.35209</b>	2.50740	0.30000	<b>1.87709</b>
	D->Y (RF)	0.01860	0.00100	<b>0.02605</b>	0.32940	0.06480	<b>0.34612</b>	2.50740	0.30000	<b>1.86952</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_2	A	0.01860	0.00100	<b>0.02381</b>	0.32940	0.12960	<b>0.02359</b>	2.50740	0.60000	<b>0.02735</b>
	B	0.01860	0.00100	<b>0.01951</b>	0.32940	0.12960	<b>0.01921</b>	2.50740	0.60000	<b>0.02256</b>
	C	0.01860	0.00100	<b>0.01548</b>	0.32940	0.12960	<b>0.01528</b>	2.50740	0.60000	<b>0.01914</b>
	D	0.01860	0.00100	<b>0.00829</b>	0.32940	0.12960	<b>0.00857</b>	2.50740	0.60000	<b>0.01429</b>
sg13g2_nor4_1	A	0.01860	0.00100	<b>0.01186</b>	0.32940	0.06480	<b>0.01166</b>	2.50740	0.30000	<b>0.01362</b>
	B	0.01860	0.00100	<b>0.00971</b>	0.32940	0.06480	<b>0.00957</b>	2.50740	0.30000	<b>0.01155</b>
	C	0.01860	0.00100	<b>0.00788</b>	0.32940	0.06480	<b>0.00772</b>	2.50740	0.30000	<b>0.00982</b>
	D	0.01860	0.00100	<b>0.00446</b>	0.32940	0.06480	<b>0.00469</b>	2.50740	0.30000	<b>0.00744</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_2	A	0.01860	0.00100	<b>0.00858</b>	0.32940	0.12960	<b>0.00850</b>	2.50740	0.60000	<b>0.01441</b>
	B	0.01860	0.00100	<b>0.00785</b>	0.32940	0.12960	<b>0.00789</b>	2.50740	0.60000	<b>0.01384</b>
	C	0.01860	0.00100	<b>0.00488</b>	0.32940	0.12960	<b>0.00505</b>	2.50740	0.60000	<b>0.01088</b>
	D	0.01860	0.00100	<b>0.00043</b>	0.32940	0.12960	<b>0.00154</b>	2.50740	0.60000	<b>0.00705</b>
sg13g2_nor4_1	A	0.01860	0.00100	<b>0.00421</b>	0.32940	0.06480	<b>0.00417</b>	2.50740	0.30000	<b>0.00718</b>
	B	0.01860	0.00100	<b>0.00397</b>	0.32940	0.06480	<b>0.00397</b>	2.50740	0.30000	<b>0.00707</b>
	C	0.01860	0.00100	<b>0.00259</b>	0.32940	0.06480	<b>0.00276</b>	2.50740	0.30000	<b>0.00547</b>
	D	0.01860	0.00100	<b>0.00059</b>	0.32940	0.06480	<b>0.00106</b>	2.50740	0.30000	<b>0.00380</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00003</b>	0.32940	<b>-0.00033</b>	2.50740	<b>-0.00034</b>
sg13g2_nor4_1	0.01860	<b>0.00012</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00006</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00032</b>	0.32940	<b>0.00033</b>	2.50740	<b>0.00034</b>
sg13g2_nor4_1	0.01860	<b>0.00005</b>	0.32940	<b>0.00005</b>	2.50740	<b>0.00006</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!B * C) + (!B * !C * D)	0.01860	<b>0.00003</b>	0.32940	<b>-0.00033</b>	2.50740	<b>-0.00034</b>
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00012</b>	0.32940	<b>-0.00005</b>	2.50740	<b>-0.00006</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!B * C) + (!B * !C * D)	0.01860	<b>0.00032</b>	0.32940	<b>0.00033</b>	2.50740	<b>0.00034</b>
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00005</b>	0.32940	<b>0.00005</b>	2.50740	<b>0.00006</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00008</b>	0.32940	<b>-0.00021</b>	2.50740	<b>-0.00022</b>
sg13g2_nor4_1	0.01860	<b>0.00016</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00020</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00022</b>
sg13g2_nor4_1	0.01860	<b>-0.00004</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!A * C) + (!A * !C * D)	0.01860	<b>0.00008</b>	0.32940	<b>-0.00021</b>	2.50740	<b>-0.00022</b>
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	<b>0.00016</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!A * C) + (!A * !C * D)	0.01860	<b>0.00020</b>	0.32940	<b>0.00021</b>	2.50740	<b>0.00022</b>
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	<b>-0.00004</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00134</b>	0.32940	<b>0.00135</b>	2.50740	<b>0.00137</b>
sg13g2_nor4_1	0.01860	<b>0.00087</b>	0.32940	<b>0.00087</b>	2.50740	<b>0.00088</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00025</b>	2.50740	<b>-0.00025</b>
sg13g2_nor4_1	0.01860	<b>-0.00044</b>	0.32940	<b>-0.00043</b>	2.50740	<b>-0.00043</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	$(A * !D) + (!A * B * !D)$	0.01860	<b>0.00134</b>	0.32940	<b>0.00135</b>	2.50740	<b>0.00137</b>
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	<b>0.00087</b>	0.32940	<b>0.00087</b>	2.50740	<b>0.00088</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	$(A * !D) + (!A * B * !D)$	0.01860	<b>-0.00028</b>	0.32940	<b>-0.00025</b>	2.50740	<b>-0.00025</b>
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	<b>-0.00044</b>	0.32940	<b>-0.00043</b>	2.50740	<b>-0.00043</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00385</b>	0.32940	<b>0.00385</b>	2.50740	<b>0.00386</b>
sg13g2_nor4_1	0.01860	<b>0.00209</b>	0.32940	<b>0.00209</b>	2.50740	<b>0.00210</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	<b>0.00163</b>	0.32940	<b>0.00170</b>	2.50740	<b>0.00173</b>
sg13g2_nor4_1	0.01860	<b>0.00038</b>	0.32940	<b>0.00041</b>	2.50740	<b>0.00042</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00385</b>	0.32940	<b>0.00385</b>	2.50740	<b>0.00386</b>
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00209</b>	0.32940	<b>0.00209</b>	2.50740	<b>0.00210</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_2</b>	<b>(A * !C) + (!A * B * !C)</b>	0.01860	<b>0.00163</b>	0.32940	<b>0.00170</b>	2.50740	<b>0.00173</b>
<b>sg13g2_nor4_1</b>	<b>(A * !C) + (!A * B * !C)</b>	0.01860	<b>0.00038</b>	0.32940	<b>0.00041</b>	2.50740	<b>0.00042</b>

