

sg13g2_stdcell_slow_1p35V_125C Library

Cell Groups
A21OIx
A221OI
A22OI
AND2x
AND3x
AND4x
AO21x
BTLx
BUx
DECAPx
DFFRRx
DFRBPQx
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
SDFRBPQx
SDFRBPx
SDFRRS
SGCLK
TIE0
TIE1

XNOR2_1
XOR2_1

A21OIx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a21oi_2	14.51520
sg13g2_a21oi_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_a21oi_2	0.00571	0.00602	0.00552	0.60000
sg13g2_a21oi_1	0.00296	0.00302	0.00282	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	570.10900	1407.60000	3188.44000
sg13g2_a21oi_1	285.06600	703.80900	1594.23000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1->Y (FR)	0.01860	0.00100	0.04246	0.32940	0.12960	0.53592	2.50740	0.60000	2.62723
	A2->Y (FR)	0.01860	0.00100	0.05142	0.32940	0.12960	0.54414	2.50740	0.60000	2.63228
	B1->Y (FR)	0.01860	0.00100	0.04034	0.32940	0.12960	0.56333	2.50740	0.60000	2.87778
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.04698	0.32940	0.06480	0.53562	2.50740	0.30000	2.62028
	A2->Y (FR)	0.01860	0.00100	0.05558	0.32940	0.06480	0.54504	2.50740	0.30000	2.63387
	B1->Y (FR)	0.01860	0.00100	0.04461	0.32940	0.06480	0.56428	2.50740	0.30000	2.87969

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1->Y (RF)	0.01860	0.00100	0.03638	0.32940	0.12960	0.46603	2.50740	0.60000	2.40921
	A2->Y (RF)	0.01860	0.00100	0.04136	0.32940	0.12960	0.44765	2.50740	0.60000	2.24096
	B1->Y (RF)	0.01860	0.00100	0.02009	0.32940	0.12960	0.34300	2.50740	0.60000	1.86888
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.04010	0.32940	0.06480	0.46666	2.50740	0.30000	2.40783
	A2->Y (RF)	0.01860	0.00100	0.04468	0.32940	0.06480	0.44785	2.50740	0.30000	2.24020
	B1->Y (RF)	0.01860	0.00100	0.02256	0.32940	0.06480	0.34391	2.50740	0.30000	1.87096

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.04034	0.32940	0.12960	0.56333	2.50740	0.60000	2.87778
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03019	0.32940	0.12960	0.55361	2.50740	0.60000	2.87193
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02516	0.32940	0.12960	0.45721	2.50740	0.60000	2.43501
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.04461	0.32940	0.06480	0.56428	2.50740	0.30000	2.87969
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03460	0.32940	0.06480	0.55285	2.50740	0.30000	2.86390
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.02851	0.32940	0.06480	0.45736	2.50740	0.30000	2.43254

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02009	0.32940	0.12960	0.34300	2.50740	0.60000	1.86888
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01978	0.32940	0.12960	0.34166	2.50740	0.60000	1.86582
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01949	0.32940	0.12960	0.34129	2.50740	0.60000	1.86606
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02256	0.32940	0.06480	0.34391	2.50740	0.30000	1.87096
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02226	0.32940	0.06480	0.34257	2.50740	0.30000	1.86733
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02197	0.32940	0.06480	0.34221	2.50740	0.30000	1.86839

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1	0.01860	0.00100	0.01095	0.32940	0.12960	0.01124	2.50740	0.60000	0.01668
	A2	0.01860	0.00100	0.01182	0.32940	0.12960	0.01156	2.50740	0.60000	0.01728
	B1	0.01860	0.00100	0.00539	0.32940	0.12960	0.00649	2.50740	0.60000	0.01386
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00550	0.32940	0.06480	0.00554	2.50740	0.30000	0.00818
	A2	0.01860	0.00100	0.00586	0.32940	0.06480	0.00572	2.50740	0.30000	0.00844
	B1	0.01860	0.00100	0.00275	0.32940	0.06480	0.00320	2.50740	0.30000	0.00683

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1	0.01860	0.00100	0.00748	0.32940	0.12960	0.00750	2.50740	0.60000	0.01319
	A2	0.01860	0.00100	0.01167	0.32940	0.12960	0.01134	2.50740	0.60000	0.01654
	B1	0.01860	0.00100	0.00355	0.32940	0.12960	0.00481	2.50740	0.60000	0.01292
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00419	0.32940	0.06480	0.00420	2.50740	0.30000	0.00702
	A2	0.01860	0.00100	0.00618	0.32940	0.06480	0.00600	2.50740	0.30000	0.00858
	B1	0.01860	0.00100	0.00226	0.32940	0.06480	0.00281	2.50740	0.30000	0.00664

