

sg13g2_stdcell_typ_1p50V_25C 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_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00569	0.00627	0.00556	0.60000
sg13g2_a21oi_1	0.00296	0.00312	0.00283	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	373.63800	717.09200	919.64000
sg13g2_a21oi_1	186.81800	358.54600	459.82100

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	0.03026	0.32940	0.12960	0.37717	2.50740	0.60000	1.90552
	A2->Y (FR)	0.01860	0.00100	0.03661	0.32940	0.12960	0.38240	2.50740	0.60000	1.90984
	B1->Y (FR)	0.01860	0.00100	0.02911	0.32940	0.12960	0.40411	2.50740	0.60000	2.15981
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.03317	0.32940	0.06480	0.37658	2.50740	0.30000	1.90153
	A2->Y (FR)	0.01860	0.00100	0.03934	0.32940	0.06480	0.38300	2.50740	0.30000	1.91041
	B1->Y (FR)	0.01860	0.00100	0.03181	0.32940	0.06480	0.40441	2.50740	0.30000	2.15901

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	0.02474	0.32940	0.12960	0.32512	2.50740	0.60000	1.75991
	A2->Y (RF)	0.01860	0.00100	0.02800	0.32940	0.12960	0.30730	2.50740	0.60000	1.59535
	B1->Y (RF)	0.01860	0.00100	0.01491	0.32940	0.12960	0.24818	2.50740	0.60000	1.37871
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.02702	0.32940	0.06480	0.32544	2.50740	0.30000	1.75880
	A2->Y (RF)	0.01860	0.00100	0.03004	0.32940	0.06480	0.30739	2.50740	0.30000	1.59337
	B1->Y (RF)	0.01860	0.00100	0.01598	0.32940	0.06480	0.24753	2.50740	0.30000	1.38181

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	0.02911	0.32940	0.12960	0.40411	2.50740	0.60000	2.15981
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02226	0.32940	0.12960	0.39813	2.50740	0.60000	2.15653
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01922	0.32940	0.12960	0.33566	2.50740	0.60000	1.85122
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.03181	0.32940	0.06480	0.40441	2.50740	0.30000	2.15901
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02495	0.32940	0.06480	0.39687	2.50740	0.30000	2.14733
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02119	0.32940	0.06480	0.33527	2.50740	0.30000	1.84878

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	0.01491	0.32940	0.12960	0.24818	2.50740	0.60000	1.37871
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01460	0.32940	0.12960	0.24694	2.50740	0.60000	1.37579
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01435	0.32940	0.12960	0.24673	2.50740	0.60000	1.37765
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01649	0.32940	0.06480	0.24902	2.50740	0.30000	1.37875
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01620	0.32940	0.06480	0.24770	2.50740	0.30000	1.37617
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01598	0.32940	0.06480	0.24753	2.50740	0.30000	1.38181

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	0.01070	0.32940	0.12960	0.01181	2.50740	0.60000	0.03289
	A2	0.01860	0.00100	0.01393	0.32940	0.12960	0.01468	2.50740	0.60000	0.03638
	B1	0.01860	0.00100	0.00905	0.32940	0.12960	0.01113	2.50740	0.60000	0.03705
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00549	0.32940	0.06480	0.00595	2.50740	0.30000	0.01637
	A2	0.01860	0.00100	0.00694	0.32940	0.06480	0.00730	2.50740	0.30000	0.01815
	B1	0.01860	0.00100	0.00450	0.32940	0.06480	0.00544	2.50740	0.30000	0.01809

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	0.01009	0.32940	0.12960	0.01085	2.50740	0.60000	0.03203
	A2	0.01860	0.00100	0.01480	0.32940	0.12960	0.01502	2.50740	0.60000	0.03489
	B1	0.01860	0.00100	0.00296	0.32940	0.12960	0.00561	2.50740	0.60000	0.03009
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00557	0.32940	0.06480	0.00596	2.50740	0.30000	0.01583
	A2	0.01860	0.00100	0.00776	0.32940	0.06480	0.00790	2.50740	0.30000	0.01781
	B1	0.01860	0.00100	0.00194	0.32940	0.06480	0.00324	2.50740	0.30000	0.01597

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	0.00905	0.32940	0.12960	0.01113	2.50740	0.60000	0.03705
	B1	(!A1 * A2)	0.01860	0.00100	0.00772	0.32940	0.12960	0.01020	2.50740	0.60000	0.03602
	B1	(!A1 * !A2)	0.01860	0.00100	0.00779	0.32940	0.12960	0.01035	2.50740	0.60000	0.03792
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00450	0.32940	0.06480	0.00544	2.50740	0.30000	0.01809
	B1	(!A1 * A2)	0.01860	0.00100	0.00398	0.32940	0.06480	0.00518	2.50740	0.30000	0.01791
	B1	(!A1 * !A2)	0.01860	0.00100	0.00400	0.32940	0.06480	0.00520	2.50740	0.30000	0.01895

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	0.00856	0.32940	0.12960	0.01127	2.50740	0.60000	0.03353
	B1	(!A1 * A2)	0.01860	0.00100	0.00324	0.32940	0.12960	0.00584	2.50740	0.60000	0.02824
	B1	(!A1 * !A2)	0.01860	0.00100	0.00296	0.32940	0.12960	0.00561	2.50740	0.60000	0.03009
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00474	0.32940	0.06480	0.00608	2.50740	0.30000	0.01685
	B1	(!A1 * A2)	0.01860	0.00100	0.00208	0.32940	0.06480	0.00333	2.50740	0.30000	0.01407
	B1	(!A1 * !A2)	0.01860	0.00100	0.00194	0.32940	0.06480	0.00324	2.50740	0.30000	0.01597

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00163	0.32940	-0.00167	2.50740	-0.00166
sg13g2_a21oi_1	0.01860	-0.00081	0.32940	-0.00083	2.50740	-0.00083

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00296	0.32940	0.00304	2.50740	0.00306
sg13g2_a21oi_1	0.01860	0.00136	0.32940	0.00140	2.50740	0.00140

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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00163	0.32940	-0.00167	2.50740	-0.00166
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00081	0.32940	-0.00083	2.50740	-0.00083

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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00296	0.32940	0.00304	2.50740	0.00306
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00136	0.32940	0.00140	2.50740	0.00140

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00076	0.32940	-0.00049	2.50740	-0.00039
sg13g2_a21oi_1	0.01860	-0.00038	0.32940	-0.00025	2.50740	-0.00020

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00076	0.32940	0.00049	2.50740	0.00039
sg13g2_a21oi_1	0.01860	0.00038	0.32940	0.00025	2.50740	0.00020

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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	-0.00076	0.32940	-0.00049	2.50740	-0.00039
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	-0.00038	0.32940	-0.00025	2.50740	-0.00020

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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00076	0.32940	0.00049	2.50740	0.00039
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00038	0.32940	0.00025	2.50740	0.00020

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00128	0.32940	0.00132	2.50740	0.00132
sg13g2_a21oi_1	0.01860	0.00070	0.32940	0.00073	2.50740	0.00073

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00128	0.32940	-0.00132	2.50740	-0.00132
sg13g2_a21oi_1	0.01860	-0.00070	0.32940	-0.00073	2.50740	-0.00073

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	0.00128	0.32940	0.00132	2.50740	0.00132
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00070	0.32940	0.00073	2.50740	0.00073

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	-0.00128	0.32940	-0.00132	2.50740	-0.00132
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00070	0.32940	-0.00073	2.50740	-0.00073

A221OI



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00308	0.00314	0.00285	0.00295	0.00260	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	279.73700	536.89500	725.27700

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	0.07445	0.32940	0.12960	0.91783	2.50740	0.60000	4.15179
	A2->Y (FR)	0.01860	0.00100	0.07297	0.32940	0.12960	0.91649	2.50740	0.60000	4.15450
	B1->Y (FR)	0.01860	0.00100	0.06643	0.32940	0.12960	0.93042	2.50740	0.60000	4.36294
	B2->Y (FR)	0.01860	0.00100	0.07530	0.32940	0.12960	0.93685	2.50740	0.60000	4.36273
	C1->Y (FR)	0.01860	0.00100	0.04811	0.32940	0.12960	0.92968	2.50740	0.60000	4.50161

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	0.03428	0.32940	0.12960	0.51762	2.50740	0.60000	2.66216
	A2->Y (RF)	0.01860	0.00100	0.03710	0.32940	0.12960	0.50101	2.50740	0.60000	2.49726
	B1->Y (RF)	0.01860	0.00100	0.03162	0.32940	0.12960	0.51026	2.50740	0.60000	2.65409
	B2->Y (RF)	0.01860	0.00100	0.03456	0.32940	0.12960	0.49248	2.50740	0.60000	2.48759
	C1->Y (RF)	0.01860	0.00100	0.01864	0.32940	0.12960	0.36203	2.50740	0.60000	2.03895

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	0.07445	0.32940	0.12960	0.91783	2.50740	0.60000	4.15179
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.06377	0.32940	0.12960	0.90960	2.50740	0.60000	4.15073
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.05779	0.32940	0.12960	0.78083	2.50740	0.60000	3.62262
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.08333	0.32940	0.12960	0.92471	2.50740	0.60000	4.15397
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.07297	0.32940	0.12960	0.91649	2.50740	0.60000	4.15450
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.06529	0.32940	0.12960	0.78667	2.50740	0.60000	3.62627
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06643	0.32940	0.12960	0.93042	2.50740	0.60000	4.36294
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05569	0.32940	0.12960	0.92083	2.50740	0.60000	4.35819
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04711	0.32940	0.12960	0.78093	2.50740	0.60000	3.74374
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.07530	0.32940	0.12960	0.93685	2.50740	0.60000	4.36273
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.06489	0.32940	0.12960	0.92802	2.50740	0.60000	4.35846
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.05454	0.32940	0.12960	0.78582	2.50740	0.60000	3.74178
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04811	0.32940	0.12960	0.92968	2.50740	0.60000	4.50161

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	0.03428	0.32940	0.12960	0.51762	2.50740	0.60000	2.66216
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03332	0.32940	0.12960	0.51493	2.50740	0.60000	2.65980
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.03477	0.32940	0.12960	0.51775	2.50740	0.60000	2.66119
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.03710	0.32940	0.12960	0.50101	2.50740	0.60000	2.49726
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03623	0.32940	0.12960	0.49751	2.50740	0.60000	2.49292
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.03769	0.32940	0.12960	0.50006	2.50740	0.60000	2.49634
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03162	0.32940	0.12960	0.51026	2.50740	0.60000	2.65409
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03100	0.32940	0.12960	0.50759	2.50740	0.60000	2.65209
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03068	0.32940	0.12960	0.50750	2.50740	0.60000	2.65350
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03456	0.32940	0.12960	0.49248	2.50740	0.60000	2.48759
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03394	0.32940	0.12960	0.48983	2.50740	0.60000	2.48345
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03365	0.32940	0.12960	0.48934	2.50740	0.60000	2.48429
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01864	0.32940	0.12960	0.36203	2.50740	0.60000	2.03895

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	0.01286	0.32940	0.12960	0.01257	2.50740	0.60000	0.01722
	A2	0.01860	0.00100	0.01311	0.32940	0.12960	0.01262	2.50740	0.60000	0.01750
	B1	0.01860	0.00100	0.01166	0.32940	0.12960	0.01145	2.50740	0.60000	0.01599
	B2	0.01860	0.00100	0.01147	0.32940	0.12960	0.01111	2.50740	0.60000	0.01581
	C1	0.01860	0.00100	0.00534	0.32940	0.12960	0.00548	2.50740	0.60000	0.01073

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	0.00770	0.32940	0.12960	0.00721	2.50740	0.60000	0.01014
	A2	0.01860	0.00100	0.01031	0.32940	0.12960	0.00969	2.50740	0.60000	0.01253
	B1	0.01860	0.00100	0.00316	0.32940	0.12960	0.00300	2.50740	0.60000	0.00640
	B2	0.01860	0.00100	0.00581	0.32940	0.12960	0.00534	2.50740	0.60000	0.00861
	C1	0.01860	0.00100	0.00493	0.32940	0.12960	0.00533	2.50740	0.60000	0.00968

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	0.01286	0.32940	0.12960	0.01257	2.50740	0.60000	0.01722
	A1	(!B1 * B2)	0.01860	0.00100	0.01235	0.32940	0.12960	0.01214	2.50740	0.60000	0.01697
	A1	(!B1 * !B2)	0.01860	0.00100	0.01537	0.32940	0.12960	0.01520	2.50740	0.60000	0.01970
	A2	(B1 * !B2)	0.01860	0.00100	0.01311	0.32940	0.12960	0.01262	2.50740	0.60000	0.01750
	A2	(!B1 * B2)	0.01860	0.00100	0.01270	0.32940	0.12960	0.01225	2.50740	0.60000	0.01729
	A2	(!B1 * !B2)	0.01860	0.00100	0.01570	0.32940	0.12960	0.01522	2.50740	0.60000	0.02059
	B1	(A1 * !A2)	0.01860	0.00100	0.01166	0.32940	0.12960	0.01145	2.50740	0.60000	0.01599
	B1	(!A1 * A2)	0.01860	0.00100	0.01115	0.32940	0.12960	0.01101	2.50740	0.60000	0.01506
	B1	(!A1 * !A2)	0.01860	0.00100	0.01113	0.32940	0.12960	0.01101	2.50740	0.60000	0.01560
	B2	(A1 * !A2)	0.01860	0.00100	0.01191	0.32940	0.12960	0.01148	2.50740	0.60000	0.01563
	B2	(!A1 * A2)	0.01860	0.00100	0.01149	0.32940	0.12960	0.01118	2.50740	0.60000	0.01525
	B2	(!A1 * !A2)	0.01860	0.00100	0.01147	0.32940	0.12960	0.01111	2.50740	0.60000	0.01581
	C1	(!A1 * A2)	0.01860	0.00100	0.00534	0.32940	0.12960	0.00548	2.50740	0.60000	0.01073

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	0.01036	0.32940	0.12960	0.00979	2.50740	0.60000	0.01270
	A1	(!B1 * B2)	0.01860	0.00100	0.00770	0.32940	0.12960	0.00721	2.50740	0.60000	0.01014
	A1	(!B1 * !B2)	0.01860	0.00100	0.00632	0.32940	0.12960	0.00586	2.50740	0.60000	0.00883
	A2	(B1 * !B2)	0.01860	0.00100	0.01296	0.32940	0.12960	0.01240	2.50740	0.60000	0.01565
	A2	(!B1 * B2)	0.01860	0.00100	0.01031	0.32940	0.12960	0.00969	2.50740	0.60000	0.01253
	A2	(!B1 * !B2)	0.01860	0.00100	0.00893	0.32940	0.12960	0.00828	2.50740	0.60000	0.01168
	B1	(A1 * !A2)	0.01860	0.00100	0.00594	0.32940	0.12960	0.00574	2.50740	0.60000	0.00866
	B1	(!A1 * A2)	0.01860	0.00100	0.00329	0.32940	0.12960	0.00311	2.50740	0.60000	0.00617
	B1	(!A1 * !A2)	0.01860	0.00100	0.00316	0.32940	0.12960	0.00300	2.50740	0.60000	0.00640
	B2	(A1 * !A2)	0.01860	0.00100	0.00858	0.32940	0.12960	0.00812	2.50740	0.60000	0.01118
	B2	(!A1 * A2)	0.01860	0.00100	0.00593	0.32940	0.12960	0.00554	2.50740	0.60000	0.00815
	B2	(!A1 * !A2)	0.01860	0.00100	0.00581	0.32940	0.12960	0.00534	2.50740	0.60000	0.00861
	C1	(!A1 * A2)	0.01860	0.00100	0.00493	0.32940	0.12960	0.00533	2.50740	0.60000	0.00968

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00001	0.32940	0.00000	2.50740	0.00000

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	0.00001	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_a221oi_1	(B1 * B2 * !C1)	0.01860	-0.00001	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_a221oi_1	0.01860	0.00181	0.32940	0.00184	2.50740	0.00186

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	-0.00186

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	0.00111	0.32940	0.00117	2.50740	0.00127
	(A1 * A2 * !C1)	0.01860	0.00181	0.32940	0.00184	2.50740	0.00186

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	-0.00009	0.32940	-0.00008	2.50740	-0.00007
	(A1 * A2 * !C1)	0.01860	-0.00181	0.32940	-0.00184	2.50740	-0.00186

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00187	0.32940	0.00188	2.50740	0.00189

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00187	0.32940	-0.00188	2.50740	-0.00189

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	0.00115	0.32940	0.00121	2.50740	0.00130
	(A1 * A2 * !C1)	0.01860	0.00187	0.32940	0.00188	2.50740	0.00189

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	-0.00012	0.32940	-0.00011	2.50740	-0.00010
	(A1 * A2 * !C1)	0.01860	-0.00187	0.32940	-0.00188	2.50740	-0.00189

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00075	0.32940	0.00078	2.50740	0.00078

Passive power(pJ) for C1 falling :

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

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	0.00075	0.32940	0.00078	2.50740	0.00078

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	0.00083	0.32940	0.00086	2.50740	0.00087

A22OI



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00324	0.00322	0.00373	0.00377	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	185.83400	432.97400	681.13400

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	0.03402	0.32940	0.06480	0.33665	2.50740	0.30000	1.74761
	A2->Y (FR)	0.01860	0.00100	0.03834	0.32940	0.06480	0.34062	2.50740	0.30000	1.75177
	B1->Y (FR)	0.01860	0.00100	0.02786	0.32940	0.06480	0.34110	2.50740	0.30000	1.84999
	B2->Y (FR)	0.01860	0.00100	0.02364	0.32940	0.06480	0.33644	2.50740	0.30000	1.84371