# NP\_ANT



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00093

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.54694	5.55028	5.55362



## 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>-0.00052</b>	0.32940	<b>-0.00052</b>	2.50740	<b>-0.00052</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>0.00052</b>	0.32940	<b>0.00052</b>	2.50740	<b>0.00052</b>

# O21AI



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp 125.00*

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## Truth Table

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

## Footprint

Cell Name	Area
sg13g2_o21ai_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_o21ai_1	0.00327	0.00329	0.00300	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	178.59200	778.47600	1640.47000

## 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_o21ai_1	A1->Y (FR)	0.01860	0.00100	<b>0.06766</b>	0.32940	0.06480	<b>0.62381</b>	2.50740	0.30000	<b>2.95366</b>
	A2->Y (FR)	0.01860	0.00100	<b>0.05922</b>	0.32940	0.06480	<b>0.64722</b>	2.50740	0.30000	<b>3.22078</b>
	B1->Y (FR)	0.01860	0.00100	<b>0.02680</b>	0.32940	0.06480	<b>0.40999</b>	2.50740	0.30000	<b>2.21195</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_o21ai_1	A1->Y (RF)	0.01860	0.00100	<b>0.04897</b>	0.32940	0.06480	<b>0.45719</b>	2.50740	0.30000	<b>2.25167</b>
	A2->Y (RF)	0.01860	0.00100	<b>0.04107</b>	0.32940	0.06480	<b>0.44763</b>	2.50740	0.30000	<b>2.23851</b>
	B1->Y (RF)	0.01860	0.00100	<b>0.04119</b>	0.32940	0.06480	<b>0.47714</b>	2.50740	0.30000	<b>2.44828</b>

Delay(ns) to Y 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_o21ai_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	<b>0.02680</b>	0.32940	0.06480	<b>0.40999</b>	2.50740	0.30000	<b>2.21195</b>
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	<b>0.02602</b>	0.32940	0.06480	<b>0.40766</b>	2.50740	0.30000	<b>2.20709</b>

Delay(ns) to Y 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_o21ai_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	<b>0.04119</b>	0.32940	0.06480	<b>0.47714</b>	2.50740	0.30000	<b>2.44828</b>
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	<b>0.03141</b>	0.32940	0.06480	<b>0.46407</b>	2.50740	0.30000	<b>2.42844</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_o21ai_1	A1	0.01860	0.00100	<b>0.00601</b>	0.32940	0.06480	<b>0.00600</b>	2.50740	0.30000	<b>0.00927</b>
	A2	0.01860	0.00100	<b>0.00314</b>	0.32940	0.06480	<b>0.00337</b>	2.50740	0.30000	<b>0.00707</b>
	B1	0.01860	0.00100	<b>0.00141</b>	0.32940	0.06480	<b>0.00199</b>	2.50740	0.30000	<b>0.00557</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_o21ai_1	A1	0.01860	0.00100	<b>0.00653</b>	0.32940	0.06480	<b>0.00639</b>	2.50740	0.30000	<b>0.00894</b>
	A2	0.01860	0.00100	<b>0.00604</b>	0.32940	0.06480	<b>0.00629</b>	2.50740	0.30000	<b>0.00877</b>
	B1	0.01860	0.00100	<b>0.00284</b>	0.32940	0.06480	<b>0.00328</b>	2.50740	0.30000	<b>0.00660</b>

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_o21ai_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00422</b>	0.32940	0.06480	<b>0.00474</b>	2.50740	0.30000	<b>0.00818</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00141</b>	0.32940	0.06480	<b>0.00199</b>	2.50740	0.30000	<b>0.00557</b>

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_o21ai_1	B1	(A1 * !A2)	0.01860	0.00100	<b>0.00362</b>	0.32940	0.06480	<b>0.00387</b>	2.50740	0.30000	<b>0.00714</b>
	B1	(!A1 * A2)	0.01860	0.00100	<b>0.00284</b>	0.32940	0.06480	<b>0.00328</b>	2.50740	0.30000	<b>0.00660</b>

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>-0.00042</b>	0.32940	<b>-0.00038</b>	2.50740	<b>-0.00033</b>

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>0.00056</b>	0.32940	<b>0.00038</b>	2.50740	<b>0.00033</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A2 * !B1)	0.01860	<b>-0.00042</b>	0.32940	<b>-0.00038</b>	2.50740	<b>-0.00033</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A2 * !B1)	0.01860	<b>0.00056</b>	0.32940	<b>0.00038</b>	2.50740	<b>0.00033</b>

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>-0.00035</b>	0.32940	<b>-0.00030</b>	2.50740	<b>-0.00025</b>

