

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
FILLx
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	0.00568	0.00624	0.00554	0.60000
sg13g2_a21oi_1	0.00295	0.00311	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	0.03033	0.32940	0.12960	0.38077	2.50740	0.60000	1.90046
	A2->Y (FR)	0.01860	0.00100	0.03672	0.32940	0.12960	0.38666	2.50740	0.60000	1.90804
	B1->Y (FR)	0.01860	0.00100	0.02936	0.32940	0.12960	0.41634	2.50740	0.60000	2.17059
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.03328	0.32940	0.06480	0.38016	2.50740	0.30000	1.89710
	A2->Y (FR)	0.01860	0.00100	0.03945	0.32940	0.06480	0.38711	2.50740	0.30000	1.90907
	B1->Y (FR)	0.01860	0.00100	0.03206	0.32940	0.06480	0.41693	2.50740	0.30000	2.17253

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	0.02584	0.32940	0.12960	0.33725	2.50740	0.60000	1.76073
	A2->Y (RF)	0.01860	0.00100	0.02863	0.32940	0.12960	0.31200	2.50740	0.60000	1.58201
	B1->Y (RF)	0.01860	0.00100	0.01480	0.32940	0.12960	0.25100	2.50740	0.60000	1.35706
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.02824	0.32940	0.06480	0.33748	2.50740	0.30000	1.75979
	A2->Y (RF)	0.01860	0.00100	0.03072	0.32940	0.06480	0.31201	2.50740	0.30000	1.58049
	B1->Y (RF)	0.01860	0.00100	0.01650	0.32940	0.06480	0.25163	2.50740	0.30000	1.35937

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	0.02936	0.32940	0.12960	0.41634	2.50740	0.60000	2.17059
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02216	0.32940	0.12960	0.40969	2.50740	0.60000	2.16784
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01871	0.32940	0.12960	0.34342	2.50740	0.60000	1.85093
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.03206	0.32940	0.06480	0.41693	2.50740	0.30000	2.17253
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02508	0.32940	0.06480	0.40840	2.50740	0.30000	2.15939
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02104	0.32940	0.06480	0.34320	2.50740	0.30000	1.84873

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	0.01480	0.32940	0.12960	0.25100	2.50740	0.60000	1.35706
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01446	0.32940	0.12960	0.24955	2.50740	0.60000	1.35439
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01418	0.32940	0.12960	0.24937	2.50740	0.60000	1.35699
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01650	0.32940	0.06480	0.25163	2.50740	0.30000	1.35937
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01619	0.32940	0.06480	0.25019	2.50740	0.30000	1.35665
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01592	0.32940	0.06480	0.25003	2.50740	0.30000	1.35917

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	0.01073	0.32940	0.12960	0.01232	2.50740	0.60000	0.03269
	A2	0.01860	0.00100	0.01396	0.32940	0.12960	0.01529	2.50740	0.60000	0.03681
	B1	0.01860	0.00100	0.00906	0.32940	0.12960	0.01164	2.50740	0.60000	0.03662
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00551	0.32940	0.06480	0.00613	2.50740	0.30000	0.01659
	A2	0.01860	0.00100	0.00695	0.32940	0.06480	0.00750	2.50740	0.30000	0.01846
	B1	0.01860	0.00100	0.00451	0.32940	0.06480	0.00585	2.50740	0.30000	0.01840

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	0.01020	0.32940	0.12960	0.01148	2.50740	0.60000	0.03217
	A2	0.01860	0.00100	0.01491	0.32940	0.12960	0.01531	2.50740	0.60000	0.03476
	B1	0.01860	0.00100	0.00298	0.32940	0.12960	0.00627	2.50740	0.60000	0.03079
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00563	0.32940	0.06480	0.00624	2.50740	0.30000	0.01680
	A2	0.01860	0.00100	0.00782	0.32940	0.06480	0.00800	2.50740	0.30000	0.01793
	B1	0.01860	0.00100	0.00196	0.32940	0.06480	0.00348	2.50740	0.30000	0.01573

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	0.00906	0.32940	0.12960	0.01164	2.50740	0.60000	0.03662
	B1	(!A1 * A2)	0.01860	0.00100	0.00776	0.32940	0.12960	0.01088	2.50740	0.60000	0.03587
	B1	(!A1 * !A2)	0.01860	0.00100	0.00781	0.32940	0.12960	0.01085	2.50740	0.60000	0.03955
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00451	0.32940	0.06480	0.00585	2.50740	0.30000	0.01840
	B1	(!A1 * A2)	0.01860	0.00100	0.00400	0.32940	0.06480	0.00537	2.50740	0.30000	0.01818
	B1	(!A1 * !A2)	0.01860	0.00100	0.00402	0.32940	0.06480	0.00549	2.50740	0.30000	0.01988

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	0.00859	0.32940	0.12960	0.01164	2.50740	0.60000	0.03354
	B1	(!A1 * A2)	0.01860	0.00100	0.00327	0.32940	0.12960	0.00641	2.50740	0.60000	0.02876
	B1	(!A1 * !A2)	0.01860	0.00100	0.00298	0.32940	0.12960	0.00627	2.50740	0.60000	0.03079
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00476	0.32940	0.06480	0.00618	2.50740	0.30000	0.01724
	B1	(!A1 * A2)	0.01860	0.00100	0.00210	0.32940	0.06480	0.00357	2.50740	0.30000	0.01457
	B1	(!A1 * !A2)	0.01860	0.00100	0.00196	0.32940	0.06480	0.00348	2.50740	0.30000	0.01573

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00165	0.32940	-0.00161	2.50740	-0.00162
sg13g2_a21oi_1	0.01860	-0.00082	0.32940	-0.00081	2.50740	-0.00081

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00299	0.32940	0.00300	2.50740	0.00301
sg13g2_a21oi_1	0.01860	0.00137	0.32940	0.00138	2.50740	0.00138

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	-0.00165	0.32940	-0.00161	2.50740	-0.00162
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00082	0.32940	-0.00081	2.50740	-0.00081

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	0.00299	0.32940	0.00300	2.50740	0.00301
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00137	0.32940	0.00138	2.50740	0.00138

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00080	0.32940	-0.00047	2.50740	-0.00036
sg13g2_a21oi_1	0.01860	-0.00040	0.32940	-0.00024	2.50740	-0.00018

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00080	0.32940	0.00047	2.50740	0.00036
sg13g2_a21oi_1	0.01860	0.00040	0.32940	0.00024	2.50740	0.00018

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	-0.00080	0.32940	-0.00047	2.50740	-0.00036
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	-0.00040	0.32940	-0.00024	2.50740	-0.00018

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	0.00080	0.32940	0.00047	2.50740	0.00036
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00040	0.32940	0.00024	2.50740	0.00018

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	0.00128	2.50740	0.00129
sg13g2_a21oi_1	0.01860	0.00070	0.32940	0.00071	2.50740	0.00071

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	-0.00128	2.50740	-0.00129
sg13g2_a21oi_1	0.01860	-0.00070	0.32940	-0.00071	2.50740	-0.00071

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	0.00128	2.50740	0.00129
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00070	0.32940	0.00071	2.50740	0.00071

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	-0.00128	2.50740	-0.00129
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00070	0.32940	-0.00071	2.50740	-0.00071

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	0.00307	0.00313	0.00284	0.00294	0.00259	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	279.73800	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	0.07460	0.32940	0.12960	0.92186	2.50740	0.60000	4.17932
	A2->Y (FR)	0.01860	0.00100	0.07309	0.32940	0.12960	0.92068	2.50740	0.60000	4.18236
	B1->Y (FR)	0.01860	0.00100	0.06662	0.32940	0.12960	0.93794	2.50740	0.60000	4.41696
	B2->Y (FR)	0.01860	0.00100	0.07552	0.32940	0.12960	0.94430	2.50740	0.60000	4.41741
	C1->Y (FR)	0.01860	0.00100	0.04836	0.32940	0.12960	0.94437	2.50740	0.60000	4.60766

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	0.03646	0.32940	0.12960	0.54461	2.50740	0.60000	2.77831
	A2->Y (RF)	0.01860	0.00100	0.03856	0.32940	0.12960	0.51482	2.50740	0.60000	2.54207
	B1->Y (RF)	0.01860	0.00100	0.03296	0.32940	0.12960	0.53694	2.50740	0.60000	2.76684
	B2->Y (RF)	0.01860	0.00100	0.03534	0.32940	0.12960	0.50730	2.50740	0.60000	2.53175
	C1->Y (RF)	0.01860	0.00100	0.01892	0.32940	0.12960	0.38251	2.50740	0.60000	2.06563

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	0.07460	0.32940	0.12960	0.92186	2.50740	0.60000	4.17932
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.06391	0.32940	0.12960	0.91348	2.50740	0.60000	4.17833
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.05801	0.32940	0.12960	0.78634	2.50740	0.60000	3.65669
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.08349	0.32940	0.12960	0.92893	2.50740	0.60000	4.18235
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.07309	0.32940	0.12960	0.92068	2.50740	0.60000	4.18236
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.06555	0.32940	0.12960	0.79203	2.50740	0.60000	3.65815
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06662	0.32940	0.12960	0.93794	2.50740	0.60000	4.41696
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05588	0.32940	0.12960	0.92851	2.50740	0.60000	4.41085
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04730	0.32940	0.12960	0.78864	2.50740	0.60000	3.79276
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.07552	0.32940	0.12960	0.94430	2.50740	0.60000	4.41741
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.06505	0.32940	0.12960	0.93477	2.50740	0.60000	4.41300
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.05470	0.32940	0.12960	0.79335	2.50740	0.60000	3.79128
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04836	0.32940	0.12960	0.94437	2.50740	0.60000	4.60766

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	0.03583	0.32940	0.12960	0.54487	2.50740	0.60000	2.77716
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03496	0.32940	0.12960	0.54209	2.50740	0.60000	2.77511
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.03646	0.32940	0.12960	0.54461	2.50740	0.60000	2.77831
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.03794	0.32940	0.12960	0.51516	2.50740	0.60000	2.54178
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03705	0.32940	0.12960	0.51238	2.50740	0.60000	2.53897
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.03856	0.32940	0.12960	0.51482	2.50740	0.60000	2.54207
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03296	0.32940	0.12960	0.53694	2.50740	0.60000	2.76684
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03234	0.32940	0.12960	0.53417	2.50740	0.60000	2.76489
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03202	0.32940	0.12960	0.53376	2.50740	0.60000	2.76539
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03534	0.32940	0.12960	0.50730	2.50740	0.60000	2.53175
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03473	0.32940	0.12960	0.50455	2.50740	0.60000	2.52932
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03442	0.32940	0.12960	0.50412	2.50740	0.60000	2.52951
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01892	0.32940	0.12960	0.38251	2.50740	0.60000	2.06563

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	0.01288	0.32940	0.12960	0.01279	2.50740	0.60000	0.01786
	A2	0.01860	0.00100	0.01314	0.32940	0.12960	0.01278	2.50740	0.60000	0.01811
	B1	0.01860	0.00100	0.01174	0.32940	0.12960	0.01152	2.50740	0.60000	0.01614
	B2	0.01860	0.00100	0.01149	0.32940	0.12960	0.01128	2.50740	0.60000	0.01654
	C1	0.01860	0.00100	0.00533	0.32940	0.12960	0.00568	2.50740	0.60000	0.01171

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	0.00780	0.32940	0.12960	0.00788	2.50740	0.60000	0.01160
	A2	0.01860	0.00100	0.01037	0.32940	0.12960	0.01026	2.50740	0.60000	0.01405
	B1	0.01860	0.00100	0.00318	0.32940	0.12960	0.00355	2.50740	0.60000	0.00744
	B2	0.01860	0.00100	0.00586	0.32940	0.12960	0.00609	2.50740	0.60000	0.01007
	C1	0.01860	0.00100	0.00495	0.32940	0.12960	0.00560	2.50740	0.60000	0.01175

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	0.01288	0.32940	0.12960	0.01279	2.50740	0.60000	0.01786
	A1	(!B1 * B2)	0.01860	0.00100	0.01237	0.32940	0.12960	0.01235	2.50740	0.60000	0.01751
	A1	(!B1 * !B2)	0.01860	0.00100	0.01540	0.32940	0.12960	0.01527	2.50740	0.60000	0.02070
	A2	(B1 * !B2)	0.01860	0.00100	0.01314	0.32940	0.12960	0.01278	2.50740	0.60000	0.01811
	A2	(!B1 * B2)	0.01860	0.00100	0.01275	0.32940	0.12960	0.01256	2.50740	0.60000	0.01802
	A2	(!B1 * !B2)	0.01860	0.00100	0.01576	0.32940	0.12960	0.01573	2.50740	0.60000	0.02066
	B1	(A1 * !A2)	0.01860	0.00100	0.01174	0.32940	0.12960	0.01152	2.50740	0.60000	0.01614
	B1	(!A1 * A2)	0.01860	0.00100	0.01119	0.32940	0.12960	0.01117	2.50740	0.60000	0.01559
	B1	(!A1 * !A2)	0.01860	0.00100	0.01119	0.32940	0.12960	0.01132	2.50740	0.60000	0.01640
	B2	(A1 * !A2)	0.01860	0.00100	0.01191	0.32940	0.12960	0.01158	2.50740	0.60000	0.01675
	B2	(!A1 * A2)	0.01860	0.00100	0.01153	0.32940	0.12960	0.01122	2.50740	0.60000	0.01592
	B2	(!A1 * !A2)	0.01860	0.00100	0.01149	0.32940	0.12960	0.01128	2.50740	0.60000	0.01654
	C1	(!A1 * A2)	0.01860	0.00100	0.00533	0.32940	0.12960	0.00568	2.50740	0.60000	0.01171

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	0.01046	0.32940	0.12960	0.01056	2.50740	0.60000	0.01404
	A1	(!B1 * B2)	0.01860	0.00100	0.00780	0.32940	0.12960	0.00788	2.50740	0.60000	0.01160
	A1	(!B1 * !B2)	0.01860	0.00100	0.00639	0.32940	0.12960	0.00648	2.50740	0.60000	0.01037
	A2	(B1 * !B2)	0.01860	0.00100	0.01303	0.32940	0.12960	0.01304	2.50740	0.60000	0.01664
	A2	(!B1 * B2)	0.01860	0.00100	0.01037	0.32940	0.12960	0.01026	2.50740	0.60000	0.01405
	A2	(!B1 * !B2)	0.01860	0.00100	0.00896	0.32940	0.12960	0.00902	2.50740	0.60000	0.01317
	B1	(A1 * !A2)	0.01860	0.00100	0.00598	0.32940	0.12960	0.00631	2.50740	0.60000	0.00982
	B1	(!A1 * A2)	0.01860	0.00100	0.00331	0.32940	0.12960	0.00374	2.50740	0.60000	0.00715
	B1	(!A1 * !A2)	0.01860	0.00100	0.00318	0.32940	0.12960	0.00355	2.50740	0.60000	0.00744
	B2	(A1 * !A2)	0.01860	0.00100	0.00864	0.32940	0.12960	0.00890	2.50740	0.60000	0.01254
	B2	(!A1 * A2)	0.01860	0.00100	0.00599	0.32940	0.12960	0.00619	2.50740	0.60000	0.00989
	B2	(!A1 * !A2)	0.01860	0.00100	0.00586	0.32940	0.12960	0.00609	2.50740	0.60000	0.01007
	C1	(!A1 * A2)	0.01860	0.00100	0.00495	0.32940	0.12960	0.00560	2.50740	0.60000	0.01175

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	0.00002	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	-0.00002	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	0.00002	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	-0.00002	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	0.00183	0.32940	0.00184	2.50740	0.00188

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00183	0.32940	-0.00184	2.50740	-0.00188

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	0.00117	0.32940	0.00124	2.50740	0.00131
	(A1 * A2 * !C1)	0.01860	0.00183	0.32940	0.00184	2.50740	0.00188

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	-0.00009	2.50740	-0.00008
	(A1 * A2 * !C1)	0.01860	-0.00183	0.32940	-0.00184	2.50740	-0.00188

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00186	0.32940	0.00189	2.50740	0.00191

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00186	0.32940	-0.00189	2.50740	-0.00191

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	0.00120	0.32940	0.00127	2.50740	0.00135
	(A1 * A2 * !C1)	0.01860	0.00186	0.32940	0.00189	2.50740	0.00191

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	-0.00012	2.50740	-0.00011
	(A1 * A2 * !C1)	0.01860	-0.00186	0.32940	-0.00189	2.50740	-0.00191

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00076	0.32940	0.00076	2.50740	0.00076

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00086	0.32940	0.00089	2.50740	0.00089

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	0.00076	0.32940	0.00076	2.50740	0.00076

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	0.00086	0.32940	0.00089	2.50740	0.00089

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	x	1
0	x	1	0	1
x	x	1	1	0
1	0	0	x	1
1	0	1	0	1
1	1	x	x	0

