

sg13g2_stdcell_fast_1p32V_m40C 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_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00585	0.00642	0.00571	0.60000
sg13g2_a21oi_1	0.00304	0.00320	0.00291	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	317.74900	583.54100	764.88500
sg13g2_a21oi_1	158.87400	291.77100	382.44300

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	0.02953	0.32940	0.12960	0.36908	2.50740	0.60000	1.86786
	A2->Y (FR)	0.01860	0.00100	0.03519	0.32940	0.12960	0.37448	2.50740	0.60000	1.87301
	B1->Y (FR)	0.01860	0.00100	0.02831	0.32940	0.12960	0.39982	2.50740	0.60000	2.09715
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.03216	0.32940	0.06480	0.36840	2.50740	0.30000	1.86419
	A2->Y (FR)	0.01860	0.00100	0.03766	0.32940	0.06480	0.37491	2.50740	0.30000	1.87395
	B1->Y (FR)	0.01860	0.00100	0.03080	0.32940	0.06480	0.40044	2.50740	0.30000	2.09851

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	0.02733	0.32940	0.12960	0.35843	2.50740	0.60000	1.90118
	A2->Y (RF)	0.01860	0.00100	0.03022	0.32940	0.12960	0.33372	2.50740	0.60000	1.72017
	B1->Y (RF)	0.01860	0.00100	0.01525	0.32940	0.12960	0.26283	2.50740	0.60000	1.46176
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.02969	0.32940	0.06480	0.35873	2.50740	0.30000	1.89950
	A2->Y (RF)	0.01860	0.00100	0.03226	0.32940	0.06480	0.33351	2.50740	0.30000	1.71826
	B1->Y (RF)	0.01860	0.00100	0.01687	0.32940	0.06480	0.26349	2.50740	0.30000	1.46384

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	0.02831	0.32940	0.12960	0.39982	2.50740	0.60000	2.09715
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02176	0.32940	0.12960	0.39377	2.50740	0.60000	2.09457
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01848	0.32940	0.12960	0.33340	2.50740	0.60000	1.80947
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.03080	0.32940	0.06480	0.40044	2.50740	0.30000	2.09851
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02444	0.32940	0.06480	0.39232	2.50740	0.30000	2.08527
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02064	0.32940	0.06480	0.33313	2.50740	0.30000	1.80650

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	0.01525	0.32940	0.12960	0.26283	2.50740	0.60000	1.46176
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01497	0.32940	0.12960	0.26187	2.50740	0.60000	1.45921
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01473	0.32940	0.12960	0.26163	2.50740	0.60000	1.46031
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01687	0.32940	0.06480	0.26349	2.50740	0.30000	1.46384
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01658	0.32940	0.06480	0.26249	2.50740	0.30000	1.46146
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01635	0.32940	0.06480	0.26226	2.50740	0.30000	1.46232

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	0.00871	0.32940	0.12960	0.00928	2.50740	0.60000	0.01912
	A2	0.01860	0.00100	0.01119	0.32940	0.12960	0.01162	2.50740	0.60000	0.02160
	B1	0.01860	0.00100	0.00712	0.32940	0.12960	0.00830	2.50740	0.60000	0.02088
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00446	0.32940	0.06480	0.00468	2.50740	0.30000	0.00945
	A2	0.01860	0.00100	0.00557	0.32940	0.06480	0.00575	2.50740	0.30000	0.01078
	B1	0.01860	0.00100	0.00355	0.32940	0.06480	0.00409	2.50740	0.30000	0.01039

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	0.00802	0.32940	0.12960	0.00846	2.50740	0.60000	0.01928
	A2	0.01860	0.00100	0.01127	0.32940	0.12960	0.01104	2.50740	0.60000	0.02078
	B1	0.01860	0.00100	0.00205	0.32940	0.12960	0.00383	2.50740	0.60000	0.01666
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00439	0.32940	0.06480	0.00459	2.50740	0.30000	0.00996
	A2	0.01860	0.00100	0.00590	0.32940	0.06480	0.00579	2.50740	0.30000	0.01075
	B1	0.01860	0.00100	0.00137	0.32940	0.06480	0.00218	2.50740	0.30000	0.00862

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	0.00712	0.32940	0.12960	0.00830	2.50740	0.60000	0.02088
	B1	(!A1 * A2)	0.01860	0.00100	0.00622	0.32940	0.12960	0.00776	2.50740	0.60000	0.02065
	B1	(!A1 * !A2)	0.01860	0.00100	0.00625	0.32940	0.12960	0.00775	2.50740	0.60000	0.02194
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00355	0.32940	0.06480	0.00409	2.50740	0.30000	0.01039
	B1	(!A1 * A2)	0.01860	0.00100	0.00321	0.32940	0.06480	0.00390	2.50740	0.30000	0.01013
	B1	(!A1 * !A2)	0.01860	0.00100	0.00322	0.32940	0.06480	0.00389	2.50740	0.30000	0.01114

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	0.00647	0.32940	0.12960	0.00821	2.50740	0.60000	0.02034
	B1	(!A1 * A2)	0.01860	0.00100	0.00225	0.32940	0.12960	0.00409	2.50740	0.60000	0.01591
	B1	(!A1 * !A2)	0.01860	0.00100	0.00205	0.32940	0.12960	0.00383	2.50740	0.60000	0.01666
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00359	0.32940	0.06480	0.00437	2.50740	0.30000	0.01037
	B1	(!A1 * A2)	0.01860	0.00100	0.00148	0.32940	0.06480	0.00230	2.50740	0.30000	0.00826
	B1	(!A1 * !A2)	0.01860	0.00100	0.00137	0.32940	0.06480	0.00218	2.50740	0.30000	0.00862

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00163	0.32940	-0.00160	2.50740	-0.00161
sg13g2_a21oi_1	0.01860	-0.00080	0.32940	-0.00080	2.50740	-0.00080

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00222	0.32940	0.00223	2.50740	0.00224
sg13g2_a21oi_1	0.01860	0.00102	0.32940	0.00102	2.50740	0.00103

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00163	0.32940	-0.00160	2.50740	-0.00161
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00080	0.32940	-0.00080	2.50740	-0.00080

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	0.00222	0.32940	0.00223	2.50740	0.00224
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00102	0.32940	0.00102	2.50740	0.00103

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00043	0.32940	-0.00015	2.50740	-0.00006
sg13g2_a21oi_1	0.01860	-0.00021	0.32940	-0.00008	2.50740	-0.00004

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00043	0.32940	0.00015	2.50740	0.00006
sg13g2_a21oi_1	0.01860	0.00021	0.32940	0.00008	2.50740	0.00004

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	-0.00043	0.32940	-0.00015	2.50740	-0.00006
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	-0.00021	0.32940	-0.00008	2.50740	-0.00004

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	0.00043	0.32940	0.00015	2.50740	0.00006
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00021	0.32940	0.00008	2.50740	0.00004

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00109	0.32940	0.00109	2.50740	0.00109
sg13g2_a21oi_1	0.01860	0.00059	0.32940	0.00060	2.50740	0.00060

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00109	0.32940	-0.00109	2.50740	-0.00109
sg13g2_a21oi_1	0.01860	-0.00059	0.32940	-0.00060	2.50740	-0.00060

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	0.00109	0.32940	0.00109	2.50740	0.00109
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00059	0.32940	0.00060	2.50740	0.00060

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	-0.00109	0.32940	-0.00109	2.50740	-0.00109
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00059	0.32940	-0.00060	2.50740	-0.00060

A221OI



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00316	0.00323	0.00292	0.00301	0.00267	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	238.70800	456.17800	622.82600

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	0.06049	0.32940	0.12960	0.85581	2.50740	0.60000	3.96006
	A2->Y (FR)	0.01860	0.00100	0.06865	0.32940	0.12960	0.86227	2.50740	0.60000	3.96163
	B1->Y (FR)	0.01860	0.00100	0.06271	0.32940	0.12960	0.87823	2.50740	0.60000	4.18304
	B2->Y (FR)	0.01860	0.00100	0.07064	0.32940	0.12960	0.88387	2.50740	0.60000	4.18143
	C1->Y (FR)	0.01860	0.00100	0.04598	0.32940	0.12960	0.88238	2.50740	0.60000	4.34926

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	0.03855	0.32940	0.12960	0.56921	2.50740	0.60000	2.93377
	A2->Y (RF)	0.01860	0.00100	0.04076	0.32940	0.12960	0.54024	2.50740	0.60000	2.70326
	B1->Y (RF)	0.01860	0.00100	0.03425	0.32940	0.12960	0.56068	2.50740	0.60000	2.92316
	B2->Y (RF)	0.01860	0.00100	0.03674	0.32940	0.12960	0.53197	2.50740	0.60000	2.69264
	C1->Y (RF)	0.01860	0.00100	0.01916	0.32940	0.12960	0.38796	2.50740	0.60000	2.15152

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	0.07009	0.32940	0.12960	0.86327	2.50740	0.60000	3.95992
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.06049	0.32940	0.12960	0.85581	2.50740	0.60000	3.96006
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.05509	0.32940	0.12960	0.74079	2.50740	0.60000	3.49017
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.07804	0.32940	0.12960	0.86966	2.50740	0.60000	3.96143
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.06865	0.32940	0.12960	0.86227	2.50740	0.60000	3.96163
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.06176	0.32940	0.12960	0.74553	2.50740	0.60000	3.49080
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06271	0.32940	0.12960	0.87823	2.50740	0.60000	4.18304
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05308	0.32940	0.12960	0.86983	2.50740	0.60000	4.17923
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04503	0.32940	0.12960	0.74243	2.50740	0.60000	3.61682
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.07064	0.32940	0.12960	0.88387	2.50740	0.60000	4.18143
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.06128	0.32940	0.12960	0.87540	2.50740	0.60000	4.17832
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.05164	0.32940	0.12960	0.74654	2.50740	0.60000	3.61440
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04598	0.32940	0.12960	0.88238	2.50740	0.60000	4.34926

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	0.03766	0.32940	0.12960	0.56903	2.50740	0.60000	2.93337
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03696	0.32940	0.12960	0.56658	2.50740	0.60000	2.93074
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.03855	0.32940	0.12960	0.56921	2.50740	0.60000	2.93377
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.03987	0.32940	0.12960	0.54009	2.50740	0.60000	2.70174
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.03917	0.32940	0.12960	0.53771	2.50740	0.60000	2.69975
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.04076	0.32940	0.12960	0.54024	2.50740	0.60000	2.70326
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03425	0.32940	0.12960	0.56068	2.50740	0.60000	2.92316
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03373	0.32940	0.12960	0.55828	2.50740	0.60000	2.92019
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03341	0.32940	0.12960	0.55793	2.50740	0.60000	2.92043
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03674	0.32940	0.12960	0.53197	2.50740	0.60000	2.69264
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03622	0.32940	0.12960	0.52961	2.50740	0.60000	2.68999
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03591	0.32940	0.12960	0.52927	2.50740	0.60000	2.69013
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01916	0.32940	0.12960	0.38796	2.50740	0.60000	2.15152

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	0.01007	0.32940	0.12960	0.01047	2.50740	0.60000	0.01214
	A2	0.01860	0.00100	0.01020	0.32940	0.12960	0.01049	2.50740	0.60000	0.01215
	B1	0.01860	0.00100	0.00800	0.32940	0.12960	0.00813	2.50740	0.60000	0.01108
	B2	0.01860	0.00100	0.00816	0.32940	0.12960	0.00810	2.50740	0.60000	0.01062
	C1	0.01860	0.00100	0.00405	0.32940	0.12960	0.00471	2.50740	0.60000	0.00781

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	0.00583	0.32940	0.12960	0.00584	2.50740	0.60000	0.00710
	A2	0.01860	0.00100	0.00789	0.32940	0.12960	0.00781	2.50740	0.60000	0.00895
	B1	0.01860	0.00100	0.00311	0.32940	0.12960	0.00323	2.50740	0.60000	0.00484
	B2	0.01860	0.00100	0.00525	0.32940	0.12960	0.00524	2.50740	0.60000	0.00670
	C1	0.01860	0.00100	0.00378	0.32940	0.12960	0.00416	2.50740	0.60000	0.00734

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	0.01007	0.32940	0.12960	0.01047	2.50740	0.60000	0.01214
	A1	(!B1 * B2)	0.01860	0.00100	0.00974	0.32940	0.12960	0.00986	2.50740	0.60000	0.01213
	A1	(!B1 * !B2)	0.01860	0.00100	0.01218	0.32940	0.12960	0.01222	2.50740	0.60000	0.01509
	A2	(B1 * !B2)	0.01860	0.00100	0.01020	0.32940	0.12960	0.01049	2.50740	0.60000	0.01215
	A2	(!B1 * B2)	0.01860	0.00100	0.00995	0.32940	0.12960	0.01026	2.50740	0.60000	0.01194
	A2	(!B1 * !B2)	0.01860	0.00100	0.01235	0.32940	0.12960	0.01207	2.50740	0.60000	0.01574
	B1	(A1 * !A2)	0.01860	0.00100	0.00832	0.32940	0.12960	0.00877	2.50740	0.60000	0.01077
	B1	(!A1 * A2)	0.01860	0.00100	0.00798	0.32940	0.12960	0.00814	2.50740	0.60000	0.01035
	B1	(!A1 * !A2)	0.01860	0.00100	0.00800	0.32940	0.12960	0.00813	2.50740	0.60000	0.01108
	B2	(A1 * !A2)	0.01860	0.00100	0.00844	0.32940	0.12960	0.00812	2.50740	0.60000	0.01074
	B2	(!A1 * A2)	0.01860	0.00100	0.00816	0.32940	0.12960	0.00851	2.50740	0.60000	0.01063
	B2	(!A1 * !A2)	0.01860	0.00100	0.00816	0.32940	0.12960	0.00810	2.50740	0.60000	0.01062
	C1	(!A1 * A2)	0.01860	0.00100	0.00405	0.32940	0.12960	0.00471	2.50740	0.60000	0.00781

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	0.00794	0.32940	0.12960	0.00784	2.50740	0.60000	0.00926
	A1	(!B1 * B2)	0.01860	0.00100	0.00583	0.32940	0.12960	0.00584	2.50740	0.60000	0.00710
	A1	(!B1 * !B2)	0.01860	0.00100	0.00474	0.32940	0.12960	0.00451	2.50740	0.60000	0.00613
	A2	(B1 * !B2)	0.01860	0.00100	0.01000	0.32940	0.12960	0.00973	2.50740	0.60000	0.01101
	A2	(!B1 * B2)	0.01860	0.00100	0.00789	0.32940	0.12960	0.00781	2.50740	0.60000	0.00895
	A2	(!B1 * !B2)	0.01860	0.00100	0.00678	0.32940	0.12960	0.00650	2.50740	0.60000	0.00809
	B1	(A1 * !A2)	0.01860	0.00100	0.00533	0.32940	0.12960	0.00556	2.50740	0.60000	0.00678
	B1	(!A1 * A2)	0.01860	0.00100	0.00322	0.32940	0.12960	0.00345	2.50740	0.60000	0.00472
	B1	(!A1 * !A2)	0.01860	0.00100	0.00311	0.32940	0.12960	0.00323	2.50740	0.60000	0.00484
	B2	(A1 * !A2)	0.01860	0.00100	0.00747	0.32940	0.12960	0.00739	2.50740	0.60000	0.00862
	B2	(!A1 * A2)	0.01860	0.00100	0.00536	0.32940	0.12960	0.00547	2.50740	0.60000	0.00655
	B2	(!A1 * !A2)	0.01860	0.00100	0.00525	0.32940	0.12960	0.00524	2.50740	0.60000	0.00670
	C1	(!A1 * A2)	0.01860	0.00100	0.00378	0.32940	0.12960	0.00416	2.50740	0.60000	0.00734

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	0.00000	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	0.00000	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	0.00000	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_a221oi_1	(B1 * B2 * !C1)	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_a221oi_1	0.01860	0.00063	0.32940	0.00064	2.50740	0.00064

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00063	0.32940	-0.00064	2.50740	-0.00064

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	0.00082	0.32940	0.00086	2.50740	0.00093
	(A1 * A2 * !C1)	0.01860	0.00063	0.32940	0.00064	2.50740	0.00064

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	-0.00016	0.32940	-0.00016	2.50740	-0.00016
	(A1 * A2 * !C1)	0.01860	-0.00063	0.32940	-0.00064	2.50740	-0.00064

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00065	0.32940	0.00066	2.50740	0.00067

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00065	0.32940	-0.00066	2.50740	-0.00067

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	0.00083	0.32940	0.00089	2.50740	0.00095
	(A1 * A2 * !C1)	0.01860	0.00065	0.32940	0.00066	2.50740	0.00067

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	-0.00018	0.32940	-0.00018	2.50740	-0.00018
	(A1 * A2 * !C1)	0.01860	-0.00065	0.32940	-0.00066	2.50740	-0.00067

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00061	0.32940	0.00061	2.50740	0.00061

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00071	0.32940	0.00074	2.50740	0.00075

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	0.00061	0.32940	0.00061	2.50740	0.00061

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	0.00071	0.32940	0.00074	2.50740	0.00075

A22OI



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00292	0.00329	0.00377	0.00381	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	159.67300	355.45600	512.41900

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	0.03315	0.32940	0.06480	0.33332	2.50740	0.30000	1.72281
	A2->Y (FR)	0.01860	0.00100	0.03699	0.32940	0.06480	0.33785	2.50740	0.30000	1.72908
	B1->Y (FR)	0.01860	0.00100	0.02714	0.32940	0.06480	0.33888	2.50740	0.30000	1.80683
	B2->Y (FR)	0.01860	0.00100	0.02314	0.32940	0.06480	0.33417	2.50740	0.30000	1.79955

