

sg13g2_stdcell_slow_1p35V_125C Library

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

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

A21OIx



*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	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	0.00538	0.00588	0.00527	0.60000
sg13g2_a21oi_1	0.00281	0.00293	0.00269	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	0.04250	0.32940	0.12960	0.53010	2.50740	0.60000	2.61197
	A2->Y (FR)	0.01860	0.00100	0.05142	0.32940	0.12960	0.53792	2.50740	0.60000	2.61974
	B1->Y (FR)	0.01860	0.00100	0.04031	0.32940	0.12960	0.54819	2.50740	0.60000	2.81163
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.04701	0.32940	0.06480	0.52965	2.50740	0.30000	2.60776
	A2->Y (FR)	0.01860	0.00100	0.05560	0.32940	0.06480	0.53862	2.50740	0.30000	2.61940
	B1->Y (FR)	0.01860	0.00100	0.04456	0.32940	0.06480	0.54888	2.50740	0.30000	2.81344

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	0.03523	0.32940	0.12960	0.44194	2.50740	0.60000	2.34637
	A2->Y (RF)	0.01860	0.00100	0.04052	0.32940	0.12960	0.43291	2.50740	0.60000	2.21164
	B1->Y (RF)	0.01860	0.00100	0.01991	0.32940	0.12960	0.32720	2.50740	0.60000	1.86131
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.03886	0.32940	0.06480	0.44255	2.50740	0.30000	2.34554
	A2->Y (RF)	0.01860	0.00100	0.04386	0.32940	0.06480	0.43322	2.50740	0.30000	2.21433
	B1->Y (RF)	0.01860	0.00100	0.02192	0.32940	0.06480	0.32855	2.50740	0.30000	1.86326

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	0.04031	0.32940	0.12960	0.54819	2.50740	0.60000	2.81163
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03023	0.32940	0.12960	0.53855	2.50740	0.60000	2.80956
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02532	0.32940	0.12960	0.44222	2.50740	0.60000	2.40915
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.04456	0.32940	0.06480	0.54888	2.50740	0.30000	2.81344
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03466	0.32940	0.06480	0.53773	2.50740	0.30000	2.80158
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02859	0.32940	0.06480	0.44228	2.50740	0.30000	2.40724

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	0.01991	0.32940	0.12960	0.32720	2.50740	0.60000	1.86131
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01966	0.32940	0.12960	0.32714	2.50740	0.60000	1.85616
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01946	0.32940	0.12960	0.32635	2.50740	0.60000	1.85698
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02192	0.32940	0.06480	0.32855	2.50740	0.30000	1.86326
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02166	0.32940	0.06480	0.32743	2.50740	0.30000	1.85842
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02145	0.32940	0.06480	0.32731	2.50740	0.30000	1.86057

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	0.00888	0.32940	0.12960	0.00888	2.50740	0.60000	0.01290
	A2	0.01860	0.00100	0.01085	0.32940	0.12960	0.01069	2.50740	0.60000	0.01525
	B1	0.01860	0.00100	0.00625	0.32940	0.12960	0.00680	2.50740	0.60000	0.01398
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00455	0.32940	0.06480	0.00448	2.50740	0.30000	0.00650
	A2	0.01860	0.00100	0.00540	0.32940	0.06480	0.00529	2.50740	0.30000	0.00740
	B1	0.01860	0.00100	0.00324	0.32940	0.06480	0.00344	2.50740	0.30000	0.00702

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	0.00846	0.32940	0.12960	0.00813	2.50740	0.60000	0.01294
	A2	0.01860	0.00100	0.01206	0.32940	0.12960	0.01148	2.50740	0.60000	0.01414
	B1	0.01860	0.00100	0.00269	0.32940	0.12960	0.00328	2.50740	0.60000	0.01013
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00468	0.32940	0.06480	0.00451	2.50740	0.30000	0.00685
	A2	0.01860	0.00100	0.00637	0.32940	0.06480	0.00609	2.50740	0.30000	0.00784
	B1	0.01860	0.00100	0.00176	0.32940	0.06480	0.00202	2.50740	0.30000	0.00583

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	0.00747	0.32940	0.12960	0.00761	2.50740	0.60000	0.01281
	B1	(!A1 * A2)	0.01860	0.00100	0.00621	0.32940	0.12960	0.00676	2.50740	0.60000	0.01258
	B1	(!A1 * !A2)	0.01860	0.00100	0.00625	0.32940	0.12960	0.00680	2.50740	0.60000	0.01398
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00372	0.32940	0.06480	0.00376	2.50740	0.30000	0.00640
	B1	(!A1 * A2)	0.01860	0.00100	0.00323	0.32940	0.06480	0.00342	2.50740	0.30000	0.00630
	B1	(!A1 * !A2)	0.01860	0.00100	0.00324	0.32940	0.06480	0.00344	2.50740	0.30000	0.00702

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	0.00687	0.32940	0.12960	0.00735	2.50740	0.60000	0.01389
	B1	(!A1 * A2)	0.01860	0.00100	0.00286	0.32940	0.12960	0.00369	2.50740	0.60000	0.00971
	B1	(!A1 * !A2)	0.01860	0.00100	0.00269	0.32940	0.12960	0.00328	2.50740	0.60000	0.01013
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00385	0.32940	0.06480	0.00410	2.50740	0.30000	0.00730
	B1	(!A1 * A2)	0.01860	0.00100	0.00185	0.32940	0.06480	0.00209	2.50740	0.30000	0.00534
	B1	(!A1 * !A2)	0.01860	0.00100	0.00176	0.32940	0.06480	0.00202	2.50740	0.30000	0.00583

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00106	0.32940	-0.00110	2.50740	-0.00109
sg13g2_a21oi_1	0.01860	-0.00052	0.32940	-0.00055	2.50740	-0.00054

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00204	0.32940	0.00212	2.50740	0.00213
sg13g2_a21oi_1	0.01860	0.00092	0.32940	0.00096	2.50740	0.00097

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	-0.00026	0.32940	-0.00024	2.50740	-0.00024
	(!A2 * !B1)	0.01860	-0.00106	0.32940	-0.00110	2.50740	-0.00109
sg13g2_a21oi_1	B1	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001
	(!A2 * !B1)	0.01860	-0.00052	0.32940	-0.00055	2.50740	-0.00054

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	0.00026	0.32940	0.00024	2.50740	0.00024
	(!A2 * !B1)	0.01860	0.00204	0.32940	0.00212	2.50740	0.00213
sg13g2_a21oi_1	B1	0.01860	0.00002	0.32940	0.00001	2.50740	0.00001
	(!A2 * !B1)	0.01860	0.00092	0.32940	0.00096	2.50740	0.00097

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00048	0.32940	-0.00052	2.50740	-0.00053
sg13g2_a21oi_1	0.01860	-0.00025	0.32940	-0.00027	2.50740	-0.00027

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00096	0.32940	0.00070	2.50740	0.00061
sg13g2_a21oi_1	0.01860	0.00047	0.32940	0.00035	2.50740	0.00031

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	-0.00015	0.32940	-0.00014	2.50740	-0.00014
	(!A1 * !B1)	0.01860	-0.00048	0.32940	-0.00052	2.50740	-0.00053
sg13g2_a21oi_1	B1	0.01860	-0.00008	0.32940	-0.00008	2.50740	-0.00008
	(!A1 * !B1)	0.01860	-0.00025	0.32940	-0.00027	2.50740	-0.00027

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	0.00015	0.32940	0.00014	2.50740	0.00014
	(!A1 * !B1)	0.01860	0.00096	0.32940	0.00070	2.50740	0.00061
sg13g2_a21oi_1	B1	0.01860	0.00008	0.32940	0.00008	2.50740	0.00008
	(!A1 * !B1)	0.01860	0.00047	0.32940	0.00035	2.50740	0.00031

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00085	0.32940	0.00089	2.50740	0.00089
sg13g2_a21oi_1	0.01860	0.00048	0.32940	0.00050	2.50740	0.00050

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00085	0.32940	-0.00089	2.50740	-0.00089
sg13g2_a21oi_1	0.01860	-0.00048	0.32940	-0.00050	2.50740	-0.00050

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	0.00085	0.32940	0.00089	2.50740	0.00089
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00048	0.32940	0.00050	2.50740	0.00050

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	-0.00085	0.32940	-0.00089	2.50740	-0.00089
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00048	0.32940	-0.00050	2.50740	-0.00050

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	0.00290	0.00294	0.00271	0.00279	0.00249	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	0.10828	0.32940	0.12960	1.35806	2.50740	0.60000	6.07049
	A2->Y (FR)	0.01860	0.00100	0.12091	0.32940	0.12960	1.36913	2.50740	0.60000	6.07619
	B1->Y (FR)	0.01860	0.00100	0.09694	0.32940	0.12960	1.36005	2.50740	0.60000	6.25858
	B2->Y (FR)	0.01860	0.00100	0.10957	0.32940	0.12960	1.36939	2.50740	0.60000	6.26089
	C1->Y (FR)	0.01860	0.00100	0.07038	0.32940	0.12960	1.34478	2.50740	0.60000	6.35899

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	0.05045	0.32940	0.12960	0.74574	2.50740	0.60000	3.65950
	A2->Y (RF)	0.01860	0.00100	0.05630	0.32940	0.12960	0.73751	2.50740	0.60000	3.54734
	B1->Y (RF)	0.01860	0.00100	0.04584	0.32940	0.12960	0.73374	2.50740	0.60000	3.64624
	B2->Y (RF)	0.01860	0.00100	0.05071	0.32940	0.12960	0.72456	2.50740	0.60000	3.53350
	C1->Y (RF)	0.01860	0.00100	0.02496	0.32940	0.12960	0.49618	2.50740	0.60000	2.69202

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	0.10828	0.32940	0.12960	1.35806	2.50740	0.60000	6.07049
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.09304	0.32940	0.12960	1.34488	2.50740	0.60000	6.06731
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.08332	0.32940	0.12960	1.14337	2.50740	0.60000	5.22176
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.12091	0.32940	0.12960	1.36913	2.50740	0.60000	6.07619
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.10592	0.32940	0.12960	1.35576	2.50740	0.60000	6.07171
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.09392	0.32940	0.12960	1.15279	2.50740	0.60000	5.22439
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.09694	0.32940	0.12960	1.36005	2.50740	0.60000	6.25858
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.08165	0.32940	0.12960	1.34551	2.50740	0.60000	6.25249
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.06839	0.32940	0.12960	1.13491	2.50740	0.60000	5.32576
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.10957	0.32940	0.12960	1.36939	2.50740	0.60000	6.26089
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.09453	0.32940	0.12960	1.35543	2.50740	0.60000	6.25508
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.07883	0.32940	0.12960	1.14304	2.50740	0.60000	5.32393
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.07038	0.32940	0.12960	1.34478	2.50740	0.60000	6.35899

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	0.05045	0.32940	0.12960	0.74574	2.50740	0.60000	3.65950
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.04934	0.32940	0.12960	0.74210	2.50740	0.60000	3.65572
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.05159	0.32940	0.12960	0.74646	2.50740	0.60000	3.65825
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.05515	0.32940	0.12960	0.73691	2.50740	0.60000	3.54722
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.05406	0.32940	0.12960	0.73334	2.50740	0.60000	3.54322
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.05630	0.32940	0.12960	0.73751	2.50740	0.60000	3.54734
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.04584	0.32940	0.12960	0.73374	2.50740	0.60000	3.64624
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.04508	0.32940	0.12960	0.72972	2.50740	0.60000	3.64599
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.04473	0.32940	0.12960	0.72938	2.50740	0.60000	3.64159
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.05071	0.32940	0.12960	0.72456	2.50740	0.60000	3.53350
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.05000	0.32940	0.12960	0.72121	2.50740	0.60000	3.52973
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.04963	0.32940	0.12960	0.72098	2.50740	0.60000	3.52973
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02496	0.32940	0.12960	0.49618	2.50740	0.60000	2.69202

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	0.01019	0.32940	0.12960	0.00983	2.50740	0.60000	0.00980
	A2	0.01860	0.00100	0.01041	0.32940	0.12960	0.00994	2.50740	0.60000	0.01010
	B1	0.01860	0.00100	0.00942	0.32940	0.12960	0.00914	2.50740	0.60000	0.00920
	B2	0.01860	0.00100	0.00972	0.32940	0.12960	0.00923	2.50740	0.60000	0.00938
	C1	0.01860	0.00100	0.00450	0.32940	0.12960	0.00426	2.50740	0.60000	0.00487

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	0.00675	0.32940	0.12960	0.00608	2.50740	0.60000	0.00573
	A2	0.01860	0.00100	0.00872	0.32940	0.12960	0.00805	2.50740	0.60000	0.00779
	B1	0.01860	0.00100	0.00257	0.32940	0.12960	0.00212	2.50740	0.60000	0.00234
	B2	0.01860	0.00100	0.00456	0.32940	0.12960	0.00409	2.50740	0.60000	0.00385
	C1	0.01860	0.00100	0.00405	0.32940	0.12960	0.00388	2.50740	0.60000	0.00331

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	0.01019	0.32940	0.12960	0.00983	2.50740	0.60000	0.00980
	A1	(!B1 * B2)	0.01860	0.00100	0.00973	0.32940	0.12960	0.00945	2.50740	0.60000	0.00999
	A1	(!B1 * !B2)	0.01860	0.00100	0.01197	0.32940	0.12960	0.01167	2.50740	0.60000	0.01221
	A2	(B1 * !B2)	0.01860	0.00100	0.01041	0.32940	0.12960	0.00994	2.50740	0.60000	0.01010
	A2	(!B1 * B2)	0.01860	0.00100	0.01001	0.32940	0.12960	0.00958	2.50740	0.60000	0.01019
	A2	(!B1 * !B2)	0.01860	0.00100	0.01224	0.32940	0.12960	0.01176	2.50740	0.60000	0.01181
	B1	(A1 * !A2)	0.01860	0.00100	0.00988	0.32940	0.12960	0.00953	2.50740	0.60000	0.00982
	B1	(!A1 * A2)	0.01860	0.00100	0.00942	0.32940	0.12960	0.00912	2.50740	0.60000	0.00955
	B1	(!A1 * !A2)	0.01860	0.00100	0.00942	0.32940	0.12960	0.00914	2.50740	0.60000	0.00920
	B2	(A1 * !A2)	0.01860	0.00100	0.01013	0.32940	0.12960	0.00961	2.50740	0.60000	0.00981
	B2	(!A1 * A2)	0.01860	0.00100	0.00973	0.32940	0.12960	0.00922	2.50740	0.60000	0.00938
	B2	(!A1 * !A2)	0.01860	0.00100	0.00972	0.32940	0.12960	0.00923	2.50740	0.60000	0.00938
	C1	(!A1 * A2)	0.01860	0.00100	0.00450	0.32940	0.12960	0.00426	2.50740	0.60000	0.00487

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	0.00875	0.32940	0.12960	0.00805	2.50740	0.60000	0.00777
	A1	(!B1 * B2)	0.01860	0.00100	0.00675	0.32940	0.12960	0.00608	2.50740	0.60000	0.00573
	A1	(!B1 * !B2)	0.01860	0.00100	0.00563	0.32940	0.12960	0.00507	2.50740	0.60000	0.00476
	A2	(B1 * !B2)	0.01860	0.00100	0.01072	0.32940	0.12960	0.01001	2.50740	0.60000	0.00989
	A2	(!B1 * B2)	0.01860	0.00100	0.00872	0.32940	0.12960	0.00805	2.50740	0.60000	0.00779
	A2	(!B1 * !B2)	0.01860	0.00100	0.00761	0.32940	0.12960	0.00700	2.50740	0.60000	0.00664
	B1	(A1 * !A2)	0.01860	0.00100	0.00457	0.32940	0.12960	0.00415	2.50740	0.60000	0.00383
	B1	(!A1 * A2)	0.01860	0.00100	0.00257	0.32940	0.12960	0.00212	2.50740	0.60000	0.00234
	B1	(!A1 * !A2)	0.01860	0.00100	0.00249	0.32940	0.12960	0.00206	2.50740	0.60000	0.00178
	B2	(A1 * !A2)	0.01860	0.00100	0.00656	0.32940	0.12960	0.00604	2.50740	0.60000	0.00578
	B2	(!A1 * A2)	0.01860	0.00100	0.00456	0.32940	0.12960	0.00409	2.50740	0.60000	0.00385
	B2	(!A1 * !A2)	0.01860	0.00100	0.00449	0.32940	0.12960	0.00399	2.50740	0.60000	0.00400
	C1	(!A1 * A2)	0.01860	0.00100	0.00405	0.32940	0.12960	0.00388	2.50740	0.60000	0.00331

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00008	0.32940	-0.00007	2.50740	-0.00008

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00008	0.32940	0.00007	2.50740	0.00008

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00011	0.32940	-0.00010	2.50740	-0.00010

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00011	0.32940	0.00010	2.50740	0.00010

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	-0.00011	0.32940	-0.00010	2.50740	-0.00010

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	0.00011	0.32940	0.00010	2.50740	0.00010

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00181	0.32940	0.00184	2.50740	0.00185

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00181	0.32940	-0.00184	2.50740	-0.00185

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	-0.00007	0.32940	-0.00007	2.50740	-0.00007
	(A1 * A2 * !C1)	0.01860	0.00181	0.32940	0.00184	2.50740	0.00185

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	0.00007	0.32940	0.00007	2.50740	0.00007
	(A1 * A2 * !C1)	0.01860	-0.00181	0.32940	-0.00184	2.50740	-0.00185