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.00663	0.32940	0.12960	0.00708	2.50740	0.60000	0.01468
	B1	(!A1 * A2)	0.01860	0.00100	0.00538	0.32940	0.12960	0.00624	2.50740	0.60000	0.01408
	B1	(!A1 * !A2)	0.01860	0.00100	0.00539	0.32940	0.12960	0.00649	2.50740	0.60000	0.01386
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00323	0.32940	0.06480	0.00344	2.50740	0.30000	0.00727
	B1	(!A1 * A2)	0.01860	0.00100	0.00274	0.32940	0.06480	0.00306	2.50740	0.30000	0.00695
	B1	(!A1 * !A2)	0.01860	0.00100	0.00275	0.32940	0.06480	0.00320	2.50740	0.30000	0.00683

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.00775	0.32940	0.12960	0.00903	2.50740	0.60000	0.01628
	B1	(!A1 * A2)	0.01860	0.00100	0.00373	0.32940	0.12960	0.00507	2.50740	0.60000	0.01261
	B1	(!A1 * !A2)	0.01860	0.00100	0.00355	0.32940	0.12960	0.00481	2.50740	0.60000	0.01292
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00437	0.32940	0.06480	0.00487	2.50740	0.30000	0.00856
	B1	(!A1 * A2)	0.01860	0.00100	0.00236	0.32940	0.06480	0.00291	2.50740	0.30000	0.00644
	B1	(!A1 * !A2)	0.01860	0.00100	0.00226	0.32940	0.06480	0.00281	2.50740	0.30000	0.00664

A221OI



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a221oi_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	A1	A2	B1	B2	C1	Y
sg13g2_a221oi_1	0.00291	0.00297	0.00286	0.00298	0.00279	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	364.95300	967.84500	2189.62000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1->Y (FR)	0.01860	0.00100	0.10840	0.32940	0.06480	0.77188	2.50740	0.30000	3.37701
	A2->Y (FR)	0.01860	0.00100	0.12093	0.32940	0.06480	0.78431	2.50740	0.30000	3.38755
	B1->Y (FR)	0.01860	0.00100	0.09712	0.32940	0.06480	0.77678	2.50740	0.30000	3.58107
	B2->Y (FR)	0.01860	0.00100	0.10970	0.32940	0.06480	0.78873	2.50740	0.30000	3.59146
	C1->Y (FR)	0.01860	0.00100	0.06180	0.32940	0.06480	0.66883	2.50740	0.30000	3.30813

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1->Y (RF)	0.01860	0.00100	0.05291	0.32940	0.06480	0.48878	2.50740	0.30000	2.43726
	A2->Y (RF)	0.01860	0.00100	0.05719	0.32940	0.06480	0.46983	2.50740	0.30000	2.26838
	B1->Y (RF)	0.01860	0.00100	0.04703	0.32940	0.06480	0.47715	2.50740	0.30000	2.42097
	B2->Y (RF)	0.01860	0.00100	0.05159	0.32940	0.06480	0.45747	2.50740	0.30000	2.25263
	C1->Y (RF)	0.01860	0.00100	0.02593	0.32940	0.06480	0.34730	2.50740	0.30000	1.87388

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.10840	0.32940	0.06480	0.77188	2.50740	0.30000	3.37701
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.09310	0.32940	0.06480	0.75750	2.50740	0.30000	3.36626
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.08344	0.32940	0.06480	0.66026	2.50740	0.30000	2.99178
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.12093	0.32940	0.06480	0.78431	2.50740	0.30000	3.38755
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.10602	0.32940	0.06480	0.76986	2.50740	0.30000	3.37709
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.09401	0.32940	0.06480	0.67043	2.50740	0.30000	3.00088
	B1->Y (FR)	(A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.09712	0.32940	0.06480	0.77678	2.50740	0.30000	3.58107
	B1->Y (FR)	(!A1 * A2 * B2 * !C1)	0.01860	0.00100	0.08174	0.32940	0.06480	0.76173	2.50740	0.30000	3.56877
	B1->Y (FR)	(!A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.06848	0.32940	0.06480	0.65255	2.50740	0.30000	3.10372
	B2->Y (FR)	(A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.10970	0.32940	0.06480	0.78873	2.50740	0.30000	3.59146
	B2->Y (FR)	(!A1 * A2 * B1 * !C1)	0.01860	0.00100	0.09463	0.32940	0.06480	0.77377	2.50740	0.30000	3.57891
	B2->Y (FR)	(!A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.07890	0.32940	0.06480	0.66224	2.50740	0.30000	3.10903
	C1->Y (FR)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.05857	0.32940	0.06480	0.66600	2.50740	0.30000	3.30391
	C1->Y (FR)	(!A1 * A2 * !B1 * !B2)	0.01860	0.00100	0.04602	0.32940	0.06480	0.65366	2.50740	0.30000	3.29375
	C1->Y (FR)	(!A1 * !A2 * B1 * !B2)	0.01860	0.00100	0.06180	0.32940	0.06480	0.66883	2.50740	0.30000	3.30813
	C1->Y (FR)	(!A1 * !A2 * !B1 * B2)	0.01860	0.00100	0.04925	0.32940	0.06480	0.65744	2.50740	0.30000	3.30219
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.04085	0.32940	0.06480	0.55758	2.50740	0.30000	2.86848