Footprint

Cell Name	Area
sg13g2_a22oi_1	10.84860

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A1	A2	B1	B2	Y
sg13g2_a22oi_1	0.00283	0.00320	0.00368	0.00370	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	0.03426	0.32940	0.06480	0.34057	2.50740	0.30000	1.73807
	A2->Y (FR)	0.01860	0.00100	0.03860	0.32940	0.06480	0.34544	2.50740	0.30000	1.74453
	B1->Y (FR)	0.01860	0.00100	0.02818	0.32940	0.06480	0.34931	2.50740	0.30000	1.84808
	B2->Y (FR)	0.01860	0.00100	0.02378	0.32940	0.06480	0.34426	2.50740	0.30000	1.83883

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	0.03534	0.32940	0.06480	0.34534	2.50740	0.30000	1.77076
	A2->Y (RF)	0.01860	0.00100	0.03757	0.32940	0.06480	0.31900	2.50740	0.30000	1.59111
	B1->Y (RF)	0.01860	0.00100	0.02682	0.32940	0.06480	0.30609	2.50740	0.30000	1.57487
	B2->Y (RF)	0.01860	0.00100	0.02402	0.32940	0.06480	0.33155	2.50740	0.30000	1.75338

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	0.00419	0.32940	0.06480	0.00468	2.50740	0.30000	0.01554
	A2	0.01860	0.00100	0.00558	0.32940	0.06480	0.00591	2.50740	0.30000	0.01689
	B1	0.01860	0.00100	0.00217	0.32940	0.06480	0.00319	2.50740	0.30000	0.01613
	B2	0.01860	0.00100	0.00181	0.32940	0.06480	0.00304	2.50740	0.30000	0.01544

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	0.00059	0.32940	0.06480	0.00162	2.50740	0.30000	0.01305
	A2	0.01860	0.00100	0.00250	0.32940	0.06480	0.00328	2.50740	0.30000	0.01378
	B1	0.01860	0.00100	-0.00217	0.32940	0.06480	-0.00319	2.50740	0.30000	0.00551
	B2	0.01860	0.00100	-0.00181	0.32940	0.06480	-0.00304	2.50740	0.30000	0.00626

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00501	0.32940	0.00456	2.50740	0.00446

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00643	0.32940	0.00637	2.50740	0.00637

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00571	0.32940	0.00525	2.50740	0.00523

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00530	0.32940	0.00523	2.50740	0.00523

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.01132	0.32940	0.01173	2.50740	0.01211

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00211	0.32940	0.00215	2.50740	0.00218

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00886	0.32940	0.00928	2.50740	0.00962

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00206	0.32940	0.00208	2.50740	0.00211

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	0.00266	0.00270	0.60000
sg13g2_and2_1	0.00268	0.00272	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	0.05589	0.32940	0.12960	0.26488	2.50740	0.60000	0.90475
	B->X (RR)	0.01860	0.00100	0.05835	0.32940	0.12960	0.25705	2.50740	0.60000	0.87373
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.04556	0.32940	0.06480	0.23305	2.50740	0.30000	0.84321
	B->X (RR)	0.01860	0.00100	0.04822	0.32940	0.06480	0.22929	2.50740	0.30000	0.82037

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	0.04871	0.32940	0.12960	0.23911	2.50740	0.60000	0.78421
	B->X (FF)	0.01860	0.00100	0.05239	0.32940	0.12960	0.24939	2.50740	0.60000	0.81612
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.03989	0.32940	0.06480	0.20782	2.50740	0.30000	0.71916
	B->X (FF)	0.01860	0.00100	0.04377	0.32940	0.06480	0.22006	2.50740	0.30000	0.75520

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	0.01685	0.32940	0.12960	0.01965	2.50740	0.60000	0.04881
	B	0.01860	0.00100	0.01913	0.32940	0.12960	0.02111	2.50740	0.60000	0.04977
sg13g2_and2_1	A	0.01860	0.00100	0.01015	0.32940	0.06480	0.01335	2.50740	0.30000	0.04402
	B	0.01860	0.00100	0.01248	0.32940	0.06480	0.01470	2.50740	0.30000	0.04474

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	0.01510	0.32940	0.12960	0.01834	2.50740	0.60000	0.04898
	B	0.01860	0.00100	0.01536	0.32940	0.12960	0.01880	2.50740	0.60000	0.04913
sg13g2_and2_1	A	0.01860	0.00100	0.00883	0.32940	0.06480	0.01240	2.50740	0.30000	0.04341
	B	0.01860	0.00100	0.00907	0.32940	0.06480	0.01255	2.50740	0.30000	0.04353

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	0.00265	0.00268	0.60000
sg13g2_and3_1	0.00249	0.00266	0.00268	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	0.07386	0.32940	0.12960	0.29809	2.50740	0.60000	0.98717
	B->X (RR)	0.01860	0.00100	0.07963	0.32940	0.12960	0.29432	2.50740	0.60000	0.96541
	C->X (RR)	0.01860	0.00100	0.08209	0.32940	0.12960	0.28363	2.50740	0.60000	0.91826
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.05928	0.32940	0.06480	0.26032	2.50740	0.30000	0.91700
	B->X (RR)	0.01860	0.00100	0.06517	0.32940	0.06480	0.25951	2.50740	0.30000	0.90044
	C->X (RR)	0.01860	0.00100	0.06761	0.32940	0.06480	0.25186	2.50740	0.30000	0.86147

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	0.05111	0.32940	0.12960	0.24360	2.50740	0.60000	0.77268
	B->X (FF)	0.01860	0.00100	0.05500	0.32940	0.12960	0.25373	2.50740	0.60000	0.80175
	C->X (FF)	0.01860	0.00100	0.05766	0.32940	0.12960	0.26143	2.50740	0.60000	0.83540
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.04254	0.32940	0.06480	0.21322	2.50740	0.30000	0.70608
	B->X (FF)	0.01860	0.00100	0.04655	0.32940	0.06480	0.22504	2.50740	0.30000	0.74067
	C->X (FF)	0.01860	0.00100	0.04907	0.32940	0.06480	0.23396	2.50740	0.30000	0.77642

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	0.02038	0.32940	0.12960	0.02175	2.50740	0.60000	0.04902
	B	0.01860	0.00100	0.02153	0.32940	0.12960	0.02206	2.50740	0.60000	0.04809
	C	0.01860	0.00100	0.02362	0.32940	0.12960	0.02396	2.50740	0.60000	0.05075
sg13g2_and3_1	A	0.01860	0.00100	0.01283	0.32940	0.06480	0.01549	2.50740	0.30000	0.04384
	B	0.01860	0.00100	0.01400	0.32940	0.06480	0.01565	2.50740	0.30000	0.04285
	C	0.01860	0.00100	0.01615	0.32940	0.06480	0.01740	2.50740	0.30000	0.04592

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	0.01424	0.32940	0.12960	0.01691	2.50740	0.60000	0.04481
	B	0.01860	0.00100	0.01577	0.32940	0.12960	0.01841	2.50740	0.60000	0.04673
	C	0.01860	0.00100	0.01600	0.32940	0.12960	0.01861	2.50740	0.60000	0.04774
sg13g2_and3_1	A	0.01860	0.00100	0.00789	0.32940	0.06480	0.01077	2.50740	0.30000	0.03941
	B	0.01860	0.00100	0.00937	0.32940	0.06480	0.01240	2.50740	0.30000	0.04086
	C	0.01860	0.00100	0.00961	0.32940	0.06480	0.01256	2.50740	0.30000	0.04245

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00109	0.32940	-0.00112	2.50740	-0.00115
sg13g2_and3_1	0.01860	-0.00110	0.32940	-0.00112	2.50740	-0.00115

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00109	0.32940	0.00112	2.50740	0.00119
sg13g2_and3_1	0.01860	0.00110	0.32940	0.00112	2.50740	0.00119

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	0.00236	0.00238	0.00276	0.00272	0.60000
sg13g2_and4_1	0.00237	0.00238	0.00276	0.00272	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	0.09257	0.32940	0.12960	0.32910	2.50740	0.60000	1.05527
	B->X (RR)	0.01860	0.00100	0.10107	0.32940	0.12960	0.32811	2.50740	0.60000	1.04034
	C->X (RR)	0.01860	0.00100	0.10607	0.32940	0.12960	0.32036	2.50740	0.60000	1.00138
	D->X (RR)	0.01860	0.00100	0.10883	0.32940	0.12960	0.31234	2.50740	0.60000	0.95459
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.07403	0.32940	0.06480	0.28703	2.50740	0.30000	0.98380
	B->X (RR)	0.01860	0.00100	0.08265	0.32940	0.06480	0.28867	2.50740	0.30000	0.97379
	C->X (RR)	0.01860	0.00100	0.08767	0.32940	0.06480	0.28387	2.50740	0.30000	0.94105
	D->X (RR)	0.01860	0.00100	0.09038	0.32940	0.06480	0.27801	2.50740	0.30000	0.89995

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	0.05292	0.32940	0.12960	0.24660	2.50740	0.60000	0.75920
	B->X (FF)	0.01860	0.00100	0.05683	0.32940	0.12960	0.25627	2.50740	0.60000	0.78704
	C->X (FF)	0.01860	0.00100	0.05969	0.32940	0.12960	0.26366	2.50740	0.60000	0.81718
	D->X (FF)	0.01860	0.00100	0.06193	0.32940	0.12960	0.27112	2.50740	0.60000	0.84703
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.04489	0.32940	0.06480	0.21687	2.50740	0.30000	0.69583
	B->X (FF)	0.01860	0.00100	0.04888	0.32940	0.06480	0.22795	2.50740	0.30000	0.72541
	C->X (FF)	0.01860	0.00100	0.05165	0.32940	0.06480	0.23676	2.50740	0.30000	0.75688
	D->X (FF)	0.01860	0.00100	0.05362	0.32940	0.06480	0.24427	2.50740	0.30000	0.79086

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	0.02158	0.32940	0.12960	0.02164	2.50740	0.60000	0.04727
	B	0.01860	0.00100	0.02422	0.32940	0.12960	0.02351	2.50740	0.60000	0.04811
	C	0.01860	0.00100	0.02586	0.32940	0.12960	0.02470	2.50740	0.60000	0.04988
	D	0.01860	0.00100	0.02567	0.32940	0.12960	0.02432	2.50740	0.60000	0.05011
sg13g2_and4_1	A	0.01860	0.00100	0.01328	0.32940	0.06480	0.01534	2.50740	0.30000	0.04173
	B	0.01860	0.00100	0.01600	0.32940	0.06480	0.01710	2.50740	0.30000	0.04245
	C	0.01860	0.00100	0.01767	0.32940	0.06480	0.01827	2.50740	0.30000	0.04434
	D	0.01860	0.00100	0.01745	0.32940	0.06480	0.01790	2.50740	0.30000	0.04474

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	0.01729	2.50740	0.60000	0.04385
	B	0.01860	0.00100	0.01533	0.32940	0.12960	0.01791	2.50740	0.60000	0.04444
	C	0.01860	0.00100	0.01647	0.32940	0.12960	0.01875	2.50740	0.60000	0.04643
	D	0.01860	0.00100	0.01686	0.32940	0.12960	0.01932	2.50740	0.60000	0.04776
sg13g2_and4_1	A	0.01860	0.00100	0.00849	0.32940	0.06480	0.01100	2.50740	0.30000	0.03854
	B	0.01860	0.00100	0.00893	0.32940	0.06480	0.01142	2.50740	0.30000	0.03831
	C	0.01860	0.00100	0.01003	0.32940	0.06480	0.01256	2.50740	0.30000	0.04049
	D	0.01860	0.00100	0.01031	0.32940	0.06480	0.01286	2.50740	0.30000	0.04189

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	-0.00029	2.50740	-0.00028
sg13g2_and4_1	0.01860	-0.00030	0.32940	-0.00029	2.50740	-0.00028

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00122	0.32940	0.00121	2.50740	0.00122
sg13g2_and4_1	0.01860	0.00122	0.32940	0.00122	2.50740	0.00122

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	-0.00029	2.50740	-0.00028
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00030	0.32940	-0.00029	2.50740	-0.00028

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(B * C * !D) + (B * !C)$	0.01860	0.00122	0.32940	0.00121	2.50740	0.00122
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00122	0.32940	0.00122	2.50740	0.00122

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	-0.00048	2.50740	-0.00048
sg13g2_and4_1	0.01860	-0.00048	0.32940	-0.00048	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	0.00089	0.32940	0.00089	2.50740	0.00090
sg13g2_and4_1	0.01860	0.00089	0.32940	0.00089	2.50740	0.00090

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	-0.00048	2.50740	-0.00048
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00048	0.32940	-0.00048	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	0.00089	0.32940	0.00089	2.50740	0.00090
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00089	0.32940	0.00089	2.50740	0.00090

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	0.00228	0.32940	0.00226	2.50740	0.00226
sg13g2_and4_1	0.01860	0.00228	0.32940	0.00226	2.50740	0.00226

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00005	0.32940	-0.00001	2.50740	-0.00004
sg13g2_and4_1	0.01860	0.00006	0.32940	-0.00001	2.50740	-0.00004

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	0.00228	0.32940	0.00226	2.50740	0.00226
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00228	0.32940	0.00226	2.50740	0.00226

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	0.00005	0.32940	-0.00001	2.50740	-0.00004
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00006	0.32940	-0.00001	2.50740	-0.00004

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	0.00313	0.00310	0.00273	0.60000
sg13g2_a21o_1	0.00293	0.00299	0.00259	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	0.05927	0.32940	0.12960	0.26993	2.50740	0.60000	0.89780
	A2->X (RR)	0.01860	0.00100	0.06127	0.32940	0.12960	0.26136	2.50740	0.60000	0.86445
	B1->X (RR)	0.01860	0.00100	0.04045	0.32940	0.12960	0.23565	2.50740	0.60000	0.78982
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.05557	0.32940	0.06480	0.25575	2.50740	0.30000	0.89333
	A2->X (RR)	0.01860	0.00100	0.05777	0.32940	0.06480	0.24880	2.50740	0.30000	0.86252
	B1->X (RR)	0.01860	0.00100	0.03802	0.32940	0.06480	0.22265	2.50740	0.30000	0.78321

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	0.07866	0.32940	0.12960	0.26509	2.50740	0.60000	0.83561
	A2->X (FF)	0.01860	0.00100	0.08582	0.32940	0.12960	0.27752	2.50740	0.60000	0.86865
	B1->X (FF)	0.01860	0.00100	0.07886	0.32940	0.12960	0.29188	2.50740	0.60000	0.94433
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.06247	0.32940	0.06480	0.22905	2.50740	0.30000	0.74699
	A2->X (FF)	0.01860	0.00100	0.06897	0.32940	0.06480	0.24118	2.50740	0.30000	0.77945
	B1->X (FF)	0.01860	0.00100	0.06166	0.32940	0.06480	0.24931	2.50740	0.30000	0.83953

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	0.04045	0.32940	0.12960	0.23565	2.50740	0.60000	0.78982
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03885	0.32940	0.12960	0.22682	2.50740	0.60000	0.76583
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.03802	0.32940	0.06480	0.22265	2.50740	0.30000	0.78321
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03590	0.32940	0.06480	0.21218	2.50740	0.30000	0.75514

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	0.07886	0.32940	0.12960	0.29188	2.50740	0.60000	0.94433
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.07021	0.32940	0.12960	0.27714	2.50740	0.60000	0.91897
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.06166	0.32940	0.06480	0.24931	2.50740	0.30000	0.83953
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.05419	0.32940	0.06480	0.23488	2.50740	0.30000	0.81349

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	0.01817	0.32940	0.12960	0.02087	2.50740	0.60000	0.05241
	A2	0.01860	0.00100	0.02084	0.32940	0.12960	0.02292	2.50740	0.60000	0.05312
	B1	0.01860	0.00100	0.01527	0.32940	0.12960	0.01883	2.50740	0.60000	0.05301
sg13g2_a21o_1	A1	0.01860	0.00100	0.01148	0.32940	0.06480	0.01424	2.50740	0.30000	0.04407
	A2	0.01860	0.00100	0.01380	0.32940	0.06480	0.01583	2.50740	0.30000	0.04492
	B1	0.01860	0.00100	0.00896	0.32940	0.06480	0.01195	2.50740	0.30000	0.04434

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	0.02065	0.32940	0.12960	0.02143	2.50740	0.60000	0.05366
	A2	0.01860	0.00100	0.02087	0.32940	0.12960	0.02172	2.50740	0.60000	0.05438
	B1	0.01860	0.00100	0.01671	0.32940	0.12960	0.01946	2.50740	0.60000	0.05430
sg13g2_a21o_1	A1	0.01860	0.00100	0.01293	0.32940	0.06480	0.01468	2.50740	0.30000	0.04504
	A2	0.01860	0.00100	0.01309	0.32940	0.06480	0.01483	2.50740	0.30000	0.04475
	B1	0.01860	0.00100	0.00914	0.32940	0.06480	0.01270	2.50740	0.30000	0.04479

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	0.01799	0.32940	0.12960	0.02166	2.50740	0.60000	0.05598
	B1	(!A1 * A2)	0.01860	0.00100	0.01527	0.32940	0.12960	0.01883	2.50740	0.60000	0.05301
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.01126	0.32940	0.06480	0.01445	2.50740	0.30000	0.04695
	B1	(!A1 * A2)	0.01860	0.00100	0.00896	0.32940	0.06480	0.01195	2.50740	0.30000	0.04434