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	0.03686	0.32940	0.06480	0.36650	2.50740	0.30000	1.91052
	A2->Y (RF)	0.01860	0.00100	0.03922	0.32940	0.06480	0.34062	2.50740	0.30000	1.72855
	B1->Y (RF)	0.01860	0.00100	0.02810	0.32940	0.06480	0.32737	2.50740	0.30000	1.71149
	B2->Y (RF)	0.01860	0.00100	0.02518	0.32940	0.06480	0.35241	2.50740	0.30000	1.89194

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	0.00344	0.32940	0.06480	0.00351	2.50740	0.30000	0.00860
	A2	0.01860	0.00100	0.00449	0.32940	0.06480	0.00443	2.50740	0.30000	0.00957
	B1	0.01860	0.00100	0.00177	0.32940	0.06480	0.00215	2.50740	0.30000	0.00853
	B2	0.01860	0.00100	0.00156	0.32940	0.06480	0.00209	2.50740	0.30000	0.00839

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	0.00024	0.32940	0.06480	0.00070	2.50740	0.30000	0.00654
	A2	0.01860	0.00100	0.00173	0.32940	0.06480	0.00199	2.50740	0.30000	0.00735
	B1	0.01860	0.00100	-0.00177	0.32940	0.06480	-0.00215	2.50740	0.30000	0.00099
	B2	0.01860	0.00100	-0.00156	0.32940	0.06480	-0.00209	2.50740	0.30000	0.00165

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00393	0.32940	0.00359	2.50740	0.00351

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00499	0.32940	0.00496	2.50740	0.00495

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00452	0.32940	0.00417	2.50740	0.00411

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00410	0.32940	0.00407	2.50740	0.00407

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00903	0.32940	0.00929	2.50740	0.00960

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00154	0.32940	0.00156	2.50740	0.00157

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00706	0.32940	0.00734	2.50740	0.00764

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00147	0.32940	0.00151	2.50740	0.00152

AND2x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00272	0.00275	0.60000
sg13g2_and2_1	0.00274	0.00277	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	376.01900	422.90000	475.39400
sg13g2_and2_1	218.16900	284.75100	341.22400

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	0.05846	0.32940	0.12960	0.27048	2.50740	0.60000	0.90561
	B->X (RR)	0.01860	0.00100	0.06100	0.32940	0.12960	0.26370	2.50740	0.60000	0.88166
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.04730	0.32940	0.06480	0.23476	2.50740	0.30000	0.83469
	B->X (RR)	0.01860	0.00100	0.05004	0.32940	0.06480	0.23265	2.50740	0.30000	0.81782

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	0.04839	0.32940	0.12960	0.23653	2.50740	0.60000	0.74711
	B->X (FF)	0.01860	0.00100	0.05163	0.32940	0.12960	0.24674	2.50740	0.60000	0.77458
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.03959	0.32940	0.06480	0.20380	2.50740	0.30000	0.67574
	B->X (FF)	0.01860	0.00100	0.04308	0.32940	0.06480	0.21548	2.50740	0.30000	0.70666

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	0.01317	0.32940	0.12960	0.01481	2.50740	0.60000	0.03096
	B	0.01860	0.00100	0.01499	0.32940	0.12960	0.01612	2.50740	0.60000	0.03176
sg13g2_and2_1	A	0.01860	0.00100	0.00797	0.32940	0.06480	0.00955	2.50740	0.30000	0.02750
	B	0.01860	0.00100	0.00984	0.32940	0.06480	0.01082	2.50740	0.30000	0.02782

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	0.01160	0.32940	0.12960	0.01345	2.50740	0.60000	0.03019
	B	0.01860	0.00100	0.01169	0.32940	0.12960	0.01394	2.50740	0.60000	0.03060
sg13g2_and2_1	A	0.01860	0.00100	0.00692	0.32940	0.06480	0.00873	2.50740	0.30000	0.02622
	B	0.01860	0.00100	0.00705	0.32940	0.06480	0.00882	2.50740	0.30000	0.02625

AND3x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00254	0.00270	0.00273	0.60000
sg13g2_and3_1	0.00255	0.00272	0.00273	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	378.68700	477.15400	575.86100
sg13g2_and3_1	220.83800	329.15700	472.36100

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_and3_2	A->X (RR)	0.01860	0.00100	0.07882	0.32940	0.12960	0.30644	2.50740	0.60000	0.98622
	B->X (RR)	0.01860	0.00100	0.08511	0.32940	0.12960	0.30374	2.50740	0.60000	0.97143
	C->X (RR)	0.01860	0.00100	0.08754	0.32940	0.12960	0.29373	2.50740	0.60000	0.92662
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.06267	0.32940	0.06480	0.26405	2.50740	0.30000	0.90467
	B->X (RR)	0.01860	0.00100	0.06910	0.32940	0.06480	0.26456	2.50740	0.30000	0.89670
	C->X (RR)	0.01860	0.00100	0.07149	0.32940	0.06480	0.25833	2.50740	0.30000	0.85996

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	0.05063	0.32940	0.12960	0.24174	2.50740	0.60000	0.74307
	B->X (FF)	0.01860	0.00100	0.05411	0.32940	0.12960	0.25168	2.50740	0.60000	0.76992
	C->X (FF)	0.01860	0.00100	0.05632	0.32940	0.12960	0.25901	2.50740	0.60000	0.79689
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.04210	0.32940	0.06480	0.20999	2.50740	0.30000	0.67308
	B->X (FF)	0.01860	0.00100	0.04571	0.32940	0.06480	0.22155	2.50740	0.30000	0.70170
	C->X (FF)	0.01860	0.00100	0.04786	0.32940	0.06480	0.22982	2.50740	0.30000	0.73199

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	0.01566	0.32940	0.12960	0.01638	2.50740	0.60000	0.03168
	B	0.01860	0.00100	0.01658	0.32940	0.12960	0.01683	2.50740	0.60000	0.03121
	C	0.01860	0.00100	0.01834	0.32940	0.12960	0.01842	2.50740	0.60000	0.03278
sg13g2_and3_1	A	0.01860	0.00100	0.00995	0.32940	0.06480	0.01132	2.50740	0.30000	0.02765
	B	0.01860	0.00100	0.01097	0.32940	0.06480	0.01170	2.50740	0.30000	0.02727
	C	0.01860	0.00100	0.01269	0.32940	0.06480	0.01315	2.50740	0.30000	0.02891

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	0.01095	0.32940	0.12960	0.01257	2.50740	0.60000	0.02795
	B	0.01860	0.00100	0.01195	0.32940	0.12960	0.01376	2.50740	0.60000	0.02877
	C	0.01860	0.00100	0.01207	0.32940	0.12960	0.01389	2.50740	0.60000	0.02979
sg13g2_and3_1	A	0.01860	0.00100	0.00625	0.32940	0.06480	0.00776	2.50740	0.30000	0.02406
	B	0.01860	0.00100	0.00727	0.32940	0.06480	0.00878	2.50740	0.30000	0.02467
	C	0.01860	0.00100	0.00741	0.32940	0.06480	0.00892	2.50740	0.30000	0.02557

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00078	0.32940	-0.00080	2.50740	-0.00086
sg13g2_and3_1	0.01860	-0.00078	0.32940	-0.00080	2.50740	-0.00086

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00078	0.32940	0.00080	2.50740	0.00086
sg13g2_and3_1	0.01860	0.00078	0.32940	0.00080	2.50740	0.00086

AND4x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00243	0.00244	0.00282	0.00277	0.60000
sg13g2_and4_1	0.00244	0.00244	0.00282	0.00277	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	381.38000	515.19400	682.47800
sg13g2_and4_1	223.52500	362.26500	603.43600

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	0.10004	0.32940	0.12960	0.34042	2.50740	0.60000	1.05503
	B->X (RR)	0.01860	0.00100	0.10938	0.32940	0.12960	0.34080	2.50740	0.60000	1.04478
	C->X (RR)	0.01860	0.00100	0.11474	0.32940	0.12960	0.33405	2.50740	0.60000	1.00876
	D->X (RR)	0.01860	0.00100	0.11730	0.32940	0.12960	0.32732	2.50740	0.60000	0.96463
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.07922	0.32940	0.06480	0.29344	2.50740	0.30000	0.97079
	B->X (RR)	0.01860	0.00100	0.08876	0.32940	0.06480	0.29646	2.50740	0.30000	0.96934
	C->X (RR)	0.01860	0.00100	0.09407	0.32940	0.06480	0.29302	2.50740	0.30000	0.93889
	D->X (RR)	0.01860	0.00100	0.09662	0.32940	0.06480	0.28841	2.50740	0.30000	0.89998

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	0.05231	0.32940	0.12960	0.24522	2.50740	0.60000	0.73752
	B->X (FF)	0.01860	0.00100	0.05580	0.32940	0.12960	0.25448	2.50740	0.60000	0.76164
	C->X (FF)	0.01860	0.00100	0.05830	0.32940	0.12960	0.26172	2.50740	0.60000	0.78804
	D->X (FF)	0.01860	0.00100	0.06013	0.32940	0.12960	0.26822	2.50740	0.60000	0.81226
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.04427	0.32940	0.06480	0.21411	2.50740	0.30000	0.66538
	B->X (FF)	0.01860	0.00100	0.04789	0.32940	0.06480	0.22478	2.50740	0.30000	0.69414
	C->X (FF)	0.01860	0.00100	0.05033	0.32940	0.06480	0.23322	2.50740	0.30000	0.72211
	D->X (FF)	0.01860	0.00100	0.05196	0.32940	0.06480	0.24049	2.50740	0.30000	0.75047

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	0.01660	0.32940	0.12960	0.01652	2.50740	0.60000	0.03063
	B	0.01860	0.00100	0.01866	0.32940	0.12960	0.01812	2.50740	0.60000	0.03101
	C	0.01860	0.00100	0.01993	0.32940	0.12960	0.01913	2.50740	0.60000	0.03250
	D	0.01860	0.00100	0.01974	0.32940	0.12960	0.01878	2.50740	0.60000	0.03281
sg13g2_and4_1	A	0.01860	0.00100	0.01045	0.32940	0.06480	0.01154	2.50740	0.30000	0.02649
	B	0.01860	0.00100	0.01242	0.32940	0.06480	0.01294	2.50740	0.30000	0.02729
	C	0.01860	0.00100	0.01370	0.32940	0.06480	0.01402	2.50740	0.30000	0.02849
	D	0.01860	0.00100	0.01349	0.32940	0.06480	0.01372	2.50740	0.30000	0.02823

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	0.01131	0.32940	0.12960	0.01291	2.50740	0.60000	0.02743
	B	0.01860	0.00100	0.01164	0.32940	0.12960	0.01318	2.50740	0.60000	0.02807
	C	0.01860	0.00100	0.01244	0.32940	0.12960	0.01402	2.50740	0.60000	0.02953
	D	0.01860	0.00100	0.01252	0.32940	0.12960	0.01421	2.50740	0.60000	0.02936
sg13g2_and4_1	A	0.01860	0.00100	0.00663	0.32940	0.06480	0.00793	2.50740	0.30000	0.02312
	B	0.01860	0.00100	0.00694	0.32940	0.06480	0.00815	2.50740	0.30000	0.02345
	C	0.01860	0.00100	0.00774	0.32940	0.06480	0.00899	2.50740	0.30000	0.02474
	D	0.01860	0.00100	0.00781	0.32940	0.06480	0.00916	2.50740	0.30000	0.02542

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00033	0.32940	-0.00031	2.50740	-0.00031
sg13g2_and4_1	0.01860	-0.00032	0.32940	-0.00031	2.50740	-0.00031

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00093	0.32940	0.00093	2.50740	0.00093
sg13g2_and4_1	0.01860	0.00093	0.32940	0.00093	2.50740	0.00093

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	-0.00033	0.32940	-0.00031	2.50740	-0.00031
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00032	0.32940	-0.00031	2.50740	-0.00031

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	0.00093	0.32940	0.00093	2.50740	0.00093
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00093	0.32940	0.00093	2.50740	0.00093

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00041	0.32940	-0.00040	2.50740	-0.00040
sg13g2_and4_1	0.01860	-0.00041	0.32940	-0.00040	2.50740	-0.00040

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00066	0.32940	0.00066	2.50740	0.00067
sg13g2_and4_1	0.01860	0.00066	0.32940	0.00066	2.50740	0.00067

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	-0.00041	0.32940	-0.00040	2.50740	-0.00040
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00041	0.32940	-0.00040	2.50740	-0.00040

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	0.00066	0.32940	0.00066	2.50740	0.00067
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00066	0.32940	0.00066	2.50740	0.00067

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	0.00182	0.32940	0.00181	2.50740	0.00180
sg13g2_and4_1	0.01860	0.00182	0.32940	0.00181	2.50740	0.00180

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00013	0.32940	0.00004	2.50740	0.00000
sg13g2_and4_1	0.01860	0.00013	0.32940	0.00004	2.50740	0.00000

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	0.00182	0.32940	0.00181	2.50740	0.00180
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00182	0.32940	0.00181	2.50740	0.00180

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	0.00013	0.32940	0.00004	2.50740	0.00000
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00013	0.32940	0.00004	2.50740	0.00000

A021x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00321	0.00317	0.00279	0.60000
sg13g2_a21o_1	0.00300	0.00307	0.00264	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	433.38100	496.65500	579.98400
sg13g2_a21o_1	298.78800	357.49200	398.18900

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	0.06186	0.32940	0.12960	0.27642	2.50740	0.60000	0.90619
	A2->X (RR)	0.01860	0.00100	0.06400	0.32940	0.12960	0.26811	2.50740	0.60000	0.87929
	B1->X (RR)	0.01860	0.00100	0.04050	0.32940	0.12960	0.24025	2.50740	0.60000	0.81168
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.05757	0.32940	0.06480	0.25955	2.50740	0.30000	0.88895
	A2->X (RR)	0.01860	0.00100	0.05986	0.32940	0.06480	0.25366	2.50740	0.30000	0.86616
	B1->X (RR)	0.01860	0.00100	0.03792	0.32940	0.06480	0.22490	2.50740	0.30000	0.79517

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	0.07704	0.32940	0.12960	0.26318	2.50740	0.60000	0.79304
	A2->X (FF)	0.01860	0.00100	0.08360	0.32940	0.12960	0.27507	2.50740	0.60000	0.81910
	B1->X (FF)	0.01860	0.00100	0.07725	0.32940	0.12960	0.28428	2.50740	0.60000	0.86978
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.06132	0.32940	0.06480	0.22672	2.50740	0.30000	0.70580
	A2->X (FF)	0.01860	0.00100	0.06724	0.32940	0.06480	0.23853	2.50740	0.30000	0.73458
	B1->X (FF)	0.01860	0.00100	0.06051	0.32940	0.06480	0.24086	2.50740	0.30000	0.76864

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	0.04050	0.32940	0.12960	0.24025	2.50740	0.60000	0.81168
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03907	0.32940	0.12960	0.23030	2.50740	0.60000	0.78354
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.03792	0.32940	0.06480	0.22490	2.50740	0.30000	0.79517
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03587	0.32940	0.06480	0.21380	2.50740	0.30000	0.76507

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	0.07725	0.32940	0.12960	0.28428	2.50740	0.60000	0.86978
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.06930	0.32940	0.12960	0.26956	2.50740	0.60000	0.84273
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.06051	0.32940	0.06480	0.24086	2.50740	0.30000	0.76864
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.05367	0.32940	0.06480	0.22614	2.50740	0.30000	0.73814

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	0.01405	0.32940	0.12960	0.01571	2.50740	0.60000	0.03379
	A2	0.01860	0.00100	0.01619	0.32940	0.12960	0.01725	2.50740	0.60000	0.03423
	B1	0.01860	0.00100	0.01200	0.32940	0.12960	0.01372	2.50740	0.60000	0.03384
sg13g2_a21o_1	A1	0.01860	0.00100	0.00893	0.32940	0.06480	0.01035	2.50740	0.30000	0.02765
	A2	0.01860	0.00100	0.01077	0.32940	0.06480	0.01171	2.50740	0.30000	0.02801
	B1	0.01860	0.00100	0.00697	0.32940	0.06480	0.00847	2.50740	0.30000	0.02796

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	0.01553	0.32940	0.12960	0.01629	2.50740	0.60000	0.03348
	A2	0.01860	0.00100	0.01558	0.32940	0.12960	0.01656	2.50740	0.60000	0.03390
	B1	0.01860	0.00100	0.01258	0.32940	0.12960	0.01444	2.50740	0.60000	0.03404
sg13g2_a21o_1	A1	0.01860	0.00100	0.01017	0.32940	0.06480	0.01097	2.50740	0.30000	0.02766
	A2	0.01860	0.00100	0.01019	0.32940	0.06480	0.01106	2.50740	0.30000	0.02731
	B1	0.01860	0.00100	0.00716	0.32940	0.06480	0.00908	2.50740	0.30000	0.02724

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	0.01411	0.32940	0.12960	0.01626	2.50740	0.60000	0.03670
	B1	(!A1 * A2)	0.01860	0.00100	0.01200	0.32940	0.12960	0.01372	2.50740	0.60000	0.03384
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00879	0.32940	0.06480	0.01046	2.50740	0.30000	0.03004
	B1	(!A1 * A2)	0.01860	0.00100	0.00697	0.32940	0.06480	0.00847	2.50740	0.30000	0.02796