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05168	0.32940	0.06480	0.48810	2.50740	0.30000	2.43705
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05067	0.32940	0.06480	0.48529	2.50740	0.30000	2.43203
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05291	0.32940	0.06480	0.48878	2.50740	0.30000	2.43726
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05595	0.32940	0.06480	0.46914	2.50740	0.30000	2.26820
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05494	0.32940	0.06480	0.46644	2.50740	0.30000	2.26403
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05719	0.32940	0.06480	0.46983	2.50740	0.30000	2.26838
	B1->Y (RF)	(A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.04703	0.32940	0.06480	0.47715	2.50740	0.30000	2.42097
	B1->Y (RF)	(!A1 * A2 * B2 * !C1)	0.01860	0.00100	0.04633	0.32940	0.06480	0.47449	2.50740	0.30000	2.41621
	B1->Y (RF)	(!A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.04598	0.32940	0.06480	0.47285	2.50740	0.30000	2.41652
	B2->Y (RF)	(A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.05159	0.32940	0.06480	0.45747	2.50740	0.30000	2.25263
	B2->Y (RF)	(!A1 * A2 * B1 * !C1)	0.01860	0.00100	0.05086	0.32940	0.06480	0.45480	2.50740	0.30000	2.24823
	B2->Y (RF)	(!A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.05052	0.32940	0.06480	0.45409	2.50740	0.30000	2.24920
	C1->Y (RF)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.02577	0.32940	0.06480	0.34729	2.50740	0.30000	1.87377
	C1->Y (RF)	(!A1 * A2 * !B1 * !B2)	0.01860	0.00100	0.02548	0.32940	0.06480	0.34596	2.50740	0.30000	1.87052
	C1->Y (RF)	(!A1 * !A2 * B1 * !B2)	0.01860	0.00100	0.02593	0.32940	0.06480	0.34730	2.50740	0.30000	1.87388
	C1->Y (RF)	(!A1 * !A2 * !B1 * B2)	0.01860	0.00100	0.02564	0.32940	0.06480	0.34597	2.50740	0.30000	1.87082
	C1->Y (RF)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.02542	0.32940	0.06480	0.34573	2.50740	0.30000	1.87141

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1	0.01860	0.00100	0.01026	0.32940	0.06480	0.01017	2.50740	0.30000	0.01163
	A2	0.01860	0.00100	0.01050	0.32940	0.06480	0.01020	2.50740	0.30000	0.01197
	B1	0.01860	0.00100	0.00761	0.32940	0.06480	0.00748	2.50740	0.30000	0.00991
	B2	0.01860	0.00100	0.00788	0.32940	0.06480	0.00768	2.50740	0.30000	0.01008
	C1	0.01860	0.00100	0.00483	0.32940	0.06480	0.00515	2.50740	0.30000	0.00896

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1	0.01860	0.00100	0.00665	0.32940	0.06480	0.00645	2.50740	0.30000	0.00885
	A2	0.01860	0.00100	0.00857	0.32940	0.06480	0.00830	2.50740	0.30000	0.01058
	B1	0.01860	0.00100	0.00434	0.32940	0.06480	0.00432	2.50740	0.30000	0.00694
	B2	0.01860	0.00100	0.00644	0.32940	0.06480	0.00632	2.50740	0.30000	0.00860
	C1	0.01860	0.00100	0.00243	0.32940	0.06480	0.00290	2.50740	0.30000	0.00655

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01026	0.32940	0.06480	0.01017	2.50740	0.30000	0.01163
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00983	0.32940	0.06480	0.00988	2.50740	0.30000	0.01129
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01206	0.32940	0.06480	0.01193	2.50740	0.30000	0.01443
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01050	0.32940	0.06480	0.01020	2.50740	0.30000	0.01197
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01013	0.32940	0.06480	0.01020	2.50740	0.30000	0.01164
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01236	0.32940	0.06480	0.01206	2.50740	0.30000	0.01443
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00806	0.32940	0.06480	0.00818	2.50740	0.30000	0.00957
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00760	0.32940	0.06480	0.00746	2.50740	0.30000	0.00922
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00761	0.32940	0.06480	0.00748	2.50740	0.30000	0.00991
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00824	0.32940	0.06480	0.00818	2.50740	0.30000	0.00985
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00785	0.32940	0.06480	0.00796	2.50740	0.30000	0.00955
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00788	0.32940	0.06480	0.00768	2.50740	0.30000	0.01008
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00528	0.32940	0.06480	0.00538	2.50740	0.30000	0.00921
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00482	0.32940	0.06480	0.00513	2.50740	0.30000	0.00905
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00529	0.32940	0.06480	0.00540	2.50740	0.30000	0.00909
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00482	0.32940	0.06480	0.00511	2.50740	0.30000	0.00910
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00483	0.32940	0.06480	0.00515	2.50740	0.30000	0.00896