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	0.01962	2.50740	0.60000	0.05359
	B1	(!A1 * A2)	0.01860	0.00100	0.01671	0.32940	0.12960	0.01946	2.50740	0.60000	0.05430
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00947	0.32940	0.06480	0.01270	2.50740	0.30000	0.04422
	B1	(!A1 * A2)	0.01860	0.00100	0.00914	0.32940	0.06480	0.01270	2.50740	0.30000	0.04479

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00000	0.32940	-0.00002	2.50740	-0.00003
sg13g2_a21o_1	0.01860	-0.00010	0.32940	-0.00024	2.50740	-0.00025

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	0.00002	2.50740	0.00003
sg13g2_a21o_1	0.01860	0.00026	0.32940	0.00024	2.50740	0.00025

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	0.00000	0.32940	-0.00002	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	-0.00010	0.32940	-0.00024	2.50740	-0.00025
	(!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	0.00002	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	0.00024	2.50740	0.00025
	(!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	-0.00009	0.32940	-0.00011	2.50740	-0.00012
sg13g2_a21o_1	0.01860	-0.00007	0.32940	-0.00021	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	0.00011	2.50740	0.00012
sg13g2_a21o_1	0.01860	0.00022	0.32940	0.00021	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	-0.00009	0.32940	-0.00011	2.50740	-0.00012
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	-0.00007	0.32940	-0.00021	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	0.00011	2.50740	0.00012
	(!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	0.00021	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	0.00076	0.32940	0.00076	2.50740	0.00076
sg13g2_a21o_1	0.01860	0.00070	0.32940	0.00070	2.50740	0.00071

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00064	0.32940	0.00066	2.50740	0.00066
sg13g2_a21o_1	0.01860	0.00080	0.32940	0.00083	2.50740	0.00083

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	0.00076	0.32940	0.00076	2.50740	0.00076
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00070	0.32940	0.00070	2.50740	0.00071

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * A2)	0.01860	0.00064	0.32940	0.00066	2.50740	0.00066
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00080	0.32940	0.00083	2.50740	0.00083

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	0.00611	0.01820	2.40000
sg13g2_ebufn_4	0.00312	0.01093	1.20000
sg13g2_ebufn_2	0.00277	0.00670	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	0.02015	0.05217	0.32940	0.53755	0.39537	2.50740	2.41915	1.50049
	TE_B->Z (RR)	0.01860	0.02015	0.05260	0.32940	0.53755	0.12461	2.50740	2.41915	0.24987
	TE_B->Z (FR)	0.01860	0.02015	0.02550	0.32940	0.53755	0.37580	2.50740	2.41915	1.85534
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01071	0.05351	0.32940	0.26891	0.39570	2.50740	1.20971	1.49589
	TE_B->Z (RR)	0.01860	0.01071	0.04046	0.32940	0.26891	0.09069	2.50740	1.20971	0.17395
	TE_B->Z (FR)	0.01860	0.01071	0.02515	0.32940	0.26891	0.37407	2.50740	1.20971	1.85313
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00595	0.04533	0.32940	0.13455	0.36655	2.50740	0.60495	1.43654
	TE_B->Z (RR)	0.01860	0.00595	0.03494	0.32940	0.13455	0.07698	2.50740	0.60495	0.14520
	TE_B->Z (FR)	0.01860	0.00595	0.02537	0.32940	0.13455	0.37050	2.50740	0.60495	1.84141

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	0.02955	0.05872	0.32940	0.54695	0.33421	2.50740	2.42855	1.17587
	TE_B->Z (RF)	0.01860	0.02955	0.02315	0.32940	0.54695	0.06110	2.50740	2.42855	0.33123
	TE_B->Z (FF)	0.01860	0.02955	0.06345	0.32940	0.54695	0.38343	2.50740	2.42855	1.36837
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01550	0.06021	0.32940	0.27370	0.33559	2.50740	1.21450	1.17786
	TE_B->Z (RF)	0.01860	0.01550	0.02194	0.32940	0.27370	0.05911	2.50740	1.21450	0.32817
	TE_B->Z (FF)	0.01860	0.01550	0.04845	0.32940	0.27370	0.34177	2.50740	1.21450	1.27499
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00842	0.04669	0.32940	0.13702	0.29864	2.50740	0.60742	1.09806
	TE_B->Z (RF)	0.01860	0.00842	0.02093	0.32940	0.13702	0.05893	2.50740	0.60742	0.32561
	TE_B->Z (FF)	0.01860	0.00842	0.04171	0.32940	0.13702	0.31499	2.50740	0.60742	1.21233

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A	0.01860	0.02015	0.05899	0.32940	0.53755	0.06626	2.50740	2.41915	0.06852
	TE_B	0.01860	0.02015	0.01000	0.32940	0.53755	0.00954	2.50740	2.41915	0.00563
sg13g2_ebufn_4	A	0.01860	0.01071	0.02974	0.32940	0.26891	0.03258	2.50740	1.20971	0.03096
	TE_B	0.01860	0.01071	0.00519	0.32940	0.26891	0.00498	2.50740	1.20971	0.00294
sg13g2_ebufn_2	A	0.01860	0.00595	0.01529	0.32940	0.13455	0.01606	2.50740	0.60495	0.01459
	TE_B	0.01860	0.00595	0.00281	0.32940	0.13455	0.00273	2.50740	0.60495	0.00187

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	0.02955	0.05519	0.32940	0.54695	0.05570	2.50740	2.42855	0.05141
	TE_B	0.01860	0.02955	0.00835	0.32940	0.54695	0.06658	2.50740	2.42855	0.28144
sg13g2_ebufn_4	A	0.01860	0.01550	0.02753	0.32940	0.27370	0.02780	2.50740	1.21450	0.02613
	TE_B	0.01860	0.01550	0.00479	0.32940	0.27370	0.03291	2.50740	1.21450	0.14035
sg13g2_ebufn_2	A	0.01860	0.00842	0.01335	0.32940	0.13702	0.01384	2.50740	0.60742	0.01256
	TE_B	0.01860	0.00842	0.00255	0.32940	0.13702	0.01666	2.50740	0.60742	0.07011

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01617	0.32940	0.02396	2.50740	0.11164
sg13g2_ebufn_4	0.01860	0.00866	0.32940	0.01246	2.50740	0.05602
sg13g2_ebufn_2	0.01860	0.00513	0.32940	0.00891	2.50740	0.04746

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01348	0.32940	0.02242	2.50740	0.11177
sg13g2_ebufn_4	0.01860	0.00727	0.32940	0.01161	2.50740	0.05618
sg13g2_ebufn_2	0.01860	0.00460	0.32940	0.00877	2.50740	0.04806

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	-0.00489	0.32940	-0.00352	2.50740	0.03658
sg13g2_ebufn_4	0.01860	-0.00099	0.32940	0.00163	2.50740	0.04425
sg13g2_ebufn_2	0.01860	0.00033	0.32940	0.00343	2.50740	0.04147

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	0.08151	0.32940	0.08448	2.50740	0.12636
sg13g2_ebufn_4	0.01860	0.04178	0.32940	0.04600	2.50740	0.08962
sg13g2_ebufn_2	0.01860	0.02185	0.32940	0.02602	2.50740	0.06472

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	0.01808	4.80000
sg13g2_buf_8	0.00907	2.40000
sg13g2_buf_4	0.00392	1.20000
sg13g2_buf_2	0.00276	0.60000
sg13g2_buf_1	0.00246	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	0.04077	0.32940	1.03680	0.24197	2.50740	4.80000	0.85638
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.04039	0.32940	0.51840	0.24071	2.50740	2.40000	0.85439
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.05086	0.32940	0.25920	0.26966	2.50740	1.20000	0.96284
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.04034	0.32940	0.12960	0.23681	2.50740	0.60000	0.85010
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03588	0.32940	0.06480	0.21721	2.50740	0.30000	0.80843

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	0.04491	0.32940	1.03680	0.23356	2.50740	4.80000	0.78144
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04440	0.32940	0.51840	0.23269	2.50740	2.40000	0.78088
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04384	0.32940	0.25920	0.22691	2.50740	1.20000	0.71543
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04289	0.32940	0.12960	0.22358	2.50740	0.60000	0.75186
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03761	0.32940	0.06480	0.20258	2.50740	0.30000	0.71261

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	0.11984	0.32940	1.03680	0.14906	2.50740	4.80000	0.39512
sg13g2_buf_8	A	0.01860	0.00100	0.05905	0.32940	0.51840	0.07390	2.50740	2.40000	0.19673
sg13g2_buf_4	A	0.01860	0.00100	0.02931	0.32940	0.25920	0.03420	2.50740	1.20000	0.08389
sg13g2_buf_2	A	0.01860	0.00100	0.01532	0.32940	0.12960	0.01932	2.50740	0.60000	0.05458
sg13g2_buf_1	A	0.01860	0.00100	0.00888	0.32940	0.06480	0.01212	2.50740	0.30000	0.04246

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	0.11839	0.32940	1.03680	0.14699	2.50740	4.80000	0.40044
sg13g2_buf_8	A	0.01860	0.00100	0.05828	0.32940	0.51840	0.07241	2.50740	2.40000	0.20083
sg13g2_buf_4	A	0.01860	0.00100	0.02929	0.32940	0.25920	0.03516	2.50740	1.20000	0.08644
sg13g2_buf_2	A	0.01860	0.00100	0.01511	0.32940	0.12960	0.01932	2.50740	0.60000	0.05562
sg13g2_buf_1	A	0.01860	0.00100	0.00878	0.32940	0.06480	0.01249	2.50740	0.30000	0.04332

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	0.00171	0.00626	0.00314	0.60000	0.60000
sg13g2_dfrbp_1	0.00183	0.00674	0.00290	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1666.34000	1911.43000	2129.33000
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	0.16271	0.32940	0.12960	0.34713	2.50740	0.60000	0.94222
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.13219	0.32940	0.06480	0.31911	2.50740	0.30000	0.89064

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	0.14105	0.32940	0.12960	0.30746	2.50740	0.60000	0.78757
	RESET_B->Q (FF)	0.01860	0.00100	0.18961	0.32940	0.12960	0.39616	2.50740	0.60000	1.02254
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.12533	0.32940	0.06480	0.29097	2.50740	0.30000	0.75459
	RESET_B->Q (FF)	0.01860	0.00100	0.16674	0.32940	0.06480	0.37006	2.50740	0.30000	0.98717

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	0.09549	0.32940	0.12960	0.30586	2.50740	0.60000	0.87478
	RESET_B->Q_N (FR)	0.01860	0.00100	0.14477	0.32940	0.12960	0.39336	2.50740	0.60000	1.10909
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.09693	0.32940	0.06480	0.30051	2.50740	0.30000	0.85371
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13853	0.32940	0.06480	0.37823	2.50740	0.30000	1.08574

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	0.10681	0.32940	0.12960	0.31754	2.50740	0.60000	0.82561
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.10020	0.32940	0.06480	0.29588	2.50740	0.30000	0.78471

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	-0.03912	1.26300	1.26300	-0.13762	2.50740	2.50740	-0.18004
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.16460	2.50740	2.50740	0.20956
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.19480
	setup	CLK (R)	0.01860	0.01860	0.06602	1.26300	1.26300	0.16730	2.50740	2.50740	0.21841

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	-0.02690	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.22137
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.19428	2.50740	2.50740	0.27449
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02690	1.26300	1.26300	-0.15111	2.50740	2.50740	-0.23612
	setup	CLK (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.19428	2.50740	2.50740	0.28630

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	0.07580	1.26300	1.26300	0.19428	2.50740	2.50740	0.29220
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.28925
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.19698	2.50740	2.50740	0.30696
	removal	CLK (R)	0.01860	0.01860	-0.06113	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.30106

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	0.06413	0.32940	0.12960	0.21105	2.50740	0.60000	0.78836
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04912	0.32940	0.06480	0.12500	2.50740	0.30000	0.43494

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	0.06247	0.32940	0.12960	0.21237	2.50740	0.60000	0.78679
	RESET_B	0.01860	0.00100	0.04785	0.32940	0.12960	0.19491	2.50740	0.60000	0.74325
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04769	0.32940	0.06480	0.12448	2.50740	0.30000	0.43244
	RESET_B	0.01860	0.00100	0.03272	0.32940	0.06480	0.10743	2.50740	0.30000	0.39175

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	0.06251	0.32940	0.12960	0.21264	2.50740	0.60000	0.78915
	RESET_B	0.01860	0.00100	0.04791	0.32940	0.12960	0.19572	2.50740	0.60000	0.74518
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04773	0.32940	0.06480	0.12463	2.50740	0.30000	0.43377
	RESET_B	0.01860	0.00100	0.03268	0.32940	0.06480	0.10772	2.50740	0.30000	0.39259

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	0.06415	0.32940	0.12960	0.21107	2.50740	0.60000	0.78626
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.04912	0.32940	0.06480	0.12497	2.50740	0.30000	0.43400

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00227	0.32940	0.00395	2.50740	0.02090
sg13g2_dfrbp_1	0.01860	0.00255	0.32940	0.00418	2.50740	0.02110

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00188	0.32940	0.00368	2.50740	0.02130
sg13g2_dfrbp_1	0.01860	0.00211	0.32940	0.00387	2.50740	0.02144

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	0.00227	0.32940	0.00395	2.50740	0.02090
	(!CLK * RESET_B)	0.01860	0.01867	0.32940	0.02032	2.50740	0.04021
	(!CLK * !RESET_B)	0.01860	-0.00003	0.32940	-0.00003	2.50740	-0.00003
sg13g2_dfrbp_1	CLK	0.01860	0.00255	0.32940	0.00418	2.50740	0.02110
	(!CLK * RESET_B)	0.01860	0.01616	0.32940	0.01782	2.50740	0.03773
	(!CLK * !RESET_B)	0.01860	0.00016	0.32940	0.00016	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	0.00188	0.32940	0.00368	2.50740	0.02130
	(!CLK * RESET_B)	0.01860	0.01481	0.32940	0.01683	2.50740	0.03775
	(!CLK * !RESET_B)	0.01860	0.00029	0.32940	0.00029	2.50740	0.00030
sg13g2_dfrbp_1	CLK	0.01860	0.00211	0.32940	0.00387	2.50740	0.02144
	(!CLK * RESET_B)	0.01860	0.01384	0.32940	0.01587	2.50740	0.03652
	(!CLK * !RESET_B)	0.01860	0.00015	0.32940	0.00015	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	0.00605	0.32940	0.00698	2.50740	0.02333
sg13g2_dfrbp_1	0.01860	0.00661	0.32940	0.00748	2.50740	0.02378

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	0.01371	0.32940	0.01505	2.50740	0.04167
sg13g2_dfrbp_1	0.01860	0.01228	0.32940	0.01359	2.50740	0.04023

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	0.00605	0.32940	0.00698	2.50740	0.02333
	(CLK * !D * !Q * Q_N)	0.01860	0.00213	0.32940	0.00213	2.50740	0.00213
	(!CLK * D * !Q * Q_N)	0.01860	0.02270	0.32940	0.02387	2.50740	0.04894
	(!CLK * !D * !Q * Q_N)	0.01860	0.00222	0.32940	0.00222	2.50740	0.00221
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00661	0.32940	0.00748	2.50740	0.02378
	(CLK * !D * !Q * Q_N)	0.01860	0.00269	0.32940	0.00268	2.50740	0.00268
	(!CLK * D * !Q * Q_N)	0.01860	0.02056	0.32940	0.02177	2.50740	0.04686
	(!CLK * !D * !Q * Q_N)	0.01860	0.00278	0.32940	0.00277	2.50740	0.00278

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	0.06509	2.50740	0.11399
	(CLK * !D * !Q * Q_N)	0.01860	-0.00213	0.32940	-0.00213	2.50740	-0.00213
	(!CLK * D * !Q * Q_N)	0.01860	0.01371	0.32940	0.01505	2.50740	0.04167
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00222	0.32940	-0.00222	2.50740	-0.00221
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.04387	0.32940	0.04781	2.50740	0.09581
	(CLK * !D * !Q * Q_N)	0.01860	-0.00269	0.32940	-0.00268	2.50740	-0.00268
	(!CLK * D * !Q * Q_N)	0.01860	0.01228	0.32940	0.01359	2.50740	0.04023
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00278	0.32940	-0.00277	2.50740	-0.00278

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01719	0.32940	0.02130	2.50740	0.06794
sg13g2_dfrbp_1	0.01860	0.01713	0.32940	0.02081	2.50740	0.06377

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03249	0.32940	0.03712	2.50740	0.08606
sg13g2_dfrbp_1	0.01860	0.03032	0.32940	0.03446	2.50740	0.08034