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	0.00187	2.50740	0.00188

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	-0.00187	2.50740	-0.00188

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	-0.00005	2.50740	-0.00005
	(A1 * A2 * !C1)	0.01860	0.00186	0.32940	0.00187	2.50740	0.00188

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	0.00004	0.32940	0.00005	2.50740	0.00005
	(A1 * A2 * !C1)	0.01860	-0.00186	0.32940	-0.00187	2.50740	-0.00188

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00046	0.32940	0.00049	2.50740	0.00049

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00081	0.32940	0.00083	2.50740	0.00085

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	0.00046	0.32940	0.00049	2.50740	0.00049

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	0.00081	0.32940	0.00083	2.50740	0.00085

A22OI



*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	Y
0	x	0	0	1
0	x	x	1	0
x	x	1	x	0
1	0	0	0	1
1	0	x	1	0
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	0.00307	0.00303	0.00350	0.00355	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	0.04798	0.32940	0.06480	0.45994	2.50740	0.30000	2.34460
	A2->Y (FR)	0.01860	0.00100	0.05391	0.32940	0.06480	0.46570	2.50740	0.30000	2.35284
	B1->Y (FR)	0.01860	0.00100	0.03866	0.32940	0.06480	0.45112	2.50740	0.30000	2.41036
	B2->Y (FR)	0.01860	0.00100	0.03255	0.32940	0.06480	0.44507	2.50740	0.30000	2.40296

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	0.04959	0.32940	0.06480	0.45276	2.50740	0.30000	2.35700
	A2->Y (RF)	0.01860	0.00100	0.05420	0.32940	0.06480	0.44263	2.50740	0.30000	2.22258
	B1->Y (RF)	0.01860	0.00100	0.03815	0.32940	0.06480	0.42437	2.50740	0.30000	2.20421
	B2->Y (RF)	0.01860	0.00100	0.03287	0.32940	0.06480	0.43423	2.50740	0.30000	2.33788

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	0.00521	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	0.00521	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	0.00009	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	0.00025	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000

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	-0.00140	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	-0.00038	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	-0.00009	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	-0.00025	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00625	0.32940	0.00702	2.50740	0.02322

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00317	0.32940	0.01209	2.50740	0.02811

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00719	0.32940	0.00878	2.50740	0.02389

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00338	0.32940	0.01150	2.50740	0.02669

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00699	0.32940	0.00829	2.50740	0.02390

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00359	0.32940	0.00473	2.50740	0.02059

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00497	0.32940	0.00698	2.50740	0.02372

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00304	0.32940	0.00438	2.50740	0.02111

AND2x



*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	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	0.00254	0.60000
sg13g2_and2_1	0.00253	0.00255	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	0.08027	0.32940	0.12960	0.37956	2.50740	0.60000	1.31487
	B->X (RR)	0.01860	0.00100	0.08548	0.32940	0.12960	0.37510	2.50740	0.60000	1.29264
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.06500	0.32940	0.06480	0.33880	2.50740	0.30000	1.22301
	B->X (RR)	0.01860	0.00100	0.07033	0.32940	0.06480	0.33939	2.50740	0.30000	1.21547

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	0.06813	0.32940	0.12960	0.34784	2.50740	0.60000	1.18626
	B->X (FF)	0.01860	0.00100	0.07333	0.32940	0.12960	0.36013	2.50740	0.60000	1.21590
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.05607	0.32940	0.06480	0.30819	2.50740	0.30000	1.09498
	B->X (FF)	0.01860	0.00100	0.06143	0.32940	0.06480	0.32360	2.50740	0.30000	1.13468

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	0.01311	0.32940	0.12960	0.01377	2.50740	0.60000	0.03033
	B	0.01860	0.00100	0.01484	0.32940	0.12960	0.01504	2.50740	0.60000	0.02802
sg13g2_and2_1	A	0.01860	0.00100	0.00813	0.32940	0.06480	0.00910	2.50740	0.30000	0.02299
	B	0.01860	0.00100	0.00989	0.32940	0.06480	0.01044	2.50740	0.30000	0.02307

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	0.01175	0.32940	0.12960	0.01256	2.50740	0.60000	0.02750
	B	0.01860	0.00100	0.01196	0.32940	0.12960	0.01290	2.50740	0.60000	0.02653
sg13g2_and2_1	A	0.01860	0.00100	0.00714	0.32940	0.06480	0.00806	2.50740	0.30000	0.02123
	B	0.01860	0.00100	0.00736	0.32940	0.06480	0.00844	2.50740	0.30000	0.02179

AND3x



*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	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	0.00249	0.00252	0.60000
sg13g2_and3_1	0.00236	0.00250	0.00251	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	0.10872	0.32940	0.12960	0.42428	2.50740	0.60000	1.40501
	B->X (RR)	0.01860	0.00100	0.11817	0.32940	0.12960	0.42491	2.50740	0.60000	1.40197
	C->X (RR)	0.01860	0.00100	0.12258	0.32940	0.12960	0.41674	2.50740	0.60000	1.35230
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.08721	0.32940	0.06480	0.37489	2.50740	0.30000	1.30675
	B->X (RR)	0.01860	0.00100	0.09680	0.32940	0.06480	0.37857	2.50740	0.30000	1.30864
	C->X (RR)	0.01860	0.00100	0.10131	0.32940	0.06480	0.37390	2.50740	0.30000	1.27262

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	0.07173	0.32940	0.12960	0.35562	2.50740	0.60000	1.18719
	B->X (FF)	0.01860	0.00100	0.07729	0.32940	0.12960	0.36750	2.50740	0.60000	1.21727
	C->X (FF)	0.01860	0.00100	0.08110	0.32940	0.12960	0.37736	2.50740	0.60000	1.24933
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.06000	0.32940	0.06480	0.31825	2.50740	0.30000	1.09771
	B->X (FF)	0.01860	0.00100	0.06567	0.32940	0.06480	0.33136	2.50740	0.30000	1.13543
	C->X (FF)	0.01860	0.00100	0.06931	0.32940	0.06480	0.34219	2.50740	0.30000	1.16738

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	0.01540	0.32940	0.12960	0.01563	2.50740	0.60000	0.02949
	B	0.01860	0.00100	0.01650	0.32940	0.12960	0.01620	2.50740	0.60000	0.02857
	C	0.01860	0.00100	0.01812	0.32940	0.12960	0.01761	2.50740	0.60000	0.03065
sg13g2_and3_1	A	0.01860	0.00100	0.00998	0.32940	0.06480	0.01079	2.50740	0.30000	0.02333
	B	0.01860	0.00100	0.01109	0.32940	0.06480	0.01125	2.50740	0.30000	0.02373
	C	0.01860	0.00100	0.01269	0.32940	0.06480	0.01269	2.50740	0.30000	0.02436

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	0.01131	0.32940	0.12960	0.01181	2.50740	0.60000	0.02524
	B	0.01860	0.00100	0.01224	0.32940	0.12960	0.01294	2.50740	0.60000	0.02580
	C	0.01860	0.00100	0.01247	0.32940	0.12960	0.01339	2.50740	0.60000	0.02545
sg13g2_and3_1	A	0.01860	0.00100	0.00664	0.32940	0.06480	0.00735	2.50740	0.30000	0.01925
	B	0.01860	0.00100	0.00757	0.32940	0.06480	0.00824	2.50740	0.30000	0.02054
	C	0.01860	0.00100	0.00779	0.32940	0.06480	0.00852	2.50740	0.30000	0.02043

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00056	0.32940	-0.00074	2.50740	-0.00084
sg13g2_and3_1	0.01860	-0.00058	0.32940	-0.00075	2.50740	-0.00084

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00056	0.32940	0.00074	2.50740	0.00084
sg13g2_and3_1	0.01860	0.00058	0.32940	0.00075	2.50740	0.00084

AND4x



*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	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	0.00225	0.00226	0.00257	0.00254	0.60000
sg13g2_and4_1	0.00225	0.00227	0.00257	0.00254	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	0.13825	0.32940	0.12960	0.46621	2.50740	0.60000	1.49060
	B->X (RR)	0.01860	0.00100	0.15132	0.32940	0.12960	0.47058	2.50740	0.60000	1.48500
	C->X (RR)	0.01860	0.00100	0.15915	0.32940	0.12960	0.46698	2.50740	0.60000	1.45393
	D->X (RR)	0.01860	0.00100	0.16372	0.32940	0.12960	0.46332	2.50740	0.60000	1.40437
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.11114	0.32940	0.06480	0.41205	2.50740	0.30000	1.38538
	B->X (RR)	0.01860	0.00100	0.12441	0.32940	0.06480	0.41838	2.50740	0.30000	1.39190
	C->X (RR)	0.01860	0.00100	0.13222	0.32940	0.06480	0.41728	2.50740	0.30000	1.36419
	D->X (RR)	0.01860	0.00100	0.13678	0.32940	0.06480	0.41565	2.50740	0.30000	1.32241

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	0.07465	0.32940	0.12960	0.36114	2.50740	0.60000	1.18493
	B->X (FF)	0.01860	0.00100	0.08017	0.32940	0.12960	0.37141	2.50740	0.60000	1.21254
	C->X (FF)	0.01860	0.00100	0.08423	0.32940	0.12960	0.38113	2.50740	0.60000	1.24283
	D->X (FF)	0.01860	0.00100	0.08744	0.32940	0.12960	0.38935	2.50740	0.60000	1.27381
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.06375	0.32940	0.06480	0.32479	2.50740	0.30000	1.09707
	B->X (FF)	0.01860	0.00100	0.06931	0.32940	0.06480	0.33692	2.50740	0.30000	1.13139
	C->X (FF)	0.01860	0.00100	0.07332	0.32940	0.06480	0.34730	2.50740	0.30000	1.16174
	D->X (FF)	0.01860	0.00100	0.07613	0.32940	0.06480	0.35695	2.50740	0.30000	1.19734

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	0.01665	0.32940	0.12960	0.01579	2.50740	0.60000	0.02696
	B	0.01860	0.00100	0.01871	0.32940	0.12960	0.01761	2.50740	0.60000	0.02717
	C	0.01860	0.00100	0.01977	0.32940	0.12960	0.01849	2.50740	0.60000	0.02906
	D	0.01860	0.00100	0.01981	0.32940	0.12960	0.01836	2.50740	0.60000	0.03060
sg13g2_and4_1	A	0.01860	0.00100	0.01068	0.32940	0.06480	0.01116	2.50740	0.30000	0.02345
	B	0.01860	0.00100	0.01279	0.32940	0.06480	0.01280	2.50740	0.30000	0.02430
	C	0.01860	0.00100	0.01383	0.32940	0.06480	0.01369	2.50740	0.30000	0.02535
	D	0.01860	0.00100	0.01387	0.32940	0.06480	0.01367	2.50740	0.30000	0.02499

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	0.01156	0.32940	0.12960	0.01220	2.50740	0.60000	0.02436
	B	0.01860	0.00100	0.01200	0.32940	0.12960	0.01233	2.50740	0.60000	0.02313
	C	0.01860	0.00100	0.01280	0.32940	0.12960	0.01345	2.50740	0.60000	0.02640
	D	0.01860	0.00100	0.01344	0.32940	0.12960	0.01405	2.50740	0.60000	0.02658
sg13g2_and4_1	A	0.01860	0.00100	0.00692	0.32940	0.06480	0.00762	2.50740	0.30000	0.01940
	B	0.01860	0.00100	0.00733	0.32940	0.06480	0.00784	2.50740	0.30000	0.01950
	C	0.01860	0.00100	0.00812	0.32940	0.06480	0.00861	2.50740	0.30000	0.01987
	D	0.01860	0.00100	0.00867	0.32940	0.06480	0.00936	2.50740	0.30000	0.02181

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00028	0.32940	-0.00029	2.50740	-0.00028
sg13g2_and4_1	0.01860	-0.00029	0.32940	-0.00029	2.50740	-0.00028

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00087	0.32940	0.00091	2.50740	0.00091
sg13g2_and4_1	0.01860	0.00088	0.32940	0.00091	2.50740	0.00091

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	-0.00028	0.32940	-0.00029	2.50740	-0.00028
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00029	0.32940	-0.00029	2.50740	-0.00028

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	0.00087	0.32940	0.00091	2.50740	0.00091
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00088	0.32940	0.00091	2.50740	0.00091

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00056	0.32940	-0.00057	2.50740	-0.00057
sg13g2_and4_1	0.01860	-0.00056	0.32940	-0.00058	2.50740	-0.00057

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00058	0.32940	0.00061	2.50740	0.00062
sg13g2_and4_1	0.01860	0.00059	0.32940	0.00062	2.50740	0.00062

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	-0.00056	0.32940	-0.00057	2.50740	-0.00057
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00056	0.32940	-0.00058	2.50740	-0.00057

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	0.00058	0.32940	0.00061	2.50740	0.00062
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00059	0.32940	0.00062	2.50740	0.00062

Passive power(pJ) for C rising :

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

Passive power(pJ) for C falling :

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

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	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00150	0.32940	0.00153	2.50740	0.00151
sg13g2_and4_1	0.01860	0.00150	0.32940	0.00153	2.50740	0.00151

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00025	0.32940	-0.00033	2.50740	-0.00035
sg13g2_and4_1	0.01860	-0.00024	0.32940	-0.00033	2.50740	-0.00035

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	0.00150	0.32940	0.00153	2.50740	0.00151
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00150	0.32940	0.00153	2.50740	0.00151

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	-0.00025	0.32940	-0.00033	2.50740	-0.00035
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	-0.00024	0.32940	-0.00033	2.50740	-0.00035

A021x



*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	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	0.00286	0.00282	0.00258	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	0.08554	0.32940	0.12960	0.38708	2.50740	0.60000	1.31219
	A2->X (RR)	0.01860	0.00100	0.08997	0.32940	0.12960	0.38136	2.50740	0.60000	1.29335
	B1->X (RR)	0.01860	0.00100	0.05596	0.32940	0.12960	0.34390	2.50740	0.60000	1.20223
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.08041	0.32940	0.06480	0.36924	2.50740	0.30000	1.29668
	A2->X (RR)	0.01860	0.00100	0.08503	0.32940	0.06480	0.36484	2.50740	0.30000	1.27917
	B1->X (RR)	0.01860	0.00100	0.05283	0.32940	0.06480	0.32681	2.50740	0.30000	1.18584

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	0.11382	0.32940	0.12960	0.38965	2.50740	0.60000	1.24369
	A2->X (FF)	0.01860	0.00100	0.12391	0.32940	0.12960	0.40554	2.50740	0.60000	1.27950
	B1->X (FF)	0.01860	0.00100	0.11353	0.32940	0.12960	0.41313	2.50740	0.60000	1.34150
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.09104	0.32940	0.06480	0.34304	2.50740	0.30000	1.13351
	A2->X (FF)	0.01860	0.00100	0.09999	0.32940	0.06480	0.35822	2.50740	0.30000	1.17018
	B1->X (FF)	0.01860	0.00100	0.08917	0.32940	0.06480	0.36030	2.50740	0.30000	1.21586

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	0.05596	0.32940	0.12960	0.34390	2.50740	0.60000	1.20223
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.05353	0.32940	0.12960	0.33342	2.50740	0.60000	1.17229
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.05283	0.32940	0.06480	0.32681	2.50740	0.30000	1.18584
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.04961	0.32940	0.06480	0.31364	2.50740	0.30000	1.14927

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	0.11353	0.32940	0.12960	0.41313	2.50740	0.60000	1.34150
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.10138	0.32940	0.12960	0.39560	2.50740	0.60000	1.30328
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.08917	0.32940	0.06480	0.36030	2.50740	0.30000	1.21586
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.07860	0.32940	0.06480	0.34171	2.50740	0.30000	1.18111

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	0.01431	0.32940	0.12960	0.01484	2.50740	0.60000	0.03001
	A2	0.01860	0.00100	0.01624	0.32940	0.12960	0.01653	2.50740	0.60000	0.03025
	B1	0.01860	0.00100	0.01206	0.32940	0.12960	0.01321	2.50740	0.60000	0.02866
sg13g2_a21o_1	A1	0.01860	0.00100	0.00927	0.32940	0.06480	0.00989	2.50740	0.30000	0.02403
	A2	0.01860	0.00100	0.01074	0.32940	0.06480	0.01113	2.50740	0.30000	0.02350
	B1	0.01860	0.00100	0.00731	0.32940	0.06480	0.00809	2.50740	0.30000	0.02417

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	0.01569	0.32940	0.12960	0.01541	2.50740	0.60000	0.02951
	A2	0.01860	0.00100	0.01594	0.32940	0.12960	0.01575	2.50740	0.60000	0.02980
	B1	0.01860	0.00100	0.01262	0.32940	0.12960	0.01320	2.50740	0.60000	0.02708
sg13g2_a21o_1	A1	0.01860	0.00100	0.01034	0.32940	0.06480	0.01056	2.50740	0.30000	0.02295
	A2	0.01860	0.00100	0.01041	0.32940	0.06480	0.01066	2.50740	0.30000	0.02328
	B1	0.01860	0.00100	0.00716	0.32940	0.06480	0.00828	2.50740	0.30000	0.02263

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	0.01408	0.32940	0.12960	0.01526	2.50740	0.60000	0.03076
	B1	(!A1 * A2)	0.01860	0.00100	0.01206	0.32940	0.12960	0.01321	2.50740	0.60000	0.02866
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00904	0.32940	0.06480	0.00995	2.50740	0.30000	0.02477
	B1	(!A1 * A2)	0.01860	0.00100	0.00731	0.32940	0.06480	0.00809	2.50740	0.30000	0.02417