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	0.03391	0.32940	0.06480	0.33172	2.50740	0.30000	1.76648
	A2->Y (RF)	0.01860	0.00100	0.03676	0.32940	0.06480	0.31333	2.50740	0.30000	1.60134
	B1->Y (RF)	0.01860	0.00100	0.02632	0.32940	0.06480	0.30138	2.50740	0.30000	1.58596
	B2->Y (RF)	0.01860	0.00100	0.02325	0.32940	0.06480	0.32081	2.50740	0.30000	1.75235

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	0.00533	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	0.00519	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	0.00022	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	0.00041	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	-0.00131	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	-0.00029	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	-0.00022	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	-0.00041	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	0.00686	0.32940	0.01003	2.50740	0.04837

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00524	0.32940	0.01692	2.50740	0.05541

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00845	0.32940	0.01223	2.50740	0.04977

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00564	0.32940	0.01599	2.50740	0.05378

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00851	0.32940	0.01197	2.50740	0.04935

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00404	0.32940	0.00829	2.50740	0.04848

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00584	0.32940	0.01042	2.50740	0.04866

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00345	0.32940	0.00801	2.50740	0.04889

AND2x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	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	0.00267	0.00271	0.60000
sg13g2_and2_1	0.00270	0.00273	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	556.11100	597.63900	672.04600
sg13g2_and2_1	314.36900	392.85900	489.11200

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	0.05434	0.32940	0.12960	0.26703	2.50740	0.60000	0.92387
	B->X (RR)	0.01860	0.00100	0.05747	0.32940	0.12960	0.25888	2.50740	0.60000	0.88885
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.04421	0.32940	0.06480	0.23601	2.50740	0.30000	0.86054
	B->X (RR)	0.01860	0.00100	0.04742	0.32940	0.06480	0.23175	2.50740	0.30000	0.83311

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	0.04817	0.32940	0.12960	0.24008	2.50740	0.60000	0.79839
	B->X (FF)	0.01860	0.00100	0.05182	0.32940	0.12960	0.25066	2.50740	0.60000	0.83291
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.03949	0.32940	0.06480	0.20913	2.50740	0.30000	0.73355
	B->X (FF)	0.01860	0.00100	0.04327	0.32940	0.06480	0.22054	2.50740	0.30000	0.77015

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	0.01681	0.32940	0.12960	0.01931	2.50740	0.60000	0.05321
	B	0.01860	0.00100	0.01910	0.32940	0.12960	0.02062	2.50740	0.60000	0.05279
sg13g2_and2_1	A	0.01860	0.00100	0.01011	0.32940	0.06480	0.01336	2.50740	0.30000	0.04652
	B	0.01860	0.00100	0.01246	0.32940	0.06480	0.01476	2.50740	0.30000	0.04770

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	0.01506	0.32940	0.12960	0.01785	2.50740	0.60000	0.05230
	B	0.01860	0.00100	0.01532	0.32940	0.12960	0.01845	2.50740	0.60000	0.05316
sg13g2_and2_1	A	0.01860	0.00100	0.00883	0.32940	0.06480	0.01238	2.50740	0.30000	0.04655
	B	0.01860	0.00100	0.00906	0.32940	0.06480	0.01236	2.50740	0.30000	0.04555

AND3x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	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	0.00248	0.00266	0.00269	0.60000
sg13g2_and3_1	0.00249	0.00267	0.00269	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	559.35700	660.53700	787.78100
sg13g2_and3_1	317.62500	437.28200	686.77600

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	0.07242	0.32940	0.12960	0.30060	2.50740	0.60000	1.01341
	B->X (RR)	0.01860	0.00100	0.07872	0.32940	0.12960	0.29625	2.50740	0.60000	0.98829
	C->X (RR)	0.01860	0.00100	0.08150	0.32940	0.12960	0.28531	2.50740	0.60000	0.93651
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.05789	0.32940	0.06480	0.26267	2.50740	0.30000	0.93744
	B->X (RR)	0.01860	0.00100	0.06427	0.32940	0.06480	0.26117	2.50740	0.30000	0.92099
	C->X (RR)	0.01860	0.00100	0.06703	0.32940	0.06480	0.25372	2.50740	0.30000	0.87790

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	0.05053	0.32940	0.12960	0.24520	2.50740	0.60000	0.78521
	B->X (FF)	0.01860	0.00100	0.05441	0.32940	0.12960	0.25491	2.50740	0.60000	0.81786
	C->X (FF)	0.01860	0.00100	0.05706	0.32940	0.12960	0.26328	2.50740	0.60000	0.85214
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.04202	0.32940	0.06480	0.21450	2.50740	0.30000	0.71893
	B->X (FF)	0.01860	0.00100	0.04601	0.32940	0.06480	0.22565	2.50740	0.30000	0.75258
	C->X (FF)	0.01860	0.00100	0.04853	0.32940	0.06480	0.23492	2.50740	0.30000	0.79220

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	0.02003	0.32940	0.12960	0.02140	2.50740	0.60000	0.05566
	B	0.01860	0.00100	0.02141	0.32940	0.12960	0.02168	2.50740	0.60000	0.05513
	C	0.01860	0.00100	0.02356	0.32940	0.12960	0.02348	2.50740	0.60000	0.05649
sg13g2_and3_1	A	0.01860	0.00100	0.01256	0.32940	0.06480	0.01526	2.50740	0.30000	0.04773
	B	0.01860	0.00100	0.01394	0.32940	0.06480	0.01542	2.50740	0.30000	0.04587
	C	0.01860	0.00100	0.01608	0.32940	0.06480	0.01725	2.50740	0.30000	0.04859

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	0.01441	0.32940	0.12960	0.01682	2.50740	0.60000	0.04810
	B	0.01860	0.00100	0.01570	0.32940	0.12960	0.01803	2.50740	0.60000	0.05062
	C	0.01860	0.00100	0.01598	0.32940	0.12960	0.01849	2.50740	0.60000	0.05097
sg13g2_and3_1	A	0.01860	0.00100	0.00810	0.32940	0.06480	0.01108	2.50740	0.30000	0.04209
	B	0.01860	0.00100	0.00936	0.32940	0.06480	0.01222	2.50740	0.30000	0.04205
	C	0.01860	0.00100	0.00959	0.32940	0.06480	0.01251	2.50740	0.30000	0.04484

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00087	0.32940	-0.00111	2.50740	-0.00116
sg13g2_and3_1	0.01860	-0.00089	0.32940	-0.00111	2.50740	-0.00116

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00087	0.32940	0.00111	2.50740	0.00120
sg13g2_and3_1	0.01860	0.00089	0.32940	0.00111	2.50740	0.00120

AND4x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	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	0.00237	0.00239	0.00277	0.00273	0.60000
sg13g2_and4_1	0.00238	0.00239	0.00278	0.00273	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	562.76700	697.62200	978.26400
sg13g2_and4_1	321.02200	465.11800	884.36100

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	0.09126	0.32940	0.12960	0.33101	2.50740	0.60000	1.08806
	B->X (RR)	0.01860	0.00100	0.10013	0.32940	0.12960	0.32937	2.50740	0.60000	1.06886
	C->X (RR)	0.01860	0.00100	0.10539	0.32940	0.12960	0.32212	2.50740	0.60000	1.02644
	D->X (RR)	0.01860	0.00100	0.10830	0.32940	0.12960	0.31361	2.50740	0.60000	0.97221
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.07271	0.32940	0.06480	0.29008	2.50740	0.30000	1.01318
	B->X (RR)	0.01860	0.00100	0.08170	0.32940	0.06480	0.29096	2.50740	0.30000	1.00092
	C->X (RR)	0.01860	0.00100	0.08696	0.32940	0.06480	0.28577	2.50740	0.30000	0.96518
	D->X (RR)	0.01860	0.00100	0.08983	0.32940	0.06480	0.27938	2.50740	0.30000	0.91716

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	0.05232	0.32940	0.12960	0.24817	2.50740	0.60000	0.77144
	B->X (FF)	0.01860	0.00100	0.05620	0.32940	0.12960	0.25723	2.50740	0.60000	0.80068
	C->X (FF)	0.01860	0.00100	0.05912	0.32940	0.12960	0.26550	2.50740	0.60000	0.83239
	D->X (FF)	0.01860	0.00100	0.06135	0.32940	0.12960	0.27270	2.50740	0.60000	0.86571
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.04435	0.32940	0.06480	0.21823	2.50740	0.30000	0.70399
	B->X (FF)	0.01860	0.00100	0.04830	0.32940	0.06480	0.22861	2.50740	0.30000	0.73616
	C->X (FF)	0.01860	0.00100	0.05109	0.32940	0.06480	0.23764	2.50740	0.30000	0.77148
	D->X (FF)	0.01860	0.00100	0.05306	0.32940	0.06480	0.24588	2.50740	0.30000	0.80817

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	0.02160	0.32940	0.12960	0.02116	2.50740	0.60000	0.05166
	B	0.01860	0.00100	0.02422	0.32940	0.12960	0.02298	2.50740	0.60000	0.05136
	C	0.01860	0.00100	0.02586	0.32940	0.12960	0.02459	2.50740	0.60000	0.05423
	D	0.01860	0.00100	0.02568	0.32940	0.12960	0.02395	2.50740	0.60000	0.05429
sg13g2_and4_1	A	0.01860	0.00100	0.01324	0.32940	0.06480	0.01531	2.50740	0.30000	0.04461
	B	0.01860	0.00100	0.01586	0.32940	0.06480	0.01705	2.50740	0.30000	0.04598
	C	0.01860	0.00100	0.01751	0.32940	0.06480	0.01823	2.50740	0.30000	0.04816
	D	0.01860	0.00100	0.01732	0.32940	0.06480	0.01779	2.50740	0.30000	0.04857

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	0.01477	0.32940	0.12960	0.01708	2.50740	0.60000	0.04819
	B	0.01860	0.00100	0.01527	0.32940	0.12960	0.01722	2.50740	0.60000	0.04741
	C	0.01860	0.00100	0.01642	0.32940	0.12960	0.01858	2.50740	0.60000	0.04812
	D	0.01860	0.00100	0.01682	0.32940	0.12960	0.01878	2.50740	0.60000	0.05203
sg13g2_and4_1	A	0.01860	0.00100	0.00849	0.32940	0.06480	0.01106	2.50740	0.30000	0.04093
	B	0.01860	0.00100	0.00894	0.32940	0.06480	0.01137	2.50740	0.30000	0.04075
	C	0.01860	0.00100	0.01002	0.32940	0.06480	0.01238	2.50740	0.30000	0.04305
	D	0.01860	0.00100	0.01032	0.32940	0.06480	0.01279	2.50740	0.30000	0.04403

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00031	0.32940	-0.00031	2.50740	-0.00030
sg13g2_and4_1	0.01860	-0.00031	0.32940	-0.00031	2.50740	-0.00030

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00120	0.32940	0.00124	2.50740	0.00124
sg13g2_and4_1	0.01860	0.00121	0.32940	0.00124	2.50740	0.00124

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	-0.00031	0.32940	-0.00031	2.50740	-0.00030
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00031	0.32940	-0.00031	2.50740	-0.00030

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	0.00120	0.32940	0.00124	2.50740	0.00124
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00121	0.32940	0.00124	2.50740	0.00124

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00048	0.32940	-0.00049	2.50740	-0.00048
sg13g2_and4_1	0.01860	-0.00048	0.32940	-0.00049	2.50740	-0.00048

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00087	0.32940	0.00090	2.50740	0.00091
sg13g2_and4_1	0.01860	0.00087	0.32940	0.00090	2.50740	0.00091

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	-0.00048	0.32940	-0.00049	2.50740	-0.00048
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00048	0.32940	-0.00049	2.50740	-0.00048

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	0.00087	0.32940	0.00090	2.50740	0.00091
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00087	0.32940	0.00090	2.50740	0.00091

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	0.00226	0.32940	0.00226	2.50740	0.00229
sg13g2_and4_1	0.01860	0.00225	0.32940	0.00226	2.50740	0.00229

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00003	0.32940	0.00000	2.50740	-0.00003
sg13g2_and4_1	0.01860	0.00004	0.32940	0.00000	2.50740	-0.00003

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	0.00226	0.32940	0.00226	2.50740	0.00229
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00225	0.32940	0.00226	2.50740	0.00229

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	0.00003	0.32940	0.00000	2.50740	-0.00003
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00004	0.32940	0.00000	2.50740	-0.00003

A021x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00314	0.00311	0.00274	0.60000
sg13g2_a21o_1	0.00294	0.00301	0.00260	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	524.44200	642.53400	796.59900
sg13g2_a21o_1	405.41700	458.07700	521.36900

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	0.05773	0.32940	0.12960	0.27212	2.50740	0.60000	0.91543
	A2->X (RR)	0.01860	0.00100	0.06039	0.32940	0.12960	0.26294	2.50740	0.60000	0.87882
	B1->X (RR)	0.01860	0.00100	0.03887	0.32940	0.12960	0.23790	2.50740	0.60000	0.79726
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.05403	0.32940	0.06480	0.25826	2.50740	0.30000	0.91362
	A2->X (RR)	0.01860	0.00100	0.05689	0.32940	0.06480	0.25080	2.50740	0.30000	0.87957
	B1->X (RR)	0.01860	0.00100	0.03667	0.32940	0.06480	0.22453	2.50740	0.30000	0.79379

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	0.07852	0.32940	0.12960	0.26571	2.50740	0.60000	0.85323
	A2->X (FF)	0.01860	0.00100	0.08568	0.32940	0.12960	0.27816	2.50740	0.60000	0.88794
	B1->X (FF)	0.01860	0.00100	0.07846	0.32940	0.12960	0.29281	2.50740	0.60000	0.96558
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.06231	0.32940	0.06480	0.22923	2.50740	0.30000	0.76002
	A2->X (FF)	0.01860	0.00100	0.06880	0.32940	0.06480	0.24121	2.50740	0.30000	0.79590
	B1->X (FF)	0.01860	0.00100	0.06129	0.32940	0.06480	0.25055	2.50740	0.30000	0.86187

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	0.03887	0.32940	0.12960	0.23790	2.50740	0.60000	0.79726
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03731	0.32940	0.12960	0.22937	2.50740	0.60000	0.77212
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.03667	0.32940	0.06480	0.22453	2.50740	0.30000	0.79379
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03465	0.32940	0.06480	0.21460	2.50740	0.30000	0.76411

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	0.07846	0.32940	0.12960	0.29281	2.50740	0.60000	0.96558
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.06989	0.32940	0.12960	0.27863	2.50740	0.60000	0.93911
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.06129	0.32940	0.06480	0.25055	2.50740	0.30000	0.86187
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.05382	0.32940	0.06480	0.23572	2.50740	0.30000	0.83281

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	0.01821	0.32940	0.12960	0.02061	2.50740	0.60000	0.05767
	A2	0.01860	0.00100	0.02083	0.32940	0.12960	0.02242	2.50740	0.60000	0.05627
	B1	0.01860	0.00100	0.01523	0.32940	0.12960	0.01853	2.50740	0.60000	0.05813
sg13g2_a21o_1	A1	0.01860	0.00100	0.01148	0.32940	0.06480	0.01411	2.50740	0.30000	0.04729
	A2	0.01860	0.00100	0.01380	0.32940	0.06480	0.01584	2.50740	0.30000	0.04780
	B1	0.01860	0.00100	0.00894	0.32940	0.06480	0.01211	2.50740	0.30000	0.04856

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	0.02056	0.32940	0.12960	0.02124	2.50740	0.60000	0.05695
	A2	0.01860	0.00100	0.02087	0.32940	0.12960	0.02136	2.50740	0.60000	0.05828
	B1	0.01860	0.00100	0.01676	0.32940	0.12960	0.01888	2.50740	0.60000	0.05787
sg13g2_a21o_1	A1	0.01860	0.00100	0.01286	0.32940	0.06480	0.01463	2.50740	0.30000	0.04783
	A2	0.01860	0.00100	0.01299	0.32940	0.06480	0.01460	2.50740	0.30000	0.04804
	B1	0.01860	0.00100	0.00910	0.32940	0.06480	0.01268	2.50740	0.30000	0.04690

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	0.01793	0.32940	0.12960	0.02141	2.50740	0.60000	0.06039
	B1	(!A1 * A2)	0.01860	0.00100	0.01523	0.32940	0.12960	0.01853	2.50740	0.60000	0.05813
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.01123	0.32940	0.06480	0.01435	2.50740	0.30000	0.05120
	B1	(!A1 * A2)	0.01860	0.00100	0.00894	0.32940	0.06480	0.01211	2.50740	0.30000	0.04856

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	0.01735	0.32940	0.12960	0.01902	2.50740	0.60000	0.05877
	B1	(!A1 * A2)	0.01860	0.00100	0.01676	0.32940	0.12960	0.01888	2.50740	0.60000	0.05787
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00943	0.32940	0.06480	0.01263	2.50740	0.30000	0.04766
	B1	(!A1 * A2)	0.01860	0.00100	0.00910	0.32940	0.06480	0.01268	2.50740	0.30000	0.04690

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	-0.00004	0.32940	-0.00004	2.50740	-0.00003
sg13g2_a21o_1	0.01860	-0.00013	0.32940	-0.00026	2.50740	-0.00026

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00004	0.32940	0.00004	2.50740	0.00003
sg13g2_a21o_1	0.01860	0.00026	0.32940	0.00026	2.50740	0.00026