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	0.01281	0.32940	0.12960	0.01463	2.50740	0.60000	0.03404
	B1	(!A1 * A2)	0.01860	0.00100	0.01258	0.32940	0.12960	0.01444	2.50740	0.60000	0.03404
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00735	0.32940	0.06480	0.00913	2.50740	0.30000	0.02755
	B1	(!A1 * A2)	0.01860	0.00100	0.00716	0.32940	0.06480	0.00908	2.50740	0.30000	0.02724

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	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	-0.00014	0.32940	-0.00016	2.50740	-0.00015

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00016	0.32940	0.00016	2.50740	0.00015

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	0.00000	2.50740	0.00000
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	-0.00014	0.32940	-0.00016	2.50740	-0.00015
	(!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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00016	0.32940	0.00016	2.50740	0.00015
	(!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	-0.00006	0.32940	-0.00005	2.50740	-0.00005
sg13g2_a21o_1	0.01860	-0.00011	0.32940	-0.00013	2.50740	-0.00013

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00006	0.32940	0.00005	2.50740	0.00005
sg13g2_a21o_1	0.01860	0.00013	0.32940	0.00013	2.50740	0.00013

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	-0.00006	0.32940	-0.00005	2.50740	-0.00005
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	-0.00011	0.32940	-0.00013	2.50740	-0.00013
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * B1)	0.01860	0.00006	0.32940	0.00005	2.50740	0.00005
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00013	0.32940	0.00013	2.50740	0.00013
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00062	0.32940	0.00063	2.50740	0.00063
sg13g2_a21o_1	0.01860	0.00060	0.32940	0.00060	2.50740	0.00060

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00042	0.32940	0.00043	2.50740	0.00044
sg13g2_a21o_1	0.01860	0.00055	0.32940	0.00056	2.50740	0.00057

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	0.00062	0.32940	0.00063	2.50740	0.00063
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00060	0.32940	0.00060	2.50740	0.00060

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	0.00042	0.32940	0.00043	2.50740	0.00044
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00055	0.32940	0.00056	2.50740	0.00057

BTLx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00625	0.01878	2.40000
sg13g2_ebufn_4	0.00320	0.01126	1.20000
sg13g2_ebufn_2	0.00284	0.00690	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	374.50000	1634.34000	3019.60000
sg13g2_ebufn_4	266.08800	876.33600	1549.32000
sg13g2_ebufn_2	218.52800	523.63300	835.47100

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	0.01997	0.05220	0.32940	0.53737	0.38936	2.50740	2.41897	1.46150
	TE_B->Z (RR)	0.01860	0.01997	0.05082	0.32940	0.53737	0.13685	2.50740	2.41897	0.31857
	TE_B->Z (FR)	0.01860	0.01997	0.02556	0.32940	0.53737	0.36569	2.50740	2.41897	1.84592
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01062	0.05338	0.32940	0.26882	0.38959	2.50740	1.20962	1.45992
	TE_B->Z (RR)	0.01860	0.01062	0.04051	0.32940	0.26882	0.10444	2.50740	1.20962	0.22498
	TE_B->Z (FR)	0.01860	0.01062	0.02504	0.32940	0.26882	0.36393	2.50740	1.20962	1.84210
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00592	0.04518	0.32940	0.13452	0.35746	2.50740	0.60492	1.38630
	TE_B->Z (RR)	0.01860	0.00592	0.03528	0.32940	0.13452	0.08825	2.50740	0.60492	0.19406
	TE_B->Z (FR)	0.01860	0.00592	0.02498	0.32940	0.13452	0.35999	2.50740	0.60492	1.82725

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	0.02990	0.05820	0.32940	0.54730	0.34297	2.50740	2.42890	1.18683
	TE_B->Z (RF)	0.01860	0.02990	0.02181	0.32940	0.54730	0.04782	2.50740	2.42890	0.24303
	TE_B->Z (FF)	0.01860	0.02990	0.06658	0.32940	0.54730	0.44687	2.50740	2.42890	1.62494
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01566	0.05962	0.32940	0.27386	0.34465	2.50740	1.21466	1.18926
	TE_B->Z (RF)	0.01860	0.01566	0.02047	0.32940	0.27386	0.04638	2.50740	1.21466	0.24025
	TE_B->Z (FF)	0.01860	0.01566	0.05158	0.32940	0.27386	0.40253	2.50740	1.21466	1.52263
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00847	0.04674	0.32940	0.13707	0.30664	2.50740	0.60747	1.10346
	TE_B->Z (RF)	0.01860	0.00847	0.01944	0.32940	0.13707	0.04499	2.50740	0.60747	0.23683
	TE_B->Z (FF)	0.01860	0.00847	0.04439	0.32940	0.13707	0.37396	2.50740	0.60747	1.45577

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	0.01997	0.04941	0.32940	0.53737	0.05514	2.50740	2.41897	0.05729
	TE_B	0.01860	0.01997	0.00868	0.32940	0.53737	0.00789	2.50740	2.41897	0.00742
sg13g2_ebufn_4	A	0.01860	0.01062	0.02490	0.32940	0.26882	0.02735	2.50740	1.20962	0.02662
	TE_B	0.01860	0.01062	0.00463	0.32940	0.26882	0.00415	2.50740	1.20962	0.00338
sg13g2_ebufn_2	A	0.01860	0.00592	0.01288	0.32940	0.13452	0.01340	2.50740	0.60492	0.01213
	TE_B	0.01860	0.00592	0.00248	0.32940	0.13452	0.00223	2.50740	0.60492	0.00177

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	0.02990	0.04268	0.32940	0.54730	0.04477	2.50740	2.42890	0.04126
	TE_B	0.01860	0.02990	0.00964	0.32940	0.54730	0.11750	2.50740	2.42890	0.51355
sg13g2_ebufn_4	A	0.01860	0.01566	0.02146	0.32940	0.27386	0.02263	2.50740	1.21466	0.02108
	TE_B	0.01860	0.01566	0.00533	0.32940	0.27386	0.05853	2.50740	1.21466	0.25650
sg13g2_ebufn_2	A	0.01860	0.00847	0.01070	0.32940	0.13707	0.01131	2.50740	0.60747	0.01015
	TE_B	0.01860	0.00847	0.00286	0.32940	0.13707	0.02942	2.50740	0.60747	0.12837

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01051	0.32940	0.01431	2.50740	0.06603
sg13g2_ebufn_4	0.01860	0.00570	0.32940	0.00752	2.50740	0.03326
sg13g2_ebufn_2	0.01860	0.00342	0.32940	0.00534	2.50740	0.02828

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00965	0.32940	0.01416	2.50740	0.06412
sg13g2_ebufn_4	0.01860	0.00521	0.32940	0.00737	2.50740	0.03224
sg13g2_ebufn_2	0.01860	0.00331	0.32940	0.00542	2.50740	0.02760

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	-0.00351	0.32940	-0.00351	2.50740	0.01927
sg13g2_ebufn_4	0.01860	-0.00066	0.32940	0.00020	2.50740	0.02500
sg13g2_ebufn_2	0.01860	0.00027	0.32940	0.00161	2.50740	0.02412

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	0.06418	0.32940	0.06555	2.50740	0.08861
sg13g2_ebufn_4	0.01860	0.03277	0.32940	0.03489	2.50740	0.05936
sg13g2_ebufn_2	0.01860	0.01715	0.32940	0.01930	2.50740	0.04111

BU_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.01851	4.80000
sg13g2_buf_8	0.00928	2.40000
sg13g2_buf_4	0.00402	1.20000
sg13g2_buf_2	0.00283	0.60000
sg13g2_buf_1	0.00251	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	2211.66000	2605.74000	2999.82000
sg13g2_buf_8	1105.84000	1302.87000	1499.90000
sg13g2_buf_4	499.66200	620.31100	740.96000
sg13g2_buf_2	292.03200	338.82800	385.62400
sg13g2_buf_1	190.72100	203.43200	216.14200

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	0.04115	0.32940	1.03680	0.24508	2.50740	4.80000	0.86189
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.04070	0.32940	0.51840	0.24396	2.50740	2.40000	0.85844
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.05071	0.32940	0.25920	0.27429	2.50740	1.20000	0.96800
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.04049	0.32940	0.12960	0.23946	2.50740	0.60000	0.85166
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03587	0.32940	0.06480	0.21819	2.50740	0.30000	0.79991

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	0.04473	0.32940	1.03680	0.23094	2.50740	4.80000	0.73713
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04420	0.32940	0.51840	0.23006	2.50740	2.40000	0.73695
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04375	0.32940	0.25920	0.22557	2.50740	1.20000	0.68453
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04273	0.32940	0.12960	0.22049	2.50740	0.60000	0.70914
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03735	0.32940	0.06480	0.19829	2.50740	0.30000	0.66495

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	0.09418	0.32940	1.03680	0.10843	2.50740	4.80000	0.24888
sg13g2_buf_8	A	0.01860	0.00100	0.04641	0.32940	0.51840	0.05391	2.50740	2.40000	0.12327
sg13g2_buf_4	A	0.01860	0.00100	0.02277	0.32940	0.25920	0.02616	2.50740	1.20000	0.05308
sg13g2_buf_2	A	0.01860	0.00100	0.01207	0.32940	0.12960	0.01409	2.50740	0.60000	0.03450
sg13g2_buf_1	A	0.01860	0.00100	0.00698	0.32940	0.06480	0.00862	2.50740	0.30000	0.02629

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	0.09059	0.32940	1.03680	0.10883	2.50740	4.80000	0.24531
sg13g2_buf_8	A	0.01860	0.00100	0.04467	0.32940	0.51840	0.05359	2.50740	2.40000	0.12180
sg13g2_buf_4	A	0.01860	0.00100	0.02251	0.32940	0.25920	0.02614	2.50740	1.20000	0.05382
sg13g2_buf_2	A	0.01860	0.00100	0.01173	0.32940	0.12960	0.01418	2.50740	0.60000	0.03436
sg13g2_buf_1	A	0.01860	0.00100	0.00687	0.32940	0.06480	0.00886	2.50740	0.30000	0.02601

DECAP_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

Footprint

Cell Name	Area
sg13g2_decap_8	12.70080
sg13g2_decap_4	7.25760

Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_8	2937.24000	2937.24000	2937.24000
sg13g2_decap_4	1468.60000	1468.60000	1468.60000

DFFRRx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00174	0.00637	0.00320	0.60000	0.60000
sg13g2_dfrbp_1	0.00187	0.00685	0.00295	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1222.37000	1384.04000	1519.45000
sg13g2_dfrbp_1	942.01400	1098.90000	1247.92000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.16323	0.32940	0.12960	0.35107	2.50740	0.60000	0.95064
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.13171	0.32940	0.06480	0.32175	2.50740	0.30000	0.89787

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	0.14556	0.32940	0.12960	0.31866	2.50740	0.60000	0.82043
	RESET_B->Q (FF)	0.01860	0.00100	0.19000	0.32940	0.12960	0.39461	2.50740	0.60000	0.98873
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.12833	0.32940	0.06480	0.30144	2.50740	0.30000	0.78890
	RESET_B->Q (FF)	0.01860	0.00100	0.16643	0.32940	0.06480	0.36804	2.50740	0.30000	0.95106

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	0.09752	0.32940	0.12960	0.31344	2.50740	0.60000	0.88066
	RESET_B->Q_N (FR)	0.01860	0.00100	0.14298	0.32940	0.12960	0.38797	2.50740	0.60000	1.04850
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.09832	0.32940	0.06480	0.30700	2.50740	0.30000	0.86117
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13676	0.32940	0.06480	0.37193	2.50740	0.30000	1.02302

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	0.10777	0.32940	0.12960	0.32559	2.50740	0.60000	0.86118
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.10009	0.32940	0.06480	0.30329	2.50740	0.30000	0.82103

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	-0.04157	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.18595
	setup	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.17269	2.50740	2.50740	0.21546
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.19775
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.17269	2.50740	2.50740	0.22432

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	-0.02201	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.15348
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.15920	2.50740	2.50740	0.20956
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.11063	2.50740	2.50740	-0.16529
	setup	CLK (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.15920	2.50740	2.50740	0.21841

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	0.08069	1.26300	1.26300	0.19968	2.50740	2.50740	0.29811
	removal	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.29220
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.20238	2.50740	2.50740	0.30696
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.30401

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	0.04847	0.32940	0.12960	0.16276	2.50740	0.60000	0.60036
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03805	0.32940	0.06480	0.09593	2.50740	0.30000	0.32707

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	0.04850	0.32940	0.12960	0.16422	2.50740	0.60000	0.60122
	RESET_B	0.01860	0.00100	0.03696	0.32940	0.12960	0.15124	2.50740	0.60000	0.57242
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03735	0.32940	0.06480	0.09588	2.50740	0.30000	0.32667
	RESET_B	0.01860	0.00100	0.02561	0.32940	0.06480	0.08310	2.50740	0.30000	0.29970

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	0.04854	0.32940	0.12960	0.16446	2.50740	0.60000	0.60175
	RESET_B	0.01860	0.00100	0.03703	0.32940	0.12960	0.15159	2.50740	0.60000	0.57381
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03736	0.32940	0.06480	0.09596	2.50740	0.30000	0.32692
	RESET_B	0.01860	0.00100	0.02558	0.32940	0.06480	0.08325	2.50740	0.30000	0.30029

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	0.04849	0.32940	0.12960	0.16273	2.50740	0.60000	0.60002
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03804	0.32940	0.06480	0.09591	2.50740	0.30000	0.32695

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00177	0.32940	0.00266	2.50740	0.01323
sg13g2_dfrbp_1	0.01860	0.00192	0.32940	0.00278	2.50740	0.01330

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00141	0.32940	0.00237	2.50740	0.01267
sg13g2_dfrbp_1	0.01860	0.00160	0.32940	0.00253	2.50740	0.01277

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	0.00177	0.32940	0.00266	2.50740	0.01323
	(!CLK * RESET_B)	0.01860	0.01452	0.32940	0.01532	2.50740	0.02730
	(!CLK * !RESET_B)	0.01860	-0.00004	0.32940	-0.00003	2.50740	-0.00003
sg13g2_dfrbp_1	CLK	0.01860	0.00192	0.32940	0.00278	2.50740	0.01330
	(!CLK * RESET_B)	0.01860	0.01258	0.32940	0.01342	2.50740	0.02541
	(!CLK * !RESET_B)	0.01860	0.00011	0.32940	0.00011	2.50740	0.00011

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	0.00141	0.32940	0.00237	2.50740	0.01267
	(!CLK * RESET_B)	0.01860	0.01128	0.32940	0.01210	2.50740	0.02389
	(!CLK * !RESET_B)	0.01860	0.00023	0.32940	0.00023	2.50740	0.00024
sg13g2_dfrbp_1	CLK	0.01860	0.00160	0.32940	0.00253	2.50740	0.01277
	(!CLK * RESET_B)	0.01860	0.01057	0.32940	0.01141	2.50740	0.02316
	(!CLK * !RESET_B)	0.01860	0.00012	0.32940	0.00012	2.50740	0.00013

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	0.00483	0.32940	0.00517	2.50740	0.01488
sg13g2_dfrbp_1	0.01860	0.00525	0.32940	0.00557	2.50740	0.01522

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	0.01056	0.32940	0.01081	2.50740	0.02575
sg13g2_dfrbp_1	0.01860	0.00950	0.32940	0.00979	2.50740	0.02475

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	0.00483	0.32940	0.00517	2.50740	0.01488
	(CLK * !D * !Q * Q_N)	0.01860	0.00165	0.32940	0.00165	2.50740	0.00164
	(!CLK * D * !Q * Q_N)	0.01860	0.01778	0.32940	0.01812	2.50740	0.03262
	(!CLK * !D * !Q * Q_N)	0.01860	0.00172	0.32940	0.00171	2.50740	0.00171
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00525	0.32940	0.00557	2.50740	0.01522
	(CLK * !D * !Q * Q_N)	0.01860	0.00208	0.32940	0.00208	2.50740	0.00207
	(!CLK * D * !Q * Q_N)	0.01860	0.01614	0.32940	0.01649	2.50740	0.03102
	(!CLK * !D * !Q * Q_N)	0.01860	0.00215	0.32940	0.00214	2.50740	0.00214

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	0.04693	0.32940	0.04851	2.50740	0.07663
	(CLK * !D * !Q * Q_N)	0.01860	-0.00165	0.32940	-0.00165	2.50740	-0.00164
	(!CLK * D * !Q * Q_N)	0.01860	0.01056	0.32940	0.01081	2.50740	0.02575
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00172	0.32940	-0.00171	2.50740	-0.00171
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03411	0.32940	0.03566	2.50740	0.06328
	(CLK * !D * !Q * Q_N)	0.01860	-0.00208	0.32940	-0.00208	2.50740	-0.00207
	(!CLK * D * !Q * Q_N)	0.01860	0.00950	0.32940	0.00979	2.50740	0.02475
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00215	0.32940	-0.00214	2.50740	-0.00214

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01355	0.32940	0.01535	2.50740	0.04267
sg13g2_dfrbp_1	0.01860	0.01354	0.32940	0.01516	2.50740	0.04034

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02531	0.32940	0.02727	2.50740	0.05424
sg13g2_dfrbp_1	0.01860	0.02369	0.32940	0.02553	2.50740	0.05104

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	0.01355	0.32940	0.01535	2.50740	0.04267
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01423	0.32940	0.01601	2.50740	0.04323
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01334	0.32940	0.01512	2.50740	0.04238
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01426	0.32940	0.01604	2.50740	0.04323
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01385	0.32940	0.01549	2.50740	0.04070
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01350	0.32940	0.01514	2.50740	0.04034
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01324	0.32940	0.01487	2.50740	0.04007
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01354	0.32940	0.01516	2.50740	0.04034