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	0.01719	0.32940	0.02130	2.50740	0.06794
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01808	0.32940	0.02217	2.50740	0.06852
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01695	0.32940	0.02105	2.50740	0.06764
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01810	0.32940	0.02219	2.50740	0.06854
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01759	0.32940	0.02128	2.50740	0.06437
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01713	0.32940	0.02080	2.50740	0.06376
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01683	0.32940	0.02051	2.50740	0.06355
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01713	0.32940	0.02081	2.50740	0.06377

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	0.03249	0.32940	0.03712	2.50740	0.08606
	(D * RESET_B * !Q * Q_N)	0.01860	0.03261	0.32940	0.03704	2.50740	0.08611
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01674	0.32940	0.02101	2.50740	0.06844
	(!D * RESET_B * Q * !Q_N)	0.01860	0.08294	0.32940	0.07942	2.50740	0.12688
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01673	0.32940	0.02102	2.50740	0.06860
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01672	0.32940	0.02099	2.50740	0.06842
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03038	0.32940	0.03456	2.50740	0.08039
	(D * RESET_B * !Q * Q_N)	0.01860	0.03032	0.32940	0.03446	2.50740	0.08034
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01724	0.32940	0.02125	2.50740	0.06549
	(!D * RESET_B * Q * !Q_N)	0.01860	0.06165	0.32940	0.06480	2.50740	0.10917
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01723	0.32940	0.02127	2.50740	0.06547
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01724	0.32940	0.02123	2.50740	0.06547

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	0.00242	0.00246	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	0.12077	0.32940	0.06480	0.30030	2.50740	0.30000	0.85906
	GATE->Q (RR)	0.01860	0.00100	0.10271	0.32940	0.06480	0.28258	2.50740	0.30000	0.80245

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	0.10591	0.32940	0.06480	0.26777	2.50740	0.30000	0.73864
	GATE->Q (RF)	0.01860	0.00100	0.10910	0.32940	0.06480	0.26549	2.50740	0.30000	0.67969

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	-0.10794	2.50740	2.50740	-0.10626
	setup	GATE (F)	0.01860	0.01860	0.06847	1.26300	1.26300	0.12952	2.50740	2.50740	0.14463

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	0.01619	2.50740	2.50740	0.05313
	setup	GATE (F)	0.01860	0.01860	0.02934	1.26300	1.26300	-0.01079	2.50740	2.50740	-0.04722

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	0.02351	0.32940	0.06480	0.02392	2.50740	0.30000	0.02478
	GATE	0.01860	0.00100	0.02017	0.32940	0.06480	0.02077	2.50740	0.30000	0.02338

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	0.02420	0.32940	0.06480	0.02494	2.50740	0.30000	0.02547
	GATE	0.01860	0.00100	0.02189	0.32940	0.06480	0.02310	2.50740	0.30000	0.02292

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00538	0.32940	0.00833	2.50740	0.04006

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	0.00903	2.50740	0.04144

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	0.00549	0.32940	0.00833	2.50740	0.04014
	(!GATE * !Q)	0.01860	0.00538	0.32940	0.00833	2.50740	0.04006

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	0.00559	0.32940	0.00881	2.50740	0.04132
	(!GATE * !Q)	0.01860	0.00588	0.32940	0.00903	2.50740	0.04144

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01244	0.32940	0.01608	2.50740	0.05590

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.02358	0.32940	0.02789	2.50740	0.06978

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	0.01244	0.32940	0.01608	2.50740	0.05590

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	0.02358	0.32940	0.02789	2.50740	0.06978

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	0.00226	0.00311	0.00235	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	0.12717	0.32940	0.06480	0.30992	2.50740	0.30000	0.86555
	GATE->Q (RR)	0.01860	0.00100	0.11419	0.32940	0.06480	0.29853	2.50740	0.30000	0.81779

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	0.11156	0.32940	0.06480	0.27542	2.50740	0.30000	0.75248
	GATE->Q (RF)	0.01860	0.00100	0.11636	0.32940	0.06480	0.27625	2.50740	0.30000	0.69961
	RESET_B->Q (FF)	0.01860	0.00100	0.04625	0.32940	0.06480	0.22818	2.50740	0.30000	0.77162

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	-0.06113	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.09150
	setup	GATE (F)	0.01860	0.01860	0.06602	1.26300	1.26300	0.11873	2.50740	2.50740	0.12692

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	0.01619	2.50740	2.50740	0.05313
	setup	GATE (F)	0.01860	0.01860	0.03179	1.26300	1.26300	-0.01079	2.50740	2.50740	-0.04722

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.01223	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.17119
	removal	GATE (F)	0.01860	0.01860	0.01956	1.26300	1.26300	0.11873	2.50740	2.50740	0.18004

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	0.00164	0.32940	0.06480	0.00215	2.50740	0.30000	0.00214
	GATE	0.01860	0.00100	0.02043	0.32940	0.06480	0.02079	2.50740	0.30000	0.02379

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	-0.00164	0.32940	0.06480	-0.00215	2.50740	0.30000	-0.00214
	GATE	0.01860	0.00100	0.02041	0.32940	0.06480	0.02152	2.50740	0.30000	0.02176
	RESET_B	0.01860	0.00100	0.01183	0.32940	0.06480	0.01603	2.50740	0.30000	0.05320

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02733	0.32940	0.03009	2.50740	0.06264

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.03573	0.32940	0.04174	2.50740	0.07534

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	0.00431	0.32940	0.00722	2.50740	0.03901
	!RESET_B	0.01860	0.02733	0.32940	0.03009	2.50740	0.06264

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	0.00843	2.50740	0.04086
	!RESET_B	0.01860	0.03573	0.32940	0.04174	2.50740	0.07534

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	-0.00009	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	0.00009	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	-0.00009	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	0.00009	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	0.01302	0.32940	0.01660	2.50740	0.05601

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02383	0.32940	0.02823	2.50740	0.06927

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	0.01776	0.32940	0.02135	2.50740	0.06369
	(!D * !RESET_B * !Q)	0.01860	0.01302	0.32940	0.01660	2.50740	0.05601

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	0.01900	0.32940	0.02329	2.50740	0.06673
	(!D * RESET_B * !Q)	0.01860	0.02383	0.32940	0.02823	2.50740	0.06927
	(!D * !RESET_B * !Q)	0.01860	0.02391	0.32940	0.02828	2.50740	0.06915

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	0.00221	0.00328	0.00241	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	0.13729	0.32940	0.06480	0.32471	2.50740	0.30000	0.88045
	GATE->Q (RR)	0.01860	0.00100	0.12478	0.32940	0.06480	0.31425	2.50740	0.30000	0.83515

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	0.11570	0.32940	0.06480	0.28175	2.50740	0.30000	0.75443
	GATE->Q (RF)	0.01860	0.00100	0.12061	0.32940	0.06480	0.28337	2.50740	0.30000	0.70333
	RESET_B->Q (FF)	0.01860	0.00100	0.05021	0.32940	0.06480	0.24115	2.50740	0.30000	0.78709

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	0.14155	0.32940	0.06480	0.32205	2.50740	0.30000	0.88448
	GATE->Q_N (RR)	0.01860	0.00100	0.14662	0.32940	0.06480	0.32352	2.50740	0.30000	0.83368
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07612	0.32940	0.06480	0.27542	2.50740	0.30000	0.86280

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	0.16593	0.32940	0.06480	0.31884	2.50740	0.30000	0.78430
	GATE->Q_N (RF)	0.01860	0.00100	0.15328	0.32940	0.06480	0.30837	2.50740	0.30000	0.73870

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	-0.06358	1.26300	1.26300	-0.09984	2.50740	2.50740	-0.09445
	setup	GATE (F)	0.01860	0.01860	0.07336	1.26300	1.26300	0.12143	2.50740	2.50740	0.13282

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.02690	1.26300	1.26300	0.01619	2.50740	2.50740	0.05313
	setup	GATE (F)	0.01860	0.01860	0.03423	1.26300	1.26300	-0.01079	2.50740	2.50740	-0.04722

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	-0.00489	1.26300	1.26300	-0.07555	2.50740	2.50740	-0.12101
	removal	GATE (F)	0.01860	0.01860	0.01467	1.26300	1.26300	0.08635	2.50740	2.50740	0.12987

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	0.00739	0.32940	0.06480	0.00792	2.50740	0.30000	0.00801
	GATE	0.01860	0.00100	0.01661	0.32940	0.06480	0.01711	2.50740	0.30000	0.01841

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	0.00267	0.32940	0.06480	0.00170	2.50740	0.30000	0.00094
	GATE	0.01860	0.00100	0.01658	0.32940	0.06480	0.01740	2.50740	0.30000	0.01695
	RESET_B	0.01860	0.00100	0.01213	0.32940	0.06480	0.01452	2.50740	0.30000	0.03515

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	0.00268	0.32940	0.06480	0.00174	2.50740	0.30000	0.00134
	GATE	0.01860	0.00100	0.02288	0.32940	0.06480	0.02551	2.50740	0.30000	0.04535
	RESET_B	0.01860	0.00100	0.01216	0.32940	0.06480	0.01451	2.50740	0.30000	0.03545

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	0.00739	0.32940	0.06480	0.00791	2.50740	0.30000	0.00744
	GATE	0.01860	0.00100	0.01661	0.32940	0.06480	0.01707	2.50740	0.30000	0.01805

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02674	0.32940	0.02955	2.50740	0.06219

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.03522	0.32940	0.04146	2.50740	0.07537

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	0.00469	0.32940	0.00765	2.50740	0.03954
	!RESET_B	0.01860	0.02674	0.32940	0.02955	2.50740	0.06219

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	0.00874	2.50740	0.04135
	!RESET_B	0.01860	0.03522	0.32940	0.04146	2.50740	0.07537

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	-0.00007	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_dlhr_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_dlhr_1	(D * !GATE * !Q)	0.01860	-0.00023	0.32940	-0.00009	2.50740	-0.00004
	(!D * !GATE * !Q)	0.01860	-0.00007	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	0.00023	0.32940	0.00009	2.50740	0.00004
	(!D * !GATE * !Q)	0.01860	0.00007	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	0.01257	0.32940	0.01619	2.50740	0.05576

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02355	0.32940	0.02785	2.50740	0.06895

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	0.01729	0.32940	0.02096	2.50740	0.06325
	(!D * !RESET_B * !Q)	0.01860	0.01257	0.32940	0.01619	2.50740	0.05576

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	0.01949	0.32940	0.02375	2.50740	0.06730
	(!D * RESET_B * !Q)	0.01860	0.02355	0.32940	0.02785	2.50740	0.06895
	(!D * !RESET_B * !Q)	0.01860	0.02362	0.32940	0.02791	2.50740	0.06897

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	0.00217	0.00313	0.00232	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	0.12636	0.32940	0.06480	0.30861	2.50740	0.30000	0.86381
	GATE_N->Q (FR)	0.01860	0.00100	0.14058	0.32940	0.06480	0.34067	2.50740	0.30000	0.95995
	RESET_B->Q (RR)	0.01860	0.00100	0.05724	0.32940	0.06480	0.24091	2.50740	0.30000	0.84517

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	0.11087	0.32940	0.06480	0.27345	2.50740	0.30000	0.74732
	GATE_N->Q (FF)	0.01860	0.00100	0.10651	0.32940	0.06480	0.28694	2.50740	0.30000	0.83103
	RESET_B->Q (FF)	0.01860	0.00100	0.04658	0.32940	0.06480	0.22763	2.50740	0.30000	0.77011

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	-0.04646	1.26300	1.26300	-0.06476	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.07016	2.50740	2.50740	0.10035

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	-0.17269	2.50740	2.50740	-0.24203
	setup	GATE_N (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.19428	2.50740	2.50740	0.28040

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	-0.02445	1.26300	1.26300	-0.05127	2.50740	2.50740	-0.04132
	removal	GATE_N (R)	0.01860	0.01860	0.03423	1.26300	1.26300	0.05936	2.50740	2.50740	0.04722

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	0.01087	0.32940	0.06480	0.01140	2.50740	0.30000	0.01198
	GATE_N	0.01860	0.00100	0.01064	0.32940	0.06480	0.01082	2.50740	0.30000	0.01002
	RESET_B	0.01860	0.00100	0.01566	0.32940	0.06480	0.01774	2.50740	0.30000	0.05333

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	0.00383	0.32940	0.06480	0.00068	2.50740	0.30000	-0.00008
	GATE_N	0.01860	0.00100	0.00873	0.32940	0.06480	0.00945	2.50740	0.30000	0.01141
	RESET_B	0.01860	0.00100	0.01208	0.32940	0.06480	0.01620	2.50740	0.30000	0.05365

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01794	0.32940	0.02073	2.50740	0.05287

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.02439	0.32940	0.03142	2.50740	0.06515

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	0.00414	0.32940	0.00706	2.50740	0.03901
	!RESET_B	0.01860	0.01794	0.32940	0.02073	2.50740	0.05287

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	0.00850	2.50740	0.04106
	!RESET_B	0.01860	0.02439	0.32940	0.03142	2.50740	0.06515

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	-0.00003	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	0.00003	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	-0.00003	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	-0.00003	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	0.00003	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00003	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	0.01184	0.32940	0.01545	2.50740	0.05506

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	0.02384	0.32940	0.02810	2.50740	0.06926

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	0.02038	0.32940	0.02376	2.50740	0.06306
	(!D * !RESET_B * !Q)	0.01860	0.01184	0.32940	0.01545	2.50740	0.05506

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	0.01935	0.32940	0.02333	2.50740	0.06391
	(!D * RESET_B * !Q)	0.01860	0.02384	0.32940	0.02810	2.50740	0.06926
	(!D * !RESET_B * !Q)	0.01860	0.02392	0.32940	0.02820	2.50740	0.06946

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	0.00228	0.00324	0.00245	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	0.13832	0.32940	0.06480	0.32531	2.50740	0.30000	0.88023
	GATE_N->Q (FR)	0.01860	0.00100	0.15245	0.32940	0.06480	0.35796	2.50740	0.30000	0.97794

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	0.11697	0.32940	0.06480	0.28271	2.50740	0.30000	0.75588
	GATE_N->Q (FF)	0.01860	0.00100	0.11325	0.32940	0.06480	0.29792	2.50740	0.30000	0.84333
	RESET_B->Q (FF)	0.01860	0.00100	0.05006	0.32940	0.06480	0.24396	2.50740	0.30000	0.75729

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	0.14269	0.32940	0.06480	0.32287	2.50740	0.30000	0.88508
	GATE_N->Q_N (FR)	0.01860	0.00100	0.13909	0.32940	0.06480	0.33796	2.50740	0.30000	0.97228
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07641	0.32940	0.06480	0.27694	2.50740	0.30000	0.86943

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	0.16673	0.32940	0.06480	0.31949	2.50740	0.30000	0.78414
	GATE_N->Q_N (FF)	0.01860	0.00100	0.18078	0.32940	0.06480	0.35199	2.50740	0.30000	0.88206

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	-0.05135	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.09740
	setup	GATE_N (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.07555	2.50740	2.50740	0.10330

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	-0.17269	2.50740	2.50740	-0.24203
	setup	GATE_N (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.19698	2.50740	2.50740	0.28335

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.02159	2.50740	2.50740	0.00885
	removal	GATE_N (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.02968	2.50740	2.50740	-0.00295

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	0.01546	0.32940	0.06480	0.08830	2.50740	0.30000	0.35271
	GATE_N	0.01860	0.00100	0.03557	0.32940	0.06480	0.10828	2.50740	0.30000	0.37223

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	0.00793	0.32940	0.06480	0.07249	2.50740	0.30000	0.33575
	GATE_N	0.01860	0.00100	0.03288	0.32940	0.06480	0.10577	2.50740	0.30000	0.37218
	RESET_B	0.01860	0.00100	0.03752	0.32940	0.06480	0.11313	2.50740	0.30000	0.41026

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	0.00798	0.32940	0.06480	0.07262	2.50740	0.30000	0.33639
	GATE_N	0.01860	0.00100	0.04623	0.32940	0.06480	0.12339	2.50740	0.30000	0.43100
	RESET_B	0.01860	0.00100	0.03749	0.32940	0.06480	0.11329	2.50740	0.30000	0.41080

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	0.01544	0.32940	0.06480	0.08822	2.50740	0.30000	0.35171
	GATE_N	0.01860	0.00100	0.03557	0.32940	0.06480	0.10795	2.50740	0.30000	0.37163

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02788	0.32940	0.03073	2.50740	0.06345

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.03359	0.32940	0.04507	2.50740	0.07874

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	0.00478	0.32940	0.00772	2.50740	0.03968
	!RESET_B	0.01860	0.02788	0.32940	0.03073	2.50740	0.06345

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	0.00806	2.50740	0.04063
	!RESET_B	0.01860	0.03359	0.32940	0.04507	2.50740	0.07874

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	-0.00021	0.32940	-0.00006	2.50740	-0.00002

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	0.00021	0.32940	0.00006	2.50740	0.00002

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	0.00003	0.32940	0.00003	2.50740	0.00002
	(!D * GATE_N * !Q)	0.01860	-0.00021	0.32940	-0.00006	2.50740	-0.00002

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	0.00021	0.32940	0.00006	2.50740	0.00001
	(!D * GATE_N * !Q)	0.01860	0.00021	0.32940	0.00006	2.50740	0.00002