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>0.00048</b>	0.32940	<b>0.00030</b>	2.50740	<b>0.00025</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !B1)	0.01860	<b>-0.00035</b>	0.32940	<b>-0.00030</b>	2.50740	<b>-0.00025</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !B1)	0.01860	<b>0.00048</b>	0.32940	<b>0.00030</b>	2.50740	<b>0.00025</b>

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>0.00024</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00027</b>

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	<b>0.00079</b>	0.32940	<b>0.00080</b>	2.50740	<b>0.00080</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !A2)	0.01860	<b>0.00024</b>	0.32940	<b>0.00027</b>	2.50740	<b>0.00027</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !A2)	0.01860	<b>0.00079</b>	0.32940	<b>0.00080</b>	2.50740	<b>0.00080</b>

# OR2x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	10.88640
sg13g2_or2_1	9.07200

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_2	0.00244	0.00225	0.60000
sg13g2_or2_1	0.00245	0.00227	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	714.59500	1163.57000	1799.14000
sg13g2_or2_1	509.18000	819.34200	1038.49000

## 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_2	A->X (RR)	0.01860	0.00100	<b>0.06929</b>	0.32940	0.12960	<b>0.36655</b>	2.50740	0.60000	<b>1.27342</b>
	B->X (RR)	0.01860	0.00100	<b>0.06474</b>	0.32940	0.12960	<b>0.35444</b>	2.50740	0.60000	<b>1.23356</b>
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	<b>0.05839</b>	0.32940	0.06480	<b>0.33303</b>	2.50740	0.30000	<b>1.19492</b>
	B->X (RR)	0.01860	0.00100	<b>0.05365</b>	0.32940	0.06480	<b>0.31873</b>	2.50740	0.30000	<b>1.14909</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_2	A->X (FF)	0.01860	0.00100	<b>0.11784</b>	0.32940	0.12960	<b>0.39646</b>	2.50740	0.60000	<b>1.23862</b>
	B->X (FF)	0.01860	0.00100	<b>0.11149</b>	0.32940	0.12960	<b>0.40965</b>	2.50740	0.60000	<b>1.29006</b>
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	<b>0.09130</b>	0.32940	0.06480	<b>0.34313</b>	2.50740	0.30000	<b>1.14369</b>
	B->X (FF)	0.01860	0.00100	<b>0.08461</b>	0.32940	0.06480	<b>0.34938</b>	2.50740	0.30000	<b>1.18216</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_2	A	0.01860	0.00100	<b>0.01262</b>	0.32940	0.12960	<b>0.01343</b>	2.50740	0.60000	<b>0.02416</b>
	B	0.01860	0.00100	<b>0.01231</b>	0.32940	0.12960	<b>0.01306</b>	2.50740	0.60000	<b>0.02348</b>
sg13g2_or2_1	A	0.01860	0.00100	<b>0.00769</b>	0.32940	0.06480	<b>0.00847</b>	2.50740	0.30000	<b>0.01951</b>
	B	0.01860	0.00100	<b>0.00738</b>	0.32940	0.06480	<b>0.00813</b>	2.50740	0.30000	<b>0.01897</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_2	A	0.01860	0.00100	<b>0.01501</b>	0.32940	0.12960	<b>0.01478</b>	2.50740	0.60000	<b>0.02493</b>
	B	0.01860	0.00100	<b>0.01325</b>	0.32940	0.12960	<b>0.01355</b>	2.50740	0.60000	<b>0.02358</b>
sg13g2_or2_1	A	0.01860	0.00100	<b>0.00946</b>	0.32940	0.06480	<b>0.00982</b>	2.50740	0.30000	<b>0.02053</b>
	B	0.01860	0.00100	<b>0.00762</b>	0.32940	0.06480	<b>0.00848</b>	2.50740	0.30000	<b>0.01975</b>

# OR3x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	14.51520
sg13g2_or3_1	12.70080

## Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_2	0.00255	0.00249	0.00237	0.60000
sg13g2_or3_1	0.00256	0.00250	0.00238	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	736.48900	1155.60000	1946.55000
sg13g2_or3_1	530.92700	880.63300	1338.02000