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	0.02531	0.32940	0.02727	2.50740	0.05424
	(D * RESET_B * !Q * Q_N)	0.01860	0.02548	0.32940	0.02741	2.50740	0.05445
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01313	0.32940	0.01512	2.50740	0.04119
	(!D * RESET_B * Q * !Q_N)	0.01860	0.06993	0.32940	0.06130	2.50740	0.08751
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01310	0.32940	0.01511	2.50740	0.04121
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01312	0.32940	0.01511	2.50740	0.04118
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02369	0.32940	0.02553	2.50740	0.05104
	(D * RESET_B * !Q * Q_N)	0.01860	0.02375	0.32940	0.02553	2.50740	0.05103
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01352	0.32940	0.01529	2.50740	0.03979
	(!D * RESET_B * Q * !Q_N)	0.01860	0.04933	0.32940	0.05036	2.50740	0.07500
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01350	0.32940	0.01528	2.50740	0.03984
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01352	0.32940	0.01529	2.50740	0.03979

DLHQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00247	0.00248	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	679.01900	746.96700	843.24000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	0.11858	0.32940	0.06480	0.29940	2.50740	0.30000	0.85412
	GATE->Q (RR)	0.01860	0.00100	0.10175	0.32940	0.06480	0.28432	2.50740	0.30000	0.80793

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	0.10730	0.32940	0.06480	0.26482	2.50740	0.30000	0.69804
	GATE->Q (RF)	0.01860	0.00100	0.11031	0.32940	0.06480	0.27369	2.50740	0.30000	0.70959

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	-0.06113	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.19480
	setup	GATE (F)	0.01860	0.01860	0.06847	1.26300	1.26300	0.18079	2.50740	2.50740	0.23022

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	-0.02690	1.26300	1.26300	0.00810	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.03179	1.26300	1.26300	-0.00270	2.50740	2.50740	-0.03542

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	0.01847	0.32940	0.06480	0.01885	2.50740	0.30000	0.01873
	GATE	0.01860	0.00100	0.01594	0.32940	0.06480	0.01641	2.50740	0.30000	0.01748

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	0.01915	0.32940	0.06480	0.01974	2.50740	0.30000	0.01980
	GATE	0.01860	0.00100	0.01726	0.32940	0.06480	0.01827	2.50740	0.30000	0.01785

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00424	0.32940	0.00567	2.50740	0.02460

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00450	0.32940	0.00604	2.50740	0.02430

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	0.00420	0.32940	0.00556	2.50740	0.02450
	(!GATE * !Q)	0.01860	0.00424	0.32940	0.00567	2.50740	0.02460

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00441	0.32940	0.00603	2.50740	0.02431
	(!GATE * !Q)	0.01860	0.00450	0.32940	0.00604	2.50740	0.02430

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00973	0.32940	0.01139	2.50740	0.03498

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01857	0.32940	0.02062	2.50740	0.04359

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	0.00973	0.32940	0.01139	2.50740	0.03498

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	0.01857	0.32940	0.02062	2.50740	0.04359

DLHRQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00230	0.00318	0.00238	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	775.40800	856.02000	913.95400

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	0.12712	0.32940	0.06480	0.31165	2.50740	0.30000	0.86185
	GATE->Q (RR)	0.01860	0.00100	0.11496	0.32940	0.06480	0.30250	2.50740	0.30000	0.82491

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	0.11325	0.32940	0.06480	0.27254	2.50740	0.30000	0.71234
	GATE->Q (RF)	0.01860	0.00100	0.11755	0.32940	0.06480	0.28489	2.50740	0.30000	0.73148
	RESET_B->Q (FF)	0.01860	0.00100	0.04555	0.32940	0.06480	0.22398	2.50740	0.30000	0.72406

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	-0.05868	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.17709
	setup	GATE (F)	0.01860	0.01860	0.06602	1.26300	1.26300	0.17000	2.50740	2.50740	0.21546

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	-0.02934	1.26300	1.26300	0.00810	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.03668	1.26300	1.26300	-0.00270	2.50740	2.50740	-0.03542

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00978	1.26300	1.26300	-0.07286	2.50740	2.50740	-0.09740
	removal	GATE (F)	0.01860	0.01860	0.01712	1.26300	1.26300	0.08095	2.50740	2.50740	0.10921

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	0.00124	0.32940	0.06480	0.00168	2.50740	0.30000	0.00142
	GATE	0.01860	0.00100	0.01618	0.32940	0.06480	0.01658	2.50740	0.30000	0.01780

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	-0.00124	0.32940	0.06480	-0.00168	2.50740	0.30000	-0.00142
	GATE	0.01860	0.00100	0.01610	0.32940	0.06480	0.01708	2.50740	0.30000	0.01665
	RESET_B	0.01860	0.00100	0.00928	0.32940	0.06480	0.01143	2.50740	0.30000	0.03211

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02163	0.32940	0.02292	2.50740	0.04205

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02838	0.32940	0.03180	2.50740	0.05056

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	0.00349	0.32940	0.00489	2.50740	0.02383
	!RESET_B	0.01860	0.02163	0.32940	0.02292	2.50740	0.04205

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	0.00382	0.32940	0.00543	2.50740	0.02375
	!RESET_B	0.01860	0.02838	0.32940	0.03180	2.50740	0.05056

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	0.00000	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	0.00000	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	0.00000	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	0.00000	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	0.01012	0.32940	0.01174	2.50740	0.03519

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01880	0.32940	0.02083	2.50740	0.04365

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	0.01384	0.32940	0.01539	2.50740	0.04051
	(!D * !RESET_B * !Q)	0.01860	0.01012	0.32940	0.01174	2.50740	0.03519

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	0.01487	0.32940	0.01677	2.50740	0.04108
	(!D * RESET_B * !Q)	0.01860	0.01880	0.32940	0.02083	2.50740	0.04365
	(!D * !RESET_B * !Q)	0.01860	0.01884	0.32940	0.02090	2.50740	0.04365

DLHR



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00226	0.00336	0.00244	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	973.20200	1064.53000	1112.70000

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	0.13753	0.32940	0.06480	0.32768	2.50740	0.30000	0.87911
	GATE->Q (RR)	0.01860	0.00100	0.12586	0.32940	0.06480	0.31954	2.50740	0.30000	0.84384

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	0.11732	0.32940	0.06480	0.27852	2.50740	0.30000	0.71356
	GATE->Q (RF)	0.01860	0.00100	0.12188	0.32940	0.06480	0.29165	2.50740	0.30000	0.73457
	RESET_B->Q (FF)	0.01860	0.00100	0.04945	0.32940	0.06480	0.23798	2.50740	0.30000	0.74618

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	0.14250	0.32940	0.06480	0.31273	2.50740	0.30000	0.81457
	GATE->Q_N (RR)	0.01860	0.00100	0.14720	0.32940	0.06480	0.32576	2.50740	0.30000	0.83586
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07454	0.32940	0.06480	0.26617	2.50740	0.30000	0.79451

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	0.16740	0.32940	0.06480	0.32625	2.50740	0.30000	0.81022
	GATE->Q_N (RF)	0.01860	0.00100	0.15554	0.32940	0.06480	0.31816	2.50740	0.30000	0.77475

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	-0.14841	2.50740	2.50740	-0.18004
	setup	GATE (F)	0.01860	0.01860	0.07091	1.26300	1.26300	0.17269	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_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.02934	1.26300	1.26300	0.00810	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.03668	1.26300	1.26300	-0.00270	2.50740	2.50740	-0.03542

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	-0.00245	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.04427
	removal	GATE (F)	0.01860	0.01860	0.01223	1.26300	1.26300	0.04587	2.50740	2.50740	0.05313

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	0.00572	0.32940	0.06480	0.00622	2.50740	0.30000	0.00615
	GATE	0.01860	0.00100	0.01307	0.32940	0.06480	0.01351	2.50740	0.30000	0.01411

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	0.00192	0.32940	0.06480	0.00145	2.50740	0.30000	0.00103
	GATE	0.01860	0.00100	0.01305	0.32940	0.06480	0.01382	2.50740	0.30000	0.01341
	RESET_B	0.01860	0.00100	0.00950	0.32940	0.06480	0.01079	2.50740	0.30000	0.02224

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	0.00193	0.32940	0.06480	0.00148	2.50740	0.30000	0.00120
	GATE	0.01860	0.00100	0.01796	0.32940	0.06480	0.01952	2.50740	0.30000	0.03125
	RESET_B	0.01860	0.00100	0.00951	0.32940	0.06480	0.01077	2.50740	0.30000	0.02216

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	0.00571	0.32940	0.06480	0.00622	2.50740	0.30000	0.00601
	GATE	0.01860	0.00100	0.01306	0.32940	0.06480	0.01353	2.50740	0.30000	0.01403

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02120	0.32940	0.02250	2.50740	0.04160

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02807	0.32940	0.03162	2.50740	0.05046

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	0.00362	0.32940	0.00504	2.50740	0.02410
	!RESET_B	0.01860	0.02120	0.32940	0.02250	2.50740	0.04160

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	0.00387	0.32940	0.00551	2.50740	0.02389
	!RESET_B	0.01860	0.02807	0.32940	0.03162	2.50740	0.05046

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	-0.00004	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00004	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	-0.00009	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	-0.00004	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00009	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	0.00004	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00980	0.32940	0.01144	2.50740	0.03500

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01860	0.32940	0.02060	2.50740	0.04351

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	0.01351	0.32940	0.01507	2.50740	0.04028
	(!D * !RESET_B * !Q)	0.01860	0.00980	0.32940	0.01144	2.50740	0.03500

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	0.01522	0.32940	0.01714	2.50740	0.04144
	(!D * RESET_B * !Q)	0.01860	0.01860	0.32940	0.02060	2.50740	0.04351
	(!D * !RESET_B * !Q)	0.01860	0.01863	0.32940	0.02064	2.50740	0.04359

DLLRQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00222	0.00320	0.00237	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	775.38700	857.91900	913.96500

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	0.12618	0.32940	0.06480	0.31029	2.50740	0.30000	0.86113
	GATE_N->Q (FR)	0.01860	0.00100	0.13958	0.32940	0.06480	0.33014	2.50740	0.30000	0.88076
	RESET_B->Q (RR)	0.01860	0.00100	0.06005	0.32940	0.06480	0.24663	2.50740	0.30000	0.84691

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	0.11250	0.32940	0.06480	0.27037	2.50740	0.30000	0.70662
	GATE_N->Q (FF)	0.01860	0.00100	0.10680	0.32940	0.06480	0.28276	2.50740	0.30000	0.78514
	RESET_B->Q (FF)	0.01860	0.00100	0.04585	0.32940	0.06480	0.22340	2.50740	0.30000	0.72138

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	-0.04401	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.08855
	setup	GATE_N (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.07016	2.50740	2.50740	0.09740

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	-0.14841	2.50740	2.50740	-0.18890
	setup	GATE_N (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.17809	2.50740	2.50740	0.23908

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	-0.02201	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.05313
	removal	GATE_N (R)	0.01860	0.01860	0.03179	1.26300	1.26300	0.06746	2.50740	2.50740	0.05903

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	0.00860	0.32940	0.06480	0.00902	2.50740	0.30000	0.00907
	GATE_N	0.01860	0.00100	0.00830	0.32940	0.06480	0.00851	2.50740	0.30000	0.00802
	RESET_B	0.01860	0.00100	0.01246	0.32940	0.06480	0.01334	2.50740	0.30000	0.03330

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	0.00258	0.32940	0.06480	0.00060	2.50740	0.30000	0.00015
	GATE_N	0.01860	0.00100	0.00666	0.32940	0.06480	0.00710	2.50740	0.30000	0.00808
	RESET_B	0.01860	0.00100	0.00942	0.32940	0.06480	0.01158	2.50740	0.30000	0.03241

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01415	0.32940	0.01551	2.50740	0.03439

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01962	0.32940	0.02371	2.50740	0.04251

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	0.00333	0.32940	0.00475	2.50740	0.02376
	!RESET_B	0.01860	0.01415	0.32940	0.01551	2.50740	0.03439

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	0.00377	0.32940	0.00540	2.50740	0.02375
	!RESET_B	0.01860	0.01962	0.32940	0.02371	2.50740	0.04251

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	0.00000	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	0.00000	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	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !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_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00000	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	0.00927	0.32940	0.01088	2.50740	0.03438

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	0.01882	0.32940	0.02092	2.50740	0.04404

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	0.01604	0.32940	0.01746	2.50740	0.04067
	(!D * !RESET_B * !Q)	0.01860	0.00927	0.32940	0.01088	2.50740	0.03438

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	0.01511	0.32940	0.01692	2.50740	0.03957
	(!D * RESET_B * !Q)	0.01860	0.01879	0.32940	0.02086	2.50740	0.04435
	(!D * !RESET_B * !Q)	0.01860	0.01882	0.32940	0.02092	2.50740	0.04404

DLLR



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00233	0.00332	0.00250	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	973.77000	1084.12000	1124.14000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q (RR)	0.01860	0.00100	0.13841	0.32940	0.06480	0.32818	2.50740	0.30000	0.87882
	GATE_N->Q (FR)	0.01860	0.00100	0.15174	0.32940	0.06480	0.34859	2.50740	0.30000	0.89986

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	0.11872	0.32940	0.06480	0.27972	2.50740	0.30000	0.71512
	GATE_N->Q (FF)	0.01860	0.00100	0.11362	0.32940	0.06480	0.29367	2.50740	0.30000	0.79811
	RESET_B->Q (FF)	0.01860	0.00100	0.04932	0.32940	0.06480	0.24154	2.50740	0.30000	0.72429

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	0.14370	0.32940	0.06480	0.31365	2.50740	0.30000	0.81498
	GATE_N->Q_N (FR)	0.01860	0.00100	0.13877	0.32940	0.06480	0.32747	2.50740	0.30000	0.89766
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07481	0.32940	0.06480	0.26751	2.50740	0.30000	0.80170

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	0.16803	0.32940	0.06480	0.32682	2.50740	0.30000	0.81010
	GATE_N->Q_N (FF)	0.01860	0.00100	0.18123	0.32940	0.06480	0.34728	2.50740	0.30000	0.83119

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	-0.04890	1.26300	1.26300	-0.06476	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.07286	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_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.15111	2.50740	2.50740	-0.19185
	setup	GATE_N (R)	0.01860	0.01860	0.06602	1.26300	1.26300	0.18079	2.50740	2.50740	0.24203

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.02698	2.50740	2.50740	0.00000
	removal	GATE_N (R)	0.01860	0.01860	0.02690	1.26300	1.26300	0.03508	2.50740	2.50740	0.00590

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	0.01203	0.32940	0.06480	0.06866	2.50740	0.30000	0.27331
	GATE_N	0.01860	0.00100	0.02784	0.32940	0.06480	0.08425	2.50740	0.30000	0.28900

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	0.00571	0.32940	0.06480	0.05620	2.50740	0.30000	0.26035
	GATE_N	0.01860	0.00100	0.02575	0.32940	0.06480	0.08230	2.50740	0.30000	0.28796
	RESET_B	0.01860	0.00100	0.02953	0.32940	0.06480	0.08696	2.50740	0.30000	0.31047

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	0.00572	0.32940	0.06480	0.05629	2.50740	0.30000	0.26075
	GATE_N	0.01860	0.00100	0.03620	0.32940	0.06480	0.09481	2.50740	0.30000	0.32367
	RESET_B	0.01860	0.00100	0.02959	0.32940	0.06480	0.08696	2.50740	0.30000	0.31056

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	0.01200	0.32940	0.06480	0.06862	2.50740	0.30000	0.27309
	GATE_N	0.01860	0.00100	0.02783	0.32940	0.06480	0.08418	2.50740	0.30000	0.28879

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02199	0.32940	0.02333	2.50740	0.04248

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02694	0.32940	0.03458	2.50740	0.05341

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	0.00368	0.32940	0.00511	2.50740	0.02416
	!RESET_B	0.01860	0.02199	0.32940	0.02333	2.50740	0.04248

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	0.00350	0.32940	0.00515	2.50740	0.02351
	!RESET_B	0.01860	0.02694	0.32940	0.03458	2.50740	0.05341

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	-0.00005	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_dllr_1	0.01860	0.00005	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_dllr_1	(D * GATE_N * !Q)	0.01860	-0.00005	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	-0.00005	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_dllr_1	(D * GATE_N * !Q)	0.01860	0.00005	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00005	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_dllr_1	0.01860	0.01781	0.32940	0.02056	2.50740	0.04385

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	0.01043	0.32940	0.01241	2.50740	0.03519

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	0.01620	0.32940	0.01759	2.50740	0.04077
	(!D * RESET_B * !Q)	0.01860	0.01781	0.32940	0.02055	2.50740	0.04389
	(!D * !RESET_B * !Q)	0.01860	0.01781	0.32940	0.02056	2.50740	0.04385

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	0.01531	0.32940	0.01714	2.50740	0.03976
	(!D * !RESET_B * !Q)	0.01860	0.01043	0.32940	0.01241	2.50740	0.03519

DLY1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00159	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	308.70800	324.83100	340.95500

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	0.07848	0.32940	0.06480	0.25585	2.50740	0.30000	0.73861

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	0.09062	0.32940	0.06480	0.27089	2.50740	0.30000	0.80385

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	0.01558	0.32940	0.06480	0.01680	2.50740	0.30000	0.02889

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	0.01482	0.32940	0.06480	0.01626	2.50740	0.30000	0.02799