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	0.01304	0.32940	0.12960	0.01316	2.50740	0.60000	0.02755
	B1	(!A1 * A2)	0.01860	0.00100	0.01262	0.32940	0.12960	0.01320	2.50740	0.60000	0.02708
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00743	0.32940	0.06480	0.00832	2.50740	0.30000	0.02281
	B1	(!A1 * A2)	0.01860	0.00100	0.00716	0.32940	0.06480	0.00828	2.50740	0.30000	0.02263

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00002	0.32940	0.00007	2.50740	0.00007
sg13g2_a21o_1	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	-0.00002	0.32940	-0.00007	2.50740	-0.00007
sg13g2_a21o_1	0.01860	0.00002	0.32940	0.00001	2.50740	0.00001

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	0.00038	0.32940	0.00020	2.50740	0.00015
	(!A2 * B1)	0.01860	0.00002	0.32940	0.00007	2.50740	0.00007
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00024	0.32940	0.00005	2.50740	-0.00001
	(!A2 * B1)	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

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	-0.00013	0.32940	-0.00015	2.50740	-0.00015
	(!A2 * B1)	0.01860	-0.00002	0.32940	-0.00007	2.50740	-0.00007
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00003	0.32940	0.00002	2.50740	0.00002
	(!A2 * B1)	0.01860	0.00002	0.32940	0.00001	2.50740	0.00001

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00028	0.32940	0.00008	2.50740	0.00002

Passive power(pJ) for A2 falling :

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

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	0.00032	0.32940	0.00013	2.50740	0.00007
	(!A1 * B1)	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00028	0.32940	0.00008	2.50740	0.00002
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	-0.00006	0.32940	-0.00007	2.50740	-0.00007
	(!A1 * B1)	0.01860	-0.00001	0.32940	-0.00000	2.50740	-0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00000	0.32940	-0.00000	2.50740	-0.00001
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00053	0.32940	0.00057	2.50740	0.00058
sg13g2_a21o_1	0.01860	0.00043	0.32940	0.00046	2.50740	0.00047

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00064	0.32940	0.00064	2.50740	0.00065
sg13g2_a21o_1	0.01860	0.00076	0.32940	0.00077	2.50740	0.00078

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	0.00053	0.32940	0.00057	2.50740	0.00058
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00043	0.32940	0.00046	2.50740	0.00047

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	0.00064	0.32940	0.00064	2.50740	0.00065
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00076	0.32940	0.00077	2.50740	0.00078

BTLx



*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	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	0.00574	0.01592	2.40000
sg13g2_ebufn_4	0.00294	0.00966	1.20000
sg13g2_ebufn_2	0.00260	0.00598	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	0.01971	0.06623	0.32940	0.53711	0.57453	2.50740	2.41871	2.21960
	TE_B->Z (RR)	0.01860	0.01971	0.07238	0.32940	0.53711	0.16875	2.50740	2.41871	0.36095
	TE_B->Z (FR)	0.01860	0.01971	0.03487	0.32940	0.53711	0.52298	2.50740	2.41871	2.59407
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01051	0.06844	0.32940	0.26871	0.57578	2.50740	1.20951	2.22081
	TE_B->Z (RR)	0.01860	0.01051	0.05541	0.32940	0.26871	0.12797	2.50740	1.20951	0.26094
	TE_B->Z (FR)	0.01860	0.01051	0.03504	0.32940	0.26871	0.52165	2.50740	1.20951	2.58787
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00586	0.05910	0.32940	0.13446	0.53945	2.50740	0.60486	2.13496
	TE_B->Z (RR)	0.01860	0.00586	0.04784	0.32940	0.13446	0.10716	2.50740	0.60486	0.21496
	TE_B->Z (FR)	0.01860	0.00586	0.03539	0.32940	0.13446	0.51777	2.50740	0.60486	2.57566

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	0.02971	0.08622	0.32940	0.54711	0.48784	2.50740	2.42871	1.76294
	TE_B->Z (RF)	0.01860	0.02971	0.04094	0.32940	0.54711	-0.18698	2.50740	2.42871	-1.87328
	TE_B->Z (FF)	0.01860	0.02971	0.08817	0.32940	0.54711	0.49320	2.50740	2.42871	1.76133
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01562	0.08883	0.32940	0.27382	0.49103	2.50740	1.21462	1.76902
	TE_B->Z (RF)	0.01860	0.01562	0.03190	0.32940	0.27382	-0.18595	2.50740	1.21462	-1.87229
	TE_B->Z (FF)	0.01860	0.01562	0.06628	0.32940	0.27382	0.44064	2.50740	1.21462	1.63032
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00849	0.06720	0.32940	0.13709	0.44432	2.50740	0.60749	1.66198
	TE_B->Z (RF)	0.01860	0.00849	0.02256	0.32940	0.13709	-0.20302	2.50740	0.60749	-1.88923
	TE_B->Z (FF)	0.01860	0.00849	0.05675	0.32940	0.13709	0.40679	2.50740	0.60749	1.54995

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	0.01971	0.01770	0.32940	0.53711	0.02716	2.50740	2.41871	0.02557
	TE_B	0.01860	0.01971	0.01294	0.32940	0.53711	0.01070	2.50740	2.41871	0.00609
sg13g2_ebufn_4	A	0.01860	0.01051	0.00899	0.32940	0.26871	0.01330	2.50740	1.20951	0.01192
	TE_B	0.01860	0.01051	0.00642	0.32940	0.26871	0.00525	2.50740	1.20951	0.00257
sg13g2_ebufn_2	A	0.01860	0.00586	0.00485	0.32940	0.13446	0.00663	2.50740	0.60486	0.00509
	TE_B	0.01860	0.00586	0.00322	0.32940	0.13446	0.00262	2.50740	0.60486	0.00098

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	0.02971	0.04285	0.32940	0.54711	0.04230	2.50740	2.42871	0.03194
	TE_B	0.01860	0.02971	0.00974	0.32940	0.54711	0.00753	2.50740	2.42871	0.00424
sg13g2_ebufn_4	A	0.01860	0.01562	0.02146	0.32940	0.27382	0.02123	2.50740	1.21462	0.01647
	TE_B	0.01860	0.01562	0.00488	0.32940	0.27382	0.00382	2.50740	1.21462	0.00198
sg13g2_ebufn_2	A	0.01860	0.00849	0.01040	0.32940	0.13709	0.01041	2.50740	0.60749	0.00852
	TE_B	0.01860	0.00849	0.00243	0.32940	0.13709	0.00197	2.50740	0.60749	0.00212

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.03529	0.32940	0.03738	2.50740	0.07589
sg13g2_ebufn_4	0.01860	0.01801	0.32940	0.01903	2.50740	0.03812
sg13g2_ebufn_2	0.01860	0.00973	0.32940	0.01086	2.50740	0.02785

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01230	0.32940	0.01501	2.50740	0.05301
sg13g2_ebufn_4	0.01860	0.00665	0.32940	0.00794	2.50740	0.02675
sg13g2_ebufn_2	0.01860	0.00422	0.32940	0.00551	2.50740	0.02231

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	-0.00452	0.32940	-0.00535	2.50740	0.01141
sg13g2_ebufn_4	0.01860	-0.00083	0.32940	-0.00070	2.50740	0.01781
sg13g2_ebufn_2	0.01860	0.00048	0.32940	0.00107	2.50740	0.01780

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	0.05786	0.32940	0.05932	2.50740	0.07704
sg13g2_ebufn_4	0.01860	0.03009	0.32940	0.03176	2.50740	0.05051
sg13g2_ebufn_2	0.01860	0.01603	0.32940	0.01752	2.50740	0.03426

BU_x



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.01696	4.80000
sg13g2_buf_8	0.00851	2.40000
sg13g2_buf_4	0.00368	1.20000
sg13g2_buf_2	0.00260	0.60000
sg13g2_buf_1	0.00231	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	0.05609	0.32940	1.03680	0.34856	2.50740	4.80000	1.25398
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.05568	0.32940	0.51840	0.34768	2.50740	2.40000	1.25208
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.07190	0.32940	0.25920	0.38277	2.50740	1.20000	1.38548
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.05598	0.32940	0.12960	0.34329	2.50740	0.60000	1.24840
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.04981	0.32940	0.06480	0.31889	2.50740	0.30000	1.19196

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	0.06215	0.32940	1.03680	0.33947	2.50740	4.80000	1.16750
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.06162	0.32940	0.51840	0.33875	2.50740	2.40000	1.16784
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.06065	0.32940	0.25920	0.33357	2.50740	1.20000	1.10716
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.05980	0.32940	0.12960	0.32848	2.50740	0.60000	1.13394
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.05279	0.32940	0.06480	0.30122	2.50740	0.30000	1.07527

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	0.09333	0.32940	1.03680	0.10305	2.50740	4.80000	0.21134
sg13g2_buf_8	A	0.01860	0.00100	0.04602	0.32940	0.51840	0.05129	2.50740	2.40000	0.10649
sg13g2_buf_4	A	0.01860	0.00100	0.02266	0.32940	0.25920	0.02394	2.50740	1.20000	0.04850
sg13g2_buf_2	A	0.01860	0.00100	0.01206	0.32940	0.12960	0.01332	2.50740	0.60000	0.02880
sg13g2_buf_1	A	0.01860	0.00100	0.00715	0.32940	0.06480	0.00810	2.50740	0.30000	0.02117

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	0.09152	0.32940	1.03680	0.10144	2.50740	4.80000	0.20649
sg13g2_buf_8	A	0.01860	0.00100	0.04516	0.32940	0.51840	0.05000	2.50740	2.40000	0.10290
sg13g2_buf_4	A	0.01860	0.00100	0.02271	0.32940	0.25920	0.02458	2.50740	1.20000	0.04337
sg13g2_buf_2	A	0.01860	0.00100	0.01189	0.32940	0.12960	0.01343	2.50740	0.60000	0.02873
sg13g2_buf_1	A	0.01860	0.00100	0.00712	0.32940	0.06480	0.00826	2.50740	0.30000	0.02157

DECAP_x



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp
125.00*

Footprint

Cell Name	Area
sg13g2_decap_4	7.25760
sg13g2_decap_8	12.70080

Pin Capacitance Information Leakage Information

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

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	0.00160	0.00582	0.00282	0.60000	0.60000
sg13g2_dfrbp_1	0.00173	0.00638	0.00274	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4377.29000	5083.71000	5904.02000
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	0.23873	0.32940	0.12960	0.50738	2.50740	0.60000	1.40019
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.19439	0.32940	0.06480	0.46857	2.50740	0.30000	1.33959

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	0.20758	0.32940	0.12960	0.46036	2.50740	0.60000	1.22865
	RESET_B->Q (FF)	0.01860	0.00100	0.28190	0.32940	0.12960	0.57302	2.50740	0.60000	1.52389
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.18561	0.32940	0.06480	0.43885	2.50740	0.30000	1.19388
	RESET_B->Q (FF)	0.01860	0.00100	0.24862	0.32940	0.06480	0.53666	2.50740	0.30000	1.47306

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	0.13926	0.32940	0.12960	0.44791	2.50740	0.60000	1.30975
	RESET_B->Q_N (FR)	0.01860	0.00100	0.21472	0.32940	0.12960	0.55879	2.50740	0.60000	1.60339
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.14297	0.32940	0.06480	0.44242	2.50740	0.30000	1.29132
	RESET_B->Q_N (FR)	0.01860	0.00100	0.20632	0.32940	0.06480	0.53817	2.50740	0.30000	1.56951

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	0.15462	0.32940	0.12960	0.47121	2.50740	0.60000	1.27338
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.14623	0.32940	0.06480	0.44128	2.50740	0.30000	1.22484

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	-0.04646	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.23612
	setup	CLK (R)	0.01860	0.01860	0.12470	1.26300	1.26300	0.25095	2.50740	2.50740	0.31582
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.05135	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.25904	2.50740	2.50740	0.33648

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	-0.02445	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.25088
	setup	CLK (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.26444	2.50740	2.50740	0.37189
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02201	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.23612
	setup	CLK (R)	0.01860	0.01860	0.11248	1.26300	1.26300	0.26174	2.50740	2.50740	0.37189

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	0.13204	1.26300	1.26300	0.28063	2.50740	2.50740	0.39846
	removal	CLK (R)	0.01860	0.01860	-0.10514	1.26300	1.26300	-0.26174	2.50740	2.50740	-0.38075
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.12715	1.26300	1.26300	0.28873	2.50740	2.50740	0.42502
	removal	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.25904	2.50740	2.50740	-0.39255

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	0.04881	0.32940	0.12960	0.16645	2.50740	0.60000	0.62272
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03873	0.32940	0.06480	0.09822	2.50740	0.30000	0.33801

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	0.04832	0.32940	0.12960	0.16716	2.50740	0.60000	0.61665
	RESET_B	0.01860	0.00100	0.03675	0.32940	0.12960	0.15451	2.50740	0.60000	0.59415
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03764	0.32940	0.06480	0.09735	2.50740	0.30000	0.33191
	RESET_B	0.01860	0.00100	0.02555	0.32940	0.06480	0.08438	2.50740	0.30000	0.30708

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	0.04836	0.32940	0.12960	0.16776	2.50740	0.60000	0.62275
	RESET_B	0.01860	0.00100	0.03677	0.32940	0.12960	0.15532	2.50740	0.60000	0.59647
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03765	0.32940	0.06480	0.09771	2.50740	0.30000	0.33455
	RESET_B	0.01860	0.00100	0.02554	0.32940	0.06480	0.08479	2.50740	0.30000	0.30830

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	0.04882	0.32940	0.12960	0.16587	2.50740	0.60000	0.61717
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03873	0.32940	0.06480	0.09789	2.50740	0.30000	0.33136

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00221	0.32940	0.00269	2.50740	0.01005
sg13g2_dfrbp_1	0.01860	0.00235	0.32940	0.00279	2.50740	0.01009

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00168	0.32940	0.00215	2.50740	0.00956
sg13g2_dfrbp_1	0.01860	0.00186	0.32940	0.00233	2.50740	0.00968

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	0.00221	0.32940	0.00269	2.50740	0.01005
	(!CLK * RESET_B)	0.01860	0.01506	0.32940	0.01547	2.50740	0.02397
	(!CLK * !RESET_B)	0.01860	-0.00004	0.32940	-0.00006	2.50740	-0.00006
sg13g2_dfrbp_1	CLK	0.01860	0.00235	0.32940	0.00279	2.50740	0.01009
	(!CLK * RESET_B)	0.01860	0.01287	0.32940	0.01338	2.50740	0.02175
	(!CLK * !RESET_B)	0.01860	0.00014	0.32940	0.00013	2.50740	0.00013

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	0.00168	0.32940	0.00215	2.50740	0.00956
	(!CLK * RESET_B)	0.01860	0.01179	0.32940	0.01221	2.50740	0.02096
	(!CLK * !RESET_B)	0.01860	0.00004	0.32940	0.00006	2.50740	0.00006
sg13g2_dfrbp_1	CLK	0.01860	0.00186	0.32940	0.00233	2.50740	0.00968
	(!CLK * RESET_B)	0.01860	0.01096	0.32940	0.01137	2.50740	0.02004
	(!CLK * !RESET_B)	0.01860	0.00001	0.32940	0.00004	2.50740	0.00004

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	0.00503	0.32940	0.00519	2.50740	0.01188
sg13g2_dfrbp_1	0.01860	0.00560	0.32940	0.00572	2.50740	0.01237

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	0.01123	0.32940	0.01124	2.50740	0.02165
sg13g2_dfrbp_1	0.01860	0.00995	0.32940	0.00990	2.50740	0.02041

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	0.00503	0.32940	0.00519	2.50740	0.01188
	(CLK * !D * !Q * Q_N)	0.01860	0.00210	0.32940	0.00205	2.50740	0.00205
	(!CLK * D * !Q * Q_N)	0.01860	0.01832	0.32940	0.01840	2.50740	0.02845
	(!CLK * !D * !Q * Q_N)	0.01860	0.00208	0.32940	0.00203	2.50740	0.00203
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00560	0.32940	0.00572	2.50740	0.01237
	(CLK * !D * !Q * Q_N)	0.01860	0.00264	0.32940	0.00259	2.50740	0.00259
	(!CLK * D * !Q * Q_N)	0.01860	0.01657	0.32940	0.01675	2.50740	0.02675
	(!CLK * !D * !Q * Q_N)	0.01860	0.00266	0.32940	0.00262	2.50740	0.00261

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	0.04744	0.32940	0.04784	2.50740	0.06869
	(CLK * !D * !Q * Q_N)	0.01860	-0.00154	0.32940	-0.00174	2.50740	-0.00182
	(!CLK * D * !Q * Q_N)	0.01860	0.01123	0.32940	0.01124	2.50740	0.02165
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00187	0.32940	-0.00202	2.50740	-0.00203
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03457	0.32940	0.03498	2.50740	0.05532
	(CLK * !D * !Q * Q_N)	0.01860	-0.00207	0.32940	-0.00227	2.50740	-0.00235
	(!CLK * D * !Q * Q_N)	0.01860	0.00995	0.32940	0.00990	2.50740	0.02041
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00217	0.32940	-0.00235	2.50740	-0.00241

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01393	0.32940	0.01503	2.50740	0.03546
sg13g2_dfrbp_1	0.01860	0.01398	0.32940	0.01501	2.50740	0.03380

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02633	0.32940	0.02737	2.50740	0.04824
sg13g2_dfrbp_1	0.01860	0.02431	0.32940	0.02530	2.50740	0.04513