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	-0.00004	0.32940	-0.00004	2.50740	-0.00003
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	-0.00013	0.32940	-0.00026	2.50740	-0.00026
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00004	0.32940	0.00004	2.50740	0.00003
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00026	0.32940	0.00026	2.50740	0.00026
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	-0.00011	0.32940	-0.00013	2.50740	-0.00013
sg13g2_a21o_1	0.01860	-0.00008	0.32940	-0.00023	2.50740	-0.00022

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00013	0.32940	0.00013	2.50740	0.00013
sg13g2_a21o_1	0.01860	0.00022	0.32940	0.00023	2.50740	0.00022

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	-0.00011	0.32940	-0.00013	2.50740	-0.00013
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	-0.00008	0.32940	-0.00023	2.50740	-0.00022
	(!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	0.00013	0.32940	0.00013	2.50740	0.00013
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00022	0.32940	0.00023	2.50740	0.00022
	(!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	0.00073	0.32940	0.00078	2.50740	0.00078
sg13g2_a21o_1	0.01860	0.00069	0.32940	0.00072	2.50740	0.00072

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00062	0.32940	0.00063	2.50740	0.00064
sg13g2_a21o_1	0.01860	0.00079	0.32940	0.00080	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_a21o_2	(A1 * A2)	0.01860	0.00073	0.32940	0.00078	2.50740	0.00078
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00069	0.32940	0.00072	2.50740	0.00072

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	0.00062	0.32940	0.00063	2.50740	0.00064
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00079	0.32940	0.00080	2.50740	0.00082

BTLx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00614	0.01758	2.40000
sg13g2_ebufn_4	0.00314	0.01062	1.20000
sg13g2_ebufn_2	0.00279	0.00655	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	590.45000	2069.25000	3795.96000
sg13g2_ebufn_4	416.01100	1118.47000	1944.93000
sg13g2_ebufn_2	331.86400	683.06600	1042.43000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A->Z (RR)	0.01860	0.02027	0.04674	0.32940	0.53768	0.39700	2.50740	2.41927	1.51752
	TE_B->Z (RR)	0.01860	0.02027	0.05083	0.32940	0.53768	0.12720	2.50740	2.41927	0.26506
	TE_B->Z (FR)	0.01860	0.02027	0.02563	0.32940	0.53768	0.37210	2.50740	2.41927	1.86150
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01076	0.04792	0.32940	0.26896	0.39741	2.50740	1.20976	1.51259
	TE_B->Z (RR)	0.01860	0.01076	0.03901	0.32940	0.26896	0.09359	2.50740	1.20976	0.18346
	TE_B->Z (FR)	0.01860	0.01076	0.02533	0.32940	0.26896	0.37050	2.50740	1.20976	1.85770
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00598	0.04173	0.32940	0.13458	0.36948	2.50740	0.60498	1.45247
	TE_B->Z (RR)	0.01860	0.00598	0.03390	0.32940	0.13458	0.07807	2.50740	0.60498	0.14906
	TE_B->Z (FR)	0.01860	0.00598	0.02555	0.32940	0.13458	0.36699	2.50740	0.60498	1.84371

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	0.02968	0.06014	0.32940	0.54708	0.33606	2.50740	2.42868	1.19198
	TE_B->Z (RF)	0.01860	0.02968	0.02549	0.32940	0.54708	-0.20756	2.50740	2.42868	-1.89388
	TE_B->Z (FF)	0.01860	0.02968	0.05847	0.32940	0.54708	0.30294	2.50740	2.42868	1.01957
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01557	0.06168	0.32940	0.27377	0.33791	2.50740	1.21457	1.19455
	TE_B->Z (RF)	0.01860	0.01557	0.02076	0.32940	0.27377	-0.20666	2.50740	1.21457	-1.89311
	TE_B->Z (FF)	0.01860	0.01557	0.04425	0.32940	0.27377	0.26191	2.50740	1.21457	0.92659
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00844	0.04695	0.32940	0.13704	0.30006	2.50740	0.60744	1.11242
	TE_B->Z (RF)	0.01860	0.00844	0.01507	0.32940	0.13704	-0.21874	2.50740	0.60744	-1.90508
	TE_B->Z (FF)	0.01860	0.00844	0.03798	0.32940	0.13704	0.23583	2.50740	0.60744	0.86268

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	0.02027	0.05337	0.32940	0.53768	0.06429	2.50740	2.41927	0.07763
	TE_B	0.01860	0.02027	0.01049	0.32940	0.53768	0.00718	2.50740	2.41927	0.00314
sg13g2_ebufn_4	A	0.01860	0.01076	0.02672	0.32940	0.26896	0.03147	2.50740	1.20976	0.03109
	TE_B	0.01860	0.01076	0.00529	0.32940	0.26896	0.00415	2.50740	1.20976	0.00105
sg13g2_ebufn_2	A	0.01860	0.00598	0.01394	0.32940	0.13458	0.01579	2.50740	0.60498	0.01501
	TE_B	0.01860	0.00598	0.00277	0.32940	0.13458	0.00217	2.50740	0.60498	0.00094

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	0.02968	0.05721	0.32940	0.54708	0.05594	2.50740	2.42868	0.05251
	TE_B	0.01860	0.02968	0.00404	0.32940	0.54708	0.00047	2.50740	2.42868	0.00263
sg13g2_ebufn_4	A	0.01860	0.01557	0.02870	0.32940	0.27377	0.02803	2.50740	1.21457	0.02822
	TE_B	0.01860	0.01557	0.00218	0.32940	0.27377	0.00097	2.50740	1.21457	0.00028
sg13g2_ebufn_2	A	0.01860	0.00844	0.01372	0.32940	0.13704	0.01365	2.50740	0.60744	0.01644
	TE_B	0.01860	0.00844	0.00121	0.32940	0.13704	0.00067	2.50740	0.60744	0.00095

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01599	0.32940	0.02438	2.50740	0.11797
sg13g2_ebufn_4	0.01860	0.00861	0.32940	0.01268	2.50740	0.05928
sg13g2_ebufn_2	0.01860	0.00506	0.32940	0.00907	2.50740	0.05032

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01344	0.32940	0.02267	2.50740	0.11554
sg13g2_ebufn_4	0.01860	0.00725	0.32940	0.01171	2.50740	0.05807
sg13g2_ebufn_2	0.01860	0.00457	0.32940	0.00889	2.50740	0.04971

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	-0.00493	0.32940	-0.00350	2.50740	0.03947
sg13g2_ebufn_4	0.01860	-0.00100	0.32940	0.00179	2.50740	0.04737
sg13g2_ebufn_2	0.01860	0.00031	0.32940	0.00351	2.50740	0.04419

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	0.08056	0.32940	0.08566	2.50740	0.12911
sg13g2_ebufn_4	0.01860	0.04156	0.32940	0.04640	2.50740	0.09207
sg13g2_ebufn_2	0.01860	0.02183	0.32940	0.02630	2.50740	0.06676

BU_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.01816	4.80000
sg13g2_buf_8	0.00911	2.40000
sg13g2_buf_4	0.00393	1.20000
sg13g2_buf_2	0.00277	0.60000
sg13g2_buf_1	0.00247	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	2952.72000	3691.96000	4431.20000
sg13g2_buf_8	1476.38000	1845.98000	2215.59000
sg13g2_buf_4	678.32300	883.10600	1087.89000
sg13g2_buf_2	397.47500	481.44300	565.41000
sg13g2_buf_1	270.78600	290.47200	310.15800

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	0.03915	0.32940	1.03680	0.24401	2.50740	4.80000	0.87307
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.03875	0.32940	0.51840	0.24264	2.50740	2.40000	0.86999
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.04902	0.32940	0.25920	0.27223	2.50740	1.20000	0.99077
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.03872	0.32940	0.12960	0.23937	2.50740	0.60000	0.86624
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03465	0.32940	0.06480	0.21996	2.50740	0.30000	0.82317

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	0.04438	0.32940	1.03680	0.23483	2.50740	4.80000	0.79643
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04388	0.32940	0.51840	0.23398	2.50740	2.40000	0.79600
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04333	0.32940	0.25920	0.22782	2.50740	1.20000	0.72521
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04242	0.32940	0.12960	0.22460	2.50740	0.60000	0.76621
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03727	0.32940	0.06480	0.20323	2.50740	0.30000	0.72642

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	0.11925	0.32940	1.03680	0.14556	2.50740	4.80000	0.42662
sg13g2_buf_8	A	0.01860	0.00100	0.05876	0.32940	0.51840	0.07109	2.50740	2.40000	0.20855
sg13g2_buf_4	A	0.01860	0.00100	0.02922	0.32940	0.25920	0.03378	2.50740	1.20000	0.09340
sg13g2_buf_2	A	0.01860	0.00100	0.01525	0.32940	0.12960	0.01901	2.50740	0.60000	0.05814
sg13g2_buf_1	A	0.01860	0.00100	0.00885	0.32940	0.06480	0.01219	2.50740	0.30000	0.04596

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	0.11827	0.32940	1.03680	0.14502	2.50740	4.80000	0.42549
sg13g2_buf_8	A	0.01860	0.00100	0.05824	0.32940	0.51840	0.07237	2.50740	2.40000	0.20728
sg13g2_buf_4	A	0.01860	0.00100	0.02923	0.32940	0.25920	0.03484	2.50740	1.20000	0.09349
sg13g2_buf_2	A	0.01860	0.00100	0.01510	0.32940	0.12960	0.01941	2.50740	0.60000	0.05971
sg13g2_buf_1	A	0.01860	0.00100	0.00878	0.32940	0.06480	0.01229	2.50740	0.30000	0.04723

DECAP_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	1670.68000	1670.68000	1670.68000
sg13g2_decap_8	3341.41000	3341.41000	3341.41000

DFFRRx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dfrbp_2	54.43200
sg13g2_dfrbp_1	47.17440

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00170	0.00621	0.00302	0.60000	0.60000
sg13g2_dfrbp_1	0.00182	0.00676	0.00293	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1666.34000	1911.44000	2129.36000
sg13g2_dfrbp_1	1278.41000	1513.72000	1738.44000

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	0.16101	0.32940	0.12960	0.34918	2.50740	0.60000	0.95290
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.13072	0.32940	0.06480	0.32172	2.50740	0.30000	0.89929

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	0.13937	0.32940	0.12960	0.30921	2.50740	0.60000	0.79492
	RESET_B->Q (FF)	0.01860	0.00100	0.18899	0.32940	0.12960	0.39690	2.50740	0.60000	1.04541
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.12391	0.32940	0.06480	0.29319	2.50740	0.30000	0.76137
	RESET_B->Q (FF)	0.01860	0.00100	0.16619	0.32940	0.06480	0.37113	2.50740	0.30000	1.00965

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	0.09376	0.32940	0.12960	0.30783	2.50740	0.60000	0.88282
	RESET_B->Q_N (FR)	0.01860	0.00100	0.14411	0.32940	0.12960	0.39434	2.50740	0.60000	1.13189
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.09549	0.32940	0.06480	0.30267	2.50740	0.30000	0.86062
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13793	0.32940	0.06480	0.37966	2.50740	0.30000	1.10838

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	0.10508	0.32940	0.12960	0.31970	2.50740	0.60000	0.83702
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.09874	0.32940	0.06480	0.29842	2.50740	0.30000	0.79425

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	-0.03179	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.17414
	setup	CLK (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.17539	2.50740	2.50740	0.21841
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.03423	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.19480
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.18619	2.50740	2.50740	0.24498

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	-0.01956	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.22432
	setup	CLK (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.20777	2.50740	2.50740	0.30401
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.21251
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.21047	2.50740	2.50740	0.31286

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	0.08314	1.26300	1.26300	0.21317	2.50740	2.50740	0.32172
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.31286
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.08069	1.26300	1.26300	0.22127	2.50740	2.50740	0.34828
	removal	CLK (R)	0.01860	0.01860	-0.06113	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.32467

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	0.06382	0.32940	0.12960	0.21053	2.50740	0.60000	0.80212
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04910	0.32940	0.06480	0.12512	2.50740	0.30000	0.43984

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	0.06215	0.32940	0.12960	0.21110	2.50740	0.60000	0.80158
	RESET_B	0.01860	0.00100	0.04792	0.32940	0.12960	0.19414	2.50740	0.60000	0.74911
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04767	0.32940	0.06480	0.12419	2.50740	0.30000	0.44001
	RESET_B	0.01860	0.00100	0.03278	0.32940	0.06480	0.10698	2.50740	0.30000	0.39574

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	0.06219	0.32940	0.12960	0.21241	2.50740	0.60000	0.79533
	RESET_B	0.01860	0.00100	0.04792	0.32940	0.12960	0.19537	2.50740	0.60000	0.74745
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04768	0.32940	0.06480	0.12454	2.50740	0.30000	0.43718
	RESET_B	0.01860	0.00100	0.03275	0.32940	0.06480	0.10755	2.50740	0.30000	0.39485

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	0.06387	0.32940	0.12960	0.20975	2.50740	0.60000	0.79989
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04912	0.32940	0.06480	0.12469	2.50740	0.30000	0.44112

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00224	0.32940	0.00400	2.50740	0.02219
sg13g2_dfrbp_1	0.01860	0.00253	0.32940	0.00423	2.50740	0.02235

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00185	0.32940	0.00374	2.50740	0.02208
sg13g2_dfrbp_1	0.01860	0.00210	0.32940	0.00394	2.50740	0.02222

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	0.00224	0.32940	0.00400	2.50740	0.02219
	(!CLK * RESET_B)	0.01860	0.01867	0.32940	0.02057	2.50740	0.04185
	(!CLK * !RESET_B)	0.01860	-0.00003	0.32940	-0.00004	2.50740	-0.00003
sg13g2_dfrbp_1	CLK	0.01860	0.00253	0.32940	0.00423	2.50740	0.02235
	(!CLK * RESET_B)	0.01860	0.01610	0.32940	0.01799	2.50740	0.03927
	(!CLK * !RESET_B)	0.01860	0.00016	0.32940	0.00015	2.50740	0.00016

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	0.00185	0.32940	0.00374	2.50740	0.02208
	(!CLK * RESET_B)	0.01860	0.01473	0.32940	0.01669	2.50740	0.03876
	(!CLK * !RESET_B)	0.01860	0.00027	0.32940	0.00030	2.50740	0.00030
sg13g2_dfrbp_1	CLK	0.01860	0.00210	0.32940	0.00394	2.50740	0.02222
	(!CLK * RESET_B)	0.01860	0.01383	0.32940	0.01579	2.50740	0.03759
	(!CLK * !RESET_B)	0.01860	0.00013	0.32940	0.00016	2.50740	0.00016

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	0.00601	0.32940	0.00709	2.50740	0.02461
sg13g2_dfrbp_1	0.01860	0.00666	0.32940	0.00768	2.50740	0.02511

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	0.01361	0.32940	0.01511	2.50740	0.04299
sg13g2_dfrbp_1	0.01860	0.01216	0.32940	0.01367	2.50740	0.04151

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	0.00601	0.32940	0.00709	2.50740	0.02461
	(CLK * !D * !Q * Q_N)	0.01860	0.00214	0.32940	0.00208	2.50740	0.00208
	(!CLK * D * !Q * Q_N)	0.01860	0.02267	0.32940	0.02413	2.50740	0.05120
	(!CLK * !D * !Q * Q_N)	0.01860	0.00223	0.32940	0.00217	2.50740	0.00217
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00666	0.32940	0.00768	2.50740	0.02511
	(CLK * !D * !Q * Q_N)	0.01860	0.00278	0.32940	0.00272	2.50740	0.00272
	(!CLK * D * !Q * Q_N)	0.01860	0.02058	0.32940	0.02208	2.50740	0.04916
	(!CLK * !D * !Q * Q_N)	0.01860	0.00289	0.32940	0.00281	2.50740	0.00281

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	0.06094	0.32940	0.06519	2.50740	0.11664
	(CLK * !D * !Q * Q_N)	0.01860	-0.00214	0.32940	-0.00208	2.50740	-0.00208
	(!CLK * D * !Q * Q_N)	0.01860	0.01361	0.32940	0.01511	2.50740	0.04299
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00223	0.32940	-0.00217	2.50740	-0.00217
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.04384	0.32940	0.04795	2.50740	0.09840
	(CLK * !D * !Q * Q_N)	0.01860	-0.00278	0.32940	-0.00272	2.50740	-0.00272
	(!CLK * D * !Q * Q_N)	0.01860	0.01216	0.32940	0.01367	2.50740	0.04151
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00289	0.32940	-0.00281	2.50740	-0.00281

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01690	0.32940	0.02119	2.50740	0.07103
sg13g2_dfrbp_1	0.01860	0.01711	0.32940	0.02093	2.50740	0.06719

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03256	0.32940	0.03719	2.50740	0.08852
sg13g2_dfrbp_1	0.01860	0.03032	0.32940	0.03481	2.50740	0.08277

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	0.01690	0.32940	0.02119	2.50740	0.07103
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01779	0.32940	0.02208	2.50740	0.07183
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01665	0.32940	0.02094	2.50740	0.07085
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01782	0.32940	0.02210	2.50740	0.07183
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01756	0.32940	0.02143	2.50740	0.06763
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01710	0.32940	0.02092	2.50740	0.06721
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01681	0.32940	0.02064	2.50740	0.06690
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01711	0.32940	0.02093	2.50740	0.06719