DLY2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00160	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	402.35400	418.47800	434.60200

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	0.11601	0.32940	0.06480	0.30409	2.50740	0.30000	0.82436

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	0.12919	0.32940	0.06480	0.32781	2.50740	0.30000	0.88584

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	0.01862	0.32940	0.06480	0.01958	2.50740	0.30000	0.03106

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	0.01795	0.32940	0.06480	0.01917	2.50740	0.30000	0.03047

DLY4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00161	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	939.25200	955.35100	971.44900

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	0.24029	0.32940	0.06480	0.45571	2.50740	0.30000	1.04991

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	0.24389	0.32940	0.06480	0.47829	2.50740	0.30000	1.10466

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	0.02706	0.32940	0.06480	0.02752	2.50740	0.30000	0.03815

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	0.02664	0.32940	0.06480	0.02704	2.50740	0.30000	0.03756

EINVIN_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00807	0.00989	1.20000
sg13g2_einvn_2	0.00410	0.00527	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1155.03000	1312.66000	1470.28000
sg13g2_einvn_2	581.53900	660.35200	739.16400

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	0.01072	0.01829	0.32940	0.26892	0.39038	2.50740	1.20972	2.08479
	TE_B->Z (RR)	0.01860	0.01072	0.03935	0.32940	0.26892	0.10389	2.50740	1.20972	0.22369
	TE_B->Z (FR)	0.01860	0.01072	0.02309	0.32940	0.26892	0.36031	2.50740	1.20972	1.83173
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00593	0.01966	0.32940	0.13453	0.38997	2.50740	0.60494	2.08155
	TE_B->Z (RR)	0.01860	0.00593	0.03805	0.32940	0.13453	0.09921	2.50740	0.60494	0.21174
	TE_B->Z (FR)	0.01860	0.00593	0.02394	0.32940	0.13453	0.36024	2.50740	0.60494	1.83267

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	0.01572	0.01700	0.32940	0.27392	0.35172	2.50740	1.21472	1.90355
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00850	0.01823	0.32940	0.13710	0.35169	2.50740	0.60750	1.90329

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	0.01072	0.01254	0.32940	0.26892	0.01592	2.50740	1.20972	0.03929
	TE_B	0.01860	0.01072	0.02070	0.32940	0.26892	0.01990	2.50740	1.20972	0.01797
sg13g2_einvn_2	A	0.01860	0.00593	0.00634	0.32940	0.13453	0.00772	2.50740	0.60494	0.01943
	TE_B	0.01860	0.00593	0.01021	0.32940	0.13453	0.00976	2.50740	0.60494	0.00890

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	0.01572	0.01143	0.32940	0.27392	0.01498	2.50740	1.21472	0.03613
sg13g2_einvn_2	A	0.01860	0.00850	0.00588	0.32940	0.13710	0.00755	2.50740	0.60750	0.01802

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	-0.01236	0.32940	-0.01166	2.50740	0.01329
sg13g2_einvn_2	0.01860	-0.00588	0.32940	-0.00542	2.50740	0.00845

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	0.01693	0.32940	0.01940	2.50740	0.04457
sg13g2_einvn_2	0.01860	0.00855	0.32940	0.00992	2.50740	0.02381

FILLx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

Pin Capacitance Information

Leakage Information

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

GCLK



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00250	0.00534	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	804.30800	828.58300	867.50900

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	0.05277	0.32940	0.06480	0.23395	2.50740	0.30000	0.81833

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	0.04283	0.32940	0.06480	0.21498	2.50740	0.30000	0.70569

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	-0.02532	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.21907
	setup	CLK (R)	0.01860	0.01860	0.05261	1.26300	1.26300	0.18079	2.50740	2.50740	0.26925

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	-0.00873	1.26300	1.26300	0.01349	2.50740	2.50740	0.02858
	setup	CLK (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.01889	2.50740	2.50740	0.01071

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	0.01185	0.32940	0.06480	0.01267	2.50740	0.30000	0.03000

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	0.00703	0.32940	0.06480	0.00918	2.50740	0.30000	0.02679

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02405	0.32940	0.02545	2.50740	0.04409

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02009	0.32940	0.03645	2.50740	0.05489

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	0.02405	0.32940	0.02545	2.50740	0.04409

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	0.02009	0.32940	0.03645	2.50740	0.05489

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00783	0.32940	0.00949	2.50740	0.03254

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01008	0.32940	0.01191	2.50740	0.03470

INx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

Cell Name	Area
sg13g2_inv_16	34.47360
sg13g2_inv_8	18.14400
sg13g2_inv_4	10.88640
sg13g2_inv_2	7.25760
sg13g2_inv_1	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04921	4.80000
sg13g2_inv_8	0.02405	2.40000
sg13g2_inv_4	0.01203	1.20000
sg13g2_inv_2	0.00603	0.60000
sg13g2_inv_1	0.00308	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	1264.60000	1895.09000	2525.59000
sg13g2_inv_8	632.29200	947.57600	1262.86000
sg13g2_inv_4	316.15300	473.77600	631.40000
sg13g2_inv_2	158.07700	236.87900	315.68100
sg13g2_inv_1	79.03780	118.44400	157.85000

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	0.01197	0.32940	1.03680	0.27081	2.50740	4.80000	1.50511
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01184	0.32940	0.51840	0.27024	2.50740	2.40000	1.50326
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01211	0.32940	0.25920	0.26998	2.50740	1.20000	1.50274
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01300	0.32940	0.12960	0.26941	2.50740	0.60000	1.49948
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01506	0.32940	0.06480	0.26985	2.50740	0.30000	1.49947

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	0.01206	0.32940	1.03680	0.26127	2.50740	4.80000	1.46562
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01198	0.32940	0.51840	0.26135	2.50740	2.40000	1.46699
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01219	0.32940	0.25920	0.26111	2.50740	1.20000	1.46612
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01301	0.32940	0.12960	0.25965	2.50740	0.60000	1.45874
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01488	0.32940	0.06480	0.26006	2.50740	0.30000	1.45837

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	0.02672	0.32940	1.03680	0.04233	2.50740	4.80000	0.17625
sg13g2_inv_8	A	0.01860	0.00100	0.01276	0.32940	0.51840	0.02021	2.50740	2.40000	0.08298
sg13g2_inv_4	A	0.01860	0.00100	0.00641	0.32940	0.25920	0.01023	2.50740	1.20000	0.04184
sg13g2_inv_2	A	0.01860	0.00100	0.00320	0.32940	0.12960	0.00508	2.50740	0.60000	0.02097
sg13g2_inv_1	A	0.01860	0.00100	0.00181	0.32940	0.06480	0.00263	2.50740	0.30000	0.01060

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	0.02191	0.32940	1.03680	0.03760	2.50740	4.80000	0.15172
sg13g2_inv_8	A	0.01860	0.00100	0.01046	0.32940	0.51840	0.01843	2.50740	2.40000	0.07432
sg13g2_inv_4	A	0.01860	0.00100	0.00527	0.32940	0.25920	0.00922	2.50740	1.20000	0.03736
sg13g2_inv_2	A	0.01860	0.00100	0.00273	0.32940	0.12960	0.00464	2.50740	0.60000	0.01872
sg13g2_inv_1	A	0.01860	0.00100	0.00178	0.32940	0.06480	0.00265	2.50740	0.30000	0.00957

ITL



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.01588	0.01676	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2231.02000	2546.27000	2861.52000

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	0.02036	0.01769	0.32940	0.53776	0.39213	2.50740	2.41936	2.09213
	TE_B->Z (RR)	0.01860	0.02036	0.05007	0.32940	0.53776	0.13617	2.50740	2.41936	0.31402
	TE_B->Z (FR)	0.01860	0.02036	0.02428	0.32940	0.53776	0.36285	2.50740	2.41936	1.83706

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	0.03022	0.01664	0.32940	0.54762	0.35349	2.50740	2.42922	1.91252

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	0.02036	0.02486	0.32940	0.53776	0.03249	2.50740	2.41936	0.08509
	TE_B	0.01860	0.02036	0.04339	0.32940	0.53776	0.04076	2.50740	2.41936	0.03852

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	0.03022	0.02228	0.32940	0.54762	0.02939	2.50740	2.42922	0.07057

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	-0.02729	0.32940	-0.02766	2.50740	-0.00480

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	0.02962	0.32940	0.03251	2.50740	0.05668

KEEPSTATE



*sg13g2_stdcell_fast_1p32V_m40C Cell Library:
Process sg13g2_stdcell_fast_1p32V_m40C,
Voltage 1.32, Temp -40.00*

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	46.59170	363.86300	681.13400

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_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00214	0.00225	0.00552	0.60000
sg13g2_mux2_1	0.00215	0.00225	0.00552	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	583.71400	677.51200	746.56200
sg13g2_mux2_1	481.21800	559.06900	661.66000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_2	A0->X (RR)	0.01860	0.00100	0.05993	0.32940	0.12960	0.27645	2.50740	0.60000	0.90065
	A1->X (RR)	0.01860	0.00100	0.05325	0.32940	0.12960	0.27925	2.50740	0.60000	0.90703
	S->X (-R)	0.01860	0.00100	0.06565	0.32940	0.12960	0.27151	2.50740	0.60000	0.88835
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.05192	0.32940	0.06480	0.24829	2.50740	0.30000	0.83952
	A1->X (RR)	0.01860	0.00100	0.05031	0.32940	0.06480	0.25122	2.50740	0.30000	0.84827
	S->X (-R)	0.01860	0.00100	0.05717	0.32940	0.06480	0.24644	2.50740	0.30000	0.83300

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	0.07233	0.32940	0.12960	0.29084	2.50740	0.60000	0.87310
	A1->X (FF)	0.01860	0.00100	0.07794	0.32940	0.12960	0.29433	2.50740	0.60000	0.88094
	S->X (-F)	0.01860	0.00100	0.08583	0.32940	0.12960	0.27931	2.50740	0.60000	0.83451
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.06227	0.32940	0.06480	0.25454	2.50740	0.30000	0.80535
	A1->X (FF)	0.01860	0.00100	0.06444	0.32940	0.06480	0.25834	2.50740	0.30000	0.81367
	S->X (-F)	0.01860	0.00100	0.07196	0.32940	0.06480	0.24705	2.50740	0.30000	0.77350

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	0.06565	0.32940	0.12960	0.27151	2.50740	0.60000	0.88835
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.08940	0.32940	0.12960	0.27459	2.50740	0.60000	0.78336
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.05717	0.32940	0.06480	0.24644	2.50740	0.30000	0.83300
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.08081	0.32940	0.06480	0.25870	2.50740	0.30000	0.76375

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	0.08583	0.32940	0.12960	0.27931	2.50740	0.60000	0.83451
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.10776	0.32940	0.12960	0.29001	2.50740	0.60000	0.78457
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.07196	0.32940	0.06480	0.24705	2.50740	0.30000	0.77350
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.09385	0.32940	0.06480	0.26606	2.50740	0.30000	0.75859

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	0.01758	0.32940	0.12960	0.01899	2.50740	0.60000	0.03805
	A1	0.01860	0.00100	0.02150	0.32940	0.12960	0.02539	2.50740	0.60000	0.04414
	S	0.01860	0.00100	0.01763	0.32940	0.12960	0.01907	2.50740	0.60000	0.03606
sg13g2_mux2_1	A0	0.01860	0.00100	0.01238	0.32940	0.06480	0.01391	2.50740	0.30000	0.03341
	A1	0.01860	0.00100	0.01533	0.32940	0.06480	0.01755	2.50740	0.30000	0.03689
	S	0.01860	0.00100	0.01261	0.32940	0.06480	0.01377	2.50740	0.30000	0.03135

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	0.02307	0.32940	0.12960	0.02595	2.50740	0.60000	0.04436
	A1	0.01860	0.00100	0.01764	0.32940	0.12960	0.01906	2.50740	0.60000	0.03833
	S	0.01860	0.00100	0.01701	0.32940	0.12960	0.01821	2.50740	0.60000	0.03588
sg13g2_mux2_1	A0	0.01860	0.00100	0.01570	0.32940	0.06480	0.01793	2.50740	0.30000	0.03709
	A1	0.01860	0.00100	0.01226	0.32940	0.06480	0.01406	2.50740	0.30000	0.03347
	S	0.01860	0.00100	0.01188	0.32940	0.06480	0.01311	2.50740	0.30000	0.03084

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	0.01709	0.32940	0.12960	0.01763	2.50740	0.60000	0.01759
	S	(!A0 * A1)	0.01860	0.00100	0.01763	0.32940	0.12960	0.01907	2.50740	0.60000	0.03606
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01214	0.32940	0.06480	0.01232	2.50740	0.30000	0.01234
	S	(!A0 * A1)	0.01860	0.00100	0.01261	0.32940	0.06480	0.01377	2.50740	0.30000	0.03135

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	0.01772	0.32940	0.12960	0.01822	2.50740	0.60000	0.01805
	S	(!A0 * A1)	0.01860	0.00100	0.01701	0.32940	0.12960	0.01821	2.50740	0.60000	0.03588
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01258	0.32940	0.06480	0.01313	2.50740	0.30000	0.01297
	S	(!A0 * A1)	0.01860	0.00100	0.01188	0.32940	0.06480	0.01311	2.50740	0.30000	0.03084

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00421	0.32940	0.00544	2.50740	0.02429
sg13g2_mux2_1	0.01860	0.00421	0.32940	0.00544	2.50740	0.02429

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00480	0.32940	0.00632	2.50740	0.02450
sg13g2_mux2_1	0.01860	0.00480	0.32940	0.00632	2.50740	0.02450

MUX4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00305	0.00303	0.00305	0.00313	0.00882	0.00538	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	762.61000	984.26700	1144.80000

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	0.09432	0.32940	0.06480	0.30734	2.50740	0.30000	0.96735
	A1->X (RR)	0.01860	0.00100	0.09166	0.32940	0.06480	0.30631	2.50740	0.30000	0.96370
	A2->X (RR)	0.01860	0.00100	0.09735	0.32940	0.06480	0.31407	2.50740	0.30000	0.98162
	A3->X (RR)	0.01860	0.00100	0.09529	0.32940	0.06480	0.31298	2.50740	0.30000	0.97976
	S0->X (-R)	0.01860	0.00100	0.08311	0.32940	0.06480	0.30697	2.50740	0.30000	0.97265
	S1->X (-R)	0.01860	0.00100	0.05007	0.32940	0.06480	0.24692	2.50740	0.30000	0.84541

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	0.10338	0.32940	0.06480	0.29933	2.50740	0.30000	0.83686
	A1->X (FF)	0.01860	0.00100	0.10517	0.32940	0.06480	0.29958	2.50740	0.30000	0.83793
	A2->X (FF)	0.01860	0.00100	0.11012	0.32940	0.06480	0.30864	2.50740	0.30000	0.85530
	A3->X (FF)	0.01860	0.00100	0.11079	0.32940	0.06480	0.30817	2.50740	0.30000	0.85411
	S0->X (-F)	0.01860	0.00100	0.12803	0.32940	0.06480	0.32683	2.50740	0.30000	0.86878
	S1->X (-F)	0.01860	0.00100	0.07157	0.32940	0.06480	0.25612	2.50740	0.30000	0.75657

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	0.08311	0.32940	0.06480	0.30697	2.50740	0.30000	0.97265
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.07880	0.32940	0.06480	0.29684	2.50740	0.30000	0.95127
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.11903	0.32940	0.06480	0.32149	2.50740	0.30000	0.86751
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11589	0.32940	0.06480	0.31613	2.50740	0.30000	0.85972
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.05017	0.32940	0.06480	0.24690	2.50740	0.30000	0.84530
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.05007	0.32940	0.06480	0.24692	2.50740	0.30000	0.84541
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.06551	0.32940	0.06480	0.25088	2.50740	0.30000	0.75466
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.06536	0.32940	0.06480	0.25084	2.50740	0.30000	0.75562

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	0.09550	0.32940	0.06480	0.30428	2.50740	0.30000	0.86683
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.08761	0.32940	0.06480	0.29137	2.50740	0.30000	0.84151
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.12803	0.32940	0.06480	0.32683	2.50740	0.30000	0.86878
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.12164	0.32940	0.06480	0.31864	2.50740	0.30000	0.85723
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.05774	0.32940	0.06480	0.23952	2.50740	0.30000	0.75408
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.05771	0.32940	0.06480	0.23938	2.50740	0.30000	0.75360
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.07157	0.32940	0.06480	0.25612	2.50740	0.30000	0.75657
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.07176	0.32940	0.06480	0.25604	2.50740	0.30000	0.75646

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	0.02371	0.32940	0.06480	0.02409	2.50740	0.30000	0.03953
	A1	0.01860	0.00100	0.01526	0.32940	0.06480	0.01574	2.50740	0.30000	0.03110
	A2	0.01860	0.00100	0.02370	0.32940	0.06480	0.02407	2.50740	0.30000	0.03952
	A3	0.01860	0.00100	0.02235	0.32940	0.06480	0.02271	2.50740	0.30000	0.03797
	S0	0.01860	0.00100	0.01810	0.32940	0.06480	0.01535	2.50740	0.30000	-0.00223
	S1	0.01860	0.00100	0.01076	0.32940	0.06480	0.01271	2.50740	0.30000	0.02400