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	0.01393	0.32940	0.01503	2.50740	0.03546
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01456	0.32940	0.01567	2.50740	0.03600
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01374	0.32940	0.01486	2.50740	0.03524
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01438	0.32940	0.01549	2.50740	0.03582
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01445	0.32940	0.01547	2.50740	0.03436
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01398	0.32940	0.01501	2.50740	0.03380
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01380	0.32940	0.01483	2.50740	0.03360
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01378	0.32940	0.01480	2.50740	0.03359

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	0.02798	0.32940	0.02901	2.50740	0.04989
	(D * RESET_B * !Q * Q_N)	0.01860	0.02633	0.32940	0.02737	2.50740	0.04824
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01360	0.32940	0.01480	2.50740	0.03499
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00395	0.32940	0.04998	2.50740	0.07017
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01352	0.32940	0.01468	2.50740	0.03492
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01354	0.32940	0.01473	2.50740	0.03493
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02641	0.32940	0.02739	2.50740	0.04722
	(D * RESET_B * !Q * Q_N)	0.01860	0.02431	0.32940	0.02530	2.50740	0.04513
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01395	0.32940	0.01509	2.50740	0.03404
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00372	0.32940	0.04051	2.50740	0.05929
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01387	0.32940	0.01500	2.50740	0.03395
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01389	0.32940	0.01502	2.50740	0.03396

DLHQ



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.00227	0.00232	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	0.17733	0.32940	0.06480	0.44362	2.50740	0.30000	1.28833
	GATE->Q (RR)	0.01860	0.00100	0.15100	0.32940	0.06480	0.41798	2.50740	0.30000	1.22804

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	0.15594	0.32940	0.06480	0.40002	2.50740	0.30000	1.14033
	GATE->Q (RF)	0.01860	0.00100	0.16088	0.32940	0.06480	0.40409	2.50740	0.30000	1.09905

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	-0.09536	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.20366
	setup	GATE (F)	0.01860	0.01860	0.10759	1.26300	1.26300	0.23746	2.50740	2.50740	0.29515

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	-0.03912	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.05135	1.26300	1.26300	0.00810	2.50740	2.50740	-0.03247

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	0.01842	0.32940	0.06480	0.01867	2.50740	0.30000	0.01931
	GATE	0.01860	0.00100	0.01489	0.32940	0.06480	0.01508	2.50740	0.30000	0.01658

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	0.01889	0.32940	0.06480	0.01923	2.50740	0.30000	0.01934
	GATE	0.01860	0.00100	0.01626	0.32940	0.06480	0.01685	2.50740	0.30000	0.01678

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00424	0.32940	0.00512	2.50740	0.01903

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00484	0.32940	0.00572	2.50740	0.01940

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	0.00507	0.32940	0.00583	2.50740	0.01973
	(!GATE * !Q)	0.01860	0.00424	0.32940	0.00512	2.50740	0.01903

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	0.00441	0.32940	0.00539	2.50740	0.01913
	(!GATE * !Q)	0.01860	0.00484	0.32940	0.00572	2.50740	0.01940

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01104	0.32940	0.01211	2.50740	0.02968

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00376	0.32940	0.02060	2.50740	0.03842

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	0.01104	0.32940	0.01211	2.50740	0.02968

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	0.00376	0.32940	0.02060	2.50740	0.03842

DLHRQ



*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	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	0.00214	0.00288	0.00224	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	0.18662	0.32940	0.06480	0.45746	2.50740	0.30000	1.29968
	GATE->Q (RR)	0.01860	0.00100	0.16787	0.32940	0.06480	0.44157	2.50740	0.30000	1.25130

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	0.16492	0.32940	0.06480	0.41188	2.50740	0.30000	1.15929
	GATE->Q (RF)	0.01860	0.00100	0.17213	0.32940	0.06480	0.42077	2.50740	0.30000	1.12772
	RESET_B->Q (FF)	0.01860	0.00100	0.06528	0.32940	0.06480	0.33342	2.50740	0.30000	1.15970

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	-0.08069	1.26300	1.26300	-0.16460	2.50740	2.50740	-0.17709
	setup	GATE (F)	0.01860	0.01860	0.10270	1.26300	1.26300	0.21857	2.50740	2.50740	0.26859

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	-0.04401	1.26300	1.26300	0.00270	2.50740	2.50740	0.04427
	setup	GATE (F)	0.01860	0.01860	0.05624	1.26300	1.26300	0.00810	2.50740	2.50740	-0.03247

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	-0.01223	1.26300	1.26300	-0.11603	2.50740	2.50740	-0.17709
	removal	GATE (F)	0.01860	0.01860	0.02934	1.26300	1.26300	0.14571	2.50740	2.50740	0.21251

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	0.00259	0.32940	0.06480	0.00099	2.50740	0.30000	0.00189
	GATE	0.01860	0.00100	0.01540	0.32940	0.06480	0.01545	2.50740	0.30000	0.01642

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	0.00809	0.32940	0.06480	-0.00099	2.50740	0.30000	-0.00189
	GATE	0.01860	0.00100	0.01541	0.32940	0.06480	0.01602	2.50740	0.30000	0.01611
	RESET_B	0.01860	0.00100	0.00937	0.32940	0.06480	0.01070	2.50740	0.30000	0.02683

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02010	0.32940	0.02272	2.50740	0.03695

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01415	0.32940	0.03223	2.50740	0.04628

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	0.00145	0.32940	0.00228	2.50740	0.01616
	!RESET_B	0.01860	0.02010	0.32940	0.02272	2.50740	0.03695

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	0.00576	0.32940	0.00673	2.50740	0.02047
	!RESET_B	0.01860	0.01415	0.32940	0.03223	2.50740	0.04628

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	0.00012	0.32940	0.00008	2.50740	0.00008

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	0.00020	0.32940	0.00009	2.50740	0.00005

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	0.00012	0.32940	0.00008	2.50740	0.00008
	(!D * !GATE * !Q)	0.01860	0.00012	0.32940	0.00008	2.50740	0.00008

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	0.00021	0.32940	0.00009	2.50740	0.00005
	(!D * !GATE * !Q)	0.01860	0.00020	0.32940	0.00009	2.50740	0.00005

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01126	0.32940	0.01229	2.50740	0.02973

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00369	0.32940	0.02074	2.50740	0.03839

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	0.01497	0.32940	0.01592	2.50740	0.03447
	(!D * !RESET_B * !Q)	0.01860	0.01126	0.32940	0.01229	2.50740	0.02973

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	0.01493	0.32940	0.01615	2.50740	0.03505
	(!D * RESET_B * !Q)	0.01860	0.00369	0.32940	0.02074	2.50740	0.03839
	(!D * !RESET_B * !Q)	0.01860	0.00376	0.32940	0.02081	2.50740	0.03845

DLHR



*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	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	0.00208	0.00305	0.00228	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	0.20178	0.32940	0.06480	0.47930	2.50740	0.30000	1.32173
	GATE->Q (RR)	0.01860	0.00100	0.18389	0.32940	0.06480	0.46501	2.50740	0.30000	1.27602

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	0.17099	0.32940	0.06480	0.42102	2.50740	0.30000	1.16298
	GATE->Q (RF)	0.01860	0.00100	0.17841	0.32940	0.06480	0.43059	2.50740	0.30000	1.13232
	RESET_B->Q (FF)	0.01860	0.00100	0.07104	0.32940	0.06480	0.35057	2.50740	0.30000	1.18856

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	0.21011	0.32940	0.06480	0.47154	2.50740	0.30000	1.30865
	GATE->Q_N (RR)	0.01860	0.00100	0.21772	0.32940	0.06480	0.48133	2.50740	0.30000	1.27673
	RESET_B->Q_N (FR)	0.01860	0.00100	0.11010	0.32940	0.06480	0.39434	2.50740	0.30000	1.27839

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	0.24452	0.32940	0.06480	0.48123	2.50740	0.30000	1.22913
	GATE->Q_N (RF)	0.01860	0.00100	0.22685	0.32940	0.06480	0.46719	2.50740	0.30000	1.18385

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	-0.08803	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.18299
	setup	GATE (F)	0.01860	0.01860	0.11003	1.26300	1.26300	0.21857	2.50740	2.50740	0.26859

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	-0.04401	1.26300	1.26300	0.00270	2.50740	2.50740	0.04427
	setup	GATE (F)	0.01860	0.01860	0.06113	1.26300	1.26300	0.00810	2.50740	2.50740	-0.03247

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	-0.00245	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.11216
	removal	GATE (F)	0.01860	0.01860	0.02201	1.26300	1.26300	0.10524	2.50740	2.50740	0.14758

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	0.00646	0.32940	0.06480	0.00587	2.50740	0.30000	0.00770
	GATE	0.01860	0.00100	0.01270	0.32940	0.06480	0.01297	2.50740	0.30000	0.01396

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	0.00904	0.32940	0.06480	0.00071	2.50740	0.30000	0.00025
	GATE	0.01860	0.00100	0.01269	0.32940	0.06480	0.01307	2.50740	0.30000	0.01280
	RESET_B	0.01860	0.00100	0.00948	0.32940	0.06480	0.01011	2.50740	0.30000	0.01942

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	0.00906	0.32940	0.06480	0.00090	2.50740	0.30000	0.00219
	GATE	0.01860	0.00100	0.01812	0.32940	0.06480	0.01922	2.50740	0.30000	0.02859
	RESET_B	0.01860	0.00100	0.00950	0.32940	0.06480	0.01017	2.50740	0.30000	0.01973

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	0.00646	0.32940	0.06480	0.00572	2.50740	0.30000	0.00621
	GATE	0.01860	0.00100	0.01269	0.32940	0.06480	0.01283	2.50740	0.30000	0.01374

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01958	0.32940	0.02218	2.50740	0.03645

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01390	0.32940	0.03189	2.50740	0.04599

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	0.00412	0.32940	0.00496	2.50740	0.01894
	!RESET_B	0.01860	0.01958	0.32940	0.02218	2.50740	0.03645

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	0.00832	0.32940	0.00933	2.50740	0.02311
	!RESET_B	0.01860	0.01390	0.32940	0.03189	2.50740	0.04599

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	-0.00001	0.32940	-0.00007	2.50740	-0.00007

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	0.00032	0.32940	0.00022	2.50740	0.00018

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	-0.00001	0.32940	-0.00007	2.50740	-0.00007
	(!D * !GATE * !Q)	0.01860	-0.00001	0.32940	-0.00007	2.50740	-0.00007

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	0.00032	0.32940	0.00022	2.50740	0.00018
	(!D * !GATE * !Q)	0.01860	0.00032	0.32940	0.00022	2.50740	0.00018

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01085	0.32940	0.01183	2.50740	0.02943

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00378	0.32940	0.02044	2.50740	0.03818

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	0.01452	0.32940	0.01542	2.50740	0.03406
	(!D * !RESET_B * !Q)	0.01860	0.01085	0.32940	0.01183	2.50740	0.02943

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	0.01527	0.32940	0.01648	2.50740	0.03545
	(!D * RESET_B * !Q)	0.01860	0.00378	0.32940	0.02044	2.50740	0.03818
	(!D * !RESET_B * !Q)	0.01860	0.00385	0.32940	0.02051	2.50740	0.03824

DLLRQ



*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
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	0.00205	0.00289	0.00221	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	0.18555	0.32940	0.06480	0.45551	2.50740	0.30000	1.29734
	GATE_N->Q (FR)	0.01860	0.00100	0.20820	0.32940	0.06480	0.49326	2.50740	0.30000	1.39453
	RESET_B->Q (RR)	0.01860	0.00100	0.08171	0.32940	0.06480	0.35119	2.50740	0.30000	1.24388

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	0.16409	0.32940	0.06480	0.40923	2.50740	0.30000	1.15244
	GATE_N->Q (FF)	0.01860	0.00100	0.15684	0.32940	0.06480	0.42111	2.50740	0.30000	1.25250
	RESET_B->Q (FF)	0.01860	0.00100	0.06590	0.32940	0.06480	0.33294	2.50740	0.30000	1.15732

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	-0.07580	1.26300	1.26300	-0.08905	2.50740	2.50740	-0.12101
	setup	GATE_N (R)	0.01860	0.01860	0.08314	1.26300	1.26300	0.09984	2.50740	2.50740	0.13282

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	-0.08314	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.30696
	setup	GATE_N (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.28333	2.50740	2.50740	0.40141

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	-0.02934	1.26300	1.26300	-0.08095	2.50740	2.50740	-0.07379
	removal	GATE_N (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.09984	2.50740	2.50740	0.09150

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	0.00772	0.32940	0.06480	0.00820	2.50740	0.30000	0.00922
	GATE_N	0.01860	0.00100	0.02371	0.32940	0.06480	0.00818	2.50740	0.30000	0.00869
	RESET_B	0.01860	0.00100	0.01022	0.32940	0.06480	0.01071	2.50740	0.30000	0.02637

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	0.01946	0.32940	0.06480	0.00021	2.50740	0.30000	-0.00000
	GATE_N	0.01860	0.00100	0.02233	0.32940	0.06480	0.00684	2.50740	0.30000	0.00887
	RESET_B	0.01860	0.00100	0.00812	0.32940	0.06480	0.00941	2.50740	0.30000	0.02541

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01482	0.32940	0.01542	2.50740	0.02927

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00292	0.32940	0.02338	2.50740	0.03745

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	0.00135	0.32940	0.00218	2.50740	0.01614
	!RESET_B	0.01860	0.01482	0.32940	0.01542	2.50740	0.02927

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	0.00711	0.32940	0.00811	2.50740	0.02189
	!RESET_B	0.01860	0.00292	0.32940	0.02338	2.50740	0.03745

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	0.00153	0.32940	0.00148	2.50740	0.00149

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	0.00164	0.32940	0.00153	2.50740	0.00148

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	0.00011	0.32940	0.00006	2.50740	0.00007
	(!D * GATE_N * !Q)	0.01860	0.00153	0.32940	0.00148	2.50740	0.00149

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	0.00022	0.32940	0.00011	2.50740	0.00007
	(!D * GATE_N * !Q)	0.01860	0.00164	0.32940	0.00153	2.50740	0.00148

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	0.01098	0.32940	0.01203	2.50740	0.02952

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	0.00370	0.32940	0.02064	2.50740	0.03841

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	0.01641	0.32940	0.01737	2.50740	0.03459
	(!D * !RESET_B * !Q)	0.01860	0.01098	0.32940	0.01203	2.50740	0.02952

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	0.01580	0.32940	0.01691	2.50740	0.03447
	(!D * RESET_B * !Q)	0.01860	0.00370	0.32940	0.02064	2.50740	0.03841
	(!D * !RESET_B * !Q)	0.01860	0.00377	0.32940	0.02071	2.50740	0.03848

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	0.00215	0.00301	0.00233	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	0.20364	0.32940	0.06480	0.48042	2.50740	0.30000	1.32222
	GATE_N->Q (FR)	0.01860	0.00100	0.22598	0.32940	0.06480	0.51898	2.50740	0.30000	1.42041

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	0.17303	0.32940	0.06480	0.42257	2.50740	0.30000	1.16462
	GATE_N->Q (FF)	0.01860	0.00100	0.16672	0.32940	0.06480	0.43681	2.50740	0.30000	1.27127
	RESET_B->Q (FF)	0.01860	0.00100	0.07094	0.32940	0.06480	0.35467	2.50740	0.30000	1.17043

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	0.21193	0.32940	0.06480	0.47278	2.50740	0.30000	1.30836
	GATE_N->Q_N (FR)	0.01860	0.00100	0.20583	0.32940	0.06480	0.48713	2.50740	0.30000	1.41364
	RESET_B->Q_N (FR)	0.01860	0.00100	0.11066	0.32940	0.06480	0.39635	2.50740	0.30000	1.28609

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	0.24611	0.32940	0.06480	0.48271	2.50740	0.30000	1.22989
	GATE_N->Q_N (FF)	0.01860	0.00100	0.26865	0.32940	0.06480	0.52133	2.50740	0.30000	1.32924

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	-0.08558	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.12692
	setup	GATE_N (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.10794	2.50740	2.50740	0.14167

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	-0.08803	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.30991
	setup	GATE_N (R)	0.01860	0.01860	0.10025	1.26300	1.26300	0.28333	2.50740	2.50740	0.40436

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	-0.01712	1.26300	1.26300	-0.03778	2.50740	2.50740	-0.01181
	removal	GATE_N (R)	0.01860	0.01860	0.04157	1.26300	1.26300	0.06206	2.50740	2.50740	0.03247

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	0.01224	0.32940	0.06480	0.07024	2.50740	0.30000	0.28897
	GATE_N	0.01860	0.00100	0.02816	0.32940	0.06480	0.08703	2.50740	0.30000	0.30225

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	0.01860	0.32940	0.06480	0.05873	2.50740	0.30000	0.27218
	GATE_N	0.01860	0.00100	0.02613	0.32940	0.06480	0.08466	2.50740	0.30000	0.30105
	RESET_B	0.01860	0.00100	0.02810	0.32940	0.06480	0.08696	2.50740	0.30000	0.31562

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	0.01865	0.32940	0.06480	0.05907	2.50740	0.30000	0.27561
	GATE_N	0.01860	0.00100	0.03670	0.32940	0.06480	0.09675	2.50740	0.30000	0.33129
	RESET_B	0.01860	0.00100	0.02954	0.32940	0.06480	0.08857	2.50740	0.30000	0.31975

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	0.01225	0.32940	0.06480	0.06993	2.50740	0.30000	0.28601
	GATE_N	0.01860	0.00100	0.02816	0.32940	0.06480	0.08675	2.50740	0.30000	0.30070

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02175	0.32940	0.02333	2.50740	0.03764

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01417	0.32940	0.03353	2.50740	0.04761