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00867	0.32940	0.06480	0.00848	2.50740	0.30000	0.01070
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00665	0.32940	0.06480	0.00645	2.50740	0.30000	0.00885
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00555	0.32940	0.06480	0.00536	2.50740	0.30000	0.00777
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01058	0.32940	0.06480	0.01031	2.50740	0.30000	0.01251
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00857	0.32940	0.06480	0.00830	2.50740	0.30000	0.01058
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00748	0.32940	0.06480	0.00720	2.50740	0.30000	0.00945
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00644	0.32940	0.06480	0.00642	2.50740	0.30000	0.00873
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00441	0.32940	0.06480	0.00441	2.50740	0.30000	0.00687
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00434	0.32940	0.06480	0.00432	2.50740	0.30000	0.00694
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00844	0.32940	0.06480	0.00832	2.50740	0.30000	0.01059
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00644	0.32940	0.06480	0.00632	2.50740	0.30000	0.00860
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00636	0.32940	0.06480	0.00619	2.50740	0.30000	0.00867
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00446	0.32940	0.06480	0.00492	2.50740	0.30000	0.00823
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00245	0.32940	0.06480	0.00302	2.50740	0.30000	0.00635
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00451	0.32940	0.06480	0.00492	2.50740	0.30000	0.00825
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00250	0.32940	0.06480	0.00301	2.50740	0.30000	0.00639
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00243	0.32940	0.06480	0.00290	2.50740	0.30000	0.00655

A22OI



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

Truth Table

INPUT				OUTPUT
A1	A2	B1	B2	Y
0	x	0	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	0.00305	0.00306	0.00299	0.00295	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	158.84300	900.79300	1968.85000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (FR)	0.01860	0.00100	0.05447	0.32940	0.06480	0.54363	2.50740	0.30000	2.62757
	A2->Y (FR)	0.01860	0.00100	0.06225	0.32940	0.06480	0.55091	2.50740	0.30000	2.63332
	B1->Y (FR)	0.01860	0.00100	0.05813	0.32940	0.06480	0.57658	2.50740	0.30000	2.88719
	B2->Y (FR)	0.01860	0.00100	0.04950	0.32940	0.06480	0.56663	2.50740	0.30000	2.87113

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (RF)	0.01860	0.00100	0.04554	0.32940	0.06480	0.47302	2.50740	0.30000	2.41526
	A2->Y (RF)	0.01860	0.00100	0.04971	0.32940	0.06480	0.45380	2.50740	0.30000	2.24671
	B1->Y (RF)	0.01860	0.00100	0.03981	0.32940	0.06480	0.44236	2.50740	0.30000	2.23373
	B2->Y (RF)	0.01860	0.00100	0.03488	0.32940	0.06480	0.46126	2.50740	0.30000	2.40209

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (FR)	(A2 * B1)	0.01860	0.00100	0.05447	0.32940	0.06480	0.54363	2.50740	0.30000	2.62757
	A2->Y (FR)	(A1 * B1)	0.01860	0.00100	0.06225	0.32940	0.06480	0.55091	2.50740	0.30000	2.63332
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.05813	0.32940	0.06480	0.57658	2.50740	0.30000	2.88719
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04855	0.32940	0.06480	0.56554	2.50740	0.30000	2.87088
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.04950	0.32940	0.06480	0.56663	2.50740	0.30000	2.87113
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03995	0.32940	0.06480	0.55806	2.50740	0.30000	2.86611

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (RF)	(A2 * B1)	0.01860	0.00100	0.04554	0.32940	0.06480	0.47302	2.50740	0.30000	2.41526
	A2->Y (RF)	(A1 * B1)	0.01860	0.00100	0.04971	0.32940	0.06480	0.45380	2.50740	0.30000	2.24671
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03981	0.32940	0.06480	0.44236	2.50740	0.30000	2.23373
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03928	0.32940	0.06480	0.43988	2.50740	0.30000	2.22991
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03488	0.32940	0.06480	0.46126	2.50740	0.30000	2.40209
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03437	0.32940	0.06480	0.45866	2.50740	0.30000	2.39778

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	0.01860	0.00100	0.00589	0.32940	0.06480	0.00581	2.50740	0.30000	0.00853
	A2	0.01860	0.00100	0.00612	0.32940	0.06480	0.00602	2.50740	0.30000	0.00863
	B1	0.01860	0.00100	0.00397	0.32940	0.06480	0.00399	2.50740	0.30000	0.00730
	B2	0.01860	0.00100	0.00366	0.32940	0.06480	0.00377	2.50740	0.30000	0.00709