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	0.02338	0.32940	0.06480	0.02398	2.50740	0.30000	0.03965
	A1	0.01860	0.00100	0.01593	0.32940	0.06480	0.01661	2.50740	0.30000	0.03226
	A2	0.01860	0.00100	0.01773	0.32940	0.06480	0.01828	2.50740	0.30000	0.03383
	A3	0.01860	0.00100	0.01763	0.32940	0.06480	0.01819	2.50740	0.30000	0.03382
	S0	0.01860	0.00100	0.01264	0.32940	0.06480	0.01436	2.50740	0.30000	0.03152
	S1	0.01860	0.00100	0.01098	0.32940	0.06480	0.01301	2.50740	0.30000	0.02487

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	0.01810	0.32940	0.06480	0.01535	2.50740	0.30000	-0.00223
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01805	0.32940	0.06480	0.01537	2.50740	0.30000	-0.00246
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01172	0.32940	0.06480	0.01273	2.50740	0.30000	0.03011
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01177	0.32940	0.06480	0.01265	2.50740	0.30000	0.02993
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01083	0.32940	0.06480	0.01271	2.50740	0.30000	0.02507
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01076	0.32940	0.06480	0.01271	2.50740	0.30000	0.02400
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00672	0.32940	0.06480	0.00815	2.50740	0.30000	0.02355
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00671	0.32940	0.06480	0.00817	2.50740	0.30000	0.02355

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	0.02622	0.32940	0.06480	0.02584	2.50740	0.30000	0.00806
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02625	0.32940	0.06480	0.02625	2.50740	0.30000	0.00819
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01245	0.32940	0.06480	0.01391	2.50740	0.30000	0.03137
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01264	0.32940	0.06480	0.01436	2.50740	0.30000	0.03152
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01097	0.32940	0.06480	0.01301	2.50740	0.30000	0.02536
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01098	0.32940	0.06480	0.01301	2.50740	0.30000	0.02487
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00608	0.32940	0.06480	0.00768	2.50740	0.30000	0.02283
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00611	0.32940	0.06480	0.00770	2.50740	0.30000	0.02280

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00892	0.32940	0.01231	2.50740	0.05393

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01204	0.32940	0.01604	2.50740	0.05645

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	0.00821	0.32940	0.01154	2.50740	0.05318
	(A0 * A1 * !S1)	0.01860	0.00887	0.32940	0.01191	2.50740	0.05342
	(!A2 * !A3 * S1)	0.01860	0.00892	0.32940	0.01231	2.50740	0.05393
	(!A0 * !A1 * !S1)	0.01860	0.00992	0.32940	0.01302	2.50740	0.05439

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	0.01248	0.32940	0.01656	2.50740	0.05723
	(A0 * A1 * !S1)	0.01860	0.01437	0.32940	0.01862	2.50740	0.05905
	(!A2 * !A3 * S1)	0.01860	0.01204	0.32940	0.01604	2.50740	0.05645
	(!A0 * !A1 * !S1)	0.01860	0.00854	0.32940	0.01216	2.50740	0.05227

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00507	0.32940	0.00715	2.50740	0.02999

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00497	0.32940	0.00728	2.50740	0.02986

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	0.00456	0.32940	0.00660	2.50740	0.02944
	(A0 * A2 * !S0)	0.01860	0.00455	0.32940	0.00659	2.50740	0.02968
	(!A1 * !A3 * S0)	0.01860	0.00505	0.32940	0.00717	2.50740	0.03025
	(!A0 * !A2 * !S0)	0.01860	0.00507	0.32940	0.00715	2.50740	0.02999

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	0.00520	0.32940	0.00759	2.50740	0.02977
	(A0 * A2 * !S0)	0.01860	0.00520	0.32940	0.00751	2.50740	0.02989
	(!A1 * !A3 * S0)	0.01860	0.00497	0.32940	0.00728	2.50740	0.02986
	(!A0 * !A2 * !S0)	0.01860	0.00497	0.32940	0.00728	2.50740	0.02951

NAND2B1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00249	0.00335	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	138.12100	269.63300	373.98300

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	0.03726	0.32940	0.06480	0.21931	2.50740	0.30000	0.80381
	B->Y (FR)	0.01860	0.00100	0.01889	0.32940	0.06480	0.27490	2.50740	0.30000	1.50524

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	0.04411	0.32940	0.06480	0.28348	2.50740	0.30000	1.04587
	B->Y (RF)	0.01860	0.00100	0.02723	0.32940	0.06480	0.32608	2.50740	0.30000	1.71218

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	0.00240	0.32940	0.06480	0.00251	2.50740	0.30000	0.00157
	B	0.01860	0.00100	0.00202	0.32940	0.06480	0.00259	2.50740	0.30000	0.00986

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	0.00537	0.32940	0.06480	0.00550	2.50740	0.30000	0.00500
	B	0.01860	0.00100	0.00519	0.32940	0.06480	0.00550	2.50740	0.30000	0.01143

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	0.00482	0.32940	0.00641	2.50740	0.02557

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	0.00245	0.32940	0.00412	2.50740	0.02245

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	0.00482	0.32940	0.00641	2.50740	0.02557

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	0.00245	0.32940	0.00412	2.50740	0.02245

NAND2B2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00237	0.00569	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	270.99900	447.53100	672.25200

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	0.04867	0.32940	0.12960	0.25035	2.50740	0.60000	0.86956
	B->Y (FR)	0.01860	0.00100	0.01493	0.32940	0.12960	0.27105	2.50740	0.60000	1.49964

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	0.05917	0.32940	0.12960	0.33213	2.50740	0.60000	1.16723
	B->Y (RF)	0.01860	0.00100	0.02063	0.32940	0.12960	0.35976	2.50740	0.60000	1.94239

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	0.00496	0.32940	0.12960	0.00538	2.50740	0.60000	0.00423
	B	0.01860	0.00100	0.00659	0.32940	0.12960	0.00798	2.50740	0.60000	0.02180

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	0.01061	0.32940	0.12960	0.01120	2.50740	0.60000	0.01167
	B	0.01860	0.00100	0.00785	0.32940	0.12960	0.00923	2.50740	0.60000	0.02137

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	0.00782	0.32940	0.00875	2.50740	0.02669

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	0.00764	0.32940	0.00883	2.50740	0.02628

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	0.00782	0.32940	0.00875	2.50740	0.02669

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	0.00764	0.32940	0.00883	2.50740	0.02628

NAND2x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00596	0.00615	0.60000
sg13g2_nand2_1	0.00313	0.00324	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	159.30500	362.54600	613.97400
sg13g2_nand2_1	79.77980	184.60600	315.63300

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	0.01504	0.32940	0.12960	0.27146	2.50740	0.60000	1.50012
	B->Y (FR)	0.01860	0.00100	0.01822	0.32940	0.12960	0.27528	2.50740	0.60000	1.50575
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.01665	0.32940	0.06480	0.27133	2.50740	0.30000	1.49824
	B->Y (FR)	0.01860	0.00100	0.01940	0.32940	0.06480	0.27465	2.50740	0.30000	1.50355

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	0.02076	0.32940	0.12960	0.35938	2.50740	0.60000	1.94154
	B->Y (RF)	0.01860	0.00100	0.02459	0.32940	0.12960	0.33466	2.50740	0.60000	1.75903
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.02250	0.32940	0.06480	0.34979	2.50740	0.30000	1.89137
	B->Y (RF)	0.01860	0.00100	0.02533	0.32940	0.06480	0.32448	2.50740	0.30000	1.71024

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	0.00358	0.32940	0.12960	0.00524	2.50740	0.60000	0.01856
	B	0.01860	0.00100	0.00448	0.32940	0.12960	0.00557	2.50740	0.60000	0.01961
sg13g2_nand2_1	A	0.01860	0.00100	0.00194	0.32940	0.06480	0.00270	2.50740	0.30000	0.00964
	B	0.01860	0.00100	0.00204	0.32940	0.06480	0.00266	2.50740	0.30000	0.00987

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	0.00506	0.32940	0.12960	0.00635	2.50740	0.60000	0.01797
	B	0.01860	0.00100	0.00943	0.32940	0.12960	0.01012	2.50740	0.60000	0.02098
sg13g2_nand2_1	A	0.01860	0.00100	0.00274	0.32940	0.06480	0.00335	2.50740	0.30000	0.00960
	B	0.01860	0.00100	0.00498	0.32940	0.06480	0.00525	2.50740	0.30000	0.01102

NAND3B1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00242	0.00324	0.00324	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	140.70200	315.53800	531.77800

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	0.03920	0.32940	0.06480	0.21986	2.50740	0.30000	0.80379
	B->Y (FR)	0.01860	0.00100	0.02126	0.32940	0.06480	0.27716	2.50740	0.30000	1.50497
	C->Y (FR)	0.01860	0.00100	0.02293	0.32940	0.06480	0.28022	2.50740	0.30000	1.50942

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	0.05348	0.32940	0.06480	0.37535	2.50740	0.30000	1.44124
	B->Y (RF)	0.01860	0.00100	0.04095	0.32940	0.06480	0.42394	2.50740	0.30000	2.15140
	C->Y (RF)	0.01860	0.00100	0.04454	0.32940	0.06480	0.40340	2.50740	0.30000	1.95837

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	0.00272	0.32940	0.06480	0.00276	2.50740	0.30000	0.00205
	B	0.01860	0.00100	0.00253	0.32940	0.06480	0.00302	2.50740	0.30000	0.00935
	C	0.01860	0.00100	0.00285	0.32940	0.06480	0.00321	2.50740	0.30000	0.00974

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	0.00679	0.32940	0.06480	0.00692	2.50740	0.30000	0.00638
	B	0.01860	0.00100	0.00663	0.32940	0.06480	0.00676	2.50740	0.30000	0.01134
	C	0.01860	0.00100	0.00884	0.32940	0.06480	0.00887	2.50740	0.30000	0.01347

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	0.00476	0.32940	0.00636	2.50740	0.02551

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	0.00253	0.32940	0.00418	2.50740	0.02253

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	0.00476	0.32940	0.00636	2.50740	0.02551

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	0.00253	0.32940	0.00418	2.50740	0.02253

NAND3



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00310	0.00324	0.00320	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	82.46900	230.61900	473.54900

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	0.01903	0.32940	0.06480	0.27377	2.50740	0.30000	1.49980
	B->Y (FR)	0.01860	0.00100	0.02181	0.32940	0.06480	0.27720	2.50740	0.30000	1.50500
	C->Y (FR)	0.01860	0.00100	0.02320	0.32940	0.06480	0.28030	2.50740	0.30000	1.50930

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	0.03245	0.32940	0.06480	0.43793	2.50740	0.30000	2.29134
	B->Y (RF)	0.01860	0.00100	0.03881	0.32940	0.06480	0.42237	2.50740	0.30000	2.14996
	C->Y (RF)	0.01860	0.00100	0.04142	0.32940	0.06480	0.40004	2.50740	0.30000	1.95649

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	0.00234	0.32940	0.06480	0.00298	2.50740	0.30000	0.00915
	B	0.01860	0.00100	0.00253	0.32940	0.06480	0.00299	2.50740	0.30000	0.00929
	C	0.01860	0.00100	0.00287	0.32940	0.06480	0.00323	2.50740	0.30000	0.00983

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	0.00421	0.32940	0.06480	0.00464	2.50740	0.30000	0.00987
	B	0.01860	0.00100	0.00650	0.32940	0.06480	0.00664	2.50740	0.30000	0.01130
	C	0.01860	0.00100	0.00840	0.32940	0.06480	0.00847	2.50740	0.30000	0.01331

NAND4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00306	0.00320	0.00321	0.00320	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	85.11470	268.85300	631.34900

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	0.02001	0.32940	0.06480	0.27487	2.50740	0.30000	1.49936
	B->Y (FR)	0.01860	0.00100	0.02291	0.32940	0.06480	0.27848	2.50740	0.30000	1.50490
	C->Y (FR)	0.01860	0.00100	0.02444	0.32940	0.06480	0.28175	2.50740	0.30000	1.50974
	D->Y (FR)	0.01860	0.00100	0.02491	0.32940	0.06480	0.28430	2.50740	0.30000	1.51321

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	0.04079	0.32940	0.06480	0.52238	2.50740	0.30000	2.66937
	B->Y (RF)	0.01860	0.00100	0.05091	0.32940	0.06480	0.51447	2.50740	0.30000	2.55372
	C->Y (RF)	0.01860	0.00100	0.05658	0.32940	0.06480	0.49900	2.50740	0.30000	2.38729
	D->Y (RF)	0.01860	0.00100	0.05895	0.32940	0.06480	0.48590	2.50740	0.30000	2.24116

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	0.00230	0.32940	0.06480	0.00293	2.50740	0.30000	0.00851
	B	0.01860	0.00100	0.00259	0.32940	0.06480	0.00301	2.50740	0.30000	0.00875
	C	0.01860	0.00100	0.00289	0.32940	0.06480	0.00316	2.50740	0.30000	0.00906
	D	0.01860	0.00100	0.00310	0.32940	0.06480	0.00332	2.50740	0.30000	0.00933

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	0.00513	0.32940	0.06480	0.00561	2.50740	0.30000	0.00989
	B	0.01860	0.00100	0.00741	0.32940	0.06480	0.00759	2.50740	0.30000	0.01137
	C	0.01860	0.00100	0.00935	0.32940	0.06480	0.00940	2.50740	0.30000	0.01321
	D	0.01860	0.00100	0.01123	0.32940	0.06480	0.01131	2.50740	0.30000	0.01531

NOR2Bx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00605	0.00289	0.60000
sg13g2_nor2b_1	0.00312	0.00245	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	368.14100	489.67700	576.52400
sg13g2_nor2b_1	211.74300	283.30000	337.28300

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	0.02168	0.32940	0.12960	0.39113	2.50740	0.60000	2.07982
	B_N->Y (RR)	0.01860	0.00100	0.05539	0.32940	0.12960	0.36999	2.50740	0.60000	1.40672
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.02466	0.32940	0.06480	0.39197	2.50740	0.30000	2.08231
	B_N->Y (RR)	0.01860	0.00100	0.05024	0.32940	0.06480	0.34877	2.50740	0.30000	1.35188

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	0.01514	0.32940	0.12960	0.26828	2.50740	0.60000	1.49430
	B_N->Y (FF)	0.01860	0.00100	0.04896	0.32940	0.12960	0.22768	2.50740	0.60000	0.72655
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.01641	0.32940	0.06480	0.26158	2.50740	0.30000	1.45714
	B_N->Y (FF)	0.01860	0.00100	0.04150	0.32940	0.06480	0.20171	2.50740	0.30000	0.66843

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	0.00501	0.32940	0.12960	0.00648	2.50740	0.60000	0.01876
	B_N	0.01860	0.00100	0.01095	0.32940	0.12960	0.01125	2.50740	0.60000	0.01086
sg13g2_nor2b_1	A	0.01860	0.00100	0.00251	0.32940	0.06480	0.00319	2.50740	0.30000	0.00967
	B_N	0.01860	0.00100	0.00576	0.32940	0.06480	0.00579	2.50740	0.30000	0.00535

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	0.00336	0.32940	0.12960	0.00509	2.50740	0.60000	0.01683
	B_N	0.01860	0.00100	0.00523	0.32940	0.12960	0.00545	2.50740	0.60000	0.00460
sg13g2_nor2b_1	A	0.01860	0.00100	0.00213	0.32940	0.06480	0.00294	2.50740	0.30000	0.00882
	B_N	0.01860	0.00100	0.00288	0.32940	0.06480	0.00290	2.50740	0.30000	0.00210

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	0.00889	0.32940	0.01023	2.50740	0.03201
sg13g2_nor2b_1	0.01860	0.00486	0.32940	0.00627	2.50740	0.02512

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	0.00763	0.32940	0.00916	2.50740	0.03015
sg13g2_nor2b_1	0.01860	0.00443	0.32940	0.00599	2.50740	0.02418

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	0.00889	0.32940	0.01023	2.50740	0.03201
sg13g2_nor2b_1	A	0.01860	0.00486	0.32940	0.00627	2.50740	0.02512

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	0.00763	0.32940	0.00916	2.50740	0.03015
sg13g2_nor2b_1	A	0.01860	0.00443	0.32940	0.00599	2.50740	0.02418

NOR2x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00629	0.00602	0.30000
sg13g2_nor2_1	0.00326	0.00311	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	306.92100	396.71500	512.42500
sg13g2_nor2_1	153.49000	198.36100	256.19500

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	0.02740	0.32940	0.06480	0.23505	2.50740	0.30000	1.19437
	B->Y (FR)	0.01860	0.00100	0.02194	0.32940	0.06480	0.25659	2.50740	0.30000	1.35770
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02891	0.32940	0.06480	0.36300	2.50740	0.30000	1.85818
	B->Y (FR)	0.01860	0.00100	0.02472	0.32940	0.06480	0.39165	2.50740	0.30000	2.08110

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	0.01815	0.32940	0.06480	0.18865	2.50740	0.30000	1.00626
	B->Y (RF)	0.01860	0.00100	0.01492	0.32940	0.06480	0.18319	2.50740	0.30000	0.99755
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.01919	0.32940	0.06480	0.26515	2.50740	0.30000	1.46298
	B->Y (RF)	0.01860	0.00100	0.01645	0.32940	0.06480	0.26152	2.50740	0.30000	1.45705

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	0.01077	0.32940	0.06480	0.01158	2.50740	0.30000	0.02901
	B	0.01860	0.00100	0.00511	0.32940	0.06480	0.00718	2.50740	0.30000	0.02676
sg13g2_nor2_1	A	0.01860	0.00100	0.00533	0.32940	0.06480	0.00559	2.50740	0.30000	0.01126
	B	0.01860	0.00100	0.00251	0.32940	0.06480	0.00318	2.50740	0.30000	0.00940