## 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_2	A->X (RR)	0.01860	0.00100	<b>0.07855</b>	0.32940	0.12960	<b>0.38914</b>	2.50740	0.60000	<b>1.33340</b>
	B->X (RR)	0.01860	0.00100	<b>0.07487</b>	0.32940	0.12960	<b>0.37808</b>	2.50740	0.60000	<b>1.29697</b>
	C->X (RR)	0.01860	0.00100	<b>0.06897</b>	0.32940	0.12960	<b>0.36469</b>	2.50740	0.60000	<b>1.25670</b>
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	<b>0.06785</b>	0.32940	0.06480	<b>0.35806</b>	2.50740	0.30000	<b>1.26429</b>
	B->X (RR)	0.01860	0.00100	<b>0.06451</b>	0.32940	0.06480	<b>0.34583</b>	2.50740	0.30000	<b>1.21851</b>
	C->X (RR)	0.01860	0.00100	<b>0.05843</b>	0.32940	0.06480	<b>0.33082</b>	2.50740	0.30000	<b>1.17345</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_2	A->X (FF)	0.01860	0.00100	<b>0.16385</b>	0.32940	0.12960	<b>0.44515</b>	2.50740	0.60000	<b>1.25850</b>
	B->X (FF)	0.01860	0.00100	<b>0.15855</b>	0.32940	0.12960	<b>0.45462</b>	2.50740	0.60000	<b>1.32798</b>
	C->X (FF)	0.01860	0.00100	<b>0.14427</b>	0.32940	0.12960	<b>0.45597</b>	2.50740	0.60000	<b>1.35389</b>
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	<b>0.13065</b>	0.32940	0.06480	<b>0.38715</b>	2.50740	0.30000	<b>1.17007</b>
	B->X (FF)	0.01860	0.00100	<b>0.12537</b>	0.32940	0.06480	<b>0.39295</b>	2.50740	0.30000	<b>1.22968</b>
	C->X (FF)	0.01860	0.00100	<b>0.11069</b>	0.32940	0.06480	<b>0.38907</b>	2.50740	0.30000	<b>1.24396</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_2	A	0.01860	0.00100	<b>0.01323</b>	0.32940	0.12960	<b>0.01375</b>	2.50740	0.60000	<b>0.02483</b>
	B	0.01860	0.00100	<b>0.01279</b>	0.32940	0.12960	<b>0.01335</b>	2.50740	0.60000	<b>0.02410</b>
	C	0.01860	0.00100	<b>0.01248</b>	0.32940	0.12960	<b>0.01308</b>	2.50740	0.60000	<b>0.02345</b>
sg13g2_or3_1	A	0.01860	0.00100	<b>0.00826</b>	0.32940	0.06480	<b>0.00875</b>	2.50740	0.30000	<b>0.02020</b>
	B	0.01860	0.00100	<b>0.00784</b>	0.32940	0.06480	<b>0.00834</b>	2.50740	0.30000	<b>0.01922</b>
	C	0.01860	0.00100	<b>0.00753</b>	0.32940	0.06480	<b>0.00816</b>	2.50740	0.30000	<b>0.01899</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_2	A	0.01860	0.00100	<b>0.01974</b>	0.32940	0.12960	<b>0.01859</b>	2.50740	0.60000	<b>0.02831</b>
	B	0.01860	0.00100	<b>0.01773</b>	0.32940	0.12960	<b>0.01671</b>	2.50740	0.60000	<b>0.02580</b>
	C	0.01860	0.00100	<b>0.01558</b>	0.32940	0.12960	<b>0.01493</b>	2.50740	0.60000	<b>0.02491</b>
sg13g2_or3_1	A	0.01860	0.00100	<b>0.01349</b>	0.32940	0.06480	<b>0.01353</b>	2.50740	0.30000	<b>0.02400</b>
	B	0.01860	0.00100	<b>0.01151</b>	0.32940	0.06480	<b>0.01166</b>	2.50740	0.30000	<b>0.02230</b>
	C	0.01860	0.00100	<b>0.00927</b>	0.32940	0.06480	<b>0.00992</b>	2.50740	0.30000	<b>0.02094</b>

# OR4x



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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_2	16.32960
sg13g2_or4_1	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_2	0.00253	0.00246	0.00212	0.00214	0.60000
sg13g2_or4_1	0.00253	0.00246	0.00212	0.00215	0.30000



## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	738.01400	1106.77000	2087.87000
sg13g2_or4_1	532.59800	866.63700	1594.59000