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	0.01860	0.00100	0.00622	0.32940	0.06480	0.00616	2.50740	0.30000	0.00892
	A2	0.01860	0.00100	0.00815	0.32940	0.06480	0.00797	2.50740	0.30000	0.01049
	B1	0.01860	0.00100	0.00750	0.32940	0.06480	0.00765	2.50740	0.30000	0.01021
	B2	0.01860	0.00100	0.00547	0.32940	0.06480	0.00585	2.50740	0.30000	0.00853

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	(A2 * B1)	0.01860	0.00100	0.00589	0.32940	0.06480	0.00581	2.50740	0.30000	0.00853
	A2	(A1 * B1)	0.01860	0.00100	0.00612	0.32940	0.06480	0.00602	2.50740	0.30000	0.00863
	B1	(A1 * !A2)	0.01860	0.00100	0.00397	0.32940	0.06480	0.00399	2.50740	0.30000	0.00730
	B1	(!A1 * A2)	0.01860	0.00100	0.00369	0.32940	0.06480	0.00374	2.50740	0.30000	0.00722
	B2	(A1 * !A2)	0.01860	0.00100	0.00366	0.32940	0.06480	0.00377	2.50740	0.30000	0.00709
	B2	(!A1 * A2)	0.01860	0.00100	0.00329	0.32940	0.06480	0.00355	2.50740	0.30000	0.00686

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	(A2 * B1)	0.01860	0.00100	0.00622	0.32940	0.06480	0.00616	2.50740	0.30000	0.00892
	A2	(A1 * B1)	0.01860	0.00100	0.00815	0.32940	0.06480	0.00797	2.50740	0.30000	0.01049
	B1	(A1 * !A2)	0.01860	0.00100	0.00750	0.32940	0.06480	0.00765	2.50740	0.30000	0.01021
	B1	(!A1 * A2)	0.01860	0.00100	0.00547	0.32940	0.06480	0.00566	2.50740	0.30000	0.00820
	B2	(A1 * !A2)	0.01860	0.00100	0.00547	0.32940	0.06480	0.00585	2.50740	0.30000	0.00853
	B2	(!A1 * A2)	0.01860	0.00100	0.00345	0.32940	0.06480	0.00384	2.50740	0.30000	0.00656

AND2x



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

Truth Table

INPUT		OUTPUT
A	B	X
0	x	0
1	0	0
1	1	1

Footprint

Cell Name	Area
sg13g2_and2_2	10.88640
sg13g2_and2_1	9.07200

Pin Capacitance Information

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

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	1558.32000	1632.72000	1710.11000
sg13g2_and2_1	823.86200	1010.75000	1352.74000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A->X (RR)	0.01860	0.00100	0.08159	0.32940	0.12960	0.37804	2.50740	0.60000	1.28879
	B->X (RR)	0.01860	0.00100	0.08633	0.32940	0.12960	0.37435	2.50740	0.60000	1.27480
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.06614	0.32940	0.06480	0.33620	2.50740	0.30000	1.20730
	B->X (RR)	0.01860	0.00100	0.07108	0.32940	0.06480	0.33681	2.50740	0.30000	1.19872

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A->X (FF)	0.01860	0.00100	0.06855	0.32940	0.12960	0.34485	2.50740	0.60000	1.17643
	B->X (FF)	0.01860	0.00100	0.07371	0.32940	0.12960	0.35745	2.50740	0.60000	1.21069
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.05627	0.32940	0.06480	0.30540	2.50740	0.30000	1.08986
	B->X (FF)	0.01860	0.00100	0.06165	0.32940	0.06480	0.32014	2.50740	0.30000	1.12848

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A	0.01860	0.00100	0.01314	0.32940	0.12960	0.01393	2.50740	0.60000	0.02579
	B	0.01860	0.00100	0.01492	0.32940	0.12960	0.01532	2.50740	0.60000	0.02626
sg13g2_and2_1	A	0.01860	0.00100	0.00817	0.32940	0.06480	0.00912	2.50740	0.30000	0.02204
	B	0.01860	0.00100	0.00992	0.32940	0.06480	0.01039	2.50740	0.30000	0.02218

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A	0.01860	0.00100	0.01181	0.32940	0.12960	0.01265	2.50740	0.60000	0.02505
	B	0.01860	0.00100	0.01204	0.32940	0.12960	0.01302	2.50740	0.60000	0.02590
sg13g2_and2_1	A	0.01860	0.00100	0.00711	0.32940	0.06480	0.00808	2.50740	0.30000	0.02129
	B	0.01860	0.00100	0.00734	0.32940	0.06480	0.00835	2.50740	0.30000	0.02145