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	0.00419	0.32940	0.00504	2.50740	0.01902
	!RESET_B	0.01860	0.02175	0.32940	0.02333	2.50740	0.03764

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	0.00405	0.32940	0.00505	2.50740	0.01885
	!RESET_B	0.01860	0.01417	0.32940	0.03353	2.50740	0.04761

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	-0.00004	0.32940	-0.00010	2.50740	-0.00010

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	0.00179	0.32940	0.00168	2.50740	0.00164

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	0.00347	0.32940	0.00341	2.50740	0.00341
	(!D * GATE_N * !Q)	0.01860	-0.00004	0.32940	-0.00010	2.50740	-0.00010

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	0.00036	0.32940	0.00026	2.50740	0.00022
	(!D * GATE_N * !Q)	0.01860	0.00179	0.32940	0.00168	2.50740	0.00164

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	0.00295	0.32940	0.02089	2.50740	0.03835

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	0.01055	0.32940	0.01174	2.50740	0.02955

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	0.01647	0.32940	0.01744	2.50740	0.03465
	(!D * RESET_B * !Q)	0.01860	0.00295	0.32940	0.02089	2.50740	0.03835
	(!D * !RESET_B * !Q)	0.01860	0.00444	0.32940	0.02238	2.50740	0.03984

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	0.01610	0.32940	0.01723	2.50740	0.03476
	(!D * !RESET_B * !Q)	0.01860	0.01055	0.32940	0.01174	2.50740	0.02955

DLY1



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.11768	0.32940	0.06480	0.38345	2.50740	0.30000	1.16411

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	0.13589	0.32940	0.06480	0.40542	2.50740	0.30000	1.26718

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	0.01574	0.32940	0.06480	0.01631	2.50740	0.30000	0.02560

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	0.01499	0.32940	0.06480	0.01581	2.50740	0.30000	0.02495

DLY2



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.17498	0.32940	0.06480	0.45301	2.50740	0.30000	1.27767

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	0.19677	0.32940	0.06480	0.48587	2.50740	0.30000	1.38809

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	0.01869	0.32940	0.06480	0.01911	2.50740	0.30000	0.02723

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	0.01811	0.32940	0.06480	0.01859	2.50740	0.30000	0.02648

DLY4



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.00149	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	0.38478	0.32940	0.06480	0.69757	2.50740	0.30000	1.61017

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	0.40391	0.32940	0.06480	0.73083	2.50740	0.30000	1.72367

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	0.02693	0.32940	0.06480	0.02691	2.50740	0.30000	0.03438

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	0.02661	0.32940	0.06480	0.02640	2.50740	0.30000	0.03358

EINVIN_x



*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	0.00784	0.00910	1.20000
sg13g2_einvn_2	0.00400	0.00485	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	0.01053	0.02489	0.32940	0.26873	0.53294	2.50740	1.20953	2.80140
	TE_B->Z (RR)	0.01860	0.01053	0.05365	0.32940	0.26873	0.12652	2.50740	1.20953	0.25937
	TE_B->Z (FR)	0.01860	0.01053	0.03187	0.32940	0.26873	0.51730	2.50740	1.20953	2.58004
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00587	0.02644	0.32940	0.13447	0.53280	2.50740	0.60487	2.79963
	TE_B->Z (RR)	0.01860	0.00587	0.05228	0.32940	0.13447	0.12486	2.50740	0.60487	0.26188
	TE_B->Z (FR)	0.01860	0.00587	0.03343	0.32940	0.13447	0.51723	2.50740	0.60487	2.58044

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	0.01564	0.02278	0.32940	0.27384	0.43092	2.50740	1.21464	2.34456
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00850	0.02409	0.32940	0.13710	0.43099	2.50740	0.60750	2.34427

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	0.01053	0.01198	0.32940	0.26873	0.01267	2.50740	1.20953	0.02586
	TE_B	0.01860	0.01053	0.02792	0.32940	0.26873	0.01753	2.50740	1.20953	0.01375
sg13g2_einvn_2	A	0.01860	0.00587	0.00596	0.32940	0.13447	0.00627	2.50740	0.60487	0.01257
	TE_B	0.01860	0.00587	0.01387	0.32940	0.13447	0.00866	2.50740	0.60487	0.00677

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	0.01564	0.01173	0.32940	0.27384	0.01388	2.50740	1.21464	0.02302
sg13g2_einvn_2	A	0.01860	0.00850	0.00606	0.32940	0.13710	0.00700	2.50740	0.60750	0.01173

Passive power(pJ) for A rising :

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

Passive power(pJ) for A falling :

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

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	-0.00877	0.32940	-0.01384	2.50740	0.00487
sg13g2_einvn_2	0.01860	-0.00446	0.32940	-0.00607	2.50740	0.00373

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00877	0.32940	0.01965	2.50740	0.03917
sg13g2_einvn_2	0.01860	0.00446	0.32940	0.00993	2.50740	0.02003

GCLK



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.00234	0.00488	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	0.07199	0.32940	0.06480	0.33813	2.50740	0.30000	1.21440

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	0.06065	0.32940	0.06480	0.32141	2.50740	0.30000	1.13025

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	-0.03636	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.26037
	setup	CLK (R)	0.01860	0.01860	0.06193	1.26300	1.26300	0.22666	2.50740	2.50740	0.37358

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	-0.01877	1.26300	1.26300	-0.01619	2.50740	2.50740	-0.02814
	setup	CLK (R)	0.01860	0.01860	0.04389	1.26300	1.26300	0.06206	2.50740	2.50740	0.08618

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	0.01276	0.32940	0.06480	0.01327	2.50740	0.30000	0.02625

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	0.00996	0.32940	0.06480	0.01113	2.50740	0.30000	0.02462

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02289	0.32940	0.02555	2.50740	0.03949

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01195	0.32940	0.03603	2.50740	0.05032

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	0.02289	0.32940	0.02555	2.50740	0.03949

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	0.01195	0.32940	0.03603	2.50740	0.05032

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00670	0.32940	0.00778	2.50740	0.02522

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00799	0.32940	0.00911	2.50740	0.02684

INx



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.04530	4.80000
sg13g2_inv_8	0.02210	2.40000
sg13g2_inv_4	0.01105	1.20000
sg13g2_inv_2	0.00554	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	0.01668	0.32940	1.03680	0.35134	2.50740	4.80000	2.00385
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01655	0.32940	0.51840	0.35106	2.50740	2.40000	2.00202
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01697	0.32940	0.25920	0.35058	2.50740	1.20000	2.00157
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01811	0.32940	0.12960	0.35041	2.50740	0.60000	1.99904
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02076	0.32940	0.06480	0.35121	2.50740	0.30000	1.99953

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	0.01599	0.32940	1.03680	0.32547	2.50740	4.80000	1.86179
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01591	0.32940	0.51840	0.32610	2.50740	2.40000	1.86296
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01627	0.32940	0.25920	0.32549	2.50740	1.20000	1.86217
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01729	0.32940	0.12960	0.32448	2.50740	0.60000	1.85419
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01983	0.32940	0.06480	0.32517	2.50740	0.30000	1.85500

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	0.02702	0.32940	1.03680	0.03294	2.50740	4.80000	0.10323
sg13g2_inv_8	A	0.01860	0.00100	0.01288	0.32940	0.51840	0.01610	2.50740	2.40000	0.04985
sg13g2_inv_4	A	0.01860	0.00100	0.00646	0.32940	0.25920	0.00787	2.50740	1.20000	0.02651
sg13g2_inv_2	A	0.01860	0.00100	0.00326	0.32940	0.12960	0.00400	2.50740	0.60000	0.01283
sg13g2_inv_1	A	0.01860	0.00100	0.00193	0.32940	0.06480	0.00221	2.50740	0.30000	0.00657

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	0.02431	0.32940	1.03680	0.03148	2.50740	4.80000	0.09861
sg13g2_inv_8	A	0.01860	0.00100	0.01165	0.32940	0.51840	0.01605	2.50740	2.40000	0.04853
sg13g2_inv_4	A	0.01860	0.00100	0.00588	0.32940	0.25920	0.00778	2.50740	1.20000	0.02399
sg13g2_inv_2	A	0.01860	0.00100	0.00306	0.32940	0.12960	0.00390	2.50740	0.60000	0.01150
sg13g2_inv_1	A	0.01860	0.00100	0.00205	0.32940	0.06480	0.00237	2.50740	0.30000	0.00620

ITL



*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_8	39.91680

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01540	0.01544	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	0.01992	0.02418	0.32940	0.53732	0.53448	2.50740	2.41892	2.80756
	TE_B->Z (RR)	0.01860	0.01992	0.07074	0.32940	0.53732	0.16700	2.50740	2.41892	0.35982
	TE_B->Z (FR)	0.01860	0.01992	0.03256	0.32940	0.53732	0.51958	2.50740	2.41892	2.58498

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	0.03006	0.02298	0.32940	0.54746	0.43213	2.50740	2.42906	2.35023

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	0.01992	0.02392	0.32940	0.53732	0.02618	2.50740	2.41892	0.05330
	TE_B	0.01860	0.01992	0.05714	0.32940	0.53732	0.03645	2.50740	2.41892	0.03076

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	0.03006	0.02277	0.32940	0.54746	0.02754	2.50740	2.42906	0.04554

Passive power(pJ) for A rising :

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

Passive power(pJ) for A falling :

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

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	-0.01371	0.32940	-0.03360	2.50740	-0.01982

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	0.01371	0.32940	0.03360	2.50740	0.05225

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*

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	0.00206	0.00218	0.00499	0.60000
sg13g2_mux2_1	0.00206	0.00218	0.00499	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	0.08980	0.32940	0.12960	0.39142	2.50740	0.60000	1.30819
	A1->X (RR)	0.01860	0.00100	0.04963	0.32940	0.12960	0.39080	2.50740	0.60000	1.31877
	S->X (-R)	0.01860	0.00100	0.09271	0.32940	0.12960	0.38622	2.50740	0.60000	1.30314
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.07304	0.32940	0.06480	0.35477	2.50740	0.30000	1.23365
	A1->X (RR)	0.01860	0.00100	0.05098	0.32940	0.06480	0.35932	2.50740	0.30000	1.24816
	S->X (-R)	0.01860	0.00100	0.08137	0.32940	0.06480	0.35697	2.50740	0.30000	1.23845

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	0.05381	0.32940	0.12960	0.42292	2.50740	0.60000	1.35604
	A1->X (FF)	0.01860	0.00100	0.11578	0.32940	0.12960	0.42774	2.50740	0.60000	1.36386
	S->X (-F)	0.01860	0.00100	0.12782	0.32940	0.12960	0.41122	2.50740	0.60000	1.29572
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.05506	0.32940	0.06480	0.37809	2.50740	0.30000	1.26952
	A1->X (FF)	0.01860	0.00100	0.09682	0.32940	0.06480	0.38342	2.50740	0.30000	1.28106
	S->X (-F)	0.01860	0.00100	0.10819	0.32940	0.06480	0.37000	2.50740	0.30000	1.21978

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	0.09271	0.32940	0.12960	0.38622	2.50740	0.60000	1.30314
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.12982	0.32940	0.12960	0.41095	2.50740	0.60000	1.25540
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.08137	0.32940	0.06480	0.35697	2.50740	0.30000	1.23845
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.11834	0.32940	0.06480	0.38993	2.50740	0.30000	1.23020

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	0.12782	0.32940	0.12960	0.41122	2.50740	0.60000	1.29572
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.16065	0.32940	0.12960	0.43276	2.50740	0.60000	1.19249
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.10819	0.32940	0.06480	0.37000	2.50740	0.30000	1.21978
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.14098	0.32940	0.06480	0.39781	2.50740	0.30000	1.15491

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	0.01616	0.32940	0.12960	0.01657	2.50740	0.60000	0.03173
	A1	0.01860	0.00100	0.01565	0.32940	0.12960	0.02403	2.50740	0.60000	0.04096
	S	0.01860	0.00100	0.01709	0.32940	0.12960	0.01794	2.50740	0.60000	0.03126
sg13g2_mux2_1	A0	0.01860	0.00100	0.01245	0.32940	0.06480	0.01326	2.50740	0.30000	0.02847
	A1	0.01860	0.00100	0.01099	0.32940	0.06480	0.01684	2.50740	0.30000	0.03201
	S	0.01860	0.00100	0.01231	0.32940	0.06480	0.01309	2.50740	0.30000	0.02706

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	0.01551	0.32940	0.12960	0.02502	2.50740	0.60000	0.03887
	A1	0.01860	0.00100	0.01792	0.32940	0.12960	0.01789	2.50740	0.60000	0.03088
	S	0.01860	0.00100	0.01685	0.32940	0.12960	0.01707	2.50740	0.60000	0.03091
sg13g2_mux2_1	A0	0.01860	0.00100	0.01046	0.32940	0.06480	0.01725	2.50740	0.30000	0.03304
	A1	0.01860	0.00100	0.01239	0.32940	0.06480	0.01326	2.50740	0.30000	0.02819
	S	0.01860	0.00100	0.01165	0.32940	0.06480	0.01242	2.50740	0.30000	0.02729

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	0.01692	0.32940	0.12960	0.01722	2.50740	0.60000	0.01797
	S	(!A0 * A1)	0.01860	0.00100	0.01709	0.32940	0.12960	0.01794	2.50740	0.60000	0.03126
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01210	0.32940	0.06480	0.01229	2.50740	0.30000	0.01276
	S	(!A0 * A1)	0.01860	0.00100	0.01231	0.32940	0.06480	0.01309	2.50740	0.30000	0.02706

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	0.01796	0.32940	0.12960	0.01755	2.50740	0.60000	0.01926
	S	(!A0 * A1)	0.01860	0.00100	0.01685	0.32940	0.12960	0.01707	2.50740	0.60000	0.03091
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01271	0.32940	0.06480	0.01282	2.50740	0.30000	0.01290
	S	(!A0 * A1)	0.01860	0.00100	0.01165	0.32940	0.06480	0.01242	2.50740	0.30000	0.02729

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00464	0.32940	0.00544	2.50740	0.01930
sg13g2_mux2_1	0.01860	0.00464	0.32940	0.00544	2.50740	0.01930

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00507	0.32940	0.00587	2.50740	0.01956
sg13g2_mux2_1	0.01860	0.00507	0.32940	0.00587	2.50740	0.01956

MUX4



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.00276	0.00274	0.00276	0.00285	0.00800	0.00497	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	0.13570	0.32940	0.06480	0.43632	2.50740	0.30000	1.41505
	A1->X (RR)	0.01860	0.00100	0.13222	0.32940	0.06480	0.43397	2.50740	0.30000	1.41198
	A2->X (RR)	0.01860	0.00100	0.14150	0.32940	0.06480	0.44585	2.50740	0.30000	1.43739
	A3->X (RR)	0.01860	0.00100	0.13828	0.32940	0.06480	0.44385	2.50740	0.30000	1.43478
	S0->X (-R)	0.01860	0.00100	0.11980	0.32940	0.06480	0.43354	2.50740	0.30000	1.41418
	S1->X (-R)	0.01860	0.00100	0.06800	0.32940	0.06480	0.35374	2.50740	0.30000	1.23290

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	0.15639	0.32940	0.06480	0.44464	2.50740	0.30000	1.30924
	A1->X (FF)	0.01860	0.00100	0.15696	0.32940	0.06480	0.44494	2.50740	0.30000	1.31403
	A2->X (FF)	0.01860	0.00100	0.16754	0.32940	0.06480	0.45930	2.50740	0.30000	1.33999
	A3->X (FF)	0.01860	0.00100	0.16699	0.32940	0.06480	0.45921	2.50740	0.30000	1.33841
	S0->X (-F)	0.01860	0.00100	0.14543	0.32940	0.06480	0.45270	2.50740	0.30000	1.36344
	S1->X (-F)	0.01860	0.00100	0.08290	0.32940	0.06480	0.36203	2.50740	0.30000	1.20510

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	0.11980	0.32940	0.06480	0.43354	2.50740	0.30000	1.41418
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.11208	0.32940	0.06480	0.41927	2.50740	0.30000	1.38031
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.17660	0.32940	0.06480	0.47626	2.50740	0.30000	1.37256
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.17068	0.32940	0.06480	0.46791	2.50740	0.30000	1.35977
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.06812	0.32940	0.06480	0.35374	2.50740	0.30000	1.23278
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.06800	0.32940	0.06480	0.35374	2.50740	0.30000	1.23290
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.09295	0.32940	0.06480	0.37453	2.50740	0.30000	1.21369
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.09271	0.32940	0.06480	0.37445	2.50740	0.30000	1.21367

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	0.14543	0.32940	0.06480	0.45270	2.50740	0.30000	1.36344
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.13196	0.32940	0.06480	0.43210	2.50740	0.30000	1.32616
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.18979	0.32940	0.06480	0.48484	2.50740	0.30000	1.29862
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.18001	0.32940	0.06480	0.47058	2.50740	0.30000	1.28013
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.08290	0.32940	0.06480	0.36203	2.50740	0.30000	1.20510
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.08283	0.32940	0.06480	0.36172	2.50740	0.30000	1.20508
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.10208	0.32940	0.06480	0.37709	2.50740	0.30000	1.14120
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.10235	0.32940	0.06480	0.37715	2.50740	0.30000	1.14124