## 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_2	A->X (RR)	0.01860	0.00100	<b>0.08183</b>	0.32940	0.12960	<b>0.39981</b>	2.50740	0.60000	<b>1.35861</b>
	B->X (RR)	0.01860	0.00100	<b>0.08029</b>	0.32940	0.12960	<b>0.39171</b>	2.50740	0.60000	<b>1.32298</b>
	C->X (RR)	0.01860	0.00100	<b>0.07598</b>	0.32940	0.12960	<b>0.38024</b>	2.50740	0.60000	<b>1.28369</b>
	D->X (RR)	0.01860	0.00100	<b>0.06965</b>	0.32940	0.12960	<b>0.36703</b>	2.50740	0.60000	<b>1.24351</b>
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	<b>0.07085</b>	0.32940	0.06480	<b>0.36981</b>	2.50740	0.30000	<b>1.28880</b>
	B->X (RR)	0.01860	0.00100	<b>0.06985</b>	0.32940	0.06480	<b>0.36121</b>	2.50740	0.30000	<b>1.24988</b>
	C->X (RR)	0.01860	0.00100	<b>0.06589</b>	0.32940	0.06480	<b>0.34917</b>	2.50740	0.30000	<b>1.20630</b>
	D->X (RR)	0.01860	0.00100	<b>0.05947</b>	0.32940	0.06480	<b>0.33346</b>	2.50740	0.30000	<b>1.16242</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_2	A->X (FF)	0.01860	0.00100	<b>0.22506</b>	0.32940	0.12960	<b>0.52089</b>	2.50740	0.60000	<b>1.32560</b>
	B->X (FF)	0.01860	0.00100	<b>0.22003</b>	0.32940	0.12960	<b>0.52399</b>	2.50740	0.60000	<b>1.39342</b>
	C->X (FF)	0.01860	0.00100	<b>0.20606</b>	0.32940	0.12960	<b>0.52168</b>	2.50740	0.60000	<b>1.44302</b>
	D->X (FF)	0.01860	0.00100	<b>0.18171</b>	0.32940	0.12960	<b>0.51263</b>	2.50740	0.60000	<b>1.45634</b>
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	<b>0.18046</b>	0.32940	0.06480	<b>0.45077</b>	2.50740	0.30000	<b>1.23197</b>
	B->X (FF)	0.01860	0.00100	<b>0.17550</b>	0.32940	0.06480	<b>0.45219</b>	2.50740	0.30000	<b>1.29076</b>
	C->X (FF)	0.01860	0.00100	<b>0.16149</b>	0.32940	0.06480	<b>0.44712</b>	2.50740	0.30000	<b>1.32936</b>
	D->X (FF)	0.01860	0.00100	<b>0.13660</b>	0.32940	0.06480	<b>0.43460</b>	2.50740	0.30000	<b>1.32867</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_2	A	0.01860	0.00100	<b>0.01400</b>	0.32940	0.12960	<b>0.01449</b>	2.50740	0.60000	<b>0.02516</b>
	B	0.01860	0.00100	<b>0.01353</b>	0.32940	0.12960	<b>0.01403</b>	2.50740	0.60000	<b>0.02383</b>
	C	0.01860	0.00100	<b>0.01229</b>	0.32940	0.12960	<b>0.01277</b>	2.50740	0.60000	<b>0.02217</b>
	D	0.01860	0.00100	<b>0.01072</b>	0.32940	0.12960	<b>0.01147</b>	2.50740	0.60000	<b>0.02032</b>
sg13g2_or4_1	A	0.01860	0.00100	<b>0.00894</b>	0.32940	0.06480	<b>0.00944</b>	2.50740	0.30000	<b>0.02031</b>
	B	0.01860	0.00100	<b>0.00856</b>	0.32940	0.06480	<b>0.00890</b>	2.50740	0.30000	<b>0.01892</b>
	C	0.01860	0.00100	<b>0.00735</b>	0.32940	0.06480	<b>0.00785</b>	2.50740	0.30000	<b>0.01747</b>
	D	0.01860	0.00100	<b>0.00579</b>	0.32940	0.06480	<b>0.00641</b>	2.50740	0.30000	<b>0.01620</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_2	A	0.01860	0.00100	<b>0.02245</b>	0.32940	0.12960	<b>0.01987</b>	2.50740	0.60000	<b>0.02813</b>
	B	0.01860	0.00100	<b>0.02135</b>	0.32940	0.12960	<b>0.01885</b>	2.50740	0.60000	<b>0.02701</b>
	C	0.01860	0.00100	<b>0.01959</b>	0.32940	0.12960	<b>0.01722</b>	2.50740	0.60000	<b>0.02515</b>
	D	0.01860	0.00100	<b>0.01623</b>	0.32940	0.12960	<b>0.01425</b>	2.50740	0.60000	<b>0.02331</b>
sg13g2_or4_1	A	0.01860	0.00100	<b>0.01517</b>	0.32940	0.06480	<b>0.01493</b>	2.50740	0.30000	<b>0.02408</b>
	B	0.01860	0.00100	<b>0.01409</b>	0.32940	0.06480	<b>0.01385</b>	2.50740	0.30000	<b>0.02303</b>
	C	0.01860	0.00100	<b>0.01234</b>	0.32940	0.06480	<b>0.01223</b>	2.50740	0.30000	<b>0.02138</b>
	D	0.01860	0.00100	<b>0.00893</b>	0.32940	0.06480	<b>0.00933</b>	2.50740	0.30000	<b>0.01906</b>

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00001</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00022</b>
sg13g2_or4_1	0.01860	<b>0.00001</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00022</b>

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00086</b>	0.32940	<b>0.00085</b>	2.50740	<b>0.00084</b>
sg13g2_or4_1	0.01860	<b>0.00086</b>	0.32940	<b>0.00084</b>	2.50740	<b>0.00084</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!B * C) + (!B * !C * D)	0.01860	<b>0.00001</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00022</b>
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00001</b>	0.32940	<b>-0.00018</b>	2.50740	<b>-0.00022</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!B * C) + (!B * !C * D)	0.01860	<b>0.00086</b>	0.32940	<b>0.00085</b>	2.50740	<b>0.00084</b>
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	<b>0.00086</b>	0.32940	<b>0.00084</b>	2.50740	<b>0.00084</b>

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_or4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>-0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_or4_1	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!A * C) + (!A * !C * D)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!A * C) + (!A * !C * D)	0.01860	<b>-0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	<b>0.00000</b>	0.32940	<b>0.00000</b>	2.50740	<b>0.00000</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00063</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</b>
sg13g2_or4_1	0.01860	<b>0.00062</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</b>

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

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>-0.00023</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>
sg13g2_or4_1	0.01860	<b>-0.00024</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	$(A * !D) + (!A * B * !D)$	0.01860	<b>0.00063</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</b>
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	<b>0.00062</b>	0.32940	<b>0.00063</b>	2.50740	<b>0.00064</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	$(A * !D) + (!A * B * !D)$	0.01860	<b>-0.00023</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	<b>-0.00024</b>	0.32940	<b>-0.00023</b>	2.50740	<b>-0.00023</b>

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00176</b>	0.32940	<b>0.00176</b>	2.50740	<b>0.00177</b>
sg13g2_or4_1	0.01860	<b>0.00176</b>	0.32940	<b>0.00176</b>	2.50740	<b>0.00177</b>

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	<b>0.00095</b>	0.32940	<b>0.00096</b>	2.50740	<b>0.00096</b>
sg13g2_or4_1	0.01860	<b>0.00093</b>	0.32940	<b>0.00096</b>	2.50740	<b>0.00097</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00176</b>	0.32940	<b>0.00176</b>	2.50740	<b>0.00177</b>
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00176</b>	0.32940	<b>0.00176</b>	2.50740	<b>0.00177</b>

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00095</b>	0.32940	<b>0.00096</b>	2.50740	<b>0.00096</b>
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	<b>0.00093</b>	0.32940	<b>0.00096</b>	2.50740	<b>0.00097</b>