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	0.03256	0.32940	0.03719	2.50740	0.08852
	(D * RESET_B * !Q * Q_N)	0.01860	0.03267	0.32940	0.03729	2.50740	0.08864
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01672	0.32940	0.02129	2.50740	0.07072
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00776	0.32940	0.07989	2.50740	0.12915
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01672	0.32940	0.02130	2.50740	0.07076
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01671	0.32940	0.02122	2.50740	0.07070
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03039	0.32940	0.03484	2.50740	0.08286
	(D * RESET_B * !Q * Q_N)	0.01860	0.03032	0.32940	0.03481	2.50740	0.08277
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01719	0.32940	0.02140	2.50740	0.06761
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00732	0.32940	0.06536	2.50740	0.11129
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01719	0.32940	0.02143	2.50740	0.06763
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01718	0.32940	0.02135	2.50740	0.06759

DLHQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00243	0.00249	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	928.96700	1021.49000	1136.46000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	0.11957	0.32940	0.06480	0.30249	2.50740	0.30000	0.86851
	GATE->Q (RR)	0.01860	0.00100	0.10156	0.32940	0.06480	0.28446	2.50740	0.30000	0.80611

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	0.10558	0.32940	0.06480	0.26837	2.50740	0.30000	0.74783
	GATE->Q (RF)	0.01860	0.00100	0.10790	0.32940	0.06480	0.26663	2.50740	0.30000	0.68189

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	-0.06358	1.26300	1.26300	-0.11063	2.50740	2.50740	-0.10626
	setup	GATE (F)	0.01860	0.01860	0.07091	1.26300	1.26300	0.15651	2.50740	2.50740	0.18595

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	-0.02445	1.26300	1.26300	0.02159	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03179	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05608

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	0.02352	0.32940	0.06480	0.02382	2.50740	0.30000	0.02557
	GATE	0.01860	0.00100	0.02016	0.32940	0.06480	0.02072	2.50740	0.30000	0.02524

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	0.02419	0.32940	0.06480	0.02476	2.50740	0.30000	0.02832
	GATE	0.01860	0.00100	0.02186	0.32940	0.06480	0.02298	2.50740	0.30000	0.02437

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00534	0.32940	0.00847	2.50740	0.04249

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00588	0.32940	0.00920	2.50740	0.04284

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	0.00545	0.32940	0.00847	2.50740	0.04253
	(!GATE * !Q)	0.01860	0.00534	0.32940	0.00847	2.50740	0.04249

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	0.00558	0.32940	0.00897	2.50740	0.04269
	(!GATE * !Q)	0.01860	0.00588	0.32940	0.00920	2.50740	0.04284

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01242	0.32940	0.01617	2.50740	0.05872

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00765	0.32940	0.02799	2.50740	0.07096

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	0.01242	0.32940	0.01617	2.50740	0.05872

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	0.00765	0.32940	0.02799	2.50740	0.07096

DLHRQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
D	RESET_B	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	0.00229	0.00312	0.00240	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1038.48000	1159.01000	1259.73000

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	0.12602	0.32940	0.06480	0.31178	2.50740	0.30000	0.87445
	GATE->Q (RR)	0.01860	0.00100	0.11299	0.32940	0.06480	0.30046	2.50740	0.30000	0.82137

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	0.11128	0.32940	0.06480	0.27606	2.50740	0.30000	0.76174
	GATE->Q (RF)	0.01860	0.00100	0.11500	0.32940	0.06480	0.27781	2.50740	0.30000	0.70249
	RESET_B->Q (FF)	0.01860	0.00100	0.04573	0.32940	0.06480	0.22860	2.50740	0.30000	0.78825

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	-0.05624	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.08855
	setup	GATE (F)	0.01860	0.01860	0.06847	1.26300	1.26300	0.14031	2.50740	2.50740	0.16529

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	-0.02690	1.26300	1.26300	0.02159	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03668	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05313

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	-0.00978	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.17414
	removal	GATE (F)	0.01860	0.01860	0.01956	1.26300	1.26300	0.12412	2.50740	2.50740	0.19480

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	0.00266	0.32940	0.06480	0.00189	2.50740	0.30000	0.00282
	GATE	0.01860	0.00100	0.02046	0.32940	0.06480	0.02078	2.50740	0.30000	0.02489

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	0.00829	0.32940	0.06480	-0.00189	2.50740	0.30000	-0.00282
	GATE	0.01860	0.00100	0.02039	0.32940	0.06480	0.02143	2.50740	0.30000	0.02273
	RESET_B	0.01860	0.00100	0.01183	0.32940	0.06480	0.01589	2.50740	0.30000	0.05624

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02629	0.32940	0.03032	2.50740	0.06514

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01978	0.32940	0.04195	2.50740	0.07711

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	0.00425	0.32940	0.00737	2.50740	0.04139
	!RESET_B	0.01860	0.02629	0.32940	0.03032	2.50740	0.06514

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	0.00519	0.32940	0.00860	2.50740	0.04226
	!RESET_B	0.01860	0.01978	0.32940	0.04195	2.50740	0.07711

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	-0.00007	0.32940	0.00000	2.50740	0.00000

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	0.00007	0.32940	0.00000	2.50740	0.00000

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	-0.00007	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00007	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01299	0.32940	0.01663	2.50740	0.05899

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00754	0.32940	0.02824	2.50740	0.07095

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	0.01772	0.32940	0.02146	2.50740	0.06686
	(!D * !RESET_B * !Q)	0.01860	0.01299	0.32940	0.01663	2.50740	0.05899

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	0.01897	0.32940	0.02352	2.50740	0.06904
	(!D * RESET_B * !Q)	0.01860	0.00754	0.32940	0.02824	2.50740	0.07095
	(!D * !RESET_B * !Q)	0.01860	0.00761	0.32940	0.02831	2.50740	0.07101

DLHR



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT	
D	RESET_B	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	0.00223	0.00329	0.00245	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	1322.79000	1454.49000	1537.40000

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	0.13620	0.32940	0.06480	0.32668	2.50740	0.30000	0.88866
	GATE->Q (RR)	0.01860	0.00100	0.12364	0.32940	0.06480	0.31619	2.50740	0.30000	0.83868

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	0.11542	0.32940	0.06480	0.28231	2.50740	0.30000	0.76366
	GATE->Q (RF)	0.01860	0.00100	0.11932	0.32940	0.06480	0.28470	2.50740	0.30000	0.70605
	RESET_B->Q (FF)	0.01860	0.00100	0.04963	0.32940	0.06480	0.24235	2.50740	0.30000	0.80353

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	0.14134	0.32940	0.06480	0.32274	2.50740	0.30000	0.89408
	GATE->Q_N (RR)	0.01860	0.00100	0.14532	0.32940	0.06480	0.32440	2.50740	0.30000	0.83678
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07561	0.32940	0.06480	0.27541	2.50740	0.30000	0.87663

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	0.16487	0.32940	0.06480	0.32066	2.50740	0.30000	0.79190
	GATE->Q_N (RF)	0.01860	0.00100	0.15213	0.32940	0.06480	0.31000	2.50740	0.30000	0.74215

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	-0.06113	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.09150
	setup	GATE (F)	0.01860	0.01860	0.07580	1.26300	1.26300	0.14571	2.50740	2.50740	0.16824

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	-0.02934	1.26300	1.26300	0.02159	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03912	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05313

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	-0.11806
	removal	GATE (F)	0.01860	0.01860	0.01467	1.26300	1.26300	0.08905	2.50740	2.50740	0.14167

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	0.00790	0.32940	0.06480	0.00783	2.50740	0.30000	0.00855
	GATE	0.01860	0.00100	0.01664	0.32940	0.06480	0.01708	2.50740	0.30000	0.01947

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	0.01043	0.32940	0.06480	0.00135	2.50740	0.30000	0.00285
	GATE	0.01860	0.00100	0.01657	0.32940	0.06480	0.01700	2.50740	0.30000	0.01904
	RESET_B	0.01860	0.00100	0.01212	0.32940	0.06480	0.01436	2.50740	0.30000	0.03864

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	0.01047	0.32940	0.06480	0.00184	2.50740	0.30000	0.00179
	GATE	0.01860	0.00100	0.02285	0.32940	0.06480	0.02542	2.50740	0.30000	0.04759
	RESET_B	0.01860	0.00100	0.01215	0.32940	0.06480	0.01433	2.50740	0.30000	0.03720

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	0.00790	0.32940	0.06480	0.00765	2.50740	0.30000	0.00846
	GATE	0.01860	0.00100	0.01663	0.32940	0.06480	0.01676	2.50740	0.30000	0.01943

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02571	0.32940	0.02979	2.50740	0.06474

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01970	0.32940	0.04164	2.50740	0.07692

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	0.00463	0.32940	0.00781	2.50740	0.04195
	!RESET_B	0.01860	0.02571	0.32940	0.02979	2.50740	0.06474

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	0.00546	0.32940	0.00891	2.50740	0.04272
	!RESET_B	0.01860	0.01970	0.32940	0.04164	2.50740	0.07692

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	-0.00004	0.32940	0.00000	2.50740	0.00000

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	0.00004	0.32940	0.00000	2.50740	0.00000

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	-0.00020	0.32940	-0.00010	2.50740	-0.00005
	(!D * !GATE * !Q)	0.01860	-0.00004	0.32940	0.00000	2.50740	0.00000

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	0.00020	0.32940	0.00010	2.50740	0.00005
	(!D * !GATE * !Q)	0.01860	0.00004	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01254	0.32940	0.01629	2.50740	0.05875

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00783	0.32940	0.02791	2.50740	0.07080

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	0.01725	0.32940	0.02102	2.50740	0.06653
	(!D * !RESET_B * !Q)	0.01860	0.01254	0.32940	0.01629	2.50740	0.05875

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	0.01942	0.32940	0.02398	2.50740	0.06963
	(!D * RESET_B * !Q)	0.01860	0.00783	0.32940	0.02791	2.50740	0.07080
	(!D * !RESET_B * !Q)	0.01860	0.00790	0.32940	0.02798	2.50740	0.07088

DLLRQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
D	RESET_B	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	0.00220	0.00314	0.00236	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1029.36000	1158.03000	1266.82000

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	0.12522	0.32940	0.06480	0.31073	2.50740	0.30000	0.87250
	GATE_N->Q (FR)	0.01860	0.00100	0.14021	0.32940	0.06480	0.34144	2.50740	0.30000	0.97769
	RESET_B->Q (RR)	0.01860	0.00100	0.05657	0.32940	0.06480	0.24308	2.50740	0.30000	0.85921

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	0.11058	0.32940	0.06480	0.27402	2.50740	0.30000	0.75781
	GATE_N->Q (FF)	0.01860	0.00100	0.10602	0.32940	0.06480	0.28787	2.50740	0.30000	0.85108
	RESET_B->Q (FF)	0.01860	0.00100	0.04609	0.32940	0.06480	0.22819	2.50740	0.30000	0.78721

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	-0.04890	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.09740
	setup	GATE_N (R)	0.01860	0.01860	0.05868	1.26300	1.26300	0.07555	2.50740	2.50740	0.10626

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	-0.05624	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.25383
	setup	GATE_N (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.22396	2.50740	2.50740	0.33057

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	-0.01956	1.26300	1.26300	-0.04587	2.50740	2.50740	-0.03247
	removal	GATE_N (R)	0.01860	0.01860	0.03179	1.26300	1.26300	0.05936	2.50740	2.50740	0.04427

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	0.01051	0.32940	0.06480	0.01117	2.50740	0.30000	0.01313
	GATE_N	0.01860	0.00100	0.02678	0.32940	0.06480	0.01080	2.50740	0.30000	0.01185
	RESET_B	0.01860	0.00100	0.01559	0.32940	0.06480	0.01780	2.50740	0.30000	0.05659

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	0.02182	0.32940	0.06480	0.00047	2.50740	0.30000	0.00191
	GATE_N	0.01860	0.00100	0.02485	0.32940	0.06480	0.00926	2.50740	0.30000	0.01290
	RESET_B	0.01860	0.00100	0.01208	0.32940	0.06480	0.01607	2.50740	0.30000	0.05737

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01826	0.32940	0.02095	2.50740	0.05503

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00640	0.32940	0.03161	2.50740	0.06687

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	0.00407	0.32940	0.00722	2.50740	0.04135
	!RESET_B	0.01860	0.01826	0.32940	0.02095	2.50740	0.05503

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	0.00523	0.32940	0.00867	2.50740	0.04242
	!RESET_B	0.01860	0.00640	0.32940	0.03161	2.50740	0.06687

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	-0.00001	0.32940	0.00000	2.50740	0.00000

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	0.00001	0.32940	0.00000	2.50740	0.00000

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	-0.00001	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	-0.00001	0.32940	0.00000	2.50740	0.00000

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	0.00001	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00001	0.32940	0.00000	2.50740	0.00000

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	0.01183	0.32940	0.01550	2.50740	0.05798

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	0.00772	0.32940	0.02825	2.50740	0.07125

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	0.02031	0.32940	0.02389	2.50740	0.06598
	(!D * !RESET_B * !Q)	0.01860	0.01183	0.32940	0.01550	2.50740	0.05798

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	0.01930	0.32940	0.02351	2.50740	0.06597
	(!D * RESET_B * !Q)	0.01860	0.00772	0.32940	0.02825	2.50740	0.07125
	(!D * !RESET_B * !Q)	0.01860	0.00779	0.32940	0.02832	2.50740	0.07132

DLLR



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT	
D	RESET_B	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	0.00230	0.00325	0.00249	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1313.46000	1477.59000	1561.07000

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	0.13729	0.32940	0.06480	0.32720	2.50740	0.30000	0.88835
	GATE_N->Q (FR)	0.01860	0.00100	0.15215	0.32940	0.06480	0.35859	2.50740	0.30000	0.99593

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	0.11670	0.32940	0.06480	0.28323	2.50740	0.30000	0.76520
	GATE_N->Q (FF)	0.01860	0.00100	0.11281	0.32940	0.06480	0.29894	2.50740	0.30000	0.86376
	RESET_B->Q (FF)	0.01860	0.00100	0.04951	0.32940	0.06480	0.24520	2.50740	0.30000	0.76932

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	0.14247	0.32940	0.06480	0.32301	2.50740	0.30000	0.89467
	GATE_N->Q_N (FR)	0.01860	0.00100	0.13867	0.32940	0.06480	0.33887	2.50740	0.30000	0.99322
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07589	0.32940	0.06480	0.27766	2.50740	0.30000	0.88220

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	0.16573	0.32940	0.06480	0.32116	2.50740	0.30000	0.79180
	GATE_N->Q_N (FF)	0.01860	0.00100	0.18047	0.32940	0.06480	0.35276	2.50740	0.30000	0.89956

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	-0.05624	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.10330
	setup	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.08095	2.50740	2.50740	0.11216

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	-0.05868	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.25383
	setup	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.22666	2.50740	2.50740	0.33352

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	-0.01223	1.26300	1.26300	-0.01349	2.50740	2.50740	0.02361
	removal	GATE_N (R)	0.01860	0.01860	0.02690	1.26300	1.26300	0.02698	2.50740	2.50740	-0.00885

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	0.01540	0.32940	0.06480	0.08796	2.50740	0.30000	0.35397
	GATE_N	0.01860	0.00100	0.03559	0.32940	0.06480	0.10811	2.50740	0.30000	0.37615

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	0.02165	0.32940	0.06480	0.07165	2.50740	0.30000	0.33789
	GATE_N	0.01860	0.00100	0.03292	0.32940	0.06480	0.10544	2.50740	0.30000	0.37667
	RESET_B	0.01860	0.00100	0.03746	0.32940	0.06480	0.11280	2.50740	0.30000	0.41303

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	0.02174	0.32940	0.06480	0.07237	2.50740	0.30000	0.33716
	GATE_N	0.01860	0.00100	0.04623	0.32940	0.06480	0.12344	2.50740	0.30000	0.43956
	RESET_B	0.01860	0.00100	0.03750	0.32940	0.06480	0.11328	2.50740	0.30000	0.41352

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	0.01541	0.32940	0.06480	0.08755	2.50740	0.30000	0.35583
	GATE_N	0.01860	0.00100	0.03559	0.32940	0.06480	0.10771	2.50740	0.30000	0.37394

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02792	0.32940	0.03107	2.50740	0.06589

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01988	0.32940	0.04537	2.50740	0.08053

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	0.00472	0.32940	0.00789	2.50740	0.04200
	!RESET_B	0.01860	0.02792	0.32940	0.03107	2.50740	0.06589

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	0.00478	0.32940	0.00823	2.50740	0.04202
	!RESET_B	0.01860	0.01988	0.32940	0.04537	2.50740	0.08053

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	-0.00018	0.32940	-0.00008	2.50740	-0.00003

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	0.00018	0.32940	0.00008	2.50740	0.00003

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	0.00010	0.32940	0.00003	2.50740	0.00003
	(!D * GATE_N * !Q)	0.01860	-0.00018	0.32940	-0.00008	2.50740	-0.00003

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	0.00018	0.32940	0.00007	2.50740	0.00003
	(!D * GATE_N * !Q)	0.01860	0.00018	0.32940	0.00008	2.50740	0.00003

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	0.00451	0.32940	0.02782	2.50740	0.07017

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	0.01328	0.32940	0.01759	2.50740	0.06047

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	0.02044	0.32940	0.02410	2.50740	0.06605
	(!D * RESET_B * !Q)	0.01860	0.00451	0.32940	0.02782	2.50740	0.07017
	(!D * !RESET_B * !Q)	0.01860	0.00467	0.32940	0.02797	2.50740	0.07032

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	0.01961	0.32940	0.02388	2.50740	0.06623
	(!D * !RESET_B * !Q)	0.01860	0.01328	0.32940	0.01759	2.50740	0.06047

DLY1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00157	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	435.56600	473.12600	510.68600

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	0.07861	0.32940	0.06480	0.25714	2.50740	0.30000	0.74481

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	0.09150	0.32940	0.06480	0.27703	2.50740	0.30000	0.87468