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	0.01648	0.32940	0.06480	0.01655	2.50740	0.30000	0.02887
	A1	0.01860	0.00100	0.02242	0.32940	0.06480	0.02248	2.50740	0.30000	0.03496
	A2	0.01860	0.00100	0.01565	0.32940	0.06480	0.01567	2.50740	0.30000	0.02698
	A3	0.01860	0.00100	0.01664	0.32940	0.06480	0.01663	2.50740	0.30000	0.02816
	S0	0.01860	0.00100	0.01153	0.32940	0.06480	0.01216	2.50740	0.30000	0.02683
	S1	0.01860	0.00100	0.00923	0.32940	0.06480	0.01064	2.50740	0.30000	0.01924

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	0.02271	0.32940	0.06480	0.02275	2.50740	0.30000	0.03504
	A1	0.01860	0.00100	0.02294	0.32940	0.06480	0.02295	2.50740	0.30000	0.03459
	A2	0.01860	0.00100	0.02441	0.32940	0.06480	0.02435	2.50740	0.30000	0.03635
	A3	0.01860	0.00100	0.02369	0.32940	0.06480	0.02369	2.50740	0.30000	0.03562
	S0	0.01860	0.00100	0.01920	0.32940	0.06480	0.02651	2.50740	0.30000	0.01561
	S1	0.01860	0.00100	0.00652	0.32940	0.06480	0.00738	2.50740	0.30000	0.02018

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	0.02268	0.32940	0.06480	0.01330	2.50740	0.30000	0.00127
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02262	0.32940	0.06480	0.01328	2.50740	0.30000	0.00075
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01157	0.32940	0.06480	0.01233	2.50740	0.30000	0.02645
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01153	0.32940	0.06480	0.01216	2.50740	0.30000	0.02683
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00923	0.32940	0.06480	0.01064	2.50740	0.30000	0.01924
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00964	0.32940	0.06480	0.01106	2.50740	0.30000	0.01966
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00577	0.32940	0.06480	0.00652	2.50740	0.30000	0.01881
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00606	0.32940	0.06480	0.00681	2.50740	0.30000	0.01893

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	0.01920	0.32940	0.06480	0.02651	2.50740	0.30000	0.01561
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01860	0.32940	0.06480	0.02703	2.50740	0.30000	0.01444
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01212	0.32940	0.06480	0.01061	2.50740	0.30000	0.02395
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01079	0.32940	0.06480	0.01112	2.50740	0.30000	0.02553
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01058	0.32940	0.06480	0.01189	2.50740	0.30000	0.02040
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01069	0.32940	0.06480	0.01199	2.50740	0.30000	0.02047
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00652	0.32940	0.06480	0.00738	2.50740	0.30000	0.02018
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00565	0.32940	0.06480	0.00651	2.50740	0.30000	0.01900

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01014	0.32940	0.01184	2.50740	0.04267

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00836	0.32940	0.01818	2.50740	0.04885

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	0.00952	0.32940	0.01142	2.50740	0.04269
	(A0 * A1 * !S1)	0.01860	0.01014	0.32940	0.01184	2.50740	0.04267
	(!A2 * !A3 * S1)	0.01860	0.00977	0.32940	0.01181	2.50740	0.04306
	(!A0 * !A1 * !S1)	0.01860	0.01100	0.32940	0.01284	2.50740	0.04364

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	0.00766	0.32940	0.01563	2.50740	0.04671
	(A0 * A1 * !S1)	0.01860	0.00836	0.32940	0.01818	2.50740	0.04885
	(!A2 * !A3 * S1)	0.01860	0.01519	0.32940	0.01575	2.50740	0.03233
	(!A0 * !A1 * !S1)	0.01860	0.01325	0.32940	0.02443	2.50740	0.04103

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00497	0.32940	0.00638	2.50740	0.02356

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00482	0.32940	0.00622	2.50740	0.02324

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	0.00376	0.32940	0.00502	2.50740	0.02224
	(A0 * A2 * !S0)	0.01860	0.00377	0.32940	0.00502	2.50740	0.02224
	(!A1 * !A3 * S0)	0.01860	0.00497	0.32940	0.00638	2.50740	0.02356
	(!A0 * !A2 * !S0)	0.01860	0.00503	0.32940	0.00644	2.50740	0.02361

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	0.00364	0.32940	0.00520	2.50740	0.02222
	(A0 * A2 * !S0)	0.01860	0.00363	0.32940	0.00521	2.50740	0.02222
	(!A1 * !A3 * S0)	0.01860	0.00482	0.32940	0.00622	2.50740	0.02324
	(!A0 * !A2 * !S0)	0.01860	0.00487	0.32940	0.00628	2.50740	0.02330

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	0.00229	0.00309	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	0.05190	0.32940	0.06480	0.32069	2.50740	0.30000	1.19438
	B->Y (FR)	0.01860	0.00100	0.02539	0.32940	0.06480	0.35686	2.50740	0.30000	2.00646

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	0.06220	0.32940	0.06480	0.41733	2.50740	0.30000	1.59222
	B->Y (RF)	0.01860	0.00100	0.03693	0.32940	0.06480	0.42335	2.50740	0.30000	2.20179

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	0.00254	0.32940	0.06480	0.00261	2.50740	0.30000	0.00182
	B	0.01860	0.00100	0.00221	0.32940	0.06480	0.00221	2.50740	0.30000	0.00602

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	0.00526	0.32940	0.06480	0.00533	2.50740	0.30000	0.00500
	B	0.01860	0.00100	0.00534	0.32940	0.06480	0.00535	2.50740	0.30000	0.00727

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	0.00485	0.32940	0.00580	2.50740	0.01996

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	0.00276	0.32940	0.00376	2.50740	0.01761

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	0.00485	0.32940	0.00580	2.50740	0.01996

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	0.00276	0.32940	0.00376	2.50740	0.01761

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	0.00218	0.00529	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	0.06882	0.32940	0.12960	0.35930	2.50740	0.60000	1.28045
	B->Y (FR)	0.01860	0.00100	0.01966	0.32940	0.12960	0.35247	2.50740	0.60000	2.00023

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	0.08445	0.32940	0.12960	0.47928	2.50740	0.60000	1.75770
	B->Y (RF)	0.01860	0.00100	0.02736	0.32940	0.12960	0.44267	2.50740	0.60000	2.39155

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	0.00493	0.32940	0.12960	0.00483	2.50740	0.60000	0.00491
	B	0.01860	0.00100	0.00595	0.32940	0.12960	0.00654	2.50740	0.60000	0.01402

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	0.01096	0.32940	0.12960	0.01132	2.50740	0.60000	0.01139
	B	0.01860	0.00100	0.00837	0.32940	0.12960	0.00879	2.50740	0.60000	0.01484

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	0.00818	0.32940	0.00870	2.50740	0.02170

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	0.00724	0.32940	0.00801	2.50740	0.02090

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	0.00818	0.32940	0.00870	2.50740	0.02170

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	0.00724	0.32940	0.00801	2.50740	0.02090

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	0.00547	0.00565	0.60000
sg13g2_nand2_1	0.00289	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	0.02053	0.32940	0.12960	0.35341	2.50740	0.60000	2.00085
	B->Y (FR)	0.01860	0.00100	0.02450	0.32940	0.12960	0.35742	2.50740	0.60000	2.00736
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.02265	0.32940	0.06480	0.35304	2.50740	0.30000	1.99993
	B->Y (FR)	0.01860	0.00100	0.02621	0.32940	0.06480	0.35658	2.50740	0.30000	2.00513

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	0.02664	0.32940	0.12960	0.44208	2.50740	0.60000	2.39119
	B->Y (RF)	0.01860	0.00100	0.03279	0.32940	0.12960	0.43311	2.50740	0.60000	2.25654
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.02920	0.32940	0.06480	0.43094	2.50740	0.30000	2.33399
	B->Y (RF)	0.01860	0.00100	0.03392	0.32940	0.06480	0.42050	2.50740	0.30000	2.20163

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	0.00370	0.32940	0.12960	0.00444	2.50740	0.60000	0.01122
	B	0.01860	0.00100	0.00500	0.32940	0.12960	0.00498	2.50740	0.60000	0.01226
sg13g2_nand2_1	A	0.01860	0.00100	0.00207	0.32940	0.06480	0.00231	2.50740	0.30000	0.00609
	B	0.01860	0.00100	0.00224	0.32940	0.06480	0.00222	2.50740	0.30000	0.00600

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	0.00560	0.32940	0.12960	0.00610	2.50740	0.60000	0.01223
	B	0.01860	0.00100	0.00972	0.32940	0.12960	0.00970	2.50740	0.60000	0.01362
sg13g2_nand2_1	A	0.01860	0.00100	0.00302	0.32940	0.06480	0.00323	2.50740	0.30000	0.00607
	B	0.01860	0.00100	0.00513	0.32940	0.06480	0.00512	2.50740	0.30000	0.00737

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	0.00222	0.00298	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	0.05524	0.32940	0.06480	0.32252	2.50740	0.30000	1.19310
	B->Y (FR)	0.01860	0.00100	0.02907	0.32940	0.06480	0.36071	2.50740	0.30000	2.00862
	C->Y (FR)	0.01860	0.00100	0.03176	0.32940	0.06480	0.36442	2.50740	0.30000	2.01288

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	0.07590	0.32940	0.06480	0.54246	2.50740	0.30000	2.13251
	B->Y (RF)	0.01860	0.00100	0.05609	0.32940	0.06480	0.55064	2.50740	0.30000	2.72578
	C->Y (RF)	0.01860	0.00100	0.06200	0.32940	0.06480	0.54131	2.50740	0.30000	2.57564

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	0.00277	0.32940	0.06480	0.00276	2.50740	0.30000	0.00205
	B	0.01860	0.00100	0.00280	0.32940	0.06480	0.00280	2.50740	0.30000	0.00601
	C	0.01860	0.00100	0.00325	0.32940	0.06480	0.00311	2.50740	0.30000	0.00627

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	0.00709	0.32940	0.06480	0.00715	2.50740	0.30000	0.00639
	B	0.01860	0.00100	0.00691	0.32940	0.06480	0.00680	2.50740	0.30000	0.00879
	C	0.01860	0.00100	0.00902	0.32940	0.06480	0.00888	2.50740	0.30000	0.01097

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	0.00491	0.32940	0.00590	2.50740	0.02005

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	0.00257	0.32940	0.00357	2.50740	0.01742

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	0.00491	0.32940	0.00590	2.50740	0.02005

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00257	0.32940	0.00357	2.50740	0.01742

NAND3



*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	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	0.00275	0.00290	0.00287	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	79.76510	412.19300	2282.31000

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	0.02591	0.32940	0.06480	0.35649	2.50740	0.30000	2.00390
	B->Y (FR)	0.01860	0.00100	0.02982	0.32940	0.06480	0.36075	2.50740	0.30000	2.00859
	C->Y (FR)	0.01860	0.00100	0.03200	0.32940	0.06480	0.36445	2.50740	0.30000	2.01277

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	0.04321	0.32940	0.06480	0.54767	2.50740	0.30000	2.80265
	B->Y (RF)	0.01860	0.00100	0.05254	0.32940	0.06480	0.54793	2.50740	0.30000	2.72363
	C->Y (RF)	0.01860	0.00100	0.05725	0.32940	0.06480	0.53644	2.50740	0.30000	2.57088

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	0.00254	0.32940	0.06480	0.00273	2.50740	0.30000	0.00595
	B	0.01860	0.00100	0.00281	0.32940	0.06480	0.00278	2.50740	0.30000	0.00603
	C	0.01860	0.00100	0.00327	0.32940	0.06480	0.00312	2.50740	0.30000	0.00628

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	0.00456	0.32940	0.06480	0.00461	2.50740	0.30000	0.00723
	B	0.01860	0.00100	0.00671	0.32940	0.06480	0.00662	2.50740	0.30000	0.00862
	C	0.01860	0.00100	0.00852	0.32940	0.06480	0.00842	2.50740	0.30000	0.01060

NAND4



*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	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	0.00273	0.00286	0.00287	0.00287	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	82.11500	314.77800	3043.00000

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	0.02712	0.32940	0.06480	0.35784	2.50740	0.30000	2.00447
	B->Y (FR)	0.01860	0.00100	0.03139	0.32940	0.06480	0.36219	2.50740	0.30000	2.00903
	C->Y (FR)	0.01860	0.00100	0.03375	0.32940	0.06480	0.36643	2.50740	0.30000	2.01454
	D->Y (FR)	0.01860	0.00100	0.03455	0.32940	0.06480	0.36962	2.50740	0.30000	2.01887

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	0.05491	0.32940	0.06480	0.66641	2.50740	0.30000	3.28665
	B->Y (RF)	0.01860	0.00100	0.06913	0.32940	0.06480	0.67352	2.50740	0.30000	3.24005
	C->Y (RF)	0.01860	0.00100	0.07749	0.32940	0.06480	0.66834	2.50740	0.30000	3.11598
	D->Y (RF)	0.01860	0.00100	0.08178	0.32940	0.06480	0.66236	2.50740	0.30000	2.99612

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	0.00243	0.32940	0.06480	0.00264	2.50740	0.30000	0.00556
	B	0.01860	0.00100	0.00284	0.32940	0.06480	0.00279	2.50740	0.30000	0.00565
	C	0.01860	0.00100	0.00325	0.32940	0.06480	0.00309	2.50740	0.30000	0.00589
	D	0.01860	0.00100	0.00354	0.32940	0.06480	0.00334	2.50740	0.30000	0.00618

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	0.00548	0.32940	0.06480	0.00554	2.50740	0.30000	0.00784
	B	0.01860	0.00100	0.00763	0.32940	0.06480	0.00749	2.50740	0.30000	0.00931
	C	0.01860	0.00100	0.00948	0.32940	0.06480	0.00931	2.50740	0.30000	0.01114
	D	0.01860	0.00100	0.01129	0.32940	0.06480	0.01110	2.50740	0.30000	0.01295

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	0.00557	0.00266	0.60000
sg13g2_nor2b_1	0.00288	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	0.03034	0.32940	0.12960	0.53652	2.50740	0.60000	2.79625
	B_N->Y (RR)	0.01860	0.00100	0.07826	0.32940	0.12960	0.55655	2.50740	0.60000	2.16334
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.03515	0.32940	0.06480	0.53780	2.50740	0.30000	2.79971
	B_N->Y (RR)	0.01860	0.00100	0.07161	0.32940	0.06480	0.53159	2.50740	0.30000	2.10015

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	0.01989	0.32940	0.12960	0.33376	2.50740	0.60000	1.89832
	B_N->Y (FF)	0.01860	0.00100	0.06994	0.32940	0.12960	0.34078	2.50740	0.60000	1.16384
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.02153	0.32940	0.06480	0.32719	2.50740	0.30000	1.85470
	B_N->Y (FF)	0.01860	0.00100	0.05931	0.32940	0.06480	0.30666	2.50740	0.30000	1.08015

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	0.00523	0.32940	0.12960	0.00573	2.50740	0.60000	0.01115
	B_N	0.01860	0.00100	0.01155	0.32940	0.12960	0.01164	2.50740	0.60000	0.01127
sg13g2_nor2b_1	A	0.01860	0.00100	0.00263	0.32940	0.06480	0.00282	2.50740	0.30000	0.00573
	B_N	0.01860	0.00100	0.00600	0.32940	0.06480	0.00601	2.50740	0.30000	0.00549

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	0.00378	0.32940	0.12960	0.00457	2.50740	0.60000	0.01101
	B_N	0.01860	0.00100	0.00564	0.32940	0.12960	0.00559	2.50740	0.60000	0.00550
sg13g2_nor2b_1	A	0.01860	0.00100	0.00242	0.32940	0.06480	0.00273	2.50740	0.30000	0.00574
	B_N	0.01860	0.00100	0.00305	0.32940	0.06480	0.00295	2.50740	0.30000	0.00259

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	0.00779	0.32940	0.00868	2.50740	0.02479
sg13g2_nor2b_1	0.01860	0.00450	0.32940	0.00535	2.50740	0.01928

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	0.00772	0.32940	0.00861	2.50740	0.02436
sg13g2_nor2b_1	0.01860	0.00457	0.32940	0.00544	2.50740	0.01913

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	0.00779	0.32940	0.00868	2.50740	0.02479
sg13g2_nor2b_1	A	0.01860	0.00450	0.32940	0.00535	2.50740	0.01928

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	0.00772	0.32940	0.00861	2.50740	0.02436
sg13g2_nor2b_1	A	0.01860	0.00457	0.32940	0.00544	2.50740	0.01913

NOR2x



*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
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	0.00575	0.00553	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	0.03923	0.32940	0.06480	0.32880	2.50740	0.30000	1.65409
	B->Y (FR)	0.01860	0.00100	0.03069	0.32940	0.06480	0.34461	2.50740	0.30000	1.85538
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.04188	0.32940	0.06480	0.52048	2.50740	0.30000	2.60077
	B->Y (FR)	0.01860	0.00100	0.03532	0.32940	0.06480	0.53745	2.50740	0.30000	2.79808

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	0.02309	0.32940	0.06480	0.23746	2.50740	0.30000	1.28246
	B->Y (RF)	0.01860	0.00100	0.01965	0.32940	0.06480	0.23092	2.50740	0.30000	1.27205
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.02471	0.32940	0.06480	0.33007	2.50740	0.30000	1.85875
	B->Y (RF)	0.01860	0.00100	0.02160	0.32940	0.06480	0.32664	2.50740	0.30000	1.85464

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	0.01072	0.32940	0.06480	0.01081	2.50740	0.30000	0.02089
	B	0.01860	0.00100	0.00535	0.32940	0.06480	0.00624	2.50740	0.30000	0.01711
sg13g2_nor2_1	A	0.01860	0.00100	0.00530	0.32940	0.06480	0.00521	2.50740	0.30000	0.00817
	B	0.01860	0.00100	0.00263	0.32940	0.06480	0.00281	2.50740	0.30000	0.00592