# SDFRRS



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, Temp  
125.00*

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## Truth Table

INPUT						OUTPUT	
D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
0	0	x	1	1	R	0	1
0	1	0	1	1	R	0	1
x	1	1	1	1	R	1	0
1	x	0	1	1	R	1	0
1	0	1	1	1	R	0	1
x	x	x	x	0	x	1	0
x	x	x	0	1	x	0	1
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	0.00195	0.00196	0.00351	0.00172	0.00517	0.00298	0.30000	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	3962.82000	5789.74000	7346.24000

## 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>0.30403</b>	0.32940	0.06480	<b>0.57468</b>	2.50740	0.30000	<b>1.42473</b>
	SET_B->Q (FR)	0.01860	0.00100	<b>0.12378</b>	0.32940	0.06480	<b>0.41680</b>	2.50740	0.30000	<b>1.33678</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>0.25009</b>	0.32940	0.06480	<b>0.50008</b>	2.50740	0.30000	<b>1.26934</b>
	RESET_B->Q (FF)	0.01860	0.00100	<b>0.20563</b>	0.32940	0.06480	<b>0.47378</b>	2.50740	0.30000	<b>1.29642</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>0.30403</b>	0.32940	0.06480	<b>0.57468</b>	2.50740	0.30000	<b>1.42473</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>0.25009</b>	0.32940	0.06480	<b>0.50008</b>	2.50740	0.30000	<b>1.26934</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>0.20632</b>	0.32940	0.06480	<b>0.49860</b>	2.50740	0.30000	<b>1.36448</b>
	RESET_B->Q_N (FR)	0.01860	0.00100	<b>0.16095</b>	0.32940	0.06480	<b>0.47885</b>	2.50740	0.30000	<b>1.40102</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>0.25298</b>	0.32940	0.06480	<b>0.54150</b>	2.50740	0.30000	<b>1.30120</b>
	SET_B->Q_N (FF)	0.01860	0.00100	<b>0.08167</b>	0.32940	0.06480	<b>0.37717</b>	2.50740	0.30000	<b>1.22732</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>0.20632</b>	0.32940	0.06480	<b>0.49860</b>	2.50740	0.30000	<b>1.36448</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>0.25298</b>	0.32940	0.06480	<b>0.54150</b>	2.50740	0.30000	<b>1.30120</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>-0.09781</b>	1.26300	1.26300	<b>-0.25095</b>	2.50740	2.50740	<b>-0.33057</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11981</b>	1.26300	1.26300	<b>0.26714</b>	2.50740	2.50740	<b>0.34533</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>-0.10514</b>	1.26300	1.26300	<b>-0.20238</b>	2.50740	2.50740	<b>-0.26269</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.15160</b>	1.26300	1.26300	<b>0.23476</b>	2.50740	2.50740	<b>0.30696</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>-0.12715</b>	1.26300	1.26300	<b>-0.29952</b>	2.50740	2.50740	<b>-0.39551</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.14671</b>	1.26300	1.26300	<b>0.31301</b>	2.50740	2.50740	<b>0.41026</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>-0.13693</b>	1.26300	1.26300	<b>-0.21047</b>	2.50740	2.50740	<b>-0.26564</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.18339</b>	1.26300	1.26300	<b>0.24285</b>	2.50740	2.50740	<b>0.30991</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>-0.10759</b>	1.26300	1.26300	<b>-0.28603</b>	2.50740	2.50740	<b>-0.38370</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.12959</b>	1.26300	1.26300	<b>0.30222</b>	2.50740	2.50740	<b>0.40141</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>-0.10514</b>	1.26300	1.26300	<b>-0.15111</b>	2.50740	2.50740	<b>-0.18890</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.15160</b>	1.26300	1.26300	<b>0.18619</b>	2.50740	2.50740	<b>0.23612</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>0.06113</b>	1.26300	1.26300	<b>0.11333</b>	2.50740	2.50740	<b>0.13872</b>
	removal	CLK (R)	0.01860	0.01860	<b>-0.04157</b>	1.26300	1.26300	<b>-0.09174</b>	2.50740	2.50740	<b>-0.11216</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>0.01467</b>	1.26300	1.26300	<b>0.07016</b>	2.50740	2.50740	<b>0.30696</b>
	removal	CLK (R)	0.01860	0.01860	<b>0.03912</b>	1.26300	1.26300	<b>0.09444</b>	2.50740	2.50740	<b>0.09740</b>
	hold	RESET_B (R)	0.01860	0.01860	<b>-0.07825</b>	1.26300	1.26300	<b>-0.18079</b>	2.50740	2.50740	<b>-0.24203</b>
	setup	RESET_B (R)	0.01860	0.01860	<b>0.09781</b>	1.26300	1.26300	<b>0.20777</b>	2.50740	2.50740	<b>0.27744</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>0.02093</b>	0.32940	0.06480	<b>0.02177</b>	2.50740	0.30000	<b>0.03124</b>
	SET_B	0.01860	0.00100	<b>0.03913</b>	0.32940	0.06480	<b>0.09857</b>	2.50740	0.30000	<b>0.33793</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>0.02048</b>	0.32940	0.06480	<b>0.02115</b>	2.50740	0.30000	<b>0.03083</b>
	RESET_B	0.01860	0.00100	<b>0.04388</b>	0.32940	0.06480	<b>0.10267</b>	2.50740	0.30000	<b>0.32752</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>0.02093</b>	0.32940	0.06480	<b>0.02177</b>	2.50740	0.30000	<b>0.03124</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>0.02048</b>	0.32940	0.06480	<b>0.02115</b>	2.50740	0.30000	<b>0.03083</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>0.02049</b>	0.32940	0.06480	<b>0.02132</b>	2.50740	0.30000	<b>0.03110</b>