AND3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and3_2	12.70080
sg13g2_and3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_2	0.00252	0.00250	0.00251	0.60000
sg13g2_and3_1	0.00250	0.00249	0.00251	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	1583.02000	1700.65000	2131.77000
sg13g2_and3_1	822.26200	1009.27000	1926.20000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A->X (RR)	0.01860	0.00100	0.10991	0.32940	0.12960	0.42362	2.50740	0.60000	1.38320
	B->X (RR)	0.01860	0.00100	0.11917	0.32940	0.12960	0.42497	2.50740	0.60000	1.37406
	C->X (RR)	0.01860	0.00100	0.12345	0.32940	0.12960	0.41687	2.50740	0.60000	1.33221
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.08838	0.32940	0.06480	0.37319	2.50740	0.30000	1.28575
	B->X (RR)	0.01860	0.00100	0.09773	0.32940	0.06480	0.37783	2.50740	0.30000	1.28916
	C->X (RR)	0.01860	0.00100	0.10209	0.32940	0.06480	0.37333	2.50740	0.30000	1.25566

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A->X (FF)	0.01860	0.00100	0.07206	0.32940	0.12960	0.35253	2.50740	0.60000	1.18138
	B->X (FF)	0.01860	0.00100	0.07763	0.32940	0.12960	0.36542	2.50740	0.60000	1.21397
	C->X (FF)	0.01860	0.00100	0.08159	0.32940	0.12960	0.37486	2.50740	0.60000	1.24601
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.06031	0.32940	0.06480	0.31426	2.50740	0.30000	1.09256
	B->X (FF)	0.01860	0.00100	0.06600	0.32940	0.06480	0.32894	2.50740	0.30000	1.13120
	C->X (FF)	0.01860	0.00100	0.06974	0.32940	0.06480	0.33991	2.50740	0.30000	1.16511

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A	0.01860	0.00100	0.01484	0.32940	0.12960	0.01499	2.50740	0.60000	0.02585
	B	0.01860	0.00100	0.01655	0.32940	0.12960	0.01633	2.50740	0.60000	0.02598
	C	0.01860	0.00100	0.01814	0.32940	0.12960	0.01789	2.50740	0.60000	0.02721
sg13g2_and3_1	A	0.01860	0.00100	0.00947	0.32940	0.06480	0.01008	2.50740	0.30000	0.02180
	B	0.01860	0.00100	0.01114	0.32940	0.06480	0.01134	2.50740	0.30000	0.02232
	C	0.01860	0.00100	0.01273	0.32940	0.06480	0.01280	2.50740	0.30000	0.02354

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A	0.01860	0.00100	0.01196	0.32940	0.12960	0.01268	2.50740	0.60000	0.02427
	B	0.01860	0.00100	0.01231	0.32940	0.12960	0.01312	2.50740	0.60000	0.02497
	C	0.01860	0.00100	0.01252	0.32940	0.12960	0.01331	2.50740	0.60000	0.02568
sg13g2_and3_1	A	0.01860	0.00100	0.00728	0.32940	0.06480	0.00803	2.50740	0.30000	0.02030
	B	0.01860	0.00100	0.00761	0.32940	0.06480	0.00831	2.50740	0.30000	0.02053
	C	0.01860	0.00100	0.00784	0.32940	0.06480	0.00855	2.50740	0.30000	0.02094

AND4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and4_2	16.32960
sg13g2_and4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_2	0.00234	0.00247	0.00247	0.00248	0.60000
sg13g2_and4_1	0.00234	0.00247	0.00247	0.00248	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	1585.14000	1696.02000	2705.26000
sg13g2_and4_1	824.37700	969.96000	2499.71000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A->X (RR)	0.01860	0.00100	0.13845	0.32940	0.12960	0.46624	2.50740	0.60000	1.46007
	B->X (RR)	0.01860	0.00100	0.15203	0.32940	0.12960	0.47231	2.50740	0.60000	1.45934
	C->X (RR)	0.01860	0.00100	0.16052	0.32940	0.12960	0.46944	2.50740	0.60000	1.42550
	D->X (RR)	0.01860	0.00100	0.16488	0.32940	0.12960	0.46531	2.50740	0.60000	1.37981
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.11081	0.32940	0.06480	0.40840	2.50740	0.30000	1.35721
	B->X (RR)	0.01860	0.00100	0.12477	0.32940	0.06480	0.41708	2.50740	0.30000	1.36693
	C->X (RR)	0.01860	0.00100	0.13317	0.32940	0.06480	0.41720	2.50740	0.30000	1.34014
	D->X (RR)	0.01860	0.00100	0.13759	0.32940	0.06480	0.41525	2.50740	0.30000	1.30379