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	0.02221	0.32940	0.02750	2.50740	0.06741

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	0.01332	0.32940	0.01738	2.50740	0.05832

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	0.02049	0.32940	0.02390	2.50740	0.06313
	(!D * RESET_B * !Q)	0.01860	0.02221	0.32940	0.02750	2.50740	0.06741
	(!D * !RESET_B * !Q)	0.01860	0.02237	0.32940	0.02765	2.50740	0.06761

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	0.01966	0.32940	0.02365	2.50740	0.06415
	(!D * !RESET_B * !Q)	0.01860	0.01332	0.32940	0.01738	2.50740	0.05832

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	0.07964	0.32940	0.06480	0.25547	2.50740	0.30000	0.74157

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	0.09207	0.32940	0.06480	0.27626	2.50740	0.30000	0.85193

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	0.02201	2.50740	0.30000	0.04247

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	0.01883	0.32940	0.06480	0.02140	2.50740	0.30000	0.04216

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	0.11939	0.32940	0.06480	0.30619	2.50740	0.30000	0.82725

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	0.13365	0.32940	0.06480	0.33510	2.50740	0.30000	0.93568

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	0.02554	2.50740	0.30000	0.04437

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	0.02500	2.50740	0.30000	0.04485

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	0.00157	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	0.25705	0.32940	0.06480	0.47074	2.50740	0.30000	1.05628

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	0.26548	0.32940	0.06480	0.50080	2.50740	0.30000	1.16943

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	0.03469	0.32940	0.06480	0.03535	2.50740	0.30000	0.05274

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	0.03428	0.32940	0.06480	0.03486	2.50740	0.30000	0.05295

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	0.00794	0.00962	1.20000
sg13g2_einvn_2	0.00404	0.00513	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	0.01082	0.01858	0.32940	0.26902	0.40655	2.50740	1.20982	2.15393
	TE_B->Z (RR)	0.01860	0.01082	0.03922	0.32940	0.26902	0.09009	2.50740	1.20982	0.17370
	TE_B->Z (FR)	0.01860	0.01082	0.02342	0.32940	0.26902	0.37079	2.50740	1.20982	1.84462
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00598	0.01995	0.32940	0.13458	0.40577	2.50740	0.60498	2.15133
	TE_B->Z (RR)	0.01860	0.00598	0.03810	0.32940	0.13458	0.08656	2.50740	0.60498	0.17078
	TE_B->Z (FR)	0.01860	0.00598	0.02443	0.32940	0.13458	0.37073	2.50740	0.60498	1.84448

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	0.01559	0.01608	0.32940	0.27379	0.33069	2.50740	1.21459	1.76286
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00845	0.01723	0.32940	0.13705	0.33069	2.50740	0.60745	1.76250

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	0.01082	0.01564	0.32940	0.26902	0.02180	2.50740	1.20982	0.06764
	TE_B	0.01860	0.01082	0.02520	0.32940	0.26902	0.02454	2.50740	1.20982	0.02179
sg13g2_einvn_2	A	0.01860	0.00598	0.00791	0.32940	0.13458	0.01084	2.50740	0.60498	0.03347
	TE_B	0.01860	0.00598	0.01242	0.32940	0.13458	0.01206	2.50740	0.60498	0.01038

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	0.01559	0.01496	0.32940	0.27379	0.02072	2.50740	1.21459	0.06038
sg13g2_einvn_2	A	0.01860	0.00845	0.00769	0.32940	0.13705	0.01049	2.50740	0.60745	0.03012

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	-0.01421	0.32940	-0.01149	2.50740	0.03130
sg13g2_einvn_2	0.01860	-0.00665	0.32940	-0.00511	2.50740	0.01812

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	0.02201	0.32940	0.02692	2.50740	0.07184
sg13g2_einvn_2	0.01860	0.01115	0.32940	0.01374	2.50740	0.03783

FILLx



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

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_8	14.51520
sg13g2_fill_4	7.25760

Pin Capacitance Information Leakage Information

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

GCLK



*sg13g2_stdcell_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	0.00245	0.00523	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	0.05055	0.32940	0.06480	0.22962	2.50740	0.30000	0.81961

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	0.04335	0.32940	0.06480	0.21919	2.50740	0.30000	0.75488

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	-0.02316	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.21329
	setup	CLK (R)	0.01860	0.01860	0.04939	1.26300	1.26300	0.17000	2.50740	2.50740	0.26027

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	-0.00978	1.26300	1.26300	-0.01889	2.50740	2.50740	-0.02544
	setup	CLK (R)	0.01860	0.01860	0.02925	1.26300	1.26300	0.05127	2.50740	2.50740	0.07038

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	0.01483	0.32940	0.06480	0.01669	2.50740	0.30000	0.04699

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	0.00921	0.32940	0.06480	0.01312	2.50740	0.30000	0.04426

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.03047	0.32940	0.03346	2.50740	0.06635

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02599	0.32940	0.04754	2.50740	0.08142

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	0.03047	0.32940	0.03346	2.50740	0.06635

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	0.02599	0.32940	0.04754	2.50740	0.08142

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01001	0.32940	0.01358	2.50740	0.05317

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01260	0.32940	0.01651	2.50740	0.05756

IN_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	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_1	5.44320
sg13g2_inv_2	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04788	4.80000
sg13g2_inv_8	0.02339	2.40000
sg13g2_inv_4	0.01170	1.20000
sg13g2_inv_1	0.00300	0.30000
sg13g2_inv_2	0.00587	0.60000

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_1	93.89730	167.81800	241.73800
sg13g2_inv_2	187.79600	335.62400	483.45200

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	0.01185	0.32940	1.03680	0.27498	2.50740	4.80000	1.51598
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01176	0.32940	0.51840	0.27435	2.50740	2.40000	1.51403
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01204	0.32940	0.25920	0.27415	2.50740	1.20000	1.51356
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01516	0.32940	0.06480	0.27417	2.50740	0.30000	1.51114
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01297	0.32940	0.12960	0.27378	2.50740	0.60000	1.51064

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	0.01132	0.32940	1.03680	0.24907	2.50740	4.80000	1.36253
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01123	0.32940	0.51840	0.24909	2.50740	2.40000	1.36411
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01147	0.32940	0.25920	0.24886	2.50740	1.20000	1.36347
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01438	0.32940	0.06480	0.24794	2.50740	0.30000	1.35671
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01229	0.32940	0.12960	0.24751	2.50740	0.60000	1.35643

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	0.03406	0.32940	1.03680	0.06425	2.50740	4.80000	0.32966
sg13g2_inv_8	A	0.01860	0.00100	0.01634	0.32940	0.51840	0.03062	2.50740	2.40000	0.16080
sg13g2_inv_4	A	0.01860	0.00100	0.00815	0.32940	0.25920	0.01544	2.50740	1.20000	0.08134
sg13g2_inv_1	A	0.01860	0.00100	0.00230	0.32940	0.06480	0.00407	2.50740	0.30000	0.02081
sg13g2_inv_2	A	0.01860	0.00100	0.00407	0.32940	0.12960	0.00777	2.50740	0.60000	0.04100

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	0.02968	0.32940	1.03680	0.05866	2.50740	4.80000	0.28017
sg13g2_inv_8	A	0.01860	0.00100	0.01419	0.32940	0.51840	0.02863	2.50740	2.40000	0.13868
sg13g2_inv_4	A	0.01860	0.00100	0.00715	0.32940	0.25920	0.01435	2.50740	1.20000	0.06901
sg13g2_inv_1	A	0.01860	0.00100	0.00240	0.32940	0.06480	0.00405	2.50740	0.30000	0.01800
sg13g2_inv_2	A	0.01860	0.00100	0.00368	0.32940	0.12960	0.00717	2.50740	0.60000	0.03465

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	0.01560	0.01630	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	0.02050	0.01798	0.32940	0.53790	0.40784	2.50740	2.41950	2.15998
	TE_B->Z (RR)	0.01860	0.02050	0.05106	0.32940	0.53790	0.12311	2.50740	2.41950	0.26062
	TE_B->Z (FR)	0.01860	0.02050	0.02443	0.32940	0.53790	0.37322	2.50740	2.41950	1.84858

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	0.02996	0.01576	0.32940	0.54736	0.33246	2.50740	2.42896	1.77107

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	0.02050	0.03104	0.32940	0.53790	0.04467	2.50740	2.41950	0.14219
	TE_B	0.01860	0.02050	0.05300	0.32940	0.53790	0.05078	2.50740	2.41950	0.04545

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	0.02996	0.02917	0.32940	0.54736	0.04082	2.50740	2.42896	0.11703

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	-0.03234	0.32940	-0.03099	2.50740	0.00932

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	0.03861	0.32940	0.04368	2.50740	0.08743

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	0.00208	0.00223	0.00540	0.60000
sg13g2_mux2_1	0.00210	0.00224	0.00541	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	0.06168	0.32940	0.12960	0.27213	2.50740	0.60000	0.88099
	A1->X (RR)	0.01860	0.00100	0.05054	0.32940	0.12960	0.27170	2.50740	0.60000	0.88615
	S->X (-R)	0.01860	0.00100	0.06295	0.32940	0.12960	0.26447	2.50740	0.60000	0.87392
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.05042	0.32940	0.06480	0.24385	2.50740	0.30000	0.82897
	A1->X (RR)	0.01860	0.00100	0.04833	0.32940	0.06480	0.24663	2.50740	0.30000	0.83596
	S->X (-R)	0.01860	0.00100	0.07988	0.32940	0.06480	0.26734	2.50740	0.30000	0.83252

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	0.07418	0.32940	0.12960	0.29764	2.50740	0.60000	0.93767
	A1->X (FF)	0.01860	0.00100	0.07959	0.32940	0.12960	0.30078	2.50740	0.60000	0.94453
	S->X (-F)	0.01860	0.00100	0.08813	0.32940	0.12960	0.28210	2.50740	0.60000	0.88158
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.06326	0.32940	0.06480	0.26272	2.50740	0.30000	0.87294
	A1->X (FF)	0.01860	0.00100	0.06542	0.32940	0.06480	0.26638	2.50740	0.30000	0.88414
	S->X (-F)	0.01860	0.00100	0.07395	0.32940	0.06480	0.25083	2.50740	0.30000	0.82594

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	0.06295	0.32940	0.12960	0.26447	2.50740	0.60000	0.87392
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.08772	0.32940	0.12960	0.28167	2.50740	0.60000	0.85032
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.05532	0.32940	0.06480	0.24177	2.50740	0.30000	0.82746
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.07988	0.32940	0.06480	0.26734	2.50740	0.30000	0.83252

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	0.08813	0.32940	0.12960	0.28210	2.50740	0.60000	0.88158
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.11032	0.32940	0.12960	0.28708	2.50740	0.60000	0.76239
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.07395	0.32940	0.06480	0.25083	2.50740	0.30000	0.82594
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.09614	0.32940	0.06480	0.26260	2.50740	0.30000	0.73624

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	0.02059	0.32940	0.12960	0.02275	2.50740	0.60000	0.05330
	A1	0.01860	0.00100	0.02731	0.32940	0.12960	0.03308	2.50740	0.60000	0.06504
	S	0.01860	0.00100	0.02255	0.32940	0.12960	0.02486	2.50740	0.60000	0.05573
sg13g2_mux2_1	A0	0.01860	0.00100	0.01577	0.32940	0.06480	0.01865	2.50740	0.30000	0.05119
	A1	0.01860	0.00100	0.01929	0.32940	0.06480	0.02329	2.50740	0.30000	0.05634
	S	0.01860	0.00100	0.01607	0.32940	0.06480	0.01838	2.50740	0.30000	0.04992

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	0.03113	0.32940	0.12960	0.03490	2.50740	0.60000	0.06736
	A1	0.01860	0.00100	0.02364	0.32940	0.12960	0.02523	2.50740	0.60000	0.05808
	S	0.01860	0.00100	0.02256	0.32940	0.12960	0.02388	2.50740	0.60000	0.05667
sg13g2_mux2_1	A0	0.01860	0.00100	0.02051	0.32940	0.06480	0.02437	2.50740	0.30000	0.05692
	A1	0.01860	0.00100	0.01577	0.32940	0.06480	0.01906	2.50740	0.30000	0.05256
	S	0.01860	0.00100	0.01519	0.32940	0.06480	0.01745	2.50740	0.30000	0.04982

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	0.02175	0.32940	0.12960	0.02199	2.50740	0.60000	0.02227
	S	(!A0 * A1)	0.01860	0.00100	0.02255	0.32940	0.12960	0.02486	2.50740	0.60000	0.05573
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01523	0.32940	0.06480	0.01542	2.50740	0.30000	0.01585
	S	(!A0 * A1)	0.01860	0.00100	0.01607	0.32940	0.06480	0.01838	2.50740	0.30000	0.04992

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	0.02377	0.32940	0.12960	0.02323	2.50740	0.60000	0.02316
	S	(!A0 * A1)	0.01860	0.00100	0.02256	0.32940	0.12960	0.02388	2.50740	0.60000	0.05667
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01631	0.32940	0.06480	0.01666	2.50740	0.30000	0.01708
	S	(!A0 * A1)	0.01860	0.00100	0.01519	0.32940	0.06480	0.01745	2.50740	0.30000	0.04982

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00543	0.32940	0.00812	2.50740	0.03985
sg13g2_mux2_1	0.01860	0.00543	0.32940	0.00813	2.50740	0.03984

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00622	0.32940	0.00930	2.50740	0.04165
sg13g2_mux2_1	0.01860	0.00622	0.32940	0.00935	2.50740	0.04167

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	0.00297	0.00295	0.00296	0.00305	0.00862	0.00525	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	0.09025	0.32940	0.06480	0.29861	2.50740	0.30000	0.95230
	A1->X (RR)	0.01860	0.00100	0.08783	0.32940	0.06480	0.29774	2.50740	0.30000	0.95056
	A2->X (RR)	0.01860	0.00100	0.09328	0.32940	0.06480	0.30546	2.50740	0.30000	0.96525
	A3->X (RR)	0.01860	0.00100	0.09074	0.32940	0.06480	0.30427	2.50740	0.30000	0.96395
	S0->X (-R)	0.01860	0.00100	0.07986	0.32940	0.06480	0.30051	2.50740	0.30000	0.95665
	S1->X (-R)	0.01860	0.00100	0.04773	0.32940	0.06480	0.24285	2.50740	0.30000	0.83602

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	0.10505	0.32940	0.06480	0.30222	2.50740	0.30000	0.87715
	A1->X (FF)	0.01860	0.00100	0.10676	0.32940	0.06480	0.30261	2.50740	0.30000	0.87868
	A2->X (FF)	0.01860	0.00100	0.11162	0.32940	0.06480	0.31208	2.50740	0.30000	0.89450
	A3->X (FF)	0.01860	0.00100	0.11248	0.32940	0.06480	0.31155	2.50740	0.30000	0.89390
	S0->X (-F)	0.01860	0.00100	0.09696	0.32940	0.06480	0.31224	2.50740	0.30000	0.92849
	S1->X (-F)	0.01860	0.00100	0.05695	0.32940	0.06480	0.24733	2.50740	0.30000	0.82884

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	0.07986	0.32940	0.06480	0.30051	2.50740	0.30000	0.95665
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.07554	0.32940	0.06480	0.29034	2.50740	0.30000	0.93579
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.11681	0.32940	0.06480	0.32666	2.50740	0.30000	0.93109
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11359	0.32940	0.06480	0.32161	2.50740	0.30000	0.92329
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.04782	0.32940	0.06480	0.24281	2.50740	0.30000	0.83584
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.04773	0.32940	0.06480	0.24285	2.50740	0.30000	0.83602
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.06329	0.32940	0.06480	0.25832	2.50740	0.30000	0.82983
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.06315	0.32940	0.06480	0.25831	2.50740	0.30000	0.83020

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	0.09696	0.32940	0.06480	0.31224	2.50740	0.30000	0.92849
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.08833	0.32940	0.06480	0.29870	2.50740	0.30000	0.90429
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.12997	0.32940	0.06480	0.32306	2.50740	0.30000	0.84202
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.12293	0.32940	0.06480	0.31422	2.50740	0.30000	0.83069
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.05695	0.32940	0.06480	0.24733	2.50740	0.30000	0.82884
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.05687	0.32940	0.06480	0.24721	2.50740	0.30000	0.82815
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.06995	0.32940	0.06480	0.25209	2.50740	0.30000	0.74310
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.07006	0.32940	0.06480	0.25220	2.50740	0.30000	0.74329

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	0.02941	0.32940	0.06480	0.03047	2.50740	0.30000	0.05828
	A1	0.01860	0.00100	0.02849	0.32940	0.06480	0.02951	2.50740	0.30000	0.05756
	A2	0.01860	0.00100	0.02940	0.32940	0.06480	0.03043	2.50740	0.30000	0.05795
	A3	0.01860	0.00100	0.02046	0.32940	0.06480	0.02167	2.50740	0.30000	0.04920
	S0	0.01860	0.00100	0.01524	0.32940	0.06480	0.01713	2.50740	0.30000	0.04637
	S1	0.01860	0.00100	0.01157	0.32940	0.06480	0.01379	2.50740	0.30000	0.03363