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	0.00458	0.32940	0.06480	0.00594	2.50740	0.30000	0.02459
	B	0.01860	0.00100	0.00332	0.32940	0.06480	0.00527	2.50740	0.30000	0.02325
sg13g2_nor2_1	A	0.01860	0.00100	0.00229	0.32940	0.06480	0.00278	2.50740	0.30000	0.00895
	B	0.01860	0.00100	0.00213	0.32940	0.06480	0.00295	2.50740	0.30000	0.00884

NOR3x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00626	0.00619	0.00596	0.60000
sg13g2_nor3_1	0.00329	0.00328	0.00311	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	311.25000	516.04700	751.46500
sg13g2_nor3_1	162.21600	267.57800	395.48600

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	0.04661	0.32940	0.12960	0.47927	2.50740	0.60000	2.25476
	B->Y (FR)	0.01860	0.00100	0.04333	0.32940	0.12960	0.50077	2.50740	0.60000	2.46980
	C->Y (FR)	0.01860	0.00100	0.03140	0.32940	0.12960	0.51266	2.50740	0.60000	2.63396
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.05029	0.32940	0.06480	0.47741	2.50740	0.30000	2.24733
	B->Y (FR)	0.01860	0.00100	0.04710	0.32940	0.06480	0.49848	2.50740	0.30000	2.45700
	C->Y (FR)	0.01860	0.00100	0.03658	0.32940	0.06480	0.51197	2.50740	0.30000	2.62310

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	0.02041	0.32940	0.12960	0.27038	2.50740	0.60000	1.46890
	B->Y (RF)	0.01860	0.00100	0.01992	0.32940	0.12960	0.26721	2.50740	0.60000	1.46335
	C->Y (RF)	0.01860	0.00100	0.01665	0.32940	0.12960	0.26292	2.50740	0.60000	1.45750
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02136	0.32940	0.06480	0.26407	2.50740	0.30000	1.43414
	B->Y (RF)	0.01860	0.00100	0.02086	0.32940	0.06480	0.26190	2.50740	0.30000	1.43315
	C->Y (RF)	0.01860	0.00100	0.01809	0.32940	0.06480	0.25820	2.50740	0.30000	1.42758

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	0.01789	0.32940	0.12960	0.01815	2.50740	0.60000	0.02729
	B	0.01860	0.00100	0.01298	0.32940	0.12960	0.01324	2.50740	0.60000	0.02211
	C	0.01860	0.00100	0.00731	0.32940	0.12960	0.00858	2.50740	0.60000	0.01904
sg13g2_nor3_1	A	0.01860	0.00100	0.00913	0.32940	0.06480	0.00931	2.50740	0.30000	0.01417
	B	0.01860	0.00100	0.00667	0.32940	0.06480	0.00685	2.50740	0.30000	0.01141
	C	0.01860	0.00100	0.00391	0.32940	0.06480	0.00453	2.50740	0.30000	0.00992

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	0.00573	0.32940	0.12960	0.00621	2.50740	0.60000	0.01734
	B	0.01860	0.00100	0.00522	0.32940	0.12960	0.00598	2.50740	0.60000	0.01689
	C	0.01860	0.00100	0.00379	0.32940	0.12960	0.00547	2.50740	0.60000	0.01571
sg13g2_nor3_1	A	0.01860	0.00100	0.00297	0.32940	0.06480	0.00325	2.50740	0.30000	0.00912
	B	0.01860	0.00100	0.00281	0.32940	0.06480	0.00321	2.50740	0.30000	0.00885
	C	0.01860	0.00100	0.00239	0.32940	0.06480	0.00313	2.50740	0.30000	0.00845

NOR4x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00627	0.00612	0.00529	0.00536	0.60000
sg13g2_nor4_1	0.00325	0.00321	0.00278	0.00278	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	316.15400	660.41200	993.97200
sg13g2_nor4_1	158.08100	330.21400	497.00500

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	0.07235	0.32940	0.12960	0.61367	2.50740	0.60000	2.71358
	B->Y (FR)	0.01860	0.00100	0.06931	0.32940	0.12960	0.62451	2.50740	0.60000	2.87198
	C->Y (FR)	0.01860	0.00100	0.05960	0.32940	0.12960	0.63371	2.50740	0.60000	3.04439
	D->Y (FR)	0.01860	0.00100	0.04083	0.32940	0.12960	0.63389	2.50740	0.60000	3.16668
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.07543	0.32940	0.06480	0.60845	2.50740	0.30000	2.69783
	B->Y (FR)	0.01860	0.00100	0.07252	0.32940	0.06480	0.61924	2.50740	0.30000	2.85098
	C->Y (FR)	0.01860	0.00100	0.06352	0.32940	0.06480	0.62950	2.50740	0.30000	3.02426
	D->Y (FR)	0.01860	0.00100	0.04583	0.32940	0.06480	0.63037	2.50740	0.30000	3.14690

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	0.02155	0.32940	0.12960	0.27483	2.50740	0.60000	1.47446
	B->Y (RF)	0.01860	0.00100	0.02202	0.32940	0.12960	0.27263	2.50740	0.60000	1.47138
	C->Y (RF)	0.01860	0.00100	0.02113	0.32940	0.12960	0.26907	2.50740	0.60000	1.46558
	D->Y (RF)	0.01860	0.00100	0.01796	0.32940	0.12960	0.26437	2.50740	0.60000	1.45802
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.02286	0.32940	0.06480	0.27455	2.50740	0.30000	1.47397
	B->Y (RF)	0.01860	0.00100	0.02332	0.32940	0.06480	0.27298	2.50740	0.30000	1.47331
	C->Y (RF)	0.01860	0.00100	0.02236	0.32940	0.06480	0.26954	2.50740	0.30000	1.46745
	D->Y (RF)	0.01860	0.00100	0.01932	0.32940	0.06480	0.26534	2.50740	0.30000	1.46204

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	0.02232	0.32940	0.12960	0.02216	2.50740	0.60000	0.03068
	B	0.01860	0.00100	0.01983	0.32940	0.12960	0.01972	2.50740	0.60000	0.02835
	C	0.01860	0.00100	0.01565	0.32940	0.12960	0.01569	2.50740	0.60000	0.02437
	D	0.01860	0.00100	0.01107	0.32940	0.12960	0.01208	2.50740	0.60000	0.02236
sg13g2_nor4_1	A	0.01860	0.00100	0.01112	0.32940	0.06480	0.01109	2.50740	0.30000	0.01530
	B	0.01860	0.00100	0.00973	0.32940	0.06480	0.00966	2.50740	0.30000	0.01395
	C	0.01860	0.00100	0.00794	0.32940	0.06480	0.00797	2.50740	0.30000	0.01225
	D	0.01860	0.00100	0.00557	0.32940	0.06480	0.00606	2.50740	0.30000	0.01110

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	0.00768	0.32940	0.12960	0.00827	2.50740	0.60000	0.01842
	B	0.01860	0.00100	0.00674	0.32940	0.12960	0.00698	2.50740	0.60000	0.01669
	C	0.01860	0.00100	0.00421	0.32940	0.12960	0.00498	2.50740	0.60000	0.01426
	D	0.01860	0.00100	0.00223	0.32940	0.12960	0.00386	2.50740	0.60000	0.01304
sg13g2_nor4_1	A	0.01860	0.00100	0.00380	0.32940	0.06480	0.00408	2.50740	0.30000	0.00923
	B	0.01860	0.00100	0.00352	0.32940	0.06480	0.00365	2.50740	0.30000	0.00854
	C	0.01860	0.00100	0.00227	0.32940	0.06480	0.00262	2.50740	0.30000	0.00737
	D	0.01860	0.00100	0.00145	0.32940	0.06480	0.00217	2.50740	0.30000	0.00676

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00056	0.32940	-0.00096	2.50740	-0.00107
sg13g2_nor4_1	0.01860	-0.00019	0.32940	-0.00039	2.50740	-0.00044

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00233	0.32940	0.00226	2.50740	0.00228
sg13g2_nor4_1	0.01860	0.00105	0.32940	0.00101	2.50740	0.00102

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	-0.00056	0.32940	-0.00096	2.50740	-0.00107
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00019	0.32940	-0.00039	2.50740	-0.00044

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	0.00233	0.32940	0.00226	2.50740	0.00228
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00105	0.32940	0.00101	2.50740	0.00102

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	0.00129	0.32940	0.00131	2.50740	0.00131
sg13g2_nor4_1	0.01860	0.00078	0.32940	0.00079	2.50740	0.00079

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00070	0.32940	-0.00069	2.50740	-0.00069
sg13g2_nor4_1	0.01860	-0.00061	0.32940	-0.00060	2.50740	-0.00060

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	0.00129	0.32940	0.00131	2.50740	0.00131
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00078	0.32940	0.00079	2.50740	0.00079

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	-0.00070	0.32940	-0.00069	2.50740	-0.00069
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00061	0.32940	-0.00060	2.50740	-0.00060

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00177	0.32940	0.00177	2.50740	0.00177
sg13g2_nor4_1	0.01860	0.00101	0.32940	0.00101	2.50740	0.00101

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00177	0.32940	-0.00177	2.50740	-0.00175
sg13g2_nor4_1	0.01860	-0.00101	0.32940	-0.00101	2.50740	-0.00101

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	0.00177	0.32940	0.00177	2.50740	0.00177
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00101	0.32940	0.00101	2.50740	0.00101

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	-0.00177	0.32940	-0.00177	2.50740	-0.00175
sg13g2_nor4_1	(A * !C) + (!A * B * !C)	0.01860	-0.00101	0.32940	-0.00101	2.50740	-0.00101

NP_ANT



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00088

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.22720	5.22720	5.22720

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	-0.00045	0.32940	-0.00045	2.50740	-0.00045

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00045	0.32940	0.00045	2.50740	0.00045

O21AI



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00358	0.00360	0.00326	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	170.72800	372.61100	572.07100

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	0.04645	0.32940	0.06480	0.43622	2.50740	0.30000	2.14928
	A2->Y (FR)	0.01860	0.00100	0.04062	0.32940	0.06480	0.46611	2.50740	0.30000	2.40998
	B1->Y (FR)	0.01860	0.00100	0.02026	0.32940	0.06480	0.31296	2.50740	0.30000	1.72443

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	0.03386	0.32940	0.06480	0.32585	2.50740	0.30000	1.64461
	A2->Y (RF)	0.01860	0.00100	0.02846	0.32940	0.06480	0.31899	2.50740	0.30000	1.63460
	B1->Y (RF)	0.01860	0.00100	0.02943	0.32940	0.06480	0.35266	2.50740	0.30000	1.84869

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	0.02026	0.32940	0.06480	0.31296	2.50740	0.30000	1.72443
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01958	0.32940	0.06480	0.31133	2.50740	0.30000	1.72055

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	0.02943	0.32940	0.06480	0.35266	2.50740	0.30000	1.84869
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02256	0.32940	0.06480	0.34280	2.50740	0.30000	1.83082

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	0.00606	0.32940	0.06480	0.00629	2.50740	0.30000	0.01145
	A2	0.01860	0.00100	0.00299	0.32940	0.06480	0.00358	2.50740	0.30000	0.00889
	B1	0.01860	0.00100	0.00087	0.32940	0.06480	0.00166	2.50740	0.30000	0.00847

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	0.00607	0.32940	0.06480	0.00593	2.50740	0.30000	0.01103
	A2	0.01860	0.00100	0.00568	0.32940	0.06480	0.00589	2.50740	0.30000	0.01091
	B1	0.01860	0.00100	0.00283	0.32940	0.06480	0.00347	2.50740	0.30000	0.00987

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	0.00381	0.32940	0.06480	0.00456	2.50740	0.30000	0.01137
	B1	(!A1 * A2)	0.01860	0.00100	0.00087	0.32940	0.06480	0.00166	2.50740	0.30000	0.00847

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	0.00343	0.32940	0.06480	0.00384	2.50740	0.30000	0.01027
	B1	(!A1 * A2)	0.01860	0.00100	0.00283	0.32940	0.06480	0.00347	2.50740	0.30000	0.00987

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00025	0.32940	-0.00009	2.50740	-0.00004

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00025	0.32940	0.00009	2.50740	0.00004

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	-0.00025	0.32940	-0.00009	2.50740	-0.00004

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	0.00025	0.32940	0.00009	2.50740	0.00004

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00018	0.32940	-0.00001	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00018	0.32940	0.00001	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_o21ai_1	(!A1 * !B1)	0.01860	-0.00018	0.32940	-0.00001	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_o21ai_1	(!A1 * !B1)	0.01860	0.00018	0.32940	0.00001	2.50740	0.00000

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00004	0.32940	-0.00003	2.50740	-0.00003

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00116	0.32940	0.00116	2.50740	0.00117

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	-0.00004	0.32940	-0.00003	2.50740	-0.00003

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	0.00116	0.32940	0.00116	2.50740	0.00117

OR2x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00266	0.00245	0.60000
sg13g2_or2_1	0.00267	0.00248	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	266.46400	336.88200	432.15800
sg13g2_or2_1	187.54400	238.25900	274.42500

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	0.04765	0.32940	0.12960	0.25946	2.50740	0.60000	0.88111
	B->X (RR)	0.01860	0.00100	0.04500	0.32940	0.12960	0.24951	2.50740	0.60000	0.84601
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.04053	0.32940	0.06480	0.23140	2.50740	0.30000	0.81330
	B->X (RR)	0.01860	0.00100	0.03757	0.32940	0.06480	0.21946	2.50740	0.30000	0.77477

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	0.07983	0.32940	0.12960	0.27029	2.50740	0.60000	0.80565
	B->X (FF)	0.01860	0.00100	0.07579	0.32940	0.12960	0.28190	2.50740	0.60000	0.84813
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.06165	0.32940	0.06480	0.22925	2.50740	0.30000	0.73253
	B->X (FF)	0.01860	0.00100	0.05742	0.32940	0.06480	0.23516	2.50740	0.30000	0.75729

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	0.01246	0.32940	0.12960	0.01416	2.50740	0.60000	0.02911
	B	0.01860	0.00100	0.01232	0.32940	0.12960	0.01370	2.50740	0.60000	0.02875
sg13g2_or2_1	A	0.01860	0.00100	0.00742	0.32940	0.06480	0.00875	2.50740	0.30000	0.02465
	B	0.01860	0.00100	0.00723	0.32940	0.06480	0.00850	2.50740	0.30000	0.02464

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	0.01480	0.32940	0.12960	0.01548	2.50740	0.60000	0.02859
	B	0.01860	0.00100	0.01295	0.32940	0.12960	0.01405	2.50740	0.60000	0.02895
sg13g2_or2_1	A	0.01860	0.00100	0.00939	0.32940	0.06480	0.01035	2.50740	0.30000	0.02521
	B	0.01860	0.00100	0.00742	0.32940	0.06480	0.00909	2.50740	0.30000	0.02445

OR3x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00280	0.00273	0.00259	0.60000
sg13g2_or3_1	0.00281	0.00274	0.00261	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	271.04500	373.47300	522.49800
sg13g2_or3_1	191.96300	284.53900	364.60200

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	0.05309	0.32940	0.12960	0.27663	2.50740	0.60000	0.93065
	B->X (RR)	0.01860	0.00100	0.05094	0.32940	0.12960	0.26773	2.50740	0.60000	0.89632
	C->X (RR)	0.01860	0.00100	0.04737	0.32940	0.12960	0.25678	2.50740	0.60000	0.86274
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.04610	0.32940	0.06480	0.25069	2.50740	0.30000	0.87378
	B->X (RR)	0.01860	0.00100	0.04408	0.32940	0.06480	0.24074	2.50740	0.30000	0.83200
	C->X (RR)	0.01860	0.00100	0.04028	0.32940	0.06480	0.22788	2.50740	0.30000	0.79197

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	0.10923	0.32940	0.12960	0.29777	2.50740	0.60000	0.81241
	B->X (FF)	0.01860	0.00100	0.10569	0.32940	0.12960	0.30881	2.50740	0.60000	0.87226
	C->X (FF)	0.01860	0.00100	0.09627	0.32940	0.12960	0.31197	2.50740	0.60000	0.89089
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.08646	0.32940	0.06480	0.25545	2.50740	0.30000	0.74520
	B->X (FF)	0.01860	0.00100	0.08296	0.32940	0.06480	0.26208	2.50740	0.30000	0.79012
	C->X (FF)	0.01860	0.00100	0.07318	0.32940	0.06480	0.26077	2.50740	0.30000	0.80170

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	0.01290	0.32940	0.12960	0.01443	2.50740	0.60000	0.02990
	B	0.01860	0.00100	0.01263	0.32940	0.12960	0.01406	2.50740	0.60000	0.02853
	C	0.01860	0.00100	0.01247	0.32940	0.12960	0.01388	2.50740	0.60000	0.02879
sg13g2_or3_1	A	0.01860	0.00100	0.00782	0.32940	0.06480	0.00899	2.50740	0.30000	0.02546
	B	0.01860	0.00100	0.00757	0.32940	0.06480	0.00870	2.50740	0.30000	0.02440
	C	0.01860	0.00100	0.00737	0.32940	0.06480	0.00855	2.50740	0.30000	0.02469

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	0.01943	0.32940	0.12960	0.01905	2.50740	0.60000	0.03256
	B	0.01860	0.00100	0.01726	0.32940	0.12960	0.01724	2.50740	0.60000	0.03125
	C	0.01860	0.00100	0.01489	0.32940	0.12960	0.01549	2.50740	0.60000	0.03012
sg13g2_or3_1	A	0.01860	0.00100	0.01338	0.32940	0.06480	0.01390	2.50740	0.30000	0.02875
	B	0.01860	0.00100	0.01122	0.32940	0.06480	0.01196	2.50740	0.30000	0.02642
	C	0.01860	0.00100	0.00886	0.32940	0.06480	0.01036	2.50740	0.30000	0.02575