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A->X (FF)	0.01860	0.00100	0.07478	0.32940	0.12960	0.35764	2.50740	0.60000	1.17683
	B->X (FF)	0.01860	0.00100	0.08058	0.32940	0.12960	0.36988	2.50740	0.60000	1.21013
	C->X (FF)	0.01860	0.00100	0.08493	0.32940	0.12960	0.37938	2.50740	0.60000	1.23917
	D->X (FF)	0.01860	0.00100	0.08797	0.32940	0.12960	0.38766	2.50740	0.60000	1.26885
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.06361	0.32940	0.06480	0.31968	2.50740	0.30000	1.08790
	B->X (FF)	0.01860	0.00100	0.06953	0.32940	0.06480	0.33398	2.50740	0.30000	1.12590
	C->X (FF)	0.01860	0.00100	0.07377	0.32940	0.06480	0.34505	2.50740	0.30000	1.15900
	D->X (FF)	0.01860	0.00100	0.07645	0.32940	0.06480	0.35376	2.50740	0.30000	1.19210

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A	0.01860	0.00100	0.01626	0.32940	0.12960	0.01583	2.50740	0.60000	0.02582
	B	0.01860	0.00100	0.01810	0.32940	0.12960	0.01727	2.50740	0.60000	0.02613
	C	0.01860	0.00100	0.01973	0.32940	0.12960	0.01878	2.50740	0.60000	0.02761
	D	0.01860	0.00100	0.02130	0.32940	0.12960	0.02030	2.50740	0.60000	0.02874
sg13g2_and4_1	A	0.01860	0.00100	0.01032	0.32940	0.06480	0.01085	2.50740	0.30000	0.02165
	B	0.01860	0.00100	0.01218	0.32940	0.06480	0.01226	2.50740	0.30000	0.02231
	C	0.01860	0.00100	0.01379	0.32940	0.06480	0.01370	2.50740	0.30000	0.02343
	D	0.01860	0.00100	0.01537	0.32940	0.06480	0.01524	2.50740	0.30000	0.02468

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A	0.01860	0.00100	0.01245	0.32940	0.12960	0.01316	2.50740	0.60000	0.02416
	B	0.01860	0.00100	0.01268	0.32940	0.12960	0.01342	2.50740	0.60000	0.02466
	C	0.01860	0.00100	0.01308	0.32940	0.12960	0.01367	2.50740	0.60000	0.02451
	D	0.01860	0.00100	0.01332	0.32940	0.12960	0.01396	2.50740	0.60000	0.02572
sg13g2_and4_1	A	0.01860	0.00100	0.00773	0.32940	0.06480	0.00835	2.50740	0.30000	0.01988
	B	0.01860	0.00100	0.00794	0.32940	0.06480	0.00849	2.50740	0.30000	0.01995
	C	0.01860	0.00100	0.00828	0.32940	0.06480	0.00880	2.50740	0.30000	0.02031
	D	0.01860	0.00100	0.00855	0.32940	0.06480	0.00906	2.50740	0.30000	0.02111

A021x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a21o_2	14.51520
sg13g2_a21o_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_2	0.00286	0.00288	0.00272	0.60000
sg13g2_a21o_1	0.00269	0.00279	0.00260	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	879.80300	1473.24000	1953.95000
sg13g2_a21o_1	661.74800	1032.39000	1627.97000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (RR)	0.01860	0.00100	0.08683	0.32940	0.12960	0.38606	2.50740	0.60000	1.29117
	A2->X (RR)	0.01860	0.00100	0.09082	0.32940	0.12960	0.38072	2.50740	0.60000	1.27692
	B1->X (RR)	0.01860	0.00100	0.05749	0.32940	0.12960	0.34193	2.50740	0.60000	1.19234
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.08180	0.32940	0.06480	0.36748	2.50740	0.30000	1.27355
	A2->X (RR)	0.01860	0.00100	0.08595	0.32940	0.06480	0.36413	2.50740	0.30000	1.26170
	B1->X (RR)	0.01860	0.00100	0.05433	0.32940	0.06480	0.32488	2.50740	0.30000	1.17335

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (FF)	0.01860	0.00100	0.11398	0.32940	0.12960	0.38815	2.50740	0.60000	1.23854
	A2->X (FF)	0.01860	0.00100	0.12388	0.32940	0.12960	0.40419	2.50740	0.60000	1.27285
	B1->X (FF)	0.01860	0.00100	0.11377	0.32940	0.12960	0.41179	2.50740	0.60000	1.33386
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.09113	0.32940	0.06480	0.34124	2.50740	0.30000	1.13169
	A2->X (FF)	0.01860	0.00100	0.10002	0.32940	0.06480	0.35671	2.50740	0.30000	1.16518
	B1->X (FF)	0.01860	0.00100	0.08932	0.32940	0.06480	0.35730	2.50740	0.30000	1.20949