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	0.02919	0.32940	0.06480	0.03024	2.50740	0.30000	0.05978
	A1	0.01860	0.00100	0.02175	0.32940	0.06480	0.02288	2.50740	0.30000	0.05231
	A2	0.01860	0.00100	0.03066	0.32940	0.06480	0.03161	2.50740	0.30000	0.06083
	A3	0.01860	0.00100	0.02993	0.32940	0.06480	0.03090	2.50740	0.30000	0.06010
	S0	0.01860	0.00100	0.01671	0.32940	0.06480	0.01923	2.50740	0.30000	0.04939
	S1	0.01860	0.00100	0.01350	0.32940	0.06480	0.01595	2.50740	0.30000	0.03488

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	0.02298	0.32940	0.06480	0.01853	2.50740	0.30000	-0.00307
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02289	0.32940	0.06480	0.01850	2.50740	0.30000	-0.00355
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01534	0.32940	0.06480	0.01730	2.50740	0.30000	0.04620
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01524	0.32940	0.06480	0.01713	2.50740	0.30000	0.04637
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01157	0.32940	0.06480	0.01379	2.50740	0.30000	0.03363
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01358	0.32940	0.06480	0.01602	2.50740	0.30000	0.03644
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00857	0.32940	0.06480	0.01119	2.50740	0.30000	0.03559
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00658	0.32940	0.06480	0.00918	2.50740	0.30000	0.03367

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	0.03427	0.32940	0.06480	0.03228	2.50740	0.30000	0.00307
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03431	0.32940	0.06480	0.03274	2.50740	0.30000	0.00355
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01645	0.32940	0.06480	0.01866	2.50740	0.30000	0.04868
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01671	0.32940	0.06480	0.01923	2.50740	0.30000	0.04939
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01352	0.32940	0.06480	0.01599	2.50740	0.30000	0.03479
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01350	0.32940	0.06480	0.01595	2.50740	0.30000	0.03488
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00796	0.32940	0.06480	0.01046	2.50740	0.30000	0.03713
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00785	0.32940	0.06480	0.01065	2.50740	0.30000	0.03715

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01166	0.32940	0.01813	2.50740	0.08779

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01567	0.32940	0.02325	2.50740	0.09370

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	0.01083	0.32940	0.01720	2.50740	0.08674
	(A0 * A1 * !S1)	0.01860	0.01174	0.32940	0.01774	2.50740	0.08692
	(!A2 * !A3 * S1)	0.01860	0.01166	0.32940	0.01813	2.50740	0.08779
	(!A0 * !A1 * !S1)	0.01860	0.01307	0.32940	0.01916	2.50740	0.08873

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	0.01608	0.32940	0.02373	2.50740	0.09453
	(A0 * A1 * !S1)	0.01860	0.01873	0.32940	0.02652	2.50740	0.09681
	(!A2 * !A3 * S1)	0.01860	0.01567	0.32940	0.02325	2.50740	0.09370
	(!A0 * !A1 * !S1)	0.01860	0.01120	0.32940	0.01822	2.50740	0.08845

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00641	0.32940	0.01042	2.50740	0.04970

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00632	0.32940	0.01083	2.50740	0.05035

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	0.00582	0.32940	0.00979	2.50740	0.04852
	(A0 * A2 * !S0)	0.01860	0.00581	0.32940	0.00976	2.50740	0.04857
	(!A1 * !A3 * S0)	0.01860	0.00641	0.32940	0.01042	2.50740	0.04970
	(!A0 * !A2 * !S0)	0.01860	0.00644	0.32940	0.01041	2.50740	0.04994

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	0.00649	0.32940	0.01101	2.50740	0.05043
	(A0 * A2 * !S0)	0.01860	0.00649	0.32940	0.01103	2.50740	0.05066
	(!A1 * !A3 * S0)	0.01860	0.00632	0.32940	0.01083	2.50740	0.05035
	(!A0 * !A2 * !S0)	0.01860	0.00635	0.32940	0.01073	2.50740	0.05000

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	0.00244	0.00327	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	0.03729	0.32940	0.06480	0.21847	2.50740	0.30000	0.81221
	B->Y (FR)	0.01860	0.00100	0.01915	0.32940	0.06480	0.27911	2.50740	0.30000	1.51455

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	0.04387	0.32940	0.06480	0.27762	2.50740	0.30000	1.04762
	B->Y (RF)	0.01860	0.00100	0.02572	0.32940	0.06480	0.30483	2.50740	0.30000	1.57634

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	0.00305	0.32940	0.06480	0.00329	2.50740	0.30000	0.00250
	B	0.01860	0.00100	0.00258	0.32940	0.06480	0.00390	2.50740	0.30000	0.01867

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	0.00673	0.32940	0.06480	0.00697	2.50740	0.30000	0.00629
	B	0.01860	0.00100	0.00660	0.32940	0.06480	0.00739	2.50740	0.30000	0.01877

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	0.00614	0.32940	0.00927	2.50740	0.04136

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	0.00320	0.32940	0.00651	2.50740	0.03908

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	0.00614	0.32940	0.00927	2.50740	0.04136

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	0.00320	0.32940	0.00651	2.50740	0.03908

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	0.00232	0.00554	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	0.04901	0.32940	0.12960	0.24840	2.50740	0.60000	0.86784
	B->Y (FR)	0.01860	0.00100	0.01492	0.32940	0.12960	0.27414	2.50740	0.60000	1.50682

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	0.05885	0.32940	0.12960	0.32303	2.50740	0.60000	1.15214
	B->Y (RF)	0.01860	0.00100	0.01945	0.32940	0.12960	0.33888	2.50740	0.60000	1.80467

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	0.00636	0.32940	0.12960	0.00714	2.50740	0.60000	0.00576
	B	0.01860	0.00100	0.00823	0.32940	0.12960	0.01104	2.50740	0.60000	0.03949

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	0.01339	0.32940	0.12960	0.01425	2.50740	0.60000	0.01480
	B	0.01860	0.00100	0.01012	0.32940	0.12960	0.01257	2.50740	0.60000	0.03648

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	0.00996	0.32940	0.01215	2.50740	0.04279

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	0.00962	0.32940	0.01223	2.50740	0.04346

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	0.00996	0.32940	0.01215	2.50740	0.04279

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	0.00962	0.32940	0.01223	2.50740	0.04346

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	0.00578	0.00600	0.60000
sg13g2_nand2_1	0.00304	0.00316	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	0.01506	0.32940	0.12960	0.27546	2.50740	0.60000	1.50706
	B->Y (FR)	0.01860	0.00100	0.01854	0.32940	0.12960	0.27946	2.50740	0.60000	1.51404
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.01683	0.32940	0.06480	0.27526	2.50740	0.30000	1.50610
	B->Y (FR)	0.01860	0.00100	0.01976	0.32940	0.06480	0.27880	2.50740	0.30000	1.51269

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	0.01959	0.32940	0.12960	0.33848	2.50740	0.60000	1.80414
	B->Y (RF)	0.01860	0.00100	0.02330	0.32940	0.12960	0.31320	2.50740	0.60000	1.62237
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.02135	0.32940	0.06480	0.32926	2.50740	0.30000	1.75428
	B->Y (RF)	0.01860	0.00100	0.02400	0.32940	0.06480	0.30333	2.50740	0.30000	1.57498

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	0.00453	0.32940	0.12960	0.00764	2.50740	0.60000	0.03579
	B	0.01860	0.00100	0.00579	0.32940	0.12960	0.00821	2.50740	0.60000	0.03653
sg13g2_nand2_1	A	0.01860	0.00100	0.00246	0.32940	0.06480	0.00396	2.50740	0.30000	0.01816
	B	0.01860	0.00100	0.00260	0.32940	0.06480	0.00387	2.50740	0.30000	0.01857

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	0.00665	0.32940	0.12960	0.00921	2.50740	0.60000	0.03309
	B	0.01860	0.00100	0.01203	0.32940	0.12960	0.01373	2.50740	0.60000	0.03600
sg13g2_nand2_1	A	0.01860	0.00100	0.00358	0.32940	0.06480	0.00485	2.50740	0.30000	0.01696
	B	0.01860	0.00100	0.00635	0.32940	0.06480	0.00718	2.50740	0.30000	0.01880

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	0.00237	0.00316	0.00317	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	0.03943	0.32940	0.06480	0.21924	2.50740	0.30000	0.81069
	B->Y (FR)	0.01860	0.00100	0.02180	0.32940	0.06480	0.28144	2.50740	0.30000	1.51234
	C->Y (FR)	0.01860	0.00100	0.02384	0.32940	0.06480	0.28473	2.50740	0.30000	1.51718

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	0.05244	0.32940	0.06480	0.35790	2.50740	0.30000	1.39179
	B->Y (RF)	0.01860	0.00100	0.03836	0.32940	0.06480	0.39354	2.50740	0.30000	1.97968
	C->Y (RF)	0.01860	0.00100	0.04201	0.32940	0.06480	0.37113	2.50740	0.30000	1.78539

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	0.00344	0.32940	0.06480	0.00356	2.50740	0.30000	0.00279
	B	0.01860	0.00100	0.00328	0.32940	0.06480	0.00436	2.50740	0.30000	0.01707
	C	0.01860	0.00100	0.00374	0.32940	0.06480	0.00460	2.50740	0.30000	0.01806

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	0.00854	0.32940	0.06480	0.00875	2.50740	0.30000	0.00779
	B	0.01860	0.00100	0.00847	0.32940	0.06480	0.00898	2.50740	0.30000	0.01877
	C	0.01860	0.00100	0.01124	0.32940	0.06480	0.01157	2.50740	0.30000	0.02173

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	0.00609	0.32940	0.00923	2.50740	0.04131

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	0.00330	0.32940	0.00660	2.50740	0.03916

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	0.00609	0.32940	0.00923	2.50740	0.04131

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	0.00330	0.32940	0.00660	2.50740	0.03916

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	0.00301	0.00317	0.00313	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	96.07330	268.32900	725.21300

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	0.01936	0.32940	0.06480	0.27775	2.50740	0.30000	1.50654
	B->Y (FR)	0.01860	0.00100	0.02243	0.32940	0.06480	0.28147	2.50740	0.30000	1.51240
	C->Y (FR)	0.01860	0.00100	0.02414	0.32940	0.06480	0.28488	2.50740	0.30000	1.51714

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	0.03055	0.32940	0.06480	0.40927	2.50740	0.30000	2.12345
	B->Y (RF)	0.01860	0.00100	0.03630	0.32940	0.06480	0.39192	2.50740	0.30000	1.97877
	C->Y (RF)	0.01860	0.00100	0.03901	0.32940	0.06480	0.36822	2.50740	0.30000	1.78433

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	0.00300	0.32940	0.06480	0.00421	2.50740	0.30000	0.01667
	B	0.01860	0.00100	0.00326	0.32940	0.06480	0.00428	2.50740	0.30000	0.01717
	C	0.01860	0.00100	0.00376	0.32940	0.06480	0.00460	2.50740	0.30000	0.01797

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	0.00549	0.32940	0.06480	0.00644	2.50740	0.30000	0.01684
	B	0.01860	0.00100	0.00833	0.32940	0.06480	0.00887	2.50740	0.30000	0.01858
	C	0.01860	0.00100	0.01074	0.32940	0.06480	0.01112	2.50740	0.30000	0.02173

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	0.00297	0.00312	0.00314	0.00313	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	99.39160	293.39000	966.88600

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	0.02037	0.32940	0.06480	0.27871	2.50740	0.30000	1.50486
	B->Y (FR)	0.01860	0.00100	0.02362	0.32940	0.06480	0.28256	2.50740	0.30000	1.51028
	C->Y (FR)	0.01860	0.00100	0.02542	0.32940	0.06480	0.28610	2.50740	0.30000	1.51604
	D->Y (FR)	0.01860	0.00100	0.02614	0.32940	0.06480	0.28899	2.50740	0.30000	1.52120

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	0.03788	0.32940	0.06480	0.48534	2.50740	0.30000	2.47113
	B->Y (RF)	0.01860	0.00100	0.04697	0.32940	0.06480	0.47487	2.50740	0.30000	2.34861
	C->Y (RF)	0.01860	0.00100	0.05235	0.32940	0.06480	0.45749	2.50740	0.30000	2.18002
	D->Y (RF)	0.01860	0.00100	0.05486	0.32940	0.06480	0.44260	2.50740	0.30000	2.02982

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	0.00293	0.32940	0.06480	0.00409	2.50740	0.30000	0.01537
	B	0.01860	0.00100	0.00335	0.32940	0.06480	0.00421	2.50740	0.30000	0.01572
	C	0.01860	0.00100	0.00377	0.32940	0.06480	0.00451	2.50740	0.30000	0.01632
	D	0.01860	0.00100	0.00410	0.32940	0.06480	0.00479	2.50740	0.30000	0.01716

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	0.00664	0.32940	0.06480	0.00758	2.50740	0.30000	0.01641
	B	0.01860	0.00100	0.00946	0.32940	0.06480	0.00997	2.50740	0.30000	0.01804
	C	0.01860	0.00100	0.01195	0.32940	0.06480	0.01226	2.50740	0.30000	0.02088
	D	0.01860	0.00100	0.01434	0.32940	0.06480	0.01455	2.50740	0.30000	0.02376

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	0.00588	0.00283	0.60000
sg13g2_nor2b_1	0.00303	0.00240	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	0.02219	0.32940	0.12960	0.40727	2.50740	0.60000	2.15250
	B_N->Y (RR)	0.01860	0.00100	0.05529	0.32940	0.12960	0.37740	2.50740	0.60000	1.44685
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.02540	0.32940	0.06480	0.40820	2.50740	0.30000	2.15469
	B_N->Y (RR)	0.01860	0.00100	0.05061	0.32940	0.06480	0.35824	2.50740	0.30000	1.40111

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	0.01467	0.32940	0.12960	0.25603	2.50740	0.60000	1.39000
	B_N->Y (FF)	0.01860	0.00100	0.04950	0.32940	0.12960	0.23103	2.50740	0.60000	0.77196
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.01604	0.32940	0.06480	0.24930	2.50740	0.30000	1.35229
	B_N->Y (FF)	0.01860	0.00100	0.04198	0.32940	0.06480	0.20613	2.50740	0.30000	0.71602

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	0.00631	0.32940	0.12960	0.00921	2.50740	0.60000	0.03378
	B_N	0.01860	0.00100	0.01357	0.32940	0.12960	0.01404	2.50740	0.60000	0.01373
sg13g2_nor2b_1	A	0.01860	0.00100	0.00315	0.32940	0.06480	0.00466	2.50740	0.30000	0.01709
	B_N	0.01860	0.00100	0.00713	0.32940	0.06480	0.00726	2.50740	0.30000	0.00699

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	0.00758	2.50740	0.60000	0.02914
	B_N	0.01860	0.00100	0.00682	0.32940	0.12960	0.00694	2.50740	0.60000	0.00580
sg13g2_nor2b_1	A	0.01860	0.00100	0.00289	0.32940	0.06480	0.00434	2.50740	0.30000	0.01542
	B_N	0.01860	0.00100	0.00372	0.32940	0.06480	0.00379	2.50740	0.30000	0.00223

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	0.01110	0.32940	0.01411	2.50740	0.05121
sg13g2_nor2b_1	0.01860	0.00613	0.32940	0.00905	2.50740	0.04073

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	0.01304	2.50740	0.05086
sg13g2_nor2b_1	0.01860	0.00563	0.32940	0.00883	2.50740	0.04109

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	0.01110	0.32940	0.01411	2.50740	0.05121
sg13g2_nor2b_1	A	0.01860	0.00613	0.32940	0.00905	2.50740	0.04073

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	0.01304	2.50740	0.05086
sg13g2_nor2b_1	A	0.01860	0.00563	0.32940	0.00883	2.50740	0.04109

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	0.00614	0.00587	0.30000
sg13g2_nor2_1	0.00318	0.00303	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	0.02810	0.32940	0.06480	0.23784	2.50740	0.30000	1.19986
	B->Y (FR)	0.01860	0.00100	0.02243	0.32940	0.06480	0.26462	2.50740	0.30000	1.39943
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02975	0.32940	0.06480	0.37521	2.50740	0.30000	1.89345
	B->Y (FR)	0.01860	0.00100	0.02548	0.32940	0.06480	0.40792	2.50740	0.30000	2.15531

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	0.01758	0.32940	0.06480	0.17385	2.50740	0.30000	0.90318
	B->Y (RF)	0.01860	0.00100	0.01444	0.32940	0.06480	0.16849	2.50740	0.30000	0.89195
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.01872	0.32940	0.06480	0.25276	2.50740	0.30000	1.35852
	B->Y (RF)	0.01860	0.00100	0.01609	0.32940	0.06480	0.24929	2.50740	0.30000	1.35210