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	0.01974	0.32940	0.06480	0.02194	2.50740	0.30000	0.04636

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	0.01878	0.32940	0.06480	0.02129	2.50740	0.30000	0.04429

DLY2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00157	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	515.76800	553.32800	590.88800

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	0.11814	0.32940	0.06480	0.30803	2.50740	0.30000	0.83013

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	0.13312	0.32940	0.06480	0.33620	2.50740	0.30000	0.95891

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	0.02366	0.32940	0.06480	0.02545	2.50740	0.30000	0.04664

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	0.02294	0.32940	0.06480	0.02487	2.50740	0.30000	0.04830

DLY4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00158	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1214.89000	1252.42000	1289.95000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	0.25568	0.32940	0.06480	0.47128	2.50740	0.30000	1.06541

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	0.26516	0.32940	0.06480	0.50112	2.50740	0.30000	1.19100

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	0.03466	0.32940	0.06480	0.03528	2.50740	0.30000	0.05559

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	0.03432	0.32940	0.06480	0.03491	2.50740	0.30000	0.05552

EINVIN_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00796	0.00971	1.20000
sg13g2_einvn_2	0.00405	0.00518	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1259.66000	1555.35000	1851.03000
sg13g2_einvn_2	633.83500	781.67600	929.51600

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	0.01087	0.01915	0.32940	0.26907	0.39467	2.50740	1.20987	2.14300
	TE_B->Z (RR)	0.01860	0.01087	0.03770	0.32940	0.26907	0.09300	2.50740	1.20987	0.18186
	TE_B->Z (FR)	0.01860	0.01087	0.02364	0.32940	0.26907	0.36688	2.50740	1.20987	1.84737
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00602	0.02021	0.32940	0.13462	0.39448	2.50740	0.60503	2.14073
	TE_B->Z (RR)	0.01860	0.00602	0.03651	0.32940	0.13462	0.09004	2.50740	0.60503	0.17810
	TE_B->Z (FR)	0.01860	0.00602	0.02459	0.32940	0.13462	0.36679	2.50740	0.60503	1.84952

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01560	0.01671	0.32940	0.27380	0.31991	2.50740	1.21460	1.76220
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00846	0.01777	0.32940	0.13706	0.32007	2.50740	0.60746	1.76110

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	0.01087	0.01550	0.32940	0.26907	0.02031	2.50740	1.20987	0.06718
	TE_B	0.01860	0.01087	0.03433	0.32940	0.26907	0.02332	2.50740	1.20987	0.01948
sg13g2_einvn_2	A	0.01860	0.00602	0.00778	0.32940	0.13462	0.01004	2.50740	0.60503	0.03284
	TE_B	0.01860	0.00602	0.01693	0.32940	0.13462	0.01158	2.50740	0.60503	0.00995

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.01560	0.01476	0.32940	0.27380	0.01989	2.50740	1.21460	0.05846
sg13g2_einvn_2	A	0.01860	0.00846	0.00759	0.32940	0.13706	0.01012	2.50740	0.60746	0.02941

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	-0.01273	0.32940	-0.01137	2.50740	0.03435
sg13g2_einvn_2	0.01860	-0.00657	0.32940	-0.00504	2.50740	0.01973

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	0.01273	0.32940	0.02712	2.50740	0.07404
sg13g2_einvn_2	0.01860	0.00657	0.32940	0.01382	2.50740	0.03905

GCLK



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00249	0.00525	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	1095.52000	1124.37000	1180.03000

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	0.04986	0.32940	0.06480	0.23145	2.50740	0.30000	0.83258

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	0.04287	0.32940	0.06480	0.22031	2.50740	0.30000	0.77142

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	-0.02547	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.23050
	setup	CLK (R)	0.01860	0.01860	0.04124	1.26300	1.26300	0.18619	2.50740	2.50740	0.35659

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	-0.01093	1.26300	1.26300	-0.01889	2.50740	2.50740	-0.02992
	setup	CLK (R)	0.01860	0.01860	0.02884	1.26300	1.26300	0.05397	2.50740	2.50740	0.07898

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	0.01475	0.32940	0.06480	0.01660	2.50740	0.30000	0.04974

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	0.00925	0.32940	0.06480	0.01301	2.50740	0.30000	0.04726

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02873	0.32940	0.03369	2.50740	0.06902

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01554	0.32940	0.04791	2.50740	0.08340

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	0.02873	0.32940	0.03369	2.50740	0.06902

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	0.01554	0.32940	0.04791	2.50740	0.08340

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01005	0.32940	0.01378	2.50740	0.05625

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01254	0.32940	0.01671	2.50740	0.05952

INx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.04804	4.80000
sg13g2_inv_8	0.02346	2.40000
sg13g2_inv_4	0.01174	1.20000
sg13g2_inv_2	0.00588	0.60000
sg13g2_inv_1	0.00300	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	1502.34000	2685.07000	3867.80000
sg13g2_inv_8	751.16400	1342.57000	1933.98000
sg13g2_inv_4	375.59200	671.27300	966.95300
sg13g2_inv_2	187.79600	335.62400	483.45200
sg13g2_inv_1	93.89730	167.81800	241.73800

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	0.01228	0.32940	1.03680	0.27409	2.50740	4.80000	1.53289
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01219	0.32940	0.51840	0.27356	2.50740	2.40000	1.53312
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01246	0.32940	0.25920	0.27329	2.50740	1.20000	1.53196
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01340	0.32940	0.12960	0.27283	2.50740	0.60000	1.52823
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01570	0.32940	0.06480	0.27331	2.50740	0.30000	1.52965

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	0.01157	0.32940	1.03680	0.24651	2.50740	4.80000	1.38454
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01151	0.32940	0.51840	0.24660	2.50740	2.40000	1.38569
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01173	0.32940	0.25920	0.24622	2.50740	1.20000	1.38513
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01253	0.32940	0.12960	0.24522	2.50740	0.60000	1.37794
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01452	0.32940	0.06480	0.24549	2.50740	0.30000	1.37813

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	0.03429	0.32940	1.03680	0.06245	2.50740	4.80000	0.31718
sg13g2_inv_8	A	0.01860	0.00100	0.01638	0.32940	0.51840	0.03027	2.50740	2.40000	0.16262
sg13g2_inv_4	A	0.01860	0.00100	0.00817	0.32940	0.25920	0.01511	2.50740	1.20000	0.07881
sg13g2_inv_2	A	0.01860	0.00100	0.00407	0.32940	0.12960	0.00750	2.50740	0.60000	0.04039
sg13g2_inv_1	A	0.01860	0.00100	0.00231	0.32940	0.06480	0.00398	2.50740	0.30000	0.01997

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	0.02976	0.32940	1.03680	0.05600	2.50740	4.80000	0.27892
sg13g2_inv_8	A	0.01860	0.00100	0.01421	0.32940	0.51840	0.02686	2.50740	2.40000	0.13767
sg13g2_inv_4	A	0.01860	0.00100	0.00716	0.32940	0.25920	0.01341	2.50740	1.20000	0.06902
sg13g2_inv_2	A	0.01860	0.00100	0.00368	0.32940	0.12960	0.00691	2.50740	0.60000	0.03482
sg13g2_inv_1	A	0.01860	0.00100	0.00238	0.32940	0.06480	0.00384	2.50740	0.30000	0.01783

ITL



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.01565	0.01643	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2425.43000	3016.80000	3608.16000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (FR)	0.01860	0.02051	0.01870	0.32940	0.53791	0.39576	2.50740	2.41951	2.14851
	TE_B->Z (RR)	0.01860	0.02051	0.04969	0.32940	0.53791	0.12646	2.50740	2.41951	0.26395
	TE_B->Z (FR)	0.01860	0.02051	0.02462	0.32940	0.53791	0.36942	2.50740	2.41951	1.85374

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	0.02999	0.01673	0.32940	0.54739	0.32085	2.50740	2.42899	1.76982

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	0.02051	0.03084	0.32940	0.53791	0.04183	2.50740	2.41951	0.13955
	TE_B	0.01860	0.02051	0.07251	0.32940	0.53791	0.04819	2.50740	2.41951	0.04230

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	0.02999	0.02870	0.32940	0.54739	0.03889	2.50740	2.42899	0.11327

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	-0.01862	0.32940	-0.03086	2.50740	0.01213

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	0.01862	0.32940	0.04465	2.50740	0.08999

KEEPSTATE



*sg13g2_stdcell_typ_1p50V_25C Cell Library:
Process sg13g2_stdcell_typ_1p50V_25C,
Voltage 1.50, Temp 25.00*

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	76.36080	435.86400	795.36700

Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	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_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00216	0.00229	0.00543	0.60000
sg13g2_mux2_1	0.00219	0.00231	0.00543	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	755.56400	894.12900	1001.57000
sg13g2_mux2_1	622.29500	726.31200	861.45200

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	0.06029	0.32940	0.12960	0.27425	2.50740	0.60000	0.89560
	A1->X (RR)	0.01860	0.00100	0.03620	0.32940	0.12960	0.27434	2.50740	0.60000	0.90159
	S->X (-R)	0.01860	0.00100	0.06207	0.32940	0.12960	0.26688	2.50740	0.60000	0.88737
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.04911	0.32940	0.06480	0.24595	2.50740	0.30000	0.83978
	A1->X (RR)	0.01860	0.00100	0.03671	0.32940	0.06480	0.24895	2.50740	0.30000	0.84672
	S->X (-R)	0.01860	0.00100	0.07956	0.32940	0.06480	0.26797	2.50740	0.30000	0.84152

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	0.04197	0.32940	0.12960	0.29865	2.50740	0.60000	0.95844
	A1->X (FF)	0.01860	0.00100	0.07947	0.32940	0.12960	0.30204	2.50740	0.60000	0.96630
	S->X (-F)	0.01860	0.00100	0.08798	0.32940	0.12960	0.28318	2.50740	0.60000	0.89917
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.04247	0.32940	0.06480	0.26365	2.50740	0.30000	0.89472
	A1->X (FF)	0.01860	0.00100	0.06535	0.32940	0.06480	0.26757	2.50740	0.30000	0.90508
	S->X (-F)	0.01860	0.00100	0.07380	0.32940	0.06480	0.25198	2.50740	0.30000	0.84412

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	0.06207	0.32940	0.12960	0.26688	2.50740	0.60000	0.88737
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.08733	0.32940	0.12960	0.28207	2.50740	0.60000	0.86055
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.05447	0.32940	0.06480	0.24434	2.50740	0.30000	0.83844
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.07956	0.32940	0.06480	0.26797	2.50740	0.30000	0.84152

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	0.08798	0.32940	0.12960	0.28318	2.50740	0.60000	0.89917
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.10923	0.32940	0.12960	0.28930	2.50740	0.60000	0.77134
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.07380	0.32940	0.06480	0.25198	2.50740	0.30000	0.84412
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.09504	0.32940	0.06480	0.26471	2.50740	0.30000	0.74499

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	0.02055	0.32940	0.12960	0.02216	2.50740	0.60000	0.05746
	A1	0.01860	0.00100	0.02171	0.32940	0.12960	0.03307	2.50740	0.60000	0.06898
	S	0.01860	0.00100	0.02228	0.32940	0.12960	0.02476	2.50740	0.60000	0.05956
sg13g2_mux2_1	A0	0.01860	0.00100	0.01569	0.32940	0.06480	0.01865	2.50740	0.30000	0.05413
	A1	0.01860	0.00100	0.01491	0.32940	0.06480	0.02338	2.50740	0.30000	0.05818
	S	0.01860	0.00100	0.01584	0.32940	0.06480	0.01857	2.50740	0.30000	0.05345

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	0.02273	0.32940	0.12960	0.03436	2.50740	0.60000	0.07236
	A1	0.01860	0.00100	0.02365	0.32940	0.12960	0.02474	2.50740	0.60000	0.06397
	S	0.01860	0.00100	0.02239	0.32940	0.12960	0.02323	2.50740	0.60000	0.05956
sg13g2_mux2_1	A0	0.01860	0.00100	0.01491	0.32940	0.06480	0.02408	2.50740	0.30000	0.05939
	A1	0.01860	0.00100	0.01568	0.32940	0.06480	0.01891	2.50740	0.30000	0.05524
	S	0.01860	0.00100	0.01495	0.32940	0.06480	0.01738	2.50740	0.30000	0.05396

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	0.02171	0.32940	0.12960	0.02179	2.50740	0.60000	0.02303
	S	(!A0 * A1)	0.01860	0.00100	0.02228	0.32940	0.12960	0.02476	2.50740	0.60000	0.05956
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01521	0.32940	0.06480	0.01538	2.50740	0.30000	0.01700
	S	(!A0 * A1)	0.01860	0.00100	0.01584	0.32940	0.06480	0.01857	2.50740	0.30000	0.05345

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	0.02378	0.32940	0.12960	0.02305	2.50740	0.60000	0.02613
	S	(!A0 * A1)	0.01860	0.00100	0.02239	0.32940	0.12960	0.02323	2.50740	0.60000	0.05956
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01629	0.32940	0.06480	0.01664	2.50740	0.30000	0.01821
	S	(!A0 * A1)	0.01860	0.00100	0.01495	0.32940	0.06480	0.01738	2.50740	0.30000	0.05396

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00541	0.32940	0.00826	2.50740	0.04219
sg13g2_mux2_1	0.01860	0.00540	0.32940	0.00826	2.50740	0.04219

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00623	0.32940	0.00947	2.50740	0.04308
sg13g2_mux2_1	0.01860	0.00622	0.32940	0.00947	2.50740	0.04308

MUX4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00298	0.00296	0.00298	0.00307	0.00854	0.00527	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	863.95900	1307.19000	1573.90000

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	0.08891	0.32940	0.06480	0.30081	2.50740	0.30000	0.97297
	A1->X (RR)	0.01860	0.00100	0.08703	0.32940	0.06480	0.29950	2.50740	0.30000	0.97032
	A2->X (RR)	0.01860	0.00100	0.09404	0.32940	0.06480	0.30689	2.50740	0.30000	0.98671
	A3->X (RR)	0.01860	0.00100	0.08993	0.32940	0.06480	0.30592	2.50740	0.30000	0.98544
	S0->X (-R)	0.01860	0.00100	0.07833	0.32940	0.06480	0.30218	2.50740	0.30000	0.97597
	S1->X (-R)	0.01860	0.00100	0.04631	0.32940	0.06480	0.24491	2.50740	0.30000	0.84815

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	0.10554	0.32940	0.06480	0.30218	2.50740	0.30000	0.89618
	A1->X (FF)	0.01860	0.00100	0.10531	0.32940	0.06480	0.30273	2.50740	0.30000	0.89731
	A2->X (FF)	0.01860	0.00100	0.11163	0.32940	0.06480	0.31191	2.50740	0.30000	0.91229
	A3->X (FF)	0.01860	0.00100	0.11270	0.32940	0.06480	0.31159	2.50740	0.30000	0.91250
	S0->X (-F)	0.01860	0.00100	0.09652	0.32940	0.06480	0.31342	2.50740	0.30000	0.94517
	S1->X (-F)	0.01860	0.00100	0.05652	0.32940	0.06480	0.24851	2.50740	0.30000	0.84650

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	0.07833	0.32940	0.06480	0.30218	2.50740	0.30000	0.97597
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.07406	0.32940	0.06480	0.29263	2.50740	0.30000	0.95231
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.11671	0.32940	0.06480	0.32756	2.50740	0.30000	0.94339
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11357	0.32940	0.06480	0.32191	2.50740	0.30000	0.93537
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.04638	0.32940	0.06480	0.24490	2.50740	0.30000	0.84768
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.04631	0.32940	0.06480	0.24491	2.50740	0.30000	0.84815
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.06301	0.32940	0.06480	0.25847	2.50740	0.30000	0.83903
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.06287	0.32940	0.06480	0.25841	2.50740	0.30000	0.83903

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	0.09652	0.32940	0.06480	0.31342	2.50740	0.30000	0.94517
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.08843	0.32940	0.06480	0.29947	2.50740	0.30000	0.92105
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.12614	0.32940	0.06480	0.32488	2.50740	0.30000	0.85479
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11983	0.32940	0.06480	0.31584	2.50740	0.30000	0.84290
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.05652	0.32940	0.06480	0.24851	2.50740	0.30000	0.84650
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.05634	0.32940	0.06480	0.24835	2.50740	0.30000	0.84613
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.06864	0.32940	0.06480	0.25357	2.50740	0.30000	0.75348
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.06877	0.32940	0.06480	0.25361	2.50740	0.30000	0.75350

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	0.02126	0.32940	0.06480	0.02247	2.50740	0.30000	0.05498
	A1	0.01860	0.00100	0.02839	0.32940	0.06480	0.02950	2.50740	0.30000	0.06126
	A2	0.01860	0.00100	0.02932	0.32940	0.06480	0.03037	2.50740	0.30000	0.06263
	A3	0.01860	0.00100	0.01941	0.32940	0.06480	0.02049	2.50740	0.30000	0.05251
	S0	0.01860	0.00100	0.01521	0.32940	0.06480	0.01702	2.50740	0.30000	0.05017
	S1	0.01860	0.00100	0.01228	0.32940	0.06480	0.01462	2.50740	0.30000	0.03639

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	0.02130	0.32940	0.06480	0.02198	2.50740	0.30000	0.05468
	A1	0.01860	0.00100	0.03047	0.32940	0.06480	0.03146	2.50740	0.30000	0.06431
	A2	0.01860	0.00100	0.03159	0.32940	0.06480	0.03237	2.50740	0.30000	0.06440
	A3	0.01860	0.00100	0.02292	0.32940	0.06480	0.02360	2.50740	0.30000	0.05533
	S0	0.01860	0.00100	0.02721	0.32940	0.06480	0.03171	2.50740	0.30000	0.00325
	S1	0.01860	0.00100	0.00874	0.32940	0.06480	0.01126	2.50740	0.30000	0.03990