OR4x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00281	0.00278	0.00229	0.00232	0.60000
sg13g2_or4_1	0.00282	0.00278	0.00230	0.00233	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	273.36100	406.66000	591.41100
sg13g2_or4_1	194.43100	322.79800	433.56500

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	0.05519	0.32940	0.12960	0.28501	2.50740	0.60000	0.94601
	B->X (RR)	0.01860	0.00100	0.05425	0.32940	0.12960	0.27844	2.50740	0.60000	0.91599
	C->X (RR)	0.01860	0.00100	0.05180	0.32940	0.12960	0.26970	2.50740	0.60000	0.88286
	D->X (RR)	0.01860	0.00100	0.04796	0.32940	0.12960	0.25853	2.50740	0.60000	0.84736
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.04813	0.32940	0.06480	0.26069	2.50740	0.30000	0.88700
	B->X (RR)	0.01860	0.00100	0.04747	0.32940	0.06480	0.25334	2.50740	0.30000	0.85421
	C->X (RR)	0.01860	0.00100	0.04515	0.32940	0.06480	0.24319	2.50740	0.30000	0.81713
	D->X (RR)	0.01860	0.00100	0.04108	0.32940	0.06480	0.23013	2.50740	0.30000	0.77960

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	0.14970	0.32940	0.12960	0.34638	2.50740	0.60000	0.86266
	B->X (FF)	0.01860	0.00100	0.14621	0.32940	0.12960	0.35217	2.50740	0.60000	0.92284
	C->X (FF)	0.01860	0.00100	0.13711	0.32940	0.12960	0.35504	2.50740	0.60000	0.96789
	D->X (FF)	0.01860	0.00100	0.12126	0.32940	0.12960	0.35210	2.50740	0.60000	0.97591
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.11926	0.32940	0.06480	0.29660	2.50740	0.30000	0.79025
	B->X (FF)	0.01860	0.00100	0.11584	0.32940	0.06480	0.30018	2.50740	0.30000	0.84297
	C->X (FF)	0.01860	0.00100	0.10676	0.32940	0.06480	0.29982	2.50740	0.30000	0.87490
	D->X (FF)	0.01860	0.00100	0.09057	0.32940	0.06480	0.29290	2.50740	0.30000	0.87493

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	0.01388	0.32940	0.12960	0.01508	2.50740	0.60000	0.02963
	B	0.01860	0.00100	0.01344	0.32940	0.12960	0.01477	2.50740	0.60000	0.02872
	C	0.01860	0.00100	0.01211	0.32940	0.12960	0.01343	2.50740	0.60000	0.02699
	D	0.01860	0.00100	0.01165	0.32940	0.12960	0.01302	2.50740	0.60000	0.02604
sg13g2_or4_1	A	0.01860	0.00100	0.00878	0.32940	0.06480	0.00978	2.50740	0.30000	0.02478
	B	0.01860	0.00100	0.00837	0.32940	0.06480	0.00935	2.50740	0.30000	0.02383
	C	0.01860	0.00100	0.00706	0.32940	0.06480	0.00804	2.50740	0.30000	0.02218
	D	0.01860	0.00100	0.00656	0.32940	0.06480	0.00762	2.50740	0.30000	0.02237

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	0.02043	0.32940	0.12960	0.01878	2.50740	0.60000	0.03022
	B	0.01860	0.00100	0.02069	0.32940	0.12960	0.01904	2.50740	0.60000	0.03211
	C	0.01860	0.00100	0.01919	0.32940	0.12960	0.01761	2.50740	0.60000	0.03091
	D	0.01860	0.00100	0.01669	0.32940	0.12960	0.01599	2.50740	0.60000	0.02986
sg13g2_or4_1	A	0.01860	0.00100	0.01348	0.32940	0.06480	0.01367	2.50740	0.30000	0.02667
	B	0.01860	0.00100	0.01373	0.32940	0.06480	0.01393	2.50740	0.30000	0.02746
	C	0.01860	0.00100	0.01223	0.32940	0.06480	0.01265	2.50740	0.30000	0.02612
	D	0.01860	0.00100	0.00969	0.32940	0.06480	0.01089	2.50740	0.30000	0.02512

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00042	0.32940	-0.00045	2.50740	-0.00047
sg13g2_or4_1	0.01860	-0.00043	0.32940	-0.00045	2.50740	-0.00047

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00262	0.32940	0.00261	2.50740	0.00262
sg13g2_or4_1	0.01860	0.00262	0.32940	0.00261	2.50740	0.00262

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	-0.00042	0.32940	-0.00045	2.50740	-0.00047
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00043	0.32940	-0.00045	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_or4_2	(!B * C) + (!B * !C * D)	0.01860	0.00262	0.32940	0.00261	2.50740	0.00262
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00262	0.32940	0.00261	2.50740	0.00262

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00025	0.32940	-0.00025	2.50740	-0.00026
sg13g2_or4_1	0.01860	-0.00025	0.32940	-0.00025	2.50740	-0.00026

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00025	0.32940	0.00025	2.50740	0.00026
sg13g2_or4_1	0.01860	0.00025	0.32940	0.00025	2.50740	0.00026

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	-0.00025	0.32940	-0.00025	2.50740	-0.00026
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00025	0.32940	-0.00025	2.50740	-0.00026

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	0.00025	0.32940	0.00025	2.50740	0.00026
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00025	0.32940	0.00025	2.50740	0.00026

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00066	0.32940	0.00067	2.50740	0.00067
sg13g2_or4_1	0.01860	0.00066	0.32940	0.00067	2.50740	0.00067

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00038	0.32940	-0.00037	2.50740	-0.00037
sg13g2_or4_1	0.01860	-0.00038	0.32940	-0.00038	2.50740	-0.00037

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	0.00066	0.32940	0.00067	2.50740	0.00067
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00066	0.32940	0.00067	2.50740	0.00067

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	-0.00038	0.32940	-0.00037	2.50740	-0.00037
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00038	0.32940	-0.00038	2.50740	-0.00037

Passive power(pJ) for D rising :

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

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00027	0.32940	-0.00025	2.50740	-0.00024
sg13g2_or4_1	0.01860	-0.00027	0.32940	-0.00026	2.50740	-0.00025

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	0.00086	0.32940	0.00086	2.50740	0.00086
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00086	0.32940	0.00086	2.50740	0.00086

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	-0.00027	0.32940	-0.00025	2.50740	-0.00024
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	-0.00027	0.32940	-0.00026	2.50740	-0.00025

SDFRRS



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00210	0.00214	0.00379	0.00187	0.00564	0.00325	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1377.23000	1683.56000	1799.86000

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	0.20298	0.32940	0.06480	0.39253	2.50740	0.30000	0.96342
	SET_B->Q (FR)	0.01860	0.00100	0.08289	0.32940	0.06480	0.28471	2.50740	0.30000	0.85050

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	0.17029	0.32940	0.06480	0.34488	2.50740	0.30000	0.86168
	RESET_B->Q (FF)	0.01860	0.00100	0.14155	0.32940	0.06480	0.32430	2.50740	0.30000	0.83036

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	0.20298	0.32940	0.06480	0.39253	2.50740	0.30000	0.96342

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	0.17029	0.32940	0.06480	0.34488	2.50740	0.30000	0.86168

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	0.14012	0.32940	0.06480	0.34720	2.50740	0.30000	0.93429
	RESET_B->Q_N (FR)	0.01860	0.00100	0.11050	0.32940	0.06480	0.33183	2.50740	0.30000	0.91198

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	0.16987	0.32940	0.06480	0.37035	2.50740	0.30000	0.87749
	SET_B->Q_N (FF)	0.01860	0.00100	0.05583	0.32940	0.06480	0.26092	2.50740	0.30000	0.77917

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	0.14012	0.32940	0.06480	0.34720	2.50740	0.30000	0.93429

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	0.16987	0.32940	0.06480	0.37035	2.50740	0.30000	0.87749

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	-0.06602	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.08314	1.26300	1.26300	0.20238	2.50740	2.50740	0.26859

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.14031	2.50740	2.50740	0.17119

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	-0.08314	1.26300	1.26300	-0.21857	2.50740	2.50740	-0.29811
	setup	CLK (R)	0.01860	0.01860	0.10025	1.26300	1.26300	0.23206	2.50740	2.50740	0.31286

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.08803	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.14758
	setup	CLK (R)	0.01860	0.01860	0.12470	1.26300	1.26300	0.15111	2.50740	2.50740	0.18004

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	-0.20238	2.50740	2.50740	-0.28040
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.22666	2.50740	2.50740	0.31286

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	-0.06602	1.26300	1.26300	-0.07825	2.50740	2.50740	-0.07969
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.10524	2.50740	2.50740	0.11511

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	0.04401	1.26300	1.26300	0.08095	2.50740	2.50740	0.09445
	removal	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.07969

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_sdfbbp_1	-	3.3435

Constraints(ns) for SET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.01223	1.26300	1.26300	0.08365	2.50740	2.50740	0.24498
	removal	CLK (R)	0.01860	0.01860	0.02445	1.26300	1.26300	0.07286	2.50740	2.50740	0.07379
	hold	RESET_B (R)	0.01860	0.01860	-0.05379	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.22137
	setup	RESET_B (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.17539	2.50740	2.50740	0.25088

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	0.02089	0.32940	0.06480	0.02228	2.50740	0.30000	0.03563
	SET_B	0.01860	0.00100	0.03854	0.32940	0.06480	0.09670	2.50740	0.30000	0.33513

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	0.02049	0.32940	0.06480	0.02179	2.50740	0.30000	0.03572
	RESET_B	0.01860	0.00100	0.04381	0.32940	0.06480	0.10067	2.50740	0.30000	0.32023

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	0.02089	0.32940	0.06480	0.02228	2.50740	0.30000	0.03563

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	0.02049	0.32940	0.06480	0.02179	2.50740	0.30000	0.03572

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	0.02050	0.32940	0.06480	0.02185	2.50740	0.30000	0.03591
	RESET_B	0.01860	0.00100	0.04379	0.32940	0.06480	0.10077	2.50740	0.30000	0.32054

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	0.02089	0.32940	0.06480	0.02225	2.50740	0.30000	0.03560
	SET_B	0.01860	0.00100	0.03855	0.32940	0.06480	0.09663	2.50740	0.30000	0.33493

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	0.02050	0.32940	0.06480	0.02185	2.50740	0.30000	0.03591

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	0.02089	0.32940	0.06480	0.02225	2.50740	0.30000	0.03560

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00641	0.32940	0.00676	2.50740	0.01750

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00573	0.32940	0.00625	2.50740	0.01669

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	0.01382	0.32940	0.01432	2.50740	0.02635
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00641	0.32940	0.00676	2.50740	0.01750

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	0.01404	0.32940	0.01464	2.50740	0.02616
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00573	0.32940	0.00625	2.50740	0.01669

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00785	0.32940	0.00798	2.50740	0.01751

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00857	0.32940	0.00877	2.50740	0.01823

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	0.01559	0.32940	0.01589	2.50740	0.02648
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00785	0.32940	0.00798	2.50740	0.01751

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	0.01959	0.32940	0.01977	2.50740	0.03032
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00857	0.32940	0.00877	2.50740	0.01823

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01674	0.32940	0.01789	2.50740	0.03240

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01822	0.32940	0.01936	2.50740	0.03315

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	0.01674	0.32940	0.01789	2.50740	0.03240
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02288	0.32940	0.02358	2.50740	0.03802
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01584	0.32940	0.01777	2.50740	0.04453
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00780	0.32940	0.00953	2.50740	0.03497

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	0.01822	0.32940	0.01936	2.50740	0.03315
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02472	0.32940	0.03143	2.50740	0.04531
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01005	0.32940	0.03362	2.50740	0.05853
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00846	0.32940	0.01004	2.50740	0.03376

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01468	0.32940	0.01646	2.50740	0.04368

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01771	0.32940	0.02003	2.50740	0.04675

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	0.01409	0.32940	0.01582	2.50740	0.04302
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01904	0.32940	0.02074	2.50740	0.04778
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01416	0.32940	0.01591	2.50740	0.04314
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01444	0.32940	0.01618	2.50740	0.04338
	(!RESET_B * !Q * Q_N)	0.01860	0.01468	0.32940	0.01646	2.50740	0.04368
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01414	0.32940	0.01591	2.50740	0.04314

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	0.01369	0.32940	0.01566	2.50740	0.04181
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02468	0.32940	0.02657	2.50740	0.05339
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01771	0.32940	0.02003	2.50740	0.04675
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02638	0.32940	0.02871	2.50740	0.05551
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01402	0.32940	0.01596	2.50740	0.04198
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01369	0.32940	0.01566	2.50740	0.04182
	(!RESET_B * !Q * Q_N)	0.01860	0.01366	0.32940	0.01562	2.50740	0.04164
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01401	0.32940	0.01595	2.50740	0.04198

SGCLK



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00213	0.00259	0.00543	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	818.68200	878.32400	941.93500

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	0.05327	0.32940	0.06480	0.23569	2.50740	0.30000	0.82239

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	0.04333	0.32940	0.06480	0.21632	2.50740	0.30000	0.70869

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	-0.02703	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.18000
	setup	CLK (R)	0.01860	0.01860	0.04425	1.26300	1.26300	0.18889	2.50740	2.50740	0.27128

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	-0.04108	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.17089
	setup	CLK (R)	0.01860	0.01860	0.06925	1.26300	1.26300	0.14841	2.50740	2.50740	0.20723

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	-0.02976	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.22764
	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	-0.04479	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.13138
	setup	CLK (R)	0.01860	0.01860	0.07051	1.26300	1.26300	0.12143	2.50740	2.50740	0.16476

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	0.01186	0.32940	0.06480	0.01268	2.50740	0.30000	0.02979

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	0.00743	0.32940	0.06480	0.00950	2.50740	0.30000	0.02701

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02360	0.32940	0.02532	2.50740	0.04342

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02340	0.32940	0.03900	2.50740	0.05659

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	0.02360	0.32940	0.02532	2.50740	0.04342

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	0.02340	0.32940	0.03900	2.50740	0.05659

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01305	0.32940	0.01411	2.50740	0.03220

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02427	0.32940	0.03783	2.50740	0.05404

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00832	0.32940	0.01004	2.50740	0.03328

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00873	0.32940	0.01060	2.50740	0.03356

TIE0



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	246.50300	246.50300	246.50300

TIE1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	230.88300	230.88300	230.88300

XNOR2_1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00610	0.00537	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	260.35300	440.21700	585.62300

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	0.05190	0.32940	0.06480	0.23427	2.50740	0.30000	0.81888
	A->Y (FR)	0.01860	0.00100	0.03675	0.32940	0.06480	0.37288	2.50740	0.30000	1.86731
	B->Y (RR)	0.01860	0.00100	0.04833	0.32940	0.06480	0.23495	2.50740	0.30000	0.83497
	B->Y (FR)	0.01860	0.00100	0.03238	0.32940	0.06480	0.40111	2.50740	0.30000	2.09033

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	0.05017	0.32940	0.06480	0.30190	2.50740	0.30000	1.09040
	A->Y (RF)	0.01860	0.00100	0.03507	0.32940	0.06480	0.33731	2.50740	0.30000	1.72857
	B->Y (FF)	0.01860	0.00100	0.05059	0.32940	0.06480	0.29284	2.50740	0.30000	1.06931
	B->Y (RF)	0.01860	0.00100	0.02948	0.32940	0.06480	0.33026	2.50740	0.30000	1.71559

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	0.00978	0.32940	0.06480	0.01082	2.50740	0.30000	0.02805
	B	0.01860	0.00100	0.00963	0.32940	0.06480	0.01094	2.50740	0.30000	0.02894

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	0.00851	0.32940	0.06480	0.01021	2.50740	0.30000	0.02817
	B	0.01860	0.00100	0.00911	0.32940	0.06480	0.00933	2.50740	0.30000	0.02764

XOR2_1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00629	0.00552	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	333.21500	407.76900	475.67600

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	0.05049	0.32940	0.06480	0.35963	2.50740	0.30000	1.38681
	A->X (FR)	0.01860	0.00100	0.04029	0.32940	0.06480	0.37742	2.50740	0.30000	1.87651
	B->X (RR)	0.01860	0.00100	0.05176	0.32940	0.06480	0.34804	2.50740	0.30000	1.35005
	B->X (FR)	0.01860	0.00100	0.03434	0.32940	0.06480	0.37067	2.50740	0.30000	1.86606

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	0.05862	0.32940	0.06480	0.22052	2.50740	0.30000	0.69577
	A->X (RF)	0.01860	0.00100	0.03268	0.32940	0.06480	0.33415	2.50740	0.30000	1.71883
	B->X (FF)	0.01860	0.00100	0.05439	0.32940	0.06480	0.22453	2.50740	0.30000	0.71754
	B->X (RF)	0.01860	0.00100	0.02927	0.32940	0.06480	0.35879	2.50740	0.30000	1.89938

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	0.00844	0.32940	0.06480	0.00984	2.50740	0.30000	0.02757
	B	0.01860	0.00100	0.00899	0.32940	0.06480	0.00916	2.50740	0.30000	0.02720

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	0.01053	0.32940	0.06480	0.01163	2.50740	0.30000	0.02832
	B	0.01860	0.00100	0.00967	0.32940	0.06480	0.01124	2.50740	0.30000	0.02841