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	0.01353	0.32940	0.06480	0.01566	2.50740	0.30000	0.05176
	B	0.01860	0.00100	0.00645	0.32940	0.06480	0.01052	2.50740	0.30000	0.04736
sg13g2_nor2_1	A	0.01860	0.00100	0.00668	0.32940	0.06480	0.00746	2.50740	0.30000	0.01982
	B	0.01860	0.00100	0.00316	0.32940	0.06480	0.00456	2.50740	0.30000	0.01727

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	0.00619	0.32940	0.06480	0.00928	2.50740	0.30000	0.04357
	B	0.01860	0.00100	0.00454	0.32940	0.06480	0.00828	2.50740	0.30000	0.04053
sg13g2_nor2_1	A	0.01860	0.00100	0.00306	0.32940	0.06480	0.00411	2.50740	0.30000	0.01603
	B	0.01860	0.00100	0.00289	0.32940	0.06480	0.00433	2.50740	0.30000	0.01533

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	0.00610	0.00603	0.00580	0.60000
sg13g2_nor3_1	0.00321	0.00319	0.00303	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	0.50222	2.50740	0.60000	2.33751
	B->Y (FR)	0.01860	0.00100	0.04515	0.32940	0.12960	0.52558	2.50740	0.60000	2.56670
	C->Y (FR)	0.01860	0.00100	0.03225	0.32940	0.12960	0.54048	2.50740	0.60000	2.75942
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.05279	0.32940	0.06480	0.50057	2.50740	0.30000	2.33120
	B->Y (FR)	0.01860	0.00100	0.04945	0.32940	0.06480	0.52394	2.50740	0.30000	2.55748
	C->Y (FR)	0.01860	0.00100	0.03814	0.32940	0.06480	0.54035	2.50740	0.30000	2.75137

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	0.01984	0.32940	0.12960	0.25814	2.50740	0.60000	1.36322
	B->Y (RF)	0.01860	0.00100	0.01953	0.32940	0.12960	0.25485	2.50740	0.60000	1.35722
	C->Y (RF)	0.01860	0.00100	0.01623	0.32940	0.12960	0.25063	2.50740	0.60000	1.35000
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02094	0.32940	0.06480	0.25146	2.50740	0.30000	1.32683
	B->Y (RF)	0.01860	0.00100	0.02056	0.32940	0.06480	0.24921	2.50740	0.30000	1.32494
	C->Y (RF)	0.01860	0.00100	0.01776	0.32940	0.06480	0.24541	2.50740	0.30000	1.31871

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	0.02249	0.32940	0.12960	0.02298	2.50740	0.60000	0.04517
	B	0.01860	0.00100	0.01629	0.32940	0.12960	0.01716	2.50740	0.60000	0.03689
	C	0.01860	0.00100	0.00919	0.32940	0.12960	0.01145	2.50740	0.60000	0.03344
sg13g2_nor3_1	A	0.01860	0.00100	0.01153	0.32940	0.06480	0.01176	2.50740	0.30000	0.02337
	B	0.01860	0.00100	0.00843	0.32940	0.06480	0.00886	2.50740	0.30000	0.01916
	C	0.01860	0.00100	0.00496	0.32940	0.06480	0.00604	2.50740	0.30000	0.01743

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	0.00772	0.32940	0.12960	0.00907	2.50740	0.60000	0.03025
	B	0.01860	0.00100	0.00706	0.32940	0.12960	0.00875	2.50740	0.60000	0.02889
	C	0.01860	0.00100	0.00513	0.32940	0.12960	0.00795	2.50740	0.60000	0.02705
sg13g2_nor3_1	A	0.01860	0.00100	0.00398	0.32940	0.06480	0.00469	2.50740	0.30000	0.01559
	B	0.01860	0.00100	0.00376	0.32940	0.06480	0.00468	2.50740	0.30000	0.01495
	C	0.01860	0.00100	0.00322	0.32940	0.06480	0.00450	2.50740	0.30000	0.01424

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	0.00606	0.00594	0.00515	0.00521	0.60000
sg13g2_nor4_1	0.00315	0.00312	0.00270	0.00271	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	0.07642	0.32940	0.12960	0.64938	2.50740	0.60000	2.84811
	B->Y (FR)	0.01860	0.00100	0.07309	0.32940	0.12960	0.66132	2.50740	0.60000	3.01325
	C->Y (FR)	0.01860	0.00100	0.06236	0.32940	0.12960	0.67133	2.50740	0.60000	3.20036
	D->Y (FR)	0.01860	0.00100	0.04184	0.32940	0.12960	0.67361	2.50740	0.60000	3.34603
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.07987	0.32940	0.06480	0.64422	2.50740	0.30000	2.83404
	B->Y (FR)	0.01860	0.00100	0.07674	0.32940	0.06480	0.65627	2.50740	0.30000	3.00015
	C->Y (FR)	0.01860	0.00100	0.06685	0.32940	0.06480	0.66749	2.50740	0.30000	3.18304
	D->Y (FR)	0.01860	0.00100	0.04757	0.32940	0.06480	0.67066	2.50740	0.30000	3.32749

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	0.02095	0.32940	0.12960	0.26266	2.50740	0.60000	1.36783
	B->Y (RF)	0.01860	0.00100	0.02158	0.32940	0.12960	0.26017	2.50740	0.60000	1.36393
	C->Y (RF)	0.01860	0.00100	0.02081	0.32940	0.12960	0.25655	2.50740	0.60000	1.35755
	D->Y (RF)	0.01860	0.00100	0.01755	0.32940	0.12960	0.25193	2.50740	0.60000	1.34955
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.02239	0.32940	0.06480	0.26239	2.50740	0.30000	1.36719
	B->Y (RF)	0.01860	0.00100	0.02299	0.32940	0.06480	0.26051	2.50740	0.30000	1.36546
	C->Y (RF)	0.01860	0.00100	0.02215	0.32940	0.06480	0.25700	2.50740	0.30000	1.35989
	D->Y (RF)	0.01860	0.00100	0.01902	0.32940	0.06480	0.25286	2.50740	0.30000	1.35216

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	0.02978	0.32940	0.12960	0.02959	2.50740	0.60000	0.04950
	B	0.01860	0.00100	0.02500	0.32940	0.12960	0.02483	2.50740	0.60000	0.04423
	C	0.01860	0.00100	0.01953	0.32940	0.12960	0.01969	2.50740	0.60000	0.03884
	D	0.01860	0.00100	0.01259	0.32940	0.12960	0.01426	2.50740	0.60000	0.03633
sg13g2_nor4_1	A	0.01860	0.00100	0.01486	0.32940	0.06480	0.01477	2.50740	0.30000	0.02489
	B	0.01860	0.00100	0.01229	0.32940	0.06480	0.01223	2.50740	0.30000	0.02214
	C	0.01860	0.00100	0.00989	0.32940	0.06480	0.00997	2.50740	0.30000	0.01952
	D	0.01860	0.00100	0.00653	0.32940	0.06480	0.00735	2.50740	0.30000	0.01826

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	0.01050	0.32940	0.12960	0.01177	2.50740	0.60000	0.03083
	B	0.01860	0.00100	0.00911	0.32940	0.12960	0.01007	2.50740	0.60000	0.02811
	C	0.01860	0.00100	0.00567	0.32940	0.12960	0.00734	2.50740	0.60000	0.02438
	D	0.01860	0.00100	0.00305	0.32940	0.12960	0.00575	2.50740	0.60000	0.02223
sg13g2_nor4_1	A	0.01860	0.00100	0.00517	0.32940	0.06480	0.00577	2.50740	0.30000	0.01536
	B	0.01860	0.00100	0.00476	0.32940	0.06480	0.00527	2.50740	0.30000	0.01433
	C	0.01860	0.00100	0.00305	0.32940	0.06480	0.00384	2.50740	0.30000	0.01262
	D	0.01860	0.00100	0.00197	0.32940	0.06480	0.00317	2.50740	0.30000	0.01128

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00079	0.32940	-0.00125	2.50740	-0.00123
sg13g2_nor4_1	0.01860	-0.00027	0.32940	-0.00048	2.50740	-0.00047

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00128	0.32940	0.00125	2.50740	0.00123
sg13g2_nor4_1	0.01860	0.00050	0.32940	0.00048	2.50740	0.00047

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	-0.00079	0.32940	-0.00125	2.50740	-0.00123
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00027	0.32940	-0.00048	2.50740	-0.00047

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	0.00128	0.32940	0.00125	2.50740	0.00123
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00050	0.32940	0.00048	2.50740	0.00047

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	0.00171	0.32940	0.00173	2.50740	0.00174
sg13g2_nor4_1	0.01860	0.00103	0.32940	0.00103	2.50740	0.00104

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00056	0.32940	-0.00055	2.50740	-0.00054
sg13g2_nor4_1	0.01860	-0.00063	0.32940	-0.00063	2.50740	-0.00063

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	0.00171	0.32940	0.00173	2.50740	0.00174
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00103	0.32940	0.00103	2.50740	0.00104

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	-0.00056	0.32940	-0.00055	2.50740	-0.00054
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00063	0.32940	-0.00063	2.50740	-0.00063

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00231	0.32940	0.00231	2.50740	0.00232
sg13g2_nor4_1	0.01860	0.00132	0.32940	0.00132	2.50740	0.00132

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00077	0.32940	-0.00073	2.50740	-0.00071
sg13g2_nor4_1	0.01860	-0.00076	0.32940	-0.00074	2.50740	-0.00073

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	0.00231	0.32940	0.00231	2.50740	0.00232
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00132	0.32940	0.00132	2.50740	0.00132

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	-0.00077	0.32940	-0.00073	2.50740	-0.00071
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	-0.00076	0.32940	-0.00074	2.50740	-0.00073

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	0.00089

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	6.75000	6.75000	6.75000

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	-0.00060	0.32940	-0.00060	2.50740	-0.00060

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00060	0.32940	0.00060	2.50740	0.00060

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	0.00348	0.00350	0.00316	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	0.04838	0.32940	0.06480	0.44804	2.50740	0.30000	2.18081
	A2->Y (FR)	0.01860	0.00100	0.04220	0.32940	0.06480	0.48068	2.50740	0.30000	2.46764
	B1->Y (FR)	0.01860	0.00100	0.02044	0.32940	0.06480	0.31675	2.50740	0.30000	1.72640

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	0.03344	0.32940	0.06480	0.31420	2.50740	0.30000	1.55883
	A2->Y (RF)	0.01860	0.00100	0.02812	0.32940	0.06480	0.30768	2.50740	0.30000	1.54865
	B1->Y (RF)	0.01860	0.00100	0.02890	0.32940	0.06480	0.34177	2.50740	0.30000	1.76737

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	0.02044	0.32940	0.06480	0.31675	2.50740	0.30000	1.72640
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01965	0.32940	0.06480	0.31448	2.50740	0.30000	1.72338

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	0.02890	0.32940	0.06480	0.34177	2.50740	0.30000	1.76737
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02206	0.32940	0.06480	0.33219	2.50740	0.30000	1.75040

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	0.00763	0.32940	0.06480	0.00813	2.50740	0.30000	0.01910
	A2	0.01860	0.00100	0.00376	0.32940	0.06480	0.00484	2.50740	0.30000	0.01565
	B1	0.01860	0.00100	0.00105	0.32940	0.06480	0.00248	2.50740	0.30000	0.01600

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	0.00796	0.32940	0.06480	0.00810	2.50740	0.30000	0.01793
	A2	0.01860	0.00100	0.00741	0.32940	0.06480	0.00813	2.50740	0.30000	0.01747
	B1	0.01860	0.00100	0.00352	0.32940	0.06480	0.00479	2.50740	0.30000	0.01692

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	0.00476	0.32940	0.06480	0.00615	2.50740	0.30000	0.01935
	B1	(!A1 * A2)	0.01860	0.00100	0.00105	0.32940	0.06480	0.00248	2.50740	0.30000	0.01600

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	0.00436	0.32940	0.06480	0.00534	2.50740	0.30000	0.01725
	B1	(!A1 * A2)	0.01860	0.00100	0.00352	0.32940	0.06480	0.00479	2.50740	0.30000	0.01692

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00047	0.32940	-0.00027	2.50740	-0.00021

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00047	0.32940	0.00027	2.50740	0.00021

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	-0.00047	0.32940	-0.00027	2.50740	-0.00021

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	0.00047	0.32940	0.00027	2.50740	0.00021

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00037	0.32940	-0.00017	2.50740	-0.00012

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00037	0.32940	0.00017	2.50740	0.00012

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	-0.00037	0.32940	-0.00017	2.50740	-0.00012

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	0.00037	0.32940	0.00017	2.50740	0.00012

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00012	0.32940	0.00015	2.50740	0.00014

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00154	0.32940	0.00154	2.50740	0.00155

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	0.00012	0.32940	0.00015	2.50740	0.00014

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	0.00154	0.32940	0.00154	2.50740	0.00155

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	0.00260	0.00240	0.60000
sg13g2_or2_1	0.00262	0.00243	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	0.04791	0.32940	0.12960	0.25537	2.50740	0.60000	0.87014
	B->X (RR)	0.01860	0.00100	0.04509	0.32940	0.12960	0.24622	2.50740	0.60000	0.82835
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.04073	0.32940	0.06480	0.22935	2.50740	0.30000	0.81435
	B->X (RR)	0.01860	0.00100	0.03763	0.32940	0.06480	0.21749	2.50740	0.30000	0.76452

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	0.08138	0.32940	0.12960	0.27205	2.50740	0.60000	0.84696
	B->X (FF)	0.01860	0.00100	0.07711	0.32940	0.12960	0.28822	2.50740	0.60000	0.91214
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.06260	0.32940	0.06480	0.23241	2.50740	0.30000	0.78017
	B->X (FF)	0.01860	0.00100	0.05809	0.32940	0.06480	0.24286	2.50740	0.30000	0.83077

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	0.01597	0.32940	0.12960	0.01870	2.50740	0.60000	0.04536
	B	0.01860	0.00100	0.01569	0.32940	0.12960	0.01850	2.50740	0.60000	0.04400
sg13g2_or2_1	A	0.01860	0.00100	0.00951	0.32940	0.06480	0.01221	2.50740	0.30000	0.03942
	B	0.01860	0.00100	0.00921	0.32940	0.06480	0.01170	2.50740	0.30000	0.03839

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	0.01992	0.32940	0.12960	0.02038	2.50740	0.60000	0.04642
	B	0.01860	0.00100	0.01754	0.32940	0.12960	0.01886	2.50740	0.60000	0.04537
sg13g2_or2_1	A	0.01860	0.00100	0.01208	0.32940	0.06480	0.01394	2.50740	0.30000	0.04104
	B	0.01860	0.00100	0.00960	0.32940	0.06480	0.01247	2.50740	0.30000	0.03975

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	0.00274	0.00267	0.00253	0.60000
sg13g2_or3_1	0.00275	0.00269	0.00256	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	0.05363	0.32940	0.12960	0.27204	2.50740	0.60000	0.91622
	B->X (RR)	0.01860	0.00100	0.05142	0.32940	0.12960	0.26357	2.50740	0.60000	0.87660
	C->X (RR)	0.01860	0.00100	0.04762	0.32940	0.12960	0.25283	2.50740	0.60000	0.83842
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.04654	0.32940	0.06480	0.24799	2.50740	0.30000	0.86764
	B->X (RR)	0.01860	0.00100	0.04456	0.32940	0.06480	0.23810	2.50740	0.30000	0.82071
	C->X (RR)	0.01860	0.00100	0.04057	0.32940	0.06480	0.22537	2.50740	0.30000	0.77535

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	0.11226	0.32940	0.12960	0.29957	2.50740	0.60000	0.85675
	B->X (FF)	0.01860	0.00100	0.10865	0.32940	0.12960	0.31367	2.50740	0.60000	0.93110
	C->X (FF)	0.01860	0.00100	0.09840	0.32940	0.12960	0.32080	2.50740	0.60000	0.96975
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.08870	0.32940	0.06480	0.25778	2.50740	0.30000	0.79373
	B->X (FF)	0.01860	0.00100	0.08498	0.32940	0.06480	0.26831	2.50740	0.30000	0.85684
	C->X (FF)	0.01860	0.00100	0.07447	0.32940	0.06480	0.27084	2.50740	0.30000	0.88500

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	0.01669	0.32940	0.12960	0.01892	2.50740	0.60000	0.04629
	B	0.01860	0.00100	0.01624	0.32940	0.12960	0.01860	2.50740	0.60000	0.04428
	C	0.01860	0.00100	0.01593	0.32940	0.12960	0.01837	2.50740	0.60000	0.04324
sg13g2_or3_1	A	0.01860	0.00100	0.01010	0.32940	0.06480	0.01239	2.50740	0.30000	0.04099
	B	0.01860	0.00100	0.00972	0.32940	0.06480	0.01204	2.50740	0.30000	0.03814
	C	0.01860	0.00100	0.00942	0.32940	0.06480	0.01173	2.50740	0.30000	0.03790