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	0.00539	0.32940	0.06480	0.00602	2.50740	0.30000	0.01854
	B	0.01860	0.00100	0.00372	0.32940	0.06480	0.00511	2.50740	0.30000	0.01721
sg13g2_nor2_1	A	0.01860	0.00100	0.00264	0.32940	0.06480	0.00246	2.50740	0.30000	0.00574
	B	0.01860	0.00100	0.00241	0.32940	0.06480	0.00264	2.50740	0.30000	0.00573

NOR3x



*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	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	0.00571	0.00566	0.00548	0.60000
sg13g2_nor3_1	0.00301	0.00301	0.00287	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	0.06982	0.32940	0.12960	0.72801	2.50740	0.60000	3.31942
	B->Y (FR)	0.01860	0.00100	0.06469	0.32940	0.12960	0.74114	2.50740	0.60000	3.52053
	C->Y (FR)	0.01860	0.00100	0.04580	0.32940	0.12960	0.73745	2.50740	0.60000	3.63992
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.07654	0.32940	0.06480	0.72691	2.50740	0.30000	3.31141
	B->Y (FR)	0.01860	0.00100	0.07167	0.32940	0.06480	0.74011	2.50740	0.30000	3.51066
	C->Y (FR)	0.01860	0.00100	0.05551	0.32940	0.06480	0.73913	2.50740	0.30000	3.63180

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	0.02564	0.32940	0.12960	0.33711	2.50740	0.60000	1.86995
	B->Y (RF)	0.01860	0.00100	0.02557	0.32940	0.12960	0.33350	2.50740	0.60000	1.86450
	C->Y (RF)	0.01860	0.00100	0.02155	0.32940	0.12960	0.32844	2.50740	0.60000	1.85153
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02738	0.32940	0.06480	0.32916	2.50740	0.30000	1.82174
	B->Y (RF)	0.01860	0.00100	0.02707	0.32940	0.06480	0.32614	2.50740	0.30000	1.82072
	C->Y (RF)	0.01860	0.00100	0.02358	0.32940	0.06480	0.32244	2.50740	0.30000	1.81307

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	0.01761	0.32940	0.12960	0.01735	2.50740	0.60000	0.02178
	B	0.01860	0.00100	0.01303	0.32940	0.12960	0.01276	2.50740	0.60000	0.01763
	C	0.01860	0.00100	0.00768	0.32940	0.12960	0.00804	2.50740	0.60000	0.01374
sg13g2_nor3_1	A	0.01860	0.00100	0.00909	0.32940	0.06480	0.00890	2.50740	0.30000	0.01109
	B	0.01860	0.00100	0.00680	0.32940	0.06480	0.00664	2.50740	0.30000	0.00894
	C	0.01860	0.00100	0.00421	0.32940	0.06480	0.00433	2.50740	0.30000	0.00706

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	0.00674	0.32940	0.12960	0.00632	2.50740	0.60000	0.01204
	B	0.01860	0.00100	0.00602	0.32940	0.12960	0.00585	2.50740	0.60000	0.01164
	C	0.01860	0.00100	0.00411	0.32940	0.12960	0.00483	2.50740	0.60000	0.00891
sg13g2_nor3_1	A	0.01860	0.00100	0.00345	0.32940	0.06480	0.00320	2.50740	0.30000	0.00622
	B	0.01860	0.00100	0.00318	0.32940	0.06480	0.00299	2.50740	0.30000	0.00619
	C	0.01860	0.00100	0.00263	0.32940	0.06480	0.00289	2.50740	0.30000	0.00575

NOR4x



*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	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	0.00566	0.00558	0.00490	0.00498	0.60000
sg13g2_nor4_1	0.00295	0.00294	0.00258	0.00259	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	0.11104	0.32940	0.12960	0.95919	2.50740	0.60000	4.14532
	B->Y (FR)	0.01860	0.00100	0.10632	0.32940	0.12960	0.96371	2.50740	0.60000	4.28782
	C->Y (FR)	0.01860	0.00100	0.09108	0.32940	0.12960	0.95976	2.50740	0.60000	4.43081
	D->Y (FR)	0.01860	0.00100	0.06101	0.32940	0.12960	0.94283	2.50740	0.60000	4.50416
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.11648	0.32940	0.06480	0.95290	2.50740	0.30000	4.12585
	B->Y (FR)	0.01860	0.00100	0.11208	0.32940	0.06480	0.95786	2.50740	0.30000	4.27053
	C->Y (FR)	0.01860	0.00100	0.09815	0.32940	0.06480	0.95593	2.50740	0.30000	4.41250
	D->Y (FR)	0.01860	0.00100	0.07035	0.32940	0.06480	0.94093	2.50740	0.30000	4.48758

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	0.02697	0.32940	0.12960	0.34175	2.50740	0.60000	1.87409
	B->Y (RF)	0.01860	0.00100	0.02805	0.32940	0.12960	0.33940	2.50740	0.60000	1.87320
	C->Y (RF)	0.01860	0.00100	0.02727	0.32940	0.12960	0.33515	2.50740	0.60000	1.86576
	D->Y (RF)	0.01860	0.00100	0.02315	0.32940	0.12960	0.33053	2.50740	0.60000	1.85281
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.02919	0.32940	0.06480	0.34152	2.50740	0.30000	1.87691
	B->Y (RF)	0.01860	0.00100	0.03020	0.32940	0.06480	0.33946	2.50740	0.30000	1.87468
	C->Y (RF)	0.01860	0.00100	0.02915	0.32940	0.06480	0.33559	2.50740	0.30000	1.86763
	D->Y (RF)	0.01860	0.00100	0.02507	0.32940	0.06480	0.33142	2.50740	0.30000	1.85624

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	0.02381	0.32940	0.12960	0.02344	2.50740	0.60000	0.02694
	B	0.01860	0.00100	0.01950	0.32940	0.12960	0.01908	2.50740	0.60000	0.02231
	C	0.01860	0.00100	0.01548	0.32940	0.12960	0.01507	2.50740	0.60000	0.01854
	D	0.01860	0.00100	0.00828	0.32940	0.12960	0.00849	2.50740	0.60000	0.01322
sg13g2_nor4_1	A	0.01860	0.00100	0.01186	0.32940	0.06480	0.01165	2.50740	0.30000	0.01363
	B	0.01860	0.00100	0.00971	0.32940	0.06480	0.00944	2.50740	0.30000	0.01118
	C	0.01860	0.00100	0.00788	0.32940	0.06480	0.00765	2.50740	0.30000	0.00943
	D	0.01860	0.00100	0.00449	0.32940	0.06480	0.00454	2.50740	0.30000	0.00674

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	0.00849	0.32940	0.12960	0.00806	2.50740	0.60000	0.01208
	B	0.01860	0.00100	0.00774	0.32940	0.12960	0.00745	2.50740	0.60000	0.01236
	C	0.01860	0.00100	0.00485	0.32940	0.12960	0.00468	2.50740	0.60000	0.00916
	D	0.01860	0.00100	0.00041	0.32940	0.12960	0.00125	2.50740	0.60000	0.00442
sg13g2_nor4_1	A	0.01860	0.00100	0.00417	0.32940	0.06480	0.00395	2.50740	0.30000	0.00614
	B	0.01860	0.00100	0.00392	0.32940	0.06480	0.00375	2.50740	0.30000	0.00617
	C	0.01860	0.00100	0.00257	0.32940	0.06480	0.00247	2.50740	0.30000	0.00481
	D	0.01860	0.00100	0.00057	0.32940	0.06480	0.00092	2.50740	0.30000	0.00276

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00002	0.32940	-0.00035	2.50740	-0.00036
sg13g2_nor4_1	0.01860	0.00011	0.32940	-0.00007	2.50740	-0.00007

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00032	0.32940	0.00035	2.50740	0.00036
sg13g2_nor4_1	0.01860	0.00005	0.32940	0.00007	2.50740	0.00007

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	0.00002	0.32940	-0.00035	2.50740	-0.00036
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00011	0.32940	-0.00007	2.50740	-0.00007

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	0.00032	0.32940	0.00035	2.50740	0.00036
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00005	0.32940	0.00007	2.50740	0.00007

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00010	0.32940	-0.00023	2.50740	-0.00024
sg13g2_nor4_1	0.01860	0.00018	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00019	0.32940	0.00023	2.50740	0.00024
sg13g2_nor4_1	0.01860	-0.00005	0.32940	0.00000	2.50740	0.00000

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	0.00010	0.32940	-0.00023	2.50740	-0.00024
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00018	0.32940	0.00000	2.50740	0.00000

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	0.00019	0.32940	0.00023	2.50740	0.00024
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00005	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00132	0.32940	0.00135	2.50740	0.00137
sg13g2_nor4_1	0.01860	0.00086	0.32940	0.00088	2.50740	0.00088

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00027
sg13g2_nor4_1	0.01860	-0.00044	0.32940	-0.00044	2.50740	-0.00044

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	0.00132	0.32940	0.00135	2.50740	0.00137
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00086	0.32940	0.00088	2.50740	0.00088

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	-0.00028	0.32940	-0.00028	2.50740	-0.00027
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00044	0.32940	-0.00044	2.50740	-0.00044

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00387	0.32940	0.00389	2.50740	0.00389
sg13g2_nor4_1	0.01860	0.00210	0.32940	0.00211	2.50740	0.00211

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00159	0.32940	0.00165	2.50740	0.00169
sg13g2_nor4_1	0.01860	0.00036	0.32940	0.00038	2.50740	0.00040

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	0.00387	0.32940	0.00389	2.50740	0.00389
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00210	0.32940	0.00211	2.50740	0.00211

Passive power(pJ) for D falling (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	0.00159	0.32940	0.00165	2.50740	0.00169
sg13g2_nor4_1	(A * !C) + (!A * B * !C)	0.01860	0.00036	0.32940	0.00038	2.50740	0.00040

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	0.00119

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.54695	5.54695	5.54695

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	-0.00029	0.32940	-0.00029	2.50740	-0.00030

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00029	0.32940	0.00029	2.50740	0.00030

O21AI



*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	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	0.00328	0.00330	0.00301	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	0.06762	0.32940	0.06480	0.61685	2.50740	0.30000	2.93598
	A2->Y (FR)	0.01860	0.00100	0.05905	0.32940	0.06480	0.63297	2.50740	0.30000	3.15270
	B1->Y (FR)	0.01860	0.00100	0.02669	0.32940	0.06480	0.39518	2.50740	0.30000	2.20905

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	0.04805	0.32940	0.06480	0.44424	2.50740	0.30000	2.22301
	A2->Y (RF)	0.01860	0.00100	0.04019	0.32940	0.06480	0.43434	2.50740	0.30000	2.20961
	B1->Y (RF)	0.01860	0.00100	0.03998	0.32940	0.06480	0.45348	2.50740	0.30000	2.38273

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	0.02669	0.32940	0.06480	0.39518	2.50740	0.30000	2.20905
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02592	0.32940	0.06480	0.39321	2.50740	0.30000	2.20429

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	0.03998	0.32940	0.06480	0.45348	2.50740	0.30000	2.38273
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03048	0.32940	0.06480	0.44153	2.50740	0.30000	2.36411

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	0.00599	0.32940	0.06480	0.00589	2.50740	0.30000	0.00828
	A2	0.01860	0.00100	0.00315	0.32940	0.06480	0.00324	2.50740	0.30000	0.00589
	B1	0.01860	0.00100	0.00142	0.32940	0.06480	0.00162	2.50740	0.30000	0.00431

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	0.00647	0.32940	0.06480	0.00618	2.50740	0.30000	0.00807
	A2	0.01860	0.00100	0.00598	0.32940	0.06480	0.00604	2.50740	0.30000	0.00776
	B1	0.01860	0.00100	0.00283	0.32940	0.06480	0.00311	2.50740	0.30000	0.00648

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	0.00420	0.32940	0.06480	0.00439	2.50740	0.30000	0.00702
	B1	(!A1 * A2)	0.01860	0.00100	0.00142	0.32940	0.06480	0.00162	2.50740	0.30000	0.00431

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	0.00358	0.32940	0.06480	0.00362	2.50740	0.30000	0.00716
	B1	(!A1 * A2)	0.01860	0.00100	0.00283	0.32940	0.06480	0.00311	2.50740	0.30000	0.00648

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00040	0.32940	-0.00039	2.50740	-0.00034

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00055	0.32940	0.00039	2.50740	0.00034

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	-0.00040	0.32940	-0.00039	2.50740	-0.00034

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	0.00055	0.32940	0.00039	2.50740	0.00034

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00033	0.32940	-0.00031	2.50740	-0.00027

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00045	0.32940	0.00031	2.50740	0.00027

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	-0.00033	0.32940	-0.00031	2.50740	-0.00027

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	0.00045	0.32940	0.00031	2.50740	0.00027

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00024	0.32940	0.00024	2.50740	0.00025

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00078	0.32940	0.00081	2.50740	0.00082

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	0.00024	0.32940	0.00024	2.50740	0.00025

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	0.00078	0.32940	0.00081	2.50740	0.00082

OR2x



*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	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	0.00245	0.00226	0.60000
sg13g2_or2_1	0.00246	0.00228	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	0.06768	0.32940	0.12960	0.36906	2.50740	0.60000	1.29617
	B->X (RR)	0.01860	0.00100	0.06314	0.32940	0.12960	0.35722	2.50740	0.60000	1.25411
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.05684	0.32940	0.06480	0.33683	2.50740	0.30000	1.21493
	B->X (RR)	0.01860	0.00100	0.05216	0.32940	0.06480	0.32148	2.50740	0.30000	1.16659

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	0.11781	0.32940	0.12960	0.39774	2.50740	0.60000	1.25509
	B->X (FF)	0.01860	0.00100	0.11131	0.32940	0.12960	0.41063	2.50740	0.60000	1.30854
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.09141	0.32940	0.06480	0.34491	2.50740	0.30000	1.16136
	B->X (FF)	0.01860	0.00100	0.08447	0.32940	0.06480	0.35255	2.50740	0.30000	1.19970

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	0.01259	0.32940	0.12960	0.01328	2.50740	0.60000	0.02605
	B	0.01860	0.00100	0.01229	0.32940	0.12960	0.01292	2.50740	0.60000	0.02480
sg13g2_or2_1	A	0.01860	0.00100	0.00768	0.32940	0.06480	0.00849	2.50740	0.30000	0.02020
	B	0.01860	0.00100	0.00737	0.32940	0.06480	0.00803	2.50740	0.30000	0.02000

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	0.01501	0.32940	0.12960	0.01460	2.50740	0.60000	0.02860
	B	0.01860	0.00100	0.01325	0.32940	0.12960	0.01313	2.50740	0.60000	0.02434
sg13g2_or2_1	A	0.01860	0.00100	0.00944	0.32940	0.06480	0.00980	2.50740	0.30000	0.02108
	B	0.01860	0.00100	0.00762	0.32940	0.06480	0.00842	2.50740	0.30000	0.02062

OR3x



*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	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	0.00256	0.00250	0.00238	0.60000
sg13g2_or3_1	0.00257	0.00251	0.00239	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	0.07697	0.32940	0.12960	0.39070	2.50740	0.60000	1.36225
	B->X (RR)	0.01860	0.00100	0.07328	0.32940	0.12960	0.38027	2.50740	0.60000	1.31898
	C->X (RR)	0.01860	0.00100	0.06736	0.32940	0.12960	0.36714	2.50740	0.60000	1.27826
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.06622	0.32940	0.06480	0.36067	2.50740	0.30000	1.28973
	B->X (RR)	0.01860	0.00100	0.06291	0.32940	0.06480	0.34852	2.50740	0.30000	1.24173
	C->X (RR)	0.01860	0.00100	0.05685	0.32940	0.06480	0.33414	2.50740	0.30000	1.19118

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	0.16390	0.32940	0.12960	0.44541	2.50740	0.60000	1.27304
	B->X (FF)	0.01860	0.00100	0.15851	0.32940	0.12960	0.45468	2.50740	0.60000	1.34440
	C->X (FF)	0.01860	0.00100	0.14421	0.32940	0.12960	0.45603	2.50740	0.60000	1.37711
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.13083	0.32940	0.06480	0.38850	2.50740	0.30000	1.18579
	B->X (FF)	0.01860	0.00100	0.12540	0.32940	0.06480	0.39469	2.50740	0.30000	1.24376
	C->X (FF)	0.01860	0.00100	0.11065	0.32940	0.06480	0.39229	2.50740	0.30000	1.25850

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	0.01320	0.32940	0.12960	0.01367	2.50740	0.60000	0.02929
	B	0.01860	0.00100	0.01274	0.32940	0.12960	0.01329	2.50740	0.60000	0.02626
	C	0.01860	0.00100	0.01245	0.32940	0.12960	0.01289	2.50740	0.60000	0.02544
sg13g2_or3_1	A	0.01860	0.00100	0.00823	0.32940	0.06480	0.00869	2.50740	0.30000	0.02150
	B	0.01860	0.00100	0.00782	0.32940	0.06480	0.00823	2.50740	0.30000	0.02064
	C	0.01860	0.00100	0.00751	0.32940	0.06480	0.00818	2.50740	0.30000	0.01967

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	0.01971	0.32940	0.12960	0.01816	2.50740	0.60000	0.02967
	B	0.01860	0.00100	0.01772	0.32940	0.12960	0.01644	2.50740	0.60000	0.02701
	C	0.01860	0.00100	0.01557	0.32940	0.12960	0.01454	2.50740	0.60000	0.02461
sg13g2_or3_1	A	0.01860	0.00100	0.01349	0.32940	0.06480	0.01351	2.50740	0.30000	0.02534
	B	0.01860	0.00100	0.01150	0.32940	0.06480	0.01158	2.50740	0.30000	0.02321
	C	0.01860	0.00100	0.00928	0.32940	0.06480	0.00987	2.50740	0.30000	0.02191