	RESET_B	0.01860	0.00100	<b>0.04390</b>	0.32940	0.06480	<b>0.10303</b>	2.50740	0.30000	<b>0.32765</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>0.02094</b>	0.32940	0.06480	<b>0.02160</b>	2.50740	0.30000	<b>0.03097</b>
	SET_B	0.01860	0.00100	<b>0.03913</b>	0.32940	0.06480	<b>0.09824</b>	2.50740	0.30000	<b>0.33776</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>0.02049</b>	0.32940	0.06480	<b>0.02132</b>	2.50740	0.30000	<b>0.03110</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>0.02094</b>	0.32940	0.06480	<b>0.02160</b>	2.50740	0.30000	<b>0.03097</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>-0.00006</b>	0.32940	<b>0.00003</b>	2.50740	<b>0.00689</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>0.00627</b>	0.32940	<b>0.00644</b>	2.50740	<b>0.01363</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>0.01408</b>	0.32940	<b>0.01431</b>	2.50740	<b>0.02189</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>-0.00006</b>	0.32940	<b>0.00003</b>	2.50740	<b>0.00689</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>0.01419</b>	0.32940	<b>0.01440</b>	2.50740	<b>0.02245</b>
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	<b>0.00627</b>	0.32940	<b>0.00644</b>	2.50740	<b>0.01363</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>0.00748</b>	0.32940	<b>0.00750</b>	2.50740	<b>0.01340</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>-0.00237</b>	0.32940	<b>-0.00232</b>	2.50740	<b>0.00396</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>0.01602</b>	0.32940	<b>0.01613</b>	2.50740	<b>0.02264</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>0.00748</b>	0.32940	<b>0.00750</b>	2.50740	<b>0.01340</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>0.01867</b>	0.32940	<b>0.01861</b>	2.50740	<b>0.02577</b>
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	<b>-0.00237</b>	0.32940	<b>-0.00232</b>	2.50740	<b>0.00396</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>0.01341</b>	0.32940	<b>0.01338</b>	2.50740	<b>0.02284</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>0.01865</b>	0.32940	<b>0.01925</b>	2.50740	<b>0.02894</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>0.01877</b>	0.32940	<b>0.01937</b>	2.50740	<b>0.02889</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.01341</b>	0.32940	<b>0.01338</b>	2.50740	<b>0.02284</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.01641</b>	0.32940	<b>0.01745</b>	2.50740	<b>0.03489</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>0.00777</b>	0.32940	<b>0.00870</b>	2.50740	<b>0.02528</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>0.01865</b>	0.32940	<b>0.01925</b>	2.50740	<b>0.02894</b>
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	<b>0.01679</b>	0.32940	<b>0.02469</b>	2.50740	<b>0.03454</b>
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	<b>0.00659</b>	0.32940	<b>0.03014</b>	2.50740	<b>0.04845</b>
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	<b>-0.00471</b>	0.32940	<b>-0.00400</b>	2.50740	<b>0.01245</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>0.01496</b>	0.32940	<b>0.01589</b>	2.50740	<b>0.03480</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>0.01446</b>	0.32940	<b>0.01560</b>	2.50740	<b>0.03528</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>0.01535</b>	0.32940	<b>0.01624</b>	2.50740	<b>0.03505</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.01577</b>	0.32940	<b>0.01670</b>	2.50740	<b>0.03538</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01500</b>	0.32940	<b>0.01591</b>	2.50740	<b>0.03481</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.00889</b>	0.32940	<b>0.00983</b>	2.50740	<b>0.02861</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>0.00339</b>	0.32940	<b>0.00435</b>	2.50740	<b>0.02326</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01496</b>	0.32940	<b>0.01589</b>	2.50740	<b>0.03480</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>0.01379</b>	0.32940	<b>0.01492</b>	2.50740	<b>0.03463</b>
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.02518</b>	0.32940	<b>0.02623</b>	2.50740	<b>0.04650</b>
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	<b>0.00668</b>	0.32940	<b>0.00796</b>	2.50740	<b>0.02837</b>
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	<b>0.02726</b>	0.32940	<b>0.02855</b>	2.50740	<b>0.04900</b>
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01446</b>	0.32940	<b>0.01560</b>	2.50740	<b>0.03528</b>
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	<b>0.01379</b>	0.32940	<b>0.01492</b>	2.50740	<b>0.03463</b>
	(!RESET_B * !Q * Q_N)	0.01860	<b>0.00125</b>	0.32940	<b>0.00239</b>	2.50740	<b>0.02208</b>
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	<b>0.01397</b>	0.32940	<b>0.01511</b>	2.50740	<b>0.03479</b>