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	0.02644	0.32940	0.12960	0.02492	2.50740	0.60000	0.05171
	B	0.01860	0.00100	0.02373	0.32940	0.12960	0.02252	2.50740	0.60000	0.04760
	C	0.01860	0.00100	0.02073	0.32940	0.12960	0.02072	2.50740	0.60000	0.04625
sg13g2_or3_1	A	0.01860	0.00100	0.01733	0.32940	0.06480	0.01828	2.50740	0.30000	0.04619
	B	0.01860	0.00100	0.01463	0.32940	0.06480	0.01601	2.50740	0.30000	0.04211
	C	0.01860	0.00100	0.01161	0.32940	0.06480	0.01402	2.50740	0.30000	0.04054

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	0.00275	0.00270	0.00224	0.00226	0.60000
sg13g2_or4_1	0.00275	0.00271	0.00224	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	0.05569	0.32940	0.12960	0.27950	2.50740	0.60000	0.92451
	B->X (RR)	0.01860	0.00100	0.05489	0.32940	0.12960	0.27314	2.50740	0.60000	0.88880
	C->X (RR)	0.01860	0.00100	0.05225	0.32940	0.12960	0.26470	2.50740	0.60000	0.85372
	D->X (RR)	0.01860	0.00100	0.04822	0.32940	0.12960	0.25375	2.50740	0.60000	0.81736
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.04848	0.32940	0.06480	0.25651	2.50740	0.30000	0.87307
	B->X (RR)	0.01860	0.00100	0.04800	0.32940	0.06480	0.24962	2.50740	0.30000	0.83542
	C->X (RR)	0.01860	0.00100	0.04562	0.32940	0.06480	0.23990	2.50740	0.30000	0.79570
	D->X (RR)	0.01860	0.00100	0.04137	0.32940	0.06480	0.22735	2.50740	0.30000	0.75351

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	0.15450	0.32940	0.12960	0.34808	2.50740	0.60000	0.91072
	B->X (FF)	0.01860	0.00100	0.15089	0.32940	0.12960	0.35604	2.50740	0.60000	0.98356
	C->X (FF)	0.01860	0.00100	0.14101	0.32940	0.12960	0.36180	2.50740	0.60000	1.03791
	D->X (FF)	0.01860	0.00100	0.12366	0.32940	0.12960	0.36216	2.50740	0.60000	1.06185
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.12280	0.32940	0.06480	0.29855	2.50740	0.30000	0.84362
	B->X (FF)	0.01860	0.00100	0.11916	0.32940	0.06480	0.30450	2.50740	0.30000	0.90809
	C->X (FF)	0.01860	0.00100	0.10925	0.32940	0.06480	0.30748	2.50740	0.30000	0.95319
	D->X (FF)	0.01860	0.00100	0.09163	0.32940	0.06480	0.30425	2.50740	0.30000	0.96881

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	0.01828	0.32940	0.12960	0.02001	2.50740	0.60000	0.04554
	B	0.01860	0.00100	0.01738	0.32940	0.12960	0.01915	2.50740	0.60000	0.04307
	C	0.01860	0.00100	0.01561	0.32940	0.12960	0.01770	2.50740	0.60000	0.03979
	D	0.01860	0.00100	0.01492	0.32940	0.12960	0.01734	2.50740	0.60000	0.03990
sg13g2_or4_1	A	0.01860	0.00100	0.01162	0.32940	0.06480	0.01345	2.50740	0.30000	0.04007
	B	0.01860	0.00100	0.01080	0.32940	0.06480	0.01262	2.50740	0.30000	0.03718
	C	0.01860	0.00100	0.00910	0.32940	0.06480	0.01110	2.50740	0.30000	0.03411
	D	0.01860	0.00100	0.00843	0.32940	0.06480	0.01064	2.50740	0.30000	0.03399

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	0.02864	0.32940	0.12960	0.02432	2.50740	0.60000	0.04941
	B	0.01860	0.00100	0.02890	0.32940	0.12960	0.02478	2.50740	0.60000	0.04905
	C	0.01860	0.00100	0.02698	0.32940	0.12960	0.02337	2.50740	0.60000	0.04524
	D	0.01860	0.00100	0.02301	0.32940	0.12960	0.02038	2.50740	0.60000	0.04309
sg13g2_or4_1	A	0.01860	0.00100	0.01784	0.32940	0.06480	0.01775	2.50740	0.30000	0.04355
	B	0.01860	0.00100	0.01804	0.32940	0.06480	0.01811	2.50740	0.30000	0.04259
	C	0.01860	0.00100	0.01612	0.32940	0.06480	0.01672	2.50740	0.30000	0.04001
	D	0.01860	0.00100	0.01213	0.32940	0.06480	0.01378	2.50740	0.30000	0.03806

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00073	0.32940	-0.00076	2.50740	-0.00077
sg13g2_or4_1	0.01860	-0.00073	0.32940	-0.00076	2.50740	-0.00077

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	0.00314	2.50740	0.00314
sg13g2_or4_1	0.01860	0.00315	0.32940	0.00314	2.50740	0.00314

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	-0.00073	0.32940	-0.00076	2.50740	-0.00077
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00073	0.32940	-0.00076	2.50740	-0.00077

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	0.00314	2.50740	0.00314
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00315	0.32940	0.00314	2.50740	0.00314

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00028
sg13g2_or4_1	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00028

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00028	0.32940	0.00028	2.50740	0.00028
sg13g2_or4_1	0.01860	0.00028	0.32940	0.00028	2.50740	0.00028

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	-0.00028	0.32940	-0.00028	2.50740	-0.00028
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00028	0.32940	-0.00028	2.50740	-0.00028

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	0.00028	0.32940	0.00028	2.50740	0.00028
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00028	0.32940	0.00028	2.50740	0.00028

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00082	0.32940	0.00082	2.50740	0.00083
sg13g2_or4_1	0.01860	0.00082	0.32940	0.00082	2.50740	0.00083

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	-0.00048	2.50740	-0.00048
sg13g2_or4_1	0.01860	-0.00049	0.32940	-0.00049	2.50740	-0.00048

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	0.00082	0.32940	0.00082	2.50740	0.00083
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00082	0.32940	0.00082	2.50740	0.00083

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	-0.00048	2.50740	-0.00048
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00049	0.32940	-0.00049	2.50740	-0.00048

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	0.00105	2.50740	0.00106
sg13g2_or4_1	0.01860	0.00105	0.32940	0.00105	2.50740	0.00105

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00045	0.32940	0.00047	2.50740	0.00048
sg13g2_or4_1	0.01860	0.00045	0.32940	0.00048	2.50740	0.00048

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

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	0.00045	0.32940	0.00047	2.50740	0.00048
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00045	0.32940	0.00048	2.50740	0.00048

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	x	0	x	1	0
x	x	x	0	1	x	0	1
x	x	x	1	1	x	IQ	IQN

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00205	0.00210	0.00372	0.00182	0.00548	0.00318	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1774.71000	2276.08000	2444.91000

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	0.20356	0.32940	0.06480	0.39050	2.50740	0.30000	0.96267
	SET_B->Q (FR)	0.01860	0.00100	0.08495	0.32940	0.06480	0.29412	2.50740	0.30000	0.91881

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	0.16796	0.32940	0.06480	0.33532	2.50740	0.30000	0.82832
	RESET_B->Q (FF)	0.01860	0.00100	0.13934	0.32940	0.06480	0.32436	2.50740	0.30000	0.85901

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	0.20356	0.32940	0.06480	0.39050	2.50740	0.30000	0.96267

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	0.16796	0.32940	0.06480	0.33532	2.50740	0.30000	0.82832

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	0.13907	0.32940	0.06480	0.34198	2.50740	0.30000	0.92785
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10972	0.32940	0.06480	0.33552	2.50740	0.30000	0.96611

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	0.16997	0.32940	0.06480	0.36325	2.50740	0.30000	0.84823
	SET_B->Q_N (FF)	0.01860	0.00100	0.05697	0.32940	0.06480	0.26340	2.50740	0.30000	0.81252

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	0.13907	0.32940	0.06480	0.34198	2.50740	0.30000	0.92785

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	0.16997	0.32940	0.06480	0.36325	2.50740	0.30000	0.84823

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	-0.06358	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.24498
	setup	CLK (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.19158	2.50740	2.50740	0.25383

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	-0.07091	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.21546
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.18619	2.50740	2.50740	0.25088

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	-0.08069	1.26300	1.26300	-0.20777	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.21587	2.50740	2.50740	0.29220

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	-0.09292	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.20661
	setup	CLK (R)	0.01860	0.01860	0.12470	1.26300	1.26300	0.18349	2.50740	2.50740	0.23908

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	-0.06602	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.27744
	setup	CLK (R)	0.01860	0.01860	0.08314	1.26300	1.26300	0.21857	2.50740	2.50740	0.30696

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	-0.07091	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.13492	2.50740	2.50740	0.17119

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	0.04157	1.26300	1.26300	0.07555	2.50740	2.50740	0.09150
	removal	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.07674

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	0.00734	1.26300	1.26300	0.08095	2.50740	2.50740	0.25383
	removal	CLK (R)	0.01860	0.01860	0.02690	1.26300	1.26300	0.06206	2.50740	2.50740	0.05903
	hold	RESET_B (R)	0.01860	0.01860	-0.05135	1.26300	1.26300	-0.13762	2.50740	2.50740	-0.19775
	setup	RESET_B (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.15920	2.50740	2.50740	0.23022

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	0.02681	0.32940	0.06480	0.02910	2.50740	0.30000	0.05245
	SET_B	0.01860	0.00100	0.04930	0.32940	0.06480	0.12678	2.50740	0.30000	0.45072

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	0.02585	0.32940	0.06480	0.02834	2.50740	0.30000	0.05193
	RESET_B	0.01860	0.00100	0.05584	0.32940	0.06480	0.13021	2.50740	0.30000	0.42066

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	0.02681	0.32940	0.06480	0.02910	2.50740	0.30000	0.05245

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	0.02585	0.32940	0.06480	0.02834	2.50740	0.30000	0.05193

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	0.02586	0.32940	0.06480	0.02838	2.50740	0.30000	0.05249
	RESET_B	0.01860	0.00100	0.05584	0.32940	0.06480	0.13022	2.50740	0.30000	0.42137

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	0.02681	0.32940	0.06480	0.02903	2.50740	0.30000	0.05181
	SET_B	0.01860	0.00100	0.04928	0.32940	0.06480	0.12672	2.50740	0.30000	0.45023

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	0.02586	0.32940	0.06480	0.02838	2.50740	0.30000	0.05249

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	0.02681	0.32940	0.06480	0.02903	2.50740	0.30000	0.05181

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00713	0.32940	0.00806	2.50740	0.02574

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00733	0.32940	0.00847	2.50740	0.02635

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	0.01775	0.32940	0.01895	2.50740	0.03866
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00713	0.32940	0.00806	2.50740	0.02574

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	0.01803	0.32940	0.01950	2.50740	0.03949
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00733	0.32940	0.00847	2.50740	0.02635

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00948	0.32940	0.01000	2.50740	0.02681

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00990	0.32940	0.01058	2.50740	0.02800

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	0.02011	0.32940	0.02096	2.50740	0.03945
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00948	0.32940	0.01000	2.50740	0.02681

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	0.02487	0.32940	0.02567	2.50740	0.04514
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00990	0.32940	0.01058	2.50740	0.02800

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02191	0.32940	0.02414	2.50740	0.04863

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02327	0.32940	0.02567	2.50740	0.04994

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	0.02191	0.32940	0.02414	2.50740	0.04863
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02851	0.32940	0.03019	2.50740	0.05452
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02035	0.32940	0.02424	2.50740	0.06834
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00965	0.32940	0.01317	2.50740	0.05523

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	0.02327	0.32940	0.02567	2.50740	0.04994
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.03022	0.32940	0.04007	2.50740	0.06448
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01333	0.32940	0.04450	2.50740	0.08849
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00978	0.32940	0.01305	2.50740	0.05506

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01798	0.32940	0.02209	2.50740	0.06858

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02172	0.32940	0.02654	2.50740	0.07499

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	0.01795	0.32940	0.02188	2.50740	0.06834
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02349	0.32940	0.02747	2.50740	0.07359
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01799	0.32940	0.02209	2.50740	0.06853
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01775	0.32940	0.02168	2.50740	0.06815
	(!RESET_B * !Q * Q_N)	0.01860	0.01743	0.32940	0.02157	2.50740	0.06791
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01798	0.32940	0.02209	2.50740	0.06858

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	0.01754	0.32940	0.02188	2.50740	0.06941
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03147	0.32940	0.03599	2.50740	0.08476
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02172	0.32940	0.02654	2.50740	0.07499
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.03391	0.32940	0.03870	2.50740	0.08722
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01795	0.32940	0.02239	2.50740	0.06963
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01754	0.32940	0.02188	2.50740	0.06942
	(!RESET_B * !Q * Q_N)	0.01860	0.01615	0.32940	0.02060	2.50740	0.06785
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01788	0.32940	0.02234	2.50740	0.06958

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	0.00209	0.00253	0.00532	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	0.05096	0.32940	0.06480	0.23111	2.50740	0.30000	0.82333

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	0.04386	0.32940	0.06480	0.22047	2.50740	0.30000	0.75788

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	-0.02781	1.26300	1.26300	-0.12143	2.50740	2.50740	-0.16254
	setup	CLK (R)	0.01860	0.01860	0.04300	1.26300	1.26300	0.17269	2.50740	2.50740	0.24675

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	-0.04537	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.26357
	setup	CLK (R)	0.01860	0.01860	0.06954	1.26300	1.26300	0.19698	2.50740	2.50740	0.29991

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	-0.03169	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.22148
	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	-0.04841	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.19670
	setup	CLK (R)	0.01860	0.01860	0.07544	1.26300	1.26300	0.15651	2.50740	2.50740	0.23021

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	0.01481	0.32940	0.06480	0.01669	2.50740	0.30000	0.04688

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	0.00984	0.32940	0.06480	0.01366	2.50740	0.30000	0.04494

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.03010	0.32940	0.03317	2.50740	0.06351

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.03034	0.32940	0.05084	2.50740	0.08177

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	0.03010	0.32940	0.03317	2.50740	0.06351

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	0.03034	0.32940	0.05084	2.50740	0.08177

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01629	0.32940	0.01867	2.50740	0.04967

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.03148	0.32940	0.04913	2.50740	0.07933

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01063	0.32940	0.01427	2.50740	0.05408

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01076	0.32940	0.01482	2.50740	0.05592

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	0.00594	0.00522	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	0.04987	0.32940	0.06480	0.23086	2.50740	0.30000	0.82251
	A->Y (FR)	0.01860	0.00100	0.03829	0.32940	0.06480	0.38539	2.50740	0.30000	1.90071
	B->Y (RR)	0.01860	0.00100	0.04664	0.32940	0.06480	0.23344	2.50740	0.30000	0.84481
	B->Y (FR)	0.01860	0.00100	0.03401	0.32940	0.06480	0.41775	2.50740	0.30000	2.16032

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	0.05027	0.32940	0.06480	0.29556	2.50740	0.30000	1.08745
	A->Y (RF)	0.01860	0.00100	0.03308	0.32940	0.06480	0.31503	2.50740	0.30000	1.58967
	B->Y (FF)	0.01860	0.00100	0.05021	0.32940	0.06480	0.28576	2.50740	0.30000	1.05949
	B->Y (RF)	0.01860	0.00100	0.02774	0.32940	0.06480	0.30842	2.50740	0.30000	1.57757

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	0.01233	0.32940	0.06480	0.01472	2.50740	0.30000	0.04521
	B	0.01860	0.00100	0.01222	0.32940	0.06480	0.01512	2.50740	0.30000	0.04607

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	0.01076	0.32940	0.06480	0.01410	2.50740	0.30000	0.04606
	B	0.01860	0.00100	0.01159	0.32940	0.06480	0.01311	2.50740	0.30000	0.04505

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	0.00617	0.00539	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	0.05130	0.32940	0.06480	0.36924	2.50740	0.30000	1.43213
	A->X (FR)	0.01860	0.00100	0.04193	0.32940	0.06480	0.38991	2.50740	0.30000	1.90907
	B->X (RR)	0.01860	0.00100	0.05305	0.32940	0.06480	0.35788	2.50740	0.30000	1.38596
	B->X (FR)	0.01860	0.00100	0.03543	0.32940	0.06480	0.38268	2.50740	0.30000	1.89784

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	0.22361	2.50740	0.30000	0.74197
	A->X (RF)	0.01860	0.00100	0.03111	0.32940	0.06480	0.31251	2.50740	0.30000	1.58066
	B->X (FF)	0.01860	0.00100	0.05505	0.32940	0.06480	0.23178	2.50740	0.30000	0.78434
	B->X (RF)	0.01860	0.00100	0.02789	0.32940	0.06480	0.33748	2.50740	0.30000	1.75932

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	0.01077	0.32940	0.06480	0.01367	2.50740	0.30000	0.04412
	B	0.01860	0.00100	0.01154	0.32940	0.06480	0.01285	2.50740	0.30000	0.04298

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	0.01343	0.32940	0.06480	0.01568	2.50740	0.30000	0.04621
	B	0.01860	0.00100	0.01241	0.32940	0.06480	0.01521	2.50740	0.30000	0.04556