OR4x



*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	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	0.00213	0.00215	0.60000
sg13g2_or4_1	0.00253	0.00247	0.00213	0.00216	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	0.08020	0.32940	0.12960	0.40069	2.50740	0.60000	1.38172
	B->X (RR)	0.01860	0.00100	0.07873	0.32940	0.12960	0.39306	2.50740	0.60000	1.34575
	C->X (RR)	0.01860	0.00100	0.07434	0.32940	0.12960	0.38249	2.50740	0.60000	1.30730
	D->X (RR)	0.01860	0.00100	0.06811	0.32940	0.12960	0.36927	2.50740	0.60000	1.26502
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.06913	0.32940	0.06480	0.37248	2.50740	0.30000	1.31562
	B->X (RR)	0.01860	0.00100	0.06815	0.32940	0.06480	0.36361	2.50740	0.30000	1.27110
	C->X (RR)	0.01860	0.00100	0.06427	0.32940	0.06480	0.35157	2.50740	0.30000	1.22711
	D->X (RR)	0.01860	0.00100	0.05786	0.32940	0.06480	0.33720	2.50740	0.30000	1.17884

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	0.22496	0.32940	0.12960	0.52164	2.50740	0.60000	1.33809
	B->X (FF)	0.01860	0.00100	0.21986	0.32940	0.12960	0.52320	2.50740	0.60000	1.41357
	C->X (FF)	0.01860	0.00100	0.20586	0.32940	0.12960	0.52042	2.50740	0.60000	1.46755
	D->X (FF)	0.01860	0.00100	0.18150	0.32940	0.12960	0.51068	2.50740	0.60000	1.48144
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.18059	0.32940	0.06480	0.45156	2.50740	0.30000	1.24550
	B->X (FF)	0.01860	0.00100	0.17550	0.32940	0.06480	0.45255	2.50740	0.30000	1.30641
	C->X (FF)	0.01860	0.00100	0.16151	0.32940	0.06480	0.44750	2.50740	0.30000	1.35144
	D->X (FF)	0.01860	0.00100	0.13659	0.32940	0.06480	0.43598	2.50740	0.30000	1.35056

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	0.01394	0.32940	0.12960	0.01431	2.50740	0.60000	0.02653
	B	0.01860	0.00100	0.01349	0.32940	0.12960	0.01387	2.50740	0.60000	0.02567
	C	0.01860	0.00100	0.01226	0.32940	0.12960	0.01274	2.50740	0.60000	0.02473
	D	0.01860	0.00100	0.01072	0.32940	0.12960	0.01123	2.50740	0.60000	0.02169
sg13g2_or4_1	A	0.01860	0.00100	0.00892	0.32940	0.06480	0.00940	2.50740	0.30000	0.02190
	B	0.01860	0.00100	0.00851	0.32940	0.06480	0.00879	2.50740	0.30000	0.01957
	C	0.01860	0.00100	0.00734	0.32940	0.06480	0.00769	2.50740	0.30000	0.01861
	D	0.01860	0.00100	0.00577	0.32940	0.06480	0.00644	2.50740	0.30000	0.01705

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	0.02247	0.32940	0.12960	0.01994	2.50740	0.60000	0.02678
	B	0.01860	0.00100	0.02138	0.32940	0.12960	0.01861	2.50740	0.60000	0.02636
	C	0.01860	0.00100	0.01960	0.32940	0.12960	0.01698	2.50740	0.60000	0.02615
	D	0.01860	0.00100	0.01625	0.32940	0.12960	0.01387	2.50740	0.60000	0.02398
sg13g2_or4_1	A	0.01860	0.00100	0.01517	0.32940	0.06480	0.01481	2.50740	0.30000	0.02476
	B	0.01860	0.00100	0.01410	0.32940	0.06480	0.01369	2.50740	0.30000	0.02337
	C	0.01860	0.00100	0.01234	0.32940	0.06480	0.01199	2.50740	0.30000	0.02195
	D	0.01860	0.00100	0.00895	0.32940	0.06480	0.00917	2.50740	0.30000	0.01961

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00000	0.32940	-0.00017	2.50740	-0.00022
sg13g2_or4_1	0.01860	0.00000	0.32940	-0.00017	2.50740	-0.00022

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00086	0.32940	0.00089	2.50740	0.00090
sg13g2_or4_1	0.01860	0.00086	0.32940	0.00089	2.50740	0.00090

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	-0.00000	0.32940	-0.00017	2.50740	-0.00022
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00000	0.32940	-0.00017	2.50740	-0.00022

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	0.00086	0.32940	0.00089	2.50740	0.00090
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00086	0.32940	0.00089	2.50740	0.00090

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	0.01860	-0.00001	0.32940	0.00000	2.50740	0.00000

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	0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000

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	-0.00001	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00001	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00061	0.32940	0.00063	2.50740	0.00064
sg13g2_or4_1	0.01860	0.00061	0.32940	0.00063	2.50740	0.00064

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00024	0.32940	-0.00024	2.50740	-0.00024
sg13g2_or4_1	0.01860	-0.00024	0.32940	-0.00024	2.50740	-0.00024

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	0.00061	0.32940	0.00063	2.50740	0.00064
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00061	0.32940	0.00063	2.50740	0.00064

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	-0.00024	0.32940	-0.00024	2.50740	-0.00024
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00024	0.32940	-0.00024	2.50740	-0.00024

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00175	0.32940	0.00178	2.50740	0.00178
sg13g2_or4_1	0.01860	0.00176	0.32940	0.00178	2.50740	0.00178

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00093	0.32940	0.00093	2.50740	0.00095
sg13g2_or4_1	0.01860	0.00091	0.32940	0.00093	2.50740	0.00095

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	0.00175	0.32940	0.00178	2.50740	0.00178
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00176	0.32940	0.00178	2.50740	0.00178

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	0.00093	0.32940	0.00093	2.50740	0.00095
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00091	0.32940	0.00093	2.50740	0.00095

SDFRRS



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp
125.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00195	0.00196	0.00353	0.00172	0.00519	0.00299	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	4196.74000	5867.63000	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	0.30276	0.32940	0.06480	0.57714	2.50740	0.30000	1.44291
	SET_B->Q (FR)	0.01860	0.00100	0.12344	0.32940	0.06480	0.41908	2.50740	0.30000	1.34937

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	0.24886	0.32940	0.06480	0.50232	2.50740	0.30000	1.28955
	RESET_B->Q (FF)	0.01860	0.00100	0.20513	0.32940	0.06480	0.47557	2.50740	0.30000	1.30855

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	0.30276	0.32940	0.06480	0.57714	2.50740	0.30000	1.44291

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	0.24886	0.32940	0.06480	0.50232	2.50740	0.30000	1.28955

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	0.20512	0.32940	0.06480	0.50108	2.50740	0.30000	1.38427
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16039	0.32940	0.06480	0.48069	2.50740	0.30000	1.41426

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	0.25162	0.32940	0.06480	0.54399	2.50740	0.30000	1.31936
	SET_B->Q_N (FF)	0.01860	0.00100	0.08129	0.32940	0.06480	0.37925	2.50740	0.30000	1.24017

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	0.20512	0.32940	0.06480	0.50108	2.50740	0.30000	1.38427

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	0.25162	0.32940	0.06480	0.54399	2.50740	0.30000	1.31936

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	-0.09292	1.26300	1.26300	-0.25095	2.50740	2.50740	-0.34238
	setup	CLK (R)	0.01860	0.01860	0.13204	1.26300	1.26300	0.27523	2.50740	2.50740	0.36894

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	-0.09781	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.25088
	setup	CLK (R)	0.01860	0.01860	0.17116	1.26300	1.26300	0.27254	2.50740	2.50740	0.35714

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	-0.11981	1.26300	1.26300	-0.30222	2.50740	2.50740	-0.41026
	setup	CLK (R)	0.01860	0.01860	0.16138	1.26300	1.26300	0.32380	2.50740	2.50740	0.43093

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	-0.12959	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.20540	1.26300	1.26300	0.27793	2.50740	2.50740	0.36304

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	-0.10270	1.26300	1.26300	-0.28873	2.50740	2.50740	-0.39846
	setup	CLK (R)	0.01860	0.01860	0.14182	1.26300	1.26300	0.31301	2.50740	2.50740	0.42502

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	-0.10025	1.26300	1.26300	-0.14031	2.50740	2.50740	-0.17709
	setup	CLK (R)	0.01860	0.01860	0.17116	1.26300	1.26300	0.22127	2.50740	2.50740	0.28335

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	0.07825	1.26300	1.26300	0.12952	2.50740	2.50740	0.15938
	removal	CLK (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.11806

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	0.03423	1.26300	1.26300	0.20238	2.50740	2.50740	0.54899
	removal	CLK (R)	0.01860	0.01860	0.03912	1.26300	1.26300	0.09444	2.50740	2.50740	0.09445
	hold	RESET_B (R)	0.01860	0.01860	-0.07825	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.25973
	setup	RESET_B (R)	0.01860	0.01860	0.09781	1.26300	1.26300	0.23206	2.50740	2.50740	0.33057

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	0.02091	0.32940	0.06480	0.02177	2.50740	0.30000	0.03360
	SET_B	0.01860	0.00100	0.03908	0.32940	0.06480	0.09839	2.50740	0.30000	0.34262

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	0.02068	0.32940	0.06480	0.02137	2.50740	0.30000	0.03241
	RESET_B	0.01860	0.00100	0.04388	0.32940	0.06480	0.10247	2.50740	0.30000	0.32773

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	0.02091	0.32940	0.06480	0.02177	2.50740	0.30000	0.03360

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	0.02068	0.32940	0.06480	0.02137	2.50740	0.30000	0.03241

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	0.02069	0.32940	0.06480	0.02151	2.50740	0.30000	0.03400
	RESET_B	0.01860	0.00100	0.04388	0.32940	0.06480	0.10278	2.50740	0.30000	0.33022

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	0.02091	0.32940	0.06480	0.02160	2.50740	0.30000	0.03140
	SET_B	0.01860	0.00100	0.03905	0.32940	0.06480	0.09800	2.50740	0.30000	0.34181

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	0.02069	0.32940	0.06480	0.02151	2.50740	0.30000	0.03400

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	0.02091	0.32940	0.06480	0.02160	2.50740	0.30000	0.03140

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00088	0.32940	-0.00071	2.50740	0.00671

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00622	0.32940	0.00646	2.50740	0.01369

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	0.01410	0.32940	0.01424	2.50740	0.02263
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	-0.00088	0.32940	-0.00071	2.50740	0.00671

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	0.01414	0.32940	0.01428	2.50740	0.02268
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00622	0.32940	0.00646	2.50740	0.01369

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00670	0.32940	0.00673	2.50740	0.01324

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00316	0.32940	-0.00314	2.50740	0.00355

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	0.01603	0.32940	0.01600	2.50740	0.02339
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00670	0.32940	0.00673	2.50740	0.01324

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	0.01894	0.32940	0.01850	2.50740	0.02621
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	-0.00316	0.32940	-0.00314	2.50740	0.00355

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01305	0.32940	0.01268	2.50740	0.02309

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01863	0.32940	0.01921	2.50740	0.02928

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	0.01798	0.32940	0.01851	2.50740	0.02902
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01305	0.32940	0.01268	2.50740	0.02309
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01642	0.32940	0.01739	2.50740	0.03642
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00699	0.32940	0.00796	2.50740	0.02594

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	0.01863	0.32940	0.01921	2.50740	0.02928
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01414	0.32940	0.02393	2.50740	0.03409
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00103	0.32940	0.02759	2.50740	0.04851
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	-0.00555	0.32940	-0.00465	2.50740	0.01242

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01496	0.32940	0.01600	2.50740	0.03624

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01441	0.32940	0.01563	2.50740	0.03571

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	0.01525	0.32940	0.01631	2.50740	0.03649
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01496	0.32940	0.01600	2.50740	0.03624
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01494	0.32940	0.01598	2.50740	0.03628
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01525	0.32940	0.01632	2.50740	0.03649
	(!RESET_B * !Q * Q_N)	0.01860	0.00258	0.32940	0.00363	2.50740	0.02396
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01492	0.32940	0.01596	2.50740	0.03627

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	0.01375	0.32940	0.01488	2.50740	0.03511
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02517	0.32940	0.02620	2.50740	0.04695
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00588	0.32940	0.00723	2.50740	0.02802
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02726	0.32940	0.02852	2.50740	0.04945
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01441	0.32940	0.01563	2.50740	0.03571
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01376	0.32940	0.01488	2.50740	0.03511
	(!RESET_B * !Q * Q_N)	0.01860	0.00043	0.32940	0.00166	2.50740	0.02172
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01392	0.32940	0.01515	2.50740	0.03522

SGCLK



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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	0.00200	0.00239	0.00495	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	0.07281	0.32940	0.06480	0.33993	2.50740	0.30000	1.21980

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	0.06141	0.32940	0.06480	0.32325	2.50740	0.30000	1.13507

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	-0.04018	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.25125
	setup	CLK (R)	0.01860	0.01860	0.06589	1.26300	1.26300	0.26984	2.50740	2.50740	0.39772

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	-0.06697	1.26300	1.26300	-0.19428	2.50740	2.50740	-0.29873
	setup	CLK (R)	0.01860	0.01860	0.10745	1.26300	1.26300	0.24825	2.50740	2.50740	0.41057

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	-0.04406	1.26300	1.26300	-0.20777	2.50740	2.50740	-0.30171
	setup	CLK (R)	0.01860	0.01860	0.00200	1.26300	1.26300	0.00200	2.50740	2.50740	0.00200

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	-0.07391	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.23906
	setup	CLK (R)	0.01860	0.01860	0.11169	1.26300	1.26300	0.21857	2.50740	2.50740	0.33199

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	0.01336	0.32940	0.06480	0.01389	2.50740	0.30000	0.02706

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	0.01192	0.32940	0.06480	0.01308	2.50740	0.30000	0.02665

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02364	0.32940	0.02529	2.50740	0.03859

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01108	0.32940	0.03746	2.50740	0.05089

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	0.02364	0.32940	0.02529	2.50740	0.03859

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	0.01108	0.32940	0.03746	2.50740	0.05089

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00806	0.32940	0.00873	2.50740	0.02205

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01338	0.32940	0.03634	2.50740	0.04891

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00658	0.32940	0.00761	2.50740	0.02523

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00462	0.32940	0.00574	2.50740	0.02363

TIE0



*sg13g2_stdcell_slow_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

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*

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	0.00544	0.00496	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	0.07221	0.32940	0.06480	0.34026	2.50740	0.30000	1.21678
	A->Y (FR)	0.01860	0.00100	0.05441	0.32940	0.06480	0.53546	2.50740	0.30000	2.61311
	B->Y (RR)	0.01860	0.00100	0.06683	0.32940	0.06480	0.33876	2.50740	0.30000	1.22330
	B->Y (FR)	0.01860	0.00100	0.04795	0.32940	0.06480	0.55162	2.50740	0.30000	2.81166

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	0.07093	0.32940	0.06480	0.44005	2.50740	0.30000	1.65022
	A->Y (RF)	0.01860	0.00100	0.04657	0.32940	0.06480	0.43653	2.50740	0.30000	2.22002
	B->Y (FF)	0.01860	0.00100	0.07185	0.32940	0.06480	0.42693	2.50740	0.30000	1.62290
	B->Y (RF)	0.01860	0.00100	0.03938	0.32940	0.06480	0.42788	2.50740	0.30000	2.20612

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	0.00971	0.32940	0.06480	0.01029	2.50740	0.30000	0.02322
	B	0.01860	0.00100	0.00977	0.32940	0.06480	0.01039	2.50740	0.30000	0.02442

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	0.00842	0.32940	0.06480	0.00948	2.50740	0.30000	0.02236
	B	0.01860	0.00100	0.00945	0.32940	0.06480	0.00887	2.50740	0.30000	0.02244

XOR2_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	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	0.00577	0.00510	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	0.07277	0.32940	0.06480	0.54542	2.50740	0.30000	2.14328
	A->X (FR)	0.01860	0.00100	0.05934	0.32940	0.06480	0.54295	2.50740	0.30000	2.62293
	B->X (RR)	0.01860	0.00100	0.07631	0.32940	0.06480	0.53122	2.50740	0.30000	2.09767
	B->X (FR)	0.01860	0.00100	0.05076	0.32940	0.06480	0.53385	2.50740	0.30000	2.61014

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	0.08720	0.32940	0.06480	0.33445	2.50740	0.30000	1.11604
	A->X (RF)	0.01860	0.00100	0.04426	0.32940	0.06480	0.43334	2.50740	0.30000	2.21369
	B->X (FF)	0.01860	0.00100	0.08039	0.32940	0.06480	0.33927	2.50740	0.30000	1.15013
	B->X (RF)	0.01860	0.00100	0.03848	0.32940	0.06480	0.44256	2.50740	0.30000	2.34556

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	0.00872	0.32940	0.06480	0.00959	2.50740	0.30000	0.02237
	B	0.01860	0.00100	0.00947	0.32940	0.06480	0.00889	2.50740	0.30000	0.02202

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	0.01059	0.32940	0.06480	0.01102	2.50740	0.30000	0.02321
	B	0.01860	0.00100	0.00971	0.32940	0.06480	0.01035	2.50740	0.30000	0.02335