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	0.02878	0.32940	0.06480	0.01853	2.50740	0.30000	-0.00325
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02869	0.32940	0.06480	0.01850	2.50740	0.30000	-0.00343
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01518	0.32940	0.06480	0.01709	2.50740	0.30000	0.05126
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01521	0.32940	0.06480	0.01702	2.50740	0.30000	0.05017
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01228	0.32940	0.06480	0.01462	2.50740	0.30000	0.03639
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01332	0.32940	0.06480	0.01564	2.50740	0.30000	0.03742
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00907	0.32940	0.06480	0.01174	2.50740	0.30000	0.03910
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00909	0.32940	0.06480	0.01174	2.50740	0.30000	0.03909

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	0.02721	0.32940	0.06480	0.03171	2.50740	0.30000	0.00325
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02637	0.32940	0.06480	0.03223	2.50740	0.30000	0.00343
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01644	0.32940	0.06480	0.01858	2.50740	0.30000	0.05087
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.02294	0.32940	0.06480	0.01361	2.50740	0.30000	0.01259
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01290	0.32940	0.06480	0.01543	2.50740	0.30000	0.03780
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01392	0.32940	0.06480	0.01644	2.50740	0.30000	0.03869
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00672	0.32940	0.06480	0.00921	2.50740	0.30000	0.03787
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00874	0.32940	0.06480	0.01126	2.50740	0.30000	0.03990

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01155	0.32940	0.01858	2.50740	0.09275

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01012	0.32940	0.02336	2.50740	0.09692

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	0.01073	0.32940	0.01762	2.50740	0.09178
	(A0 * A1 * !S1)	0.01860	0.01166	0.32940	0.01819	2.50740	0.09181
	(!A2 * !A3 * S1)	0.01860	0.01155	0.32940	0.01858	2.50740	0.09275
	(!A0 * !A1 * !S1)	0.01860	0.01297	0.32940	0.01966	2.50740	0.09331

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	0.01051	0.32940	0.02388	2.50740	0.09766
	(A0 * A1 * !S1)	0.01860	0.01140	0.32940	0.02665	2.50740	0.09996
	(!A2 * !A3 * S1)	0.01860	0.01012	0.32940	0.02336	2.50740	0.09692
	(!A0 * !A1 * !S1)	0.01860	0.01112	0.32940	0.01841	2.50740	0.09152

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00581	0.32940	0.00994	2.50740	0.05129

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00643	0.32940	0.01106	2.50740	0.05205

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	0.00581	0.32940	0.00994	2.50740	0.05129
	(A0 * A2 * !S0)	0.01860	0.00579	0.32940	0.00991	2.50740	0.05127
	(!A1 * !A3 * S0)	0.01860	0.00634	0.32940	0.01072	2.50740	0.05205
	(!A0 * !A2 * !S0)	0.01860	0.00633	0.32940	0.01069	2.50740	0.05204

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	0.00645	0.32940	0.01109	2.50740	0.05208
	(A0 * A2 * !S0)	0.01860	0.00643	0.32940	0.01106	2.50740	0.05205
	(!A1 * !A3 * S0)	0.01860	0.00632	0.32940	0.01081	2.50740	0.05169
	(!A0 * !A2 * !S0)	0.01860	0.00632	0.32940	0.01081	2.50740	0.05168

NAND2B1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_1	0.00245	0.00329	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	161.32200	357.10700	551.88500

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	0.03607	0.32940	0.06480	0.22161	2.50740	0.30000	0.82673
	B->Y (FR)	0.01860	0.00100	0.01940	0.32940	0.06480	0.27731	2.50740	0.30000	1.53125

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	0.04347	0.32940	0.06480	0.27854	2.50740	0.30000	1.06001
	B->Y (RF)	0.01860	0.00100	0.02542	0.32940	0.06480	0.30020	2.50740	0.30000	1.58773

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	0.00311	0.32940	0.06480	0.00322	2.50740	0.30000	0.00274
	B	0.01860	0.00100	0.00259	0.32940	0.06480	0.00367	2.50740	0.30000	0.01842

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	0.00670	0.32940	0.06480	0.00690	2.50740	0.30000	0.00653
	B	0.01860	0.00100	0.00657	0.32940	0.06480	0.00719	2.50740	0.30000	0.01831

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	0.00605	0.32940	0.00943	2.50740	0.04381

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	0.00319	0.32940	0.00664	2.50740	0.04054

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	0.00605	0.32940	0.00943	2.50740	0.04381

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	0.00319	0.32940	0.00664	2.50740	0.04054

NAND2B2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2b_2	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_2	0.00233	0.00556	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	360.89300	583.53400	1016.78000

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	0.04734	0.32940	0.12960	0.25102	2.50740	0.60000	0.88554
	B->Y (FR)	0.01860	0.00100	0.01514	0.32940	0.12960	0.27394	2.50740	0.60000	1.52455

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	0.05828	0.32940	0.12960	0.32432	2.50740	0.60000	1.16602
	B->Y (RF)	0.01860	0.00100	0.01976	0.32940	0.12960	0.32641	2.50740	0.60000	1.79972

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	0.00631	0.32940	0.12960	0.00684	2.50740	0.60000	0.00740
	B	0.01860	0.00100	0.00790	0.32940	0.12960	0.01063	2.50740	0.60000	0.03729

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	0.01334	0.32940	0.12960	0.01405	2.50740	0.60000	0.01758
	B	0.01860	0.00100	0.01018	0.32940	0.12960	0.01201	2.50740	0.60000	0.03532

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	0.00998	0.32940	0.01232	2.50740	0.04514

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	0.00958	0.32940	0.01246	2.50740	0.04484

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	0.00998	0.32940	0.01232	2.50740	0.04514

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	0.00958	0.32940	0.01246	2.50740	0.04484

NAND2x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	Y
0	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	0.00580	0.00602	0.60000
sg13g2_nand2_1	0.00305	0.00318	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	184.01200	460.88700	948.37200
sg13g2_nand2_1	92.87420	234.41200	483.38900

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	0.01558	0.32940	0.12960	0.27457	2.50740	0.60000	1.52396
	B->Y (FR)	0.01860	0.00100	0.01884	0.32940	0.12960	0.27807	2.50740	0.60000	1.53005
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.01733	0.32940	0.06480	0.27444	2.50740	0.30000	1.52295
	B->Y (FR)	0.01860	0.00100	0.01993	0.32940	0.06480	0.27724	2.50740	0.30000	1.52980

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	0.01948	0.32940	0.12960	0.32615	2.50740	0.60000	1.79926
	B->Y (RF)	0.01860	0.00100	0.02306	0.32940	0.12960	0.30822	2.50740	0.60000	1.62963
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.02094	0.32940	0.06480	0.31838	2.50740	0.30000	1.75369
	B->Y (RF)	0.01860	0.00100	0.02370	0.32940	0.06480	0.29875	2.50740	0.30000	1.59014

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	0.00455	0.32940	0.12960	0.00748	2.50740	0.60000	0.03275
	B	0.01860	0.00100	0.00580	0.32940	0.12960	0.00817	2.50740	0.60000	0.03709
sg13g2_nand2_1	A	0.01860	0.00100	0.00248	0.32940	0.06480	0.00392	2.50740	0.30000	0.01723
	B	0.01860	0.00100	0.00262	0.32940	0.06480	0.00377	2.50740	0.30000	0.01913

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	0.00659	0.32940	0.12960	0.00857	2.50740	0.60000	0.03185
	B	0.01860	0.00100	0.01194	0.32940	0.12960	0.01338	2.50740	0.60000	0.03486
sg13g2_nand2_1	A	0.01860	0.00100	0.00356	0.32940	0.06480	0.00456	2.50740	0.30000	0.01673
	B	0.01860	0.00100	0.00632	0.32940	0.06480	0.00697	2.50740	0.30000	0.01887

NAND3B1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

Truth Table

INPUT			OUTPUT
A_N	B	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	0.00238	0.00317	0.00318	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	164.40600	390.89200	793.55200

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	0.03816	0.32940	0.06480	0.22252	2.50740	0.30000	0.82477
	B->Y (FR)	0.01860	0.00100	0.02169	0.32940	0.06480	0.27955	2.50740	0.30000	1.52824
	C->Y (FR)	0.01860	0.00100	0.02353	0.32940	0.06480	0.28203	2.50740	0.30000	1.53221

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	0.05215	0.32940	0.06480	0.35881	2.50740	0.30000	1.40558
	B->Y (RF)	0.01860	0.00100	0.03768	0.32940	0.06480	0.38396	2.50740	0.30000	1.98033
	C->Y (RF)	0.01860	0.00100	0.04148	0.32940	0.06480	0.36698	2.50740	0.30000	1.79333

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	0.00351	0.32940	0.06480	0.00364	2.50740	0.30000	0.00321
	B	0.01860	0.00100	0.00328	0.32940	0.06480	0.00417	2.50740	0.30000	0.01680
	C	0.01860	0.00100	0.00374	0.32940	0.06480	0.00431	2.50740	0.30000	0.01696

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	0.00852	0.32940	0.06480	0.00863	2.50740	0.30000	0.00794
	B	0.01860	0.00100	0.00840	0.32940	0.06480	0.00884	2.50740	0.30000	0.01928
	C	0.01860	0.00100	0.01118	0.32940	0.06480	0.01148	2.50740	0.30000	0.02129

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	0.00599	0.32940	0.00934	2.50740	0.04372

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	0.00328	0.32940	0.00673	2.50740	0.04063

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	0.00599	0.32940	0.00934	2.50740	0.04372

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	0.00328	0.32940	0.00673	2.50740	0.04063

NAND3



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	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	0.00292	0.00308	0.00306	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	96.07480	268.33200	725.21700

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	0.01962	0.32940	0.06480	0.27634	2.50740	0.30000	1.52232
	B->Y (FR)	0.01860	0.00100	0.02227	0.32940	0.06480	0.27898	2.50740	0.30000	1.52824
	C->Y (FR)	0.01860	0.00100	0.02378	0.32940	0.06480	0.28203	2.50740	0.30000	1.53219

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	0.02934	0.32940	0.06480	0.39190	2.50740	0.30000	2.10261
	B->Y (RF)	0.01860	0.00100	0.03545	0.32940	0.06480	0.38224	2.50740	0.30000	1.97953
	C->Y (RF)	0.01860	0.00100	0.03840	0.32940	0.06480	0.36382	2.50740	0.30000	1.79150

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	0.00305	0.32940	0.06480	0.00416	2.50740	0.30000	0.01571
	B	0.01860	0.00100	0.00329	0.32940	0.06480	0.00403	2.50740	0.30000	0.01690
	C	0.01860	0.00100	0.00376	0.32940	0.06480	0.00437	2.50740	0.30000	0.01751

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	0.00533	0.32940	0.06480	0.00622	2.50740	0.30000	0.01721
	B	0.01860	0.00100	0.00816	0.32940	0.06480	0.00861	2.50740	0.30000	0.01918
	C	0.01860	0.00100	0.01059	0.32940	0.06480	0.01092	2.50740	0.30000	0.02112

NAND4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	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	0.00289	0.00305	0.00306	0.00306	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	99.39170	293.39200	966.89000

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	0.02042	0.32940	0.06480	0.27702	2.50740	0.30000	1.52096
	B->Y (FR)	0.01860	0.00100	0.02337	0.32940	0.06480	0.28033	2.50740	0.30000	1.52623
	C->Y (FR)	0.01860	0.00100	0.02499	0.32940	0.06480	0.28319	2.50740	0.30000	1.53232
	D->Y (FR)	0.01860	0.00100	0.02565	0.32940	0.06480	0.28559	2.50740	0.30000	1.53316

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	0.03647	0.32940	0.06480	0.46463	2.50740	0.30000	2.41571
	B->Y (RF)	0.01860	0.00100	0.04594	0.32940	0.06480	0.46213	2.50740	0.30000	2.32189
	C->Y (RF)	0.01860	0.00100	0.05154	0.32940	0.06480	0.44990	2.50740	0.30000	2.18050
	D->Y (RF)	0.01860	0.00100	0.05420	0.32940	0.06480	0.43803	2.50740	0.30000	2.03666

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	0.00295	0.32940	0.06480	0.00398	2.50740	0.30000	0.01546
	B	0.01860	0.00100	0.00336	0.32940	0.06480	0.00404	2.50740	0.30000	0.01595
	C	0.01860	0.00100	0.00378	0.32940	0.06480	0.00420	2.50740	0.30000	0.01579
	D	0.01860	0.00100	0.00409	0.32940	0.06480	0.00442	2.50740	0.30000	0.01621

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	0.00645	0.32940	0.06480	0.00711	2.50740	0.30000	0.01692
	B	0.01860	0.00100	0.00929	0.32940	0.06480	0.00954	2.50740	0.30000	0.01805
	C	0.01860	0.00100	0.01178	0.32940	0.06480	0.01187	2.50740	0.30000	0.02140
	D	0.01860	0.00100	0.01420	0.32940	0.06480	0.01425	2.50740	0.30000	0.02435

NOR2Bx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B_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	0.00590	0.00284	0.60000
sg13g2_nor2b_1	0.00304	0.00241	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	514.85900	644.35000	801.20700
sg13g2_nor2b_1	289.51000	377.06300	477.24500

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	0.02233	0.32940	0.12960	0.39621	2.50740	0.60000	2.13935
	B_N->Y (RR)	0.01860	0.00100	0.05377	0.32940	0.12960	0.37989	2.50740	0.60000	1.45910
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.02527	0.32940	0.06480	0.39675	2.50740	0.30000	2.14453
	B_N->Y (RR)	0.01860	0.00100	0.04943	0.32940	0.06480	0.36050	2.50740	0.30000	1.41326

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	0.01480	0.32940	0.12960	0.25217	2.50740	0.60000	1.40235
	B_N->Y (FF)	0.01860	0.00100	0.04901	0.32940	0.12960	0.23223	2.50740	0.60000	0.78595
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.01606	0.32940	0.06480	0.24669	2.50740	0.30000	1.37396
	B_N->Y (FF)	0.01860	0.00100	0.04160	0.32940	0.06480	0.20665	2.50740	0.30000	0.72988

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	0.00630	0.32940	0.12960	0.00882	2.50740	0.60000	0.03286
	B_N	0.01860	0.00100	0.01357	0.32940	0.12960	0.01374	2.50740	0.60000	0.01439
sg13g2_nor2b_1	A	0.01860	0.00100	0.00314	0.32940	0.06480	0.00433	2.50740	0.30000	0.01705
	B_N	0.01860	0.00100	0.00715	0.32940	0.06480	0.00712	2.50740	0.30000	0.00743

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	0.00457	0.32940	0.12960	0.00689	2.50740	0.60000	0.02604
	B_N	0.01860	0.00100	0.00682	0.32940	0.12960	0.00679	2.50740	0.60000	0.00767
sg13g2_nor2b_1	A	0.01860	0.00100	0.00287	0.32940	0.06480	0.00406	2.50740	0.30000	0.01551
	B_N	0.01860	0.00100	0.00372	0.32940	0.06480	0.00358	2.50740	0.30000	0.00368

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	0.01106	0.32940	0.01424	2.50740	0.05379
sg13g2_nor2b_1	0.01860	0.00609	0.32940	0.00919	2.50740	0.04311

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	0.00968	0.32940	0.01314	2.50740	0.05239
sg13g2_nor2b_1	0.01860	0.00562	0.32940	0.00888	2.50740	0.04251

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	0.01106	0.32940	0.01424	2.50740	0.05379
sg13g2_nor2b_1	A	0.01860	0.00609	0.32940	0.00919	2.50740	0.04311

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	0.00968	0.32940	0.01314	2.50740	0.05239
sg13g2_nor2b_1	A	0.01860	0.00562	0.32940	0.00888	2.50740	0.04251

NOR2x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
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	0.00616	0.00589	0.30000
sg13g2_nor2_1	0.00319	0.00304	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	375.59000	508.93300	617.01900
sg13g2_nor2_1	187.82800	254.47200	308.48700

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	0.02813	0.32940	0.06480	0.23866	2.50740	0.30000	1.21327
	B->Y (FR)	0.01860	0.00100	0.02252	0.32940	0.06480	0.26424	2.50740	0.30000	1.42023
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02976	0.32940	0.06480	0.37089	2.50740	0.30000	1.90041
	B->Y (FR)	0.01860	0.00100	0.02535	0.32940	0.06480	0.39654	2.50740	0.30000	2.14339

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	0.01728	0.32940	0.06480	0.17538	2.50740	0.30000	0.92858
	B->Y (RF)	0.01860	0.00100	0.01458	0.32940	0.06480	0.17011	2.50740	0.30000	0.91729
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.01835	0.32940	0.06480	0.25012	2.50740	0.30000	1.37931
	B->Y (RF)	0.01860	0.00100	0.01610	0.32940	0.06480	0.24665	2.50740	0.30000	1.37390

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	0.01347	0.32940	0.06480	0.01569	2.50740	0.30000	0.05371
	B	0.01860	0.00100	0.00642	0.32940	0.06480	0.01040	2.50740	0.30000	0.04975
sg13g2_nor2_1	A	0.01860	0.00100	0.00666	0.32940	0.06480	0.00724	2.50740	0.30000	0.01990
	B	0.01860	0.00100	0.00314	0.32940	0.06480	0.00434	2.50740	0.30000	0.01710