# SGCLK



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00196	0.00237	0.00494	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	2647.27000	3177.08000	3734.68000

## 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>0.07349</b>	0.32940	0.06480	<b>0.33664</b>	2.50740	0.30000	<b>1.19950</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>0.06177</b>	0.32940	0.06480	<b>0.32081</b>	2.50740	0.30000	<b>1.12177</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>-0.04069</b>	1.26300	1.26300	<b>-0.17000</b>	2.50740	2.50740	<b>-0.23779</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.06440</b>	1.26300	1.26300	<b>0.23476</b>	2.50740	2.50740	<b>0.32593</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>-0.06557</b>	1.26300	1.26300	<b>-0.19968</b>	2.50740	2.50740	<b>-0.28886</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.10495</b>	1.26300	1.26300	<b>0.24015</b>	2.50740	2.50740	<b>0.33700</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>-0.04856</b>	1.26300	1.26300	<b>-0.19698</b>	2.50740	2.50740	<b>-0.27743</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>-0.06979</b>	1.26300	1.26300	<b>-0.16460</b>	2.50740	2.50740	<b>-0.23354</b>
	setup	CLK (R)	0.01860	0.01860	<b>0.11199</b>	1.26300	1.26300	<b>0.19968</b>	2.50740	2.50740	<b>0.27743</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>0.01346</b>	0.32940	0.06480	<b>0.01387</b>	2.50740	0.30000	<b>0.02587</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>0.01189</b>	0.32940	0.06480	<b>0.01323</b>	2.50740	0.30000	<b>0.02636</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>0.02393</b>	0.32940	<b>0.02524</b>	2.50740	<b>0.03736</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>0.01852</b>	0.32940	<b>0.03756</b>	2.50740	<b>0.05032</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>0.02393</b>	0.32940	<b>0.02524</b>	2.50740	<b>0.03736</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>0.01852</b>	0.32940	<b>0.03756</b>	2.50740	<b>0.05032</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>0.00812</b>	0.32940	<b>0.00868</b>	2.50740	<b>0.02089</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>0.01894</b>	0.32940	<b>0.03634</b>	2.50740	<b>0.04819</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>0.00657</b>	0.32940	<b>0.00756</b>	2.50740	<b>0.02370</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>0.00466</b>	0.32940	<b>0.00573</b>	2.50740	<b>0.02295</b>

# TIE0



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	57.44150	57.44150	57.44150

# TIE1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	55.10960	55.10960	55.10960

# XNOR2\_1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	0.00543	0.00494	0.30000

## Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	436.49000	1366.74000	1932.02000

## 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>0.07306</b>	0.32940	0.06480	<b>0.33707</b>	2.50740	0.30000	<b>1.19623</b>
	A->Y (FR)	0.01860	0.00100	<b>0.05430</b>	0.32940	0.06480	<b>0.54232</b>	2.50740	0.30000	<b>2.61672</b>
	B->Y (RR)	0.01860	0.00100	<b>0.06798</b>	0.32940	0.06480	<b>0.33562</b>	2.50740	0.30000	<b>1.20057</b>
	B->Y (FR)	0.01860	0.00100	<b>0.04803</b>	0.32940	0.06480	<b>0.56643</b>	2.50740	0.30000	<b>2.86303</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>0.07126</b>	0.32940	0.06480	<b>0.43810</b>	2.50740	0.30000	<b>1.64041</b>
	A->Y (RF)	0.01860	0.00100	<b>0.04739</b>	0.32940	0.06480	<b>0.45002</b>	2.50740	0.30000	<b>2.25085</b>
	B->Y (FF)	0.01860	0.00100	<b>0.07208</b>	0.32940	0.06480	<b>0.42554</b>	2.50740	0.30000	<b>1.61242</b>
	B->Y (RF)	0.01860	0.00100	<b>0.04025</b>	0.32940	0.06480	<b>0.44165</b>	2.50740	0.30000	<b>2.23718</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>0.00976</b>	0.32940	0.06480	<b>0.01023</b>	2.50740	0.30000	<b>0.02219</b>
	B	0.01860	0.00100	<b>0.00979</b>	0.32940	0.06480	<b>0.01042</b>	2.50740	0.30000	<b>0.02292</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>0.00845</b>	0.32940	0.06480	<b>0.00959</b>	2.50740	0.30000	<b>0.02232</b>
	B	0.01860	0.00100	<b>0.00944</b>	0.32940	0.06480	<b>0.00900</b>	2.50740	0.30000	<b>0.02185</b>

# XOR2\_1



*sg13g2\_stdcell\_slow\_1p35V\_125C Cell Library: Process  
sg13g2\_stdcell\_slow\_1p35V\_125C, Voltage 1.35, 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	14.51520

## Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00575	0.00509	0.30000

## Leakage Information



Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	1079.38000	1356.10000	1948.47000

## 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>0.07429</b>	0.32940	0.06480	<b>0.54287</b>	2.50740	0.30000	<b>2.12260</b>
	A->X (FR)	0.01860	0.00100	<b>0.05937</b>	0.32940	0.06480	<b>0.54956</b>	2.50740	0.30000	<b>2.62680</b>
	B->X (RR)	0.01860	0.00100	<b>0.07727</b>	0.32940	0.06480	<b>0.52889</b>	2.50740	0.30000	<b>2.07921</b>
	B->X (FR)	0.01860	0.00100	<b>0.05076</b>	0.32940	0.06480	<b>0.54002</b>	2.50740	0.30000	<b>2.61464</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>0.08706</b>	0.32940	0.06480	<b>0.33238</b>	2.50740	0.30000	<b>1.10566</b>
	A->X (RF)	0.01860	0.00100	<b>0.04508</b>	0.32940	0.06480	<b>0.44761</b>	2.50740	0.30000	<b>2.24245</b>
	B->X (FF)	0.01860	0.00100	<b>0.08040</b>	0.32940	0.06480	<b>0.33634</b>	2.50740	0.30000	<b>1.13693</b>
	B->X (RF)	0.01860	0.00100	<b>0.03964</b>	0.32940	0.06480	<b>0.46625</b>	2.50740	0.30000	<b>2.41033</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>0.00875</b>	0.32940	0.06480	<b>0.00975</b>	2.50740	0.30000	<b>0.02143</b>
	B	0.01860	0.00100	<b>0.00943</b>	0.32940	0.06480	<b>0.00907</b>	2.50740	0.30000	<b>0.02085</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>0.01062</b>	0.32940	0.06480	<b>0.01097</b>	2.50740	0.30000	<b>0.02330</b>
	B	0.01860	0.00100	<b>0.00988</b>	0.32940	0.06480	<b>0.01035</b>	2.50740	0.30000	<b>0.02320</b>