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	0.00610	0.32940	0.06480	0.00935	2.50740	0.30000	0.04681
	B	0.01860	0.00100	0.00451	0.32940	0.06480	0.00831	2.50740	0.30000	0.04256
sg13g2_nor2_1	A	0.01860	0.00100	0.00303	0.32940	0.06480	0.00404	2.50740	0.30000	0.01602
	B	0.01860	0.00100	0.00287	0.32940	0.06480	0.00405	2.50740	0.30000	0.01552

NOR3x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	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	0.00612	0.00605	0.00582	0.60000
sg13g2_nor3_1	0.00322	0.00321	0.00304	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	445.71700	630.66700	878.31100
sg13g2_nor3_1	229.89500	326.05900	460.24300

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	0.04863	0.32940	0.12960	0.49795	2.50740	0.60000	2.33403
	B->Y (FR)	0.01860	0.00100	0.04498	0.32940	0.12960	0.51836	2.50740	0.60000	2.55124
	C->Y (FR)	0.01860	0.00100	0.03195	0.32940	0.12960	0.52630	2.50740	0.60000	2.70150
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.05282	0.32940	0.06480	0.49639	2.50740	0.30000	2.32971
	B->Y (FR)	0.01860	0.00100	0.04931	0.32940	0.06480	0.51715	2.50740	0.30000	2.53818
	C->Y (FR)	0.01860	0.00100	0.03791	0.32940	0.06480	0.52614	2.50740	0.30000	2.69441

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	0.01910	0.32940	0.12960	0.25499	2.50740	0.60000	1.38502
	B->Y (RF)	0.01860	0.00100	0.01903	0.32940	0.12960	0.25188	2.50740	0.60000	1.37773
	C->Y (RF)	0.01860	0.00100	0.01623	0.32940	0.12960	0.24799	2.50740	0.60000	1.37116
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02005	0.32940	0.06480	0.24881	2.50740	0.30000	1.35007
	B->Y (RF)	0.01860	0.00100	0.01986	0.32940	0.06480	0.24674	2.50740	0.30000	1.34811
	C->Y (RF)	0.01860	0.00100	0.01763	0.32940	0.06480	0.24302	2.50740	0.30000	1.34070

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	0.02245	0.32940	0.12960	0.02269	2.50740	0.60000	0.04566
	B	0.01860	0.00100	0.01621	0.32940	0.12960	0.01677	2.50740	0.60000	0.03674
	C	0.01860	0.00100	0.00914	0.32940	0.12960	0.01106	2.50740	0.60000	0.03258
sg13g2_nor3_1	A	0.01860	0.00100	0.01151	0.32940	0.06480	0.01163	2.50740	0.30000	0.02350
	B	0.01860	0.00100	0.00840	0.32940	0.06480	0.00866	2.50740	0.30000	0.01877
	C	0.01860	0.00100	0.00496	0.32940	0.06480	0.00583	2.50740	0.30000	0.01680

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	0.00765	0.32940	0.12960	0.00892	2.50740	0.60000	0.02979
	B	0.01860	0.00100	0.00700	0.32940	0.12960	0.00840	2.50740	0.60000	0.02810
	C	0.01860	0.00100	0.00510	0.32940	0.12960	0.00746	2.50740	0.60000	0.02596
sg13g2_nor3_1	A	0.01860	0.00100	0.00395	0.32940	0.06480	0.00449	2.50740	0.30000	0.01631
	B	0.01860	0.00100	0.00373	0.32940	0.06480	0.00443	2.50740	0.30000	0.01644
	C	0.01860	0.00100	0.00319	0.32940	0.06480	0.00423	2.50740	0.30000	0.01533

NOR4x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	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	0.00609	0.00596	0.00516	0.00523	0.60000
sg13g2_nor4_1	0.00316	0.00314	0.00271	0.00272	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	451.06500	771.77000	1149.89000
sg13g2_nor4_1	225.53700	385.89500	574.96700

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	0.07645	0.32940	0.12960	0.64673	2.50740	0.60000	2.84415
	B->Y (FR)	0.01860	0.00100	0.07296	0.32940	0.12960	0.65754	2.50740	0.60000	3.00050
	C->Y (FR)	0.01860	0.00100	0.06219	0.32940	0.12960	0.66373	2.50740	0.60000	3.16233
	D->Y (FR)	0.01860	0.00100	0.04159	0.32940	0.12960	0.66062	2.50740	0.60000	3.26720
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.07994	0.32940	0.06480	0.64099	2.50740	0.30000	2.82399
	B->Y (FR)	0.01860	0.00100	0.07663	0.32940	0.06480	0.65184	2.50740	0.30000	2.98134
	C->Y (FR)	0.01860	0.00100	0.06669	0.32940	0.06480	0.66021	2.50740	0.30000	3.14478
	D->Y (FR)	0.01860	0.00100	0.04737	0.32940	0.06480	0.65794	2.50740	0.30000	3.25254

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	0.01992	0.32940	0.12960	0.25892	2.50740	0.60000	1.38949
	B->Y (RF)	0.01860	0.00100	0.02050	0.32940	0.12960	0.25625	2.50740	0.60000	1.38483
	C->Y (RF)	0.01860	0.00100	0.02003	0.32940	0.12960	0.25333	2.50740	0.60000	1.37811
	D->Y (RF)	0.01860	0.00100	0.01746	0.32940	0.12960	0.24918	2.50740	0.60000	1.37171
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.02113	0.32940	0.06480	0.25855	2.50740	0.30000	1.38891
	B->Y (RF)	0.01860	0.00100	0.02178	0.32940	0.06480	0.25658	2.50740	0.30000	1.38664
	C->Y (RF)	0.01860	0.00100	0.02118	0.32940	0.06480	0.25375	2.50740	0.30000	1.37994
	D->Y (RF)	0.01860	0.00100	0.01870	0.32940	0.06480	0.25004	2.50740	0.30000	1.37381

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	0.02975	0.32940	0.12960	0.02960	2.50740	0.60000	0.04983
	B	0.01860	0.00100	0.02492	0.32940	0.12960	0.02489	2.50740	0.60000	0.04280
	C	0.01860	0.00100	0.01941	0.32940	0.12960	0.01956	2.50740	0.60000	0.03616
	D	0.01860	0.00100	0.01259	0.32940	0.12960	0.01420	2.50740	0.60000	0.03285
sg13g2_nor4_1	A	0.01860	0.00100	0.01483	0.32940	0.06480	0.01474	2.50740	0.30000	0.02465
	B	0.01860	0.00100	0.01224	0.32940	0.06480	0.01217	2.50740	0.30000	0.02124
	C	0.01860	0.00100	0.00986	0.32940	0.06480	0.00993	2.50740	0.30000	0.01834
	D	0.01860	0.00100	0.00655	0.32940	0.06480	0.00729	2.50740	0.30000	0.01688

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	0.01042	0.32940	0.12960	0.01172	2.50740	0.60000	0.03014
	B	0.01860	0.00100	0.00903	0.32940	0.12960	0.00954	2.50740	0.60000	0.02716
	C	0.01860	0.00100	0.00562	0.32940	0.12960	0.00680	2.50740	0.60000	0.02357
	D	0.01860	0.00100	0.00301	0.32940	0.12960	0.00532	2.50740	0.60000	0.02179
sg13g2_nor4_1	A	0.01860	0.00100	0.00513	0.32940	0.06480	0.00571	2.50740	0.30000	0.01516
	B	0.01860	0.00100	0.00472	0.32940	0.06480	0.00501	2.50740	0.30000	0.01354
	C	0.01860	0.00100	0.00302	0.32940	0.06480	0.00360	2.50740	0.30000	0.01201
	D	0.01860	0.00100	0.00193	0.32940	0.06480	0.00304	2.50740	0.30000	0.01082

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00080	0.32940	-0.00130	2.50740	-0.00126
sg13g2_nor4_1	0.01860	-0.00028	0.32940	-0.00050	2.50740	-0.00049

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00127	0.32940	0.00130	2.50740	0.00126
sg13g2_nor4_1	0.01860	0.00049	0.32940	0.00050	2.50740	0.00049

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	-0.00080	0.32940	-0.00130	2.50740	-0.00126
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00028	0.32940	-0.00050	2.50740	-0.00049

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	0.00127	0.32940	0.00130	2.50740	0.00126
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00049	0.32940	0.00050	2.50740	0.00049

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_nor4_1	0.01860	0.00000	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	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_nor4_1	0.01860	0.00000	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	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00000	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	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00000	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	0.00170	0.32940	0.00174	2.50740	0.00175
sg13g2_nor4_1	0.01860	0.00102	0.32940	0.00104	2.50740	0.00105

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00058	0.32940	-0.00057	2.50740	-0.00056
sg13g2_nor4_1	0.01860	-0.00064	0.32940	-0.00064	2.50740	-0.00064

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	0.00170	0.32940	0.00174	2.50740	0.00175
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00102	0.32940	0.00104	2.50740	0.00105

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	-0.00058	0.32940	-0.00057	2.50740	-0.00056
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00064	0.32940	-0.00064	2.50740	-0.00064

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00234	0.32940	0.00237	2.50740	0.00236
sg13g2_nor4_1	0.01860	0.00133	0.32940	0.00135	2.50740	0.00134

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00083	0.32940	-0.00083	2.50740	-0.00077
sg13g2_nor4_1	0.01860	-0.00078	0.32940	-0.00079	2.50740	-0.00076

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	0.00234	0.32940	0.00237	2.50740	0.00236
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00133	0.32940	0.00135	2.50740	0.00134

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	-0.00083	0.32940	-0.00083	2.50740	-0.00077
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	-0.00078	0.32940	-0.00079	2.50740	-0.00076

NP_ANT



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00115

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	6.74996	6.74996	6.74996

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	-0.00031	0.32940	-0.00032	2.50740	-0.00033

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00031	0.32940	0.00032	2.50740	0.00033

O21AI



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00350	0.00351	0.00317	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	211.92900	444.60600	709.37900

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	0.04825	0.32940	0.06480	0.44218	2.50740	0.30000	2.18226
	A2->Y (FR)	0.01860	0.00100	0.04187	0.32940	0.06480	0.46601	2.50740	0.30000	2.43075
	B1->Y (FR)	0.01860	0.00100	0.02059	0.32940	0.06480	0.31154	2.50740	0.30000	1.73511

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	0.03268	0.32940	0.06480	0.30965	2.50740	0.30000	1.57167
	A2->Y (RF)	0.01860	0.00100	0.02757	0.32940	0.06480	0.30310	2.50740	0.30000	1.56041
	B1->Y (RF)	0.01860	0.00100	0.02767	0.32940	0.06480	0.32980	2.50740	0.30000	1.76491

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	0.02059	0.32940	0.06480	0.31154	2.50740	0.30000	1.73511
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01991	0.32940	0.06480	0.30948	2.50740	0.30000	1.73133

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	0.02767	0.32940	0.06480	0.32980	2.50740	0.30000	1.76491
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02159	0.32940	0.06480	0.32127	2.50740	0.30000	1.74873

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	0.00764	0.32940	0.06480	0.00802	2.50740	0.30000	0.01945
	A2	0.01860	0.00100	0.00379	0.32940	0.06480	0.00456	2.50740	0.30000	0.01514
	B1	0.01860	0.00100	0.00108	0.32940	0.06480	0.00231	2.50740	0.30000	0.01551

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	0.00789	0.32940	0.06480	0.00788	2.50740	0.30000	0.01785
	A2	0.01860	0.00100	0.00732	0.32940	0.06480	0.00784	2.50740	0.30000	0.01727
	B1	0.01860	0.00100	0.00350	0.32940	0.06480	0.00452	2.50740	0.30000	0.01632

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	0.00477	0.32940	0.06480	0.00603	2.50740	0.30000	0.01955
	B1	(!A1 * A2)	0.01860	0.00100	0.00108	0.32940	0.06480	0.00231	2.50740	0.30000	0.01551

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	0.00434	0.32940	0.06480	0.00509	2.50740	0.30000	0.01652
	B1	(!A1 * A2)	0.01860	0.00100	0.00350	0.32940	0.06480	0.00452	2.50740	0.30000	0.01632

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00045	0.32940	-0.00028	2.50740	-0.00023

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00045	0.32940	0.00028	2.50740	0.00023

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	-0.00045	0.32940	-0.00028	2.50740	-0.00023

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	0.00045	0.32940	0.00028	2.50740	0.00023

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00034	0.32940	-0.00019	2.50740	-0.00014

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00034	0.32940	0.00019	2.50740	0.00014

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	-0.00034	0.32940	-0.00019	2.50740	-0.00014

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	0.00034	0.32940	0.00019	2.50740	0.00014

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00011	0.32940	0.00011	2.50740	0.00012

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00152	0.32940	0.00157	2.50740	0.00157

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	0.00011	0.32940	0.00011	2.50740	0.00012

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	0.00152	0.32940	0.00157	2.50740	0.00157

OR2x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	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	0.00262	0.00241	0.60000
sg13g2_or2_1	0.00263	0.00244	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	349.39200	444.79300	620.15500
sg13g2_or2_1	255.64600	314.08700	378.56700

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	0.04611	0.32940	0.12960	0.25728	2.50740	0.60000	0.88555
	B->X (RR)	0.01860	0.00100	0.04333	0.32940	0.12960	0.24785	2.50740	0.60000	0.83985
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.03917	0.32940	0.06480	0.23174	2.50740	0.30000	0.82661
	B->X (RR)	0.01860	0.00100	0.03627	0.32940	0.06480	0.22006	2.50740	0.30000	0.77380

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	0.08136	0.32940	0.12960	0.27289	2.50740	0.60000	0.86714
	B->X (FF)	0.01860	0.00100	0.07672	0.32940	0.12960	0.28925	2.50740	0.60000	0.93427
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.06257	0.32940	0.06480	0.23289	2.50740	0.30000	0.79731
	B->X (FF)	0.01860	0.00100	0.05777	0.32940	0.06480	0.24416	2.50740	0.30000	0.84976

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	0.01593	0.32940	0.12960	0.01832	2.50740	0.60000	0.04811
	B	0.01860	0.00100	0.01565	0.32940	0.12960	0.01794	2.50740	0.60000	0.04751
sg13g2_or2_1	A	0.01860	0.00100	0.00946	0.32940	0.06480	0.01204	2.50740	0.30000	0.04178
	B	0.01860	0.00100	0.00918	0.32940	0.06480	0.01182	2.50740	0.30000	0.04266

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	0.01998	0.32940	0.12960	0.02023	2.50740	0.60000	0.04963
	B	0.01860	0.00100	0.01753	0.32940	0.12960	0.01829	2.50740	0.60000	0.05044
sg13g2_or2_1	A	0.01860	0.00100	0.01202	0.32940	0.06480	0.01385	2.50740	0.30000	0.04409
	B	0.01860	0.00100	0.00956	0.32940	0.06480	0.01233	2.50740	0.30000	0.04159

OR3x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	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	0.00275	0.00268	0.00254	0.60000
sg13g2_or3_1	0.00276	0.00270	0.00257	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	360.49500	467.21700	715.81800
sg13g2_or3_1	266.54100	354.78300	474.01900

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	0.05176	0.32940	0.12960	0.27396	2.50740	0.60000	0.93550
	B->X (RR)	0.01860	0.00100	0.04962	0.32940	0.12960	0.26551	2.50740	0.60000	0.89100
	C->X (RR)	0.01860	0.00100	0.04585	0.32940	0.12960	0.25456	2.50740	0.60000	0.84974
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.04476	0.32940	0.06480	0.25003	2.50740	0.30000	0.88468
	B->X (RR)	0.01860	0.00100	0.04289	0.32940	0.06480	0.24128	2.50740	0.30000	0.83159
	C->X (RR)	0.01860	0.00100	0.03903	0.32940	0.06480	0.22827	2.50740	0.30000	0.78508

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	0.11240	0.32940	0.12960	0.29959	2.50740	0.60000	0.87219
	B->X (FF)	0.01860	0.00100	0.10853	0.32940	0.12960	0.31393	2.50740	0.60000	0.95170
	C->X (FF)	0.01860	0.00100	0.09812	0.32940	0.12960	0.32150	2.50740	0.60000	0.98703
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.08876	0.32940	0.06480	0.25776	2.50740	0.30000	0.80784
	B->X (FF)	0.01860	0.00100	0.08489	0.32940	0.06480	0.26905	2.50740	0.30000	0.87786
	C->X (FF)	0.01860	0.00100	0.07422	0.32940	0.06480	0.27262	2.50740	0.30000	0.90557

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	0.01666	0.32940	0.12960	0.01852	2.50740	0.60000	0.04947
	B	0.01860	0.00100	0.01621	0.32940	0.12960	0.01820	2.50740	0.60000	0.04687
	C	0.01860	0.00100	0.01589	0.32940	0.12960	0.01778	2.50740	0.60000	0.04626
sg13g2_or3_1	A	0.01860	0.00100	0.01007	0.32940	0.06480	0.01231	2.50740	0.30000	0.04385
	B	0.01860	0.00100	0.00969	0.32940	0.06480	0.01205	2.50740	0.30000	0.04093
	C	0.01860	0.00100	0.00939	0.32940	0.06480	0.01170	2.50740	0.30000	0.04168

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	0.02638	0.32940	0.12960	0.02403	2.50740	0.60000	0.05482
	B	0.01860	0.00100	0.02372	0.32940	0.12960	0.02189	2.50740	0.60000	0.05091
	C	0.01860	0.00100	0.02076	0.32940	0.12960	0.01987	2.50740	0.60000	0.04677
sg13g2_or3_1	A	0.01860	0.00100	0.01731	0.32940	0.06480	0.01804	2.50740	0.30000	0.04855
	B	0.01860	0.00100	0.01461	0.32940	0.06480	0.01604	2.50740	0.30000	0.04470
	C	0.01860	0.00100	0.01161	0.32940	0.06480	0.01400	2.50740	0.30000	0.04311

OR4x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	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	0.00276	0.00271	0.00225	0.00227	0.60000
sg13g2_or4_1	0.00276	0.00272	0.00225	0.00228	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	363.05100	491.98000	793.24100
sg13g2_or4_1	269.29300	388.97300	551.50300

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	0.05372	0.32940	0.12960	0.28184	2.50740	0.60000	0.94446
	B->X (RR)	0.01860	0.00100	0.05301	0.32940	0.12960	0.27457	2.50740	0.60000	0.90443
	C->X (RR)	0.01860	0.00100	0.05046	0.32940	0.12960	0.26654	2.50740	0.60000	0.86310
	D->X (RR)	0.01860	0.00100	0.04642	0.32940	0.12960	0.25579	2.50740	0.60000	0.82580
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.04654	0.32940	0.06480	0.25901	2.50740	0.30000	0.89330
	B->X (RR)	0.01860	0.00100	0.04617	0.32940	0.06480	0.25144	2.50740	0.30000	0.84824
	C->X (RR)	0.01860	0.00100	0.04389	0.32940	0.06480	0.24180	2.50740	0.30000	0.80314
	D->X (RR)	0.01860	0.00100	0.03978	0.32940	0.06480	0.22956	2.50740	0.30000	0.75994

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	0.15456	0.32940	0.12960	0.34839	2.50740	0.60000	0.92953
	B->X (FF)	0.01860	0.00100	0.15082	0.32940	0.12960	0.35626	2.50740	0.60000	1.00386
	C->X (FF)	0.01860	0.00100	0.14085	0.32940	0.12960	0.36226	2.50740	0.60000	1.05799
	D->X (FF)	0.01860	0.00100	0.12348	0.32940	0.12960	0.36268	2.50740	0.60000	1.08738
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.12288	0.32940	0.06480	0.29856	2.50740	0.30000	0.86079
	B->X (FF)	0.01860	0.00100	0.11915	0.32940	0.06480	0.30485	2.50740	0.30000	0.92990
	C->X (FF)	0.01860	0.00100	0.10917	0.32940	0.06480	0.30800	2.50740	0.30000	0.97479
	D->X (FF)	0.01860	0.00100	0.09144	0.32940	0.06480	0.30535	2.50740	0.30000	0.99032

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	0.01826	0.32940	0.12960	0.01977	2.50740	0.60000	0.05025
	B	0.01860	0.00100	0.01733	0.32940	0.12960	0.01843	2.50740	0.60000	0.04681
	C	0.01860	0.00100	0.01562	0.32940	0.12960	0.01728	2.50740	0.60000	0.04197
	D	0.01860	0.00100	0.01490	0.32940	0.12960	0.01676	2.50740	0.60000	0.04310
sg13g2_or4_1	A	0.01860	0.00100	0.01158	0.32940	0.06480	0.01332	2.50740	0.30000	0.04327
	B	0.01860	0.00100	0.01074	0.32940	0.06480	0.01248	2.50740	0.30000	0.03966
	C	0.01860	0.00100	0.00909	0.32940	0.06480	0.01076	2.50740	0.30000	0.03641
	D	0.01860	0.00100	0.00839	0.32940	0.06480	0.01046	2.50740	0.30000	0.03636

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	0.02865	0.32940	0.12960	0.02395	2.50740	0.60000	0.05452
	B	0.01860	0.00100	0.02887	0.32940	0.12960	0.02428	2.50740	0.60000	0.05112
	C	0.01860	0.00100	0.02693	0.32940	0.12960	0.02277	2.50740	0.60000	0.04647
	D	0.01860	0.00100	0.02304	0.32940	0.12960	0.01975	2.50740	0.60000	0.04743
sg13g2_or4_1	A	0.01860	0.00100	0.01783	0.32940	0.06480	0.01742	2.50740	0.30000	0.04642
	B	0.01860	0.00100	0.01805	0.32940	0.06480	0.01776	2.50740	0.30000	0.04586
	C	0.01860	0.00100	0.01611	0.32940	0.06480	0.01631	2.50740	0.30000	0.04257
	D	0.01860	0.00100	0.01218	0.32940	0.06480	0.01353	2.50740	0.30000	0.04032

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00075	0.32940	-0.00075	2.50740	-0.00076
sg13g2_or4_1	0.01860	-0.00074	0.32940	-0.00075	2.50740	-0.00076

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00316	0.32940	0.00319	2.50740	0.00318
sg13g2_or4_1	0.01860	0.00316	0.32940	0.00319	2.50740	0.00318

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	-0.00075	0.32940	-0.00075	2.50740	-0.00076
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00074	0.32940	-0.00075	2.50740	-0.00076

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	0.00316	0.32940	0.00319	2.50740	0.00318
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00316	0.32940	0.00319	2.50740	0.00318

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00026	0.32940	-0.00030	2.50740	-0.00029
sg13g2_or4_1	0.01860	-0.00026	0.32940	-0.00030	2.50740	-0.00029

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00026	0.32940	0.00030	2.50740	0.00029
sg13g2_or4_1	0.01860	0.00026	0.32940	0.00030	2.50740	0.00029

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	-0.00026	0.32940	-0.00030	2.50740	-0.00029
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00026	0.32940	-0.00030	2.50740	-0.00029

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	0.00026	0.32940	0.00030	2.50740	0.00029
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00026	0.32940	0.00030	2.50740	0.00029

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00081	0.32940	0.00083	2.50740	0.00084
sg13g2_or4_1	0.01860	0.00081	0.32940	0.00083	2.50740	0.00084

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00049	0.32940	-0.00050	2.50740	-0.00049
sg13g2_or4_1	0.01860	-0.00050	0.32940	-0.00050	2.50740	-0.00049

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	0.00081	0.32940	0.00083	2.50740	0.00084
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00081	0.32940	0.00083	2.50740	0.00084

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	-0.00049	0.32940	-0.00050	2.50740	-0.00049
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00050	0.32940	-0.00050	2.50740	-0.00049

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00105	0.32940	0.00108	2.50740	0.00107
sg13g2_or4_1	0.01860	0.00106	0.32940	0.00108	2.50740	0.00107

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00044	0.32940	0.00043	2.50740	0.00046
sg13g2_or4_1	0.01860	0.00042	0.32940	0.00043	2.50740	0.00046

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	0.00105	0.32940	0.00108	2.50740	0.00107
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00106	0.32940	0.00108	2.50740	0.00107

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	0.00044	0.32940	0.00043	2.50740	0.00046
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00042	0.32940	0.00043	2.50740	0.00046

SDFRRS



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00206	0.00210	0.00375	0.00183	0.00550	0.00320	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1921.43000	2292.69000	2444.92000

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	0.20196	0.32940	0.06480	0.39262	2.50740	0.30000	0.97134
	SET_B->Q (FR)	0.01860	0.00100	0.08439	0.32940	0.06480	0.29521	2.50740	0.30000	0.93462

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	0.16669	0.32940	0.06480	0.33766	2.50740	0.30000	0.83858
	RESET_B->Q (FF)	0.01860	0.00100	0.13878	0.32940	0.06480	0.32524	2.50740	0.30000	0.87419

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	0.20196	0.32940	0.06480	0.39262	2.50740	0.30000	0.97134

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	0.16669	0.32940	0.06480	0.33766	2.50740	0.30000	0.83858

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	0.13770	0.32940	0.06480	0.34456	2.50740	0.30000	0.93791
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10910	0.32940	0.06480	0.33641	2.50740	0.30000	0.98168

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	0.16838	0.32940	0.06480	0.36560	2.50740	0.30000	0.85691
	SET_B->Q_N (FF)	0.01860	0.00100	0.05641	0.32940	0.06480	0.26501	2.50740	0.30000	0.82845

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	0.13770	0.32940	0.06480	0.34456	2.50740	0.30000	0.93791

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	0.16838	0.32940	0.06480	0.36560	2.50740	0.30000	0.85691

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	-0.05868	1.26300	1.26300	-0.18349	2.50740	2.50740	-0.24793
	setup	CLK (R)	0.01860	0.01860	0.08558	1.26300	1.26300	0.19968	2.50740	2.50740	0.27154

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	-0.06602	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.22137
	setup	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.22666	2.50740	2.50740	0.32762

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	-0.07580	1.26300	1.26300	-0.21047	2.50740	2.50740	-0.29515
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.22666	2.50740	2.50740	0.31286

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	-0.08803	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.21251
	setup	CLK (R)	0.01860	0.01860	0.13938	1.26300	1.26300	0.22396	2.50740	2.50740	0.31877

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	-0.06113	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.23206	2.50740	2.50740	0.32762

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	-0.06847	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.18079	2.50740	2.50740	0.24793

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	0.05379	1.26300	1.26300	0.08905	2.50740	2.50740	0.11511
	removal	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.06476	2.50740	2.50740	-0.07969

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	0.02201	1.26300	1.26300	0.22666	2.50740	2.50740	0.56079
	removal	CLK (R)	0.01860	0.01860	0.02445	1.26300	1.26300	0.06206	2.50740	2.50740	0.05608
	hold	RESET_B (R)	0.01860	0.01860	-0.05135	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.20956
	setup	RESET_B (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.18079	2.50740	2.50740	0.28335

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	0.02657	0.32940	0.06480	0.02886	2.50740	0.30000	0.05554
	SET_B	0.01860	0.00100	0.04924	0.32940	0.06480	0.12668	2.50740	0.30000	0.45611

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	0.02613	0.32940	0.06480	0.02843	2.50740	0.30000	0.05605
	RESET_B	0.01860	0.00100	0.05583	0.32940	0.06480	0.12966	2.50740	0.30000	0.42631

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	0.02657	0.32940	0.06480	0.02886	2.50740	0.30000	0.05554

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	0.02613	0.32940	0.06480	0.02843	2.50740	0.30000	0.05605

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	0.02614	0.32940	0.06480	0.02863	2.50740	0.30000	0.05624
	RESET_B	0.01860	0.00100	0.05583	0.32940	0.06480	0.13017	2.50740	0.30000	0.42702

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	0.02657	0.32940	0.06480	0.02867	2.50740	0.30000	0.05479
	SET_B	0.01860	0.00100	0.04919	0.32940	0.06480	0.12640	2.50740	0.30000	0.45591

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	0.02614	0.32940	0.06480	0.02863	2.50740	0.30000	0.05624

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	0.02657	0.32940	0.06480	0.02867	2.50740	0.30000	0.05479

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00688	0.32940	0.00804	2.50740	0.02681

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00724	0.32940	0.00858	2.50740	0.02721

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	0.01776	0.32940	0.01911	2.50740	0.04023
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00688	0.32940	0.00804	2.50740	0.02681

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	0.01804	0.32940	0.01942	2.50740	0.04063
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00724	0.32940	0.00858	2.50740	0.02721

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00924	0.32940	0.01003	2.50740	0.02811

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00969	0.32940	0.01049	2.50740	0.02908

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	0.02012	0.32940	0.02105	2.50740	0.04121
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00924	0.32940	0.01003	2.50740	0.02811

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	0.02523	0.32940	0.02569	2.50740	0.04650
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00969	0.32940	0.01049	2.50740	0.02908

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02175	0.32940	0.02412	2.50740	0.05034

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02328	0.32940	0.02586	2.50740	0.05131

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	0.02175	0.32940	0.02412	2.50740	0.05034
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02903	0.32940	0.03032	2.50740	0.05634
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02030	0.32940	0.02445	2.50740	0.07187
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00935	0.32940	0.01328	2.50740	0.05829

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	0.02328	0.32940	0.02586	2.50740	0.05131
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02678	0.32940	0.04030	2.50740	0.06575
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00555	0.32940	0.04454	2.50740	0.09087
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00953	0.32940	0.01315	2.50740	0.05723

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01801	0.32940	0.02214	2.50740	0.07198

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02150	0.32940	0.02660	2.50740	0.07707

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	0.01792	0.32940	0.02210	2.50740	0.07177
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02324	0.32940	0.02737	2.50740	0.07706
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01801	0.32940	0.02214	2.50740	0.07198
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01791	0.32940	0.02210	2.50740	0.07176
	(!RESET_B * !Q * Q_N)	0.01860	0.01727	0.32940	0.02146	2.50740	0.07121
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01800	0.32940	0.02214	2.50740	0.07198

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	0.01751	0.32940	0.02210	2.50740	0.07159
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03145	0.32940	0.03609	2.50740	0.08717
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02150	0.32940	0.02660	2.50740	0.07707
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.03388	0.32940	0.03878	2.50740	0.08949
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01788	0.32940	0.02253	2.50740	0.07189
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01751	0.32940	0.02210	2.50740	0.07159
	(!RESET_B * !Q * Q_N)	0.01860	0.01592	0.32940	0.02052	2.50740	0.06994
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01783	0.32940	0.02242	2.50740	0.07185

SGCLK



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00210	0.00255	0.00535	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	1087.27000	1198.55000	1290.35000

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	0.05026	0.32940	0.06480	0.23308	2.50740	0.30000	0.83616

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	0.04336	0.32940	0.06480	0.22147	2.50740	0.30000	0.77433

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	-0.02486	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.17092
	setup	CLK (R)	0.01860	0.01860	0.04370	1.26300	1.26300	0.19428	2.50740	2.50740	0.31108

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	-0.04486	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.28103
	setup	CLK (R)	0.01860	0.01860	0.07258	1.26300	1.26300	0.22936	2.50740	2.50740	0.36384

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	-0.03001	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.23021
	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	-0.04803	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.21120
	setup	CLK (R)	0.01860	0.01860	0.07321	1.26300	1.26300	0.19158	2.50740	2.50740	0.32625

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	0.01473	0.32940	0.06480	0.01648	2.50740	0.30000	0.05006

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	0.00986	0.32940	0.06480	0.01350	2.50740	0.30000	0.04814

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02924	0.32940	0.03344	2.50740	0.06564

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01699	0.32940	0.05090	2.50740	0.08344

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	0.02924	0.32940	0.03344	2.50740	0.06564

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	0.01699	0.32940	0.05090	2.50740	0.08344

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01624	0.32940	0.01887	2.50740	0.05199

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01849	0.32940	0.04939	2.50740	0.08138

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01066	0.32940	0.01460	2.50740	0.05710

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01072	0.32940	0.01502	2.50740	0.05797

TIE0



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	266.17500	266.17500	266.17500

TIE1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	238.39200	238.39200	238.39200

XNOR2_1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xnor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_xnor2_1	0.00597	0.00524	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	276.75100	577.49600	766.93800

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	0.04909	0.32940	0.06480	0.23331	2.50740	0.30000	0.83534
	A->Y (FR)	0.01860	0.00100	0.03826	0.32940	0.06480	0.38078	2.50740	0.30000	1.90618
	B->Y (RR)	0.01860	0.00100	0.04539	0.32940	0.06480	0.23607	2.50740	0.30000	0.86076
	B->Y (FR)	0.01860	0.00100	0.03370	0.32940	0.06480	0.40551	2.50740	0.30000	2.14918

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	0.04981	0.32940	0.06480	0.29583	2.50740	0.30000	1.10180
	A->Y (RF)	0.01860	0.00100	0.03241	0.32940	0.06480	0.30981	2.50740	0.30000	1.60007
	B->Y (FF)	0.01860	0.00100	0.04986	0.32940	0.06480	0.28675	2.50740	0.30000	1.07219
	B->Y (RF)	0.01860	0.00100	0.02711	0.32940	0.06480	0.30347	2.50740	0.30000	1.59033

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	0.01231	0.32940	0.06480	0.01480	2.50740	0.30000	0.04853
	B	0.01860	0.00100	0.01223	0.32940	0.06480	0.01502	2.50740	0.30000	0.04882

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	0.01075	0.32940	0.06480	0.01407	2.50740	0.30000	0.04862
	B	0.01860	0.00100	0.01157	0.32940	0.06480	0.01322	2.50740	0.30000	0.04744

XOR2_1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	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	0.00619	0.00540	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	427.64700	522.92600	652.79400

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	0.04986	0.32940	0.06480	0.37068	2.50740	0.30000	1.44674
	A->X (FR)	0.01860	0.00100	0.04185	0.32940	0.06480	0.38474	2.50740	0.30000	1.91525
	B->X (RR)	0.01860	0.00100	0.05223	0.32940	0.06480	0.35973	2.50740	0.30000	1.39507
	B->X (FR)	0.01860	0.00100	0.03533	0.32940	0.06480	0.37849	2.50740	0.30000	1.90117

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	0.05956	0.32940	0.06480	0.22433	2.50740	0.30000	0.75408
	A->X (RF)	0.01860	0.00100	0.03042	0.32940	0.06480	0.30748	2.50740	0.30000	1.59607
	B->X (FF)	0.01860	0.00100	0.05468	0.32940	0.06480	0.23290	2.50740	0.30000	0.80253
	B->X (RF)	0.01860	0.00100	0.02667	0.32940	0.06480	0.32544	2.50740	0.30000	1.75874

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	0.01073	0.32940	0.06480	0.01356	2.50740	0.30000	0.04685
	B	0.01860	0.00100	0.01162	0.32940	0.06480	0.01289	2.50740	0.30000	0.04542

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	0.01341	0.32940	0.06480	0.01581	2.50740	0.30000	0.04916
	B	0.01860	0.00100	0.01217	0.32940	0.06480	0.01520	2.50740	0.30000	0.04848