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (RR)	!B1	0.01860	0.00100	0.08683	0.32940	0.12960	0.38606	2.50740	0.60000	1.29117
	A2->X (RR)	!B1	0.01860	0.00100	0.09082	0.32940	0.12960	0.38072	2.50740	0.60000	1.27692
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.05749	0.32940	0.12960	0.34193	2.50740	0.60000	1.19234
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.05512	0.32940	0.12960	0.33182	2.50740	0.60000	1.15778
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.05490	0.32940	0.12960	0.33158	2.50740	0.60000	1.17301
sg13g2_a21o_1	A1->X (RR)	!B1	0.01860	0.00100	0.08180	0.32940	0.06480	0.36748	2.50740	0.30000	1.27355
	A2->X (RR)	!B1	0.01860	0.00100	0.08595	0.32940	0.06480	0.36413	2.50740	0.30000	1.26170
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.05433	0.32940	0.06480	0.32488	2.50740	0.30000	1.17335
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.05115	0.32940	0.06480	0.31236	2.50740	0.30000	1.13595
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.05087	0.32940	0.06480	0.31236	2.50740	0.30000	1.15111

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (FF)	!B1	0.01860	0.00100	0.11398	0.32940	0.12960	0.38815	2.50740	0.60000	1.23854
	A2->X (FF)	!B1	0.01860	0.00100	0.12388	0.32940	0.12960	0.40419	2.50740	0.60000	1.27285
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.11377	0.32940	0.12960	0.41179	2.50740	0.60000	1.33386
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.10152	0.32940	0.12960	0.39292	2.50740	0.60000	1.29740
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.08194	0.32940	0.12960	0.36303	2.50740	0.60000	1.23602
sg13g2_a21o_1	A1->X (FF)	!B1	0.01860	0.00100	0.09113	0.32940	0.06480	0.34124	2.50740	0.30000	1.13169
	A2->X (FF)	!B1	0.01860	0.00100	0.10002	0.32940	0.06480	0.35671	2.50740	0.30000	1.16518
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.08932	0.32940	0.06480	0.35730	2.50740	0.30000	1.20949
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.07868	0.32940	0.06480	0.33821	2.50740	0.30000	1.17205
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.06544	0.32940	0.06480	0.31712	2.50740	0.30000	1.11972

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	0.01860	0.00100	0.01440	0.32940	0.12960	0.01511	2.50740	0.60000	0.02808
	A2	0.01860	0.00100	0.01635	0.32940	0.12960	0.01667	2.50740	0.60000	0.02879
	B1	0.01860	0.00100	0.01250	0.32940	0.12960	0.01384	2.50740	0.60000	0.02877
sg13g2_a21o_1	A1	0.01860	0.00100	0.00931	0.32940	0.06480	0.00992	2.50740	0.30000	0.02244
	A2	0.01860	0.00100	0.01105	0.32940	0.06480	0.01136	2.50740	0.30000	0.02291
	B1	0.01860	0.00100	0.00768	0.32940	0.06480	0.00872	2.50740	0.30000	0.02322

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	0.01860	0.00100	0.01569	0.32940	0.12960	0.01554	2.50740	0.60000	0.02847
	A2	0.01860	0.00100	0.01593	0.32940	0.12960	0.01585	2.50740	0.60000	0.02878
	B1	0.01860	0.00100	0.01373	0.32940	0.12960	0.01422	2.50740	0.60000	0.02856
sg13g2_a21o_1	A1	0.01860	0.00100	0.01041	0.32940	0.06480	0.01059	2.50740	0.30000	0.02309
	A2	0.01860	0.00100	0.01043	0.32940	0.06480	0.01075	2.50740	0.30000	0.02288
	B1	0.01860	0.00100	0.00820	0.32940	0.06480	0.00915	2.50740	0.30000	0.02287

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	!B1	0.01860	0.00100	0.01440	0.32940	0.12960	0.01511	2.50740	0.60000	0.02808
	A2	!B1	0.01860	0.00100	0.01635	0.32940	0.12960	0.01667	2.50740	0.60000	0.02879
	B1	(A1 * !A2)	0.01860	0.00100	0.01461	0.32940	0.12960	0.01584	2.50740	0.60000	0.03056
	B1	(!A1 * A2)	0.01860	0.00100	0.01259	0.32940	0.12960	0.01390	2.50740	0.60000	0.02760
	B1	(!A1 * !A2)	0.01860	0.00100	0.01250	0.32940	0.12960	0.01384	2.50740	0.60000	0.02877
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.00931	0.32940	0.06480	0.00992	2.50740	0.30000	0.02244
	A2	!B1	0.01860	0.00100	0.01105	0.32940	0.06480	0.01136	2.50740	0.30000	0.02291
	B1	(A1 * !A2)	0.01860	0.00100	0.00950	0.32940	0.06480	0.01048	2.50740	0.30000	0.02441
	B1	(!A1 * A2)	0.01860	0.00100	0.00776	0.32940	0.06480	0.00868	2.50740	0.30000	0.02233
	B1	(!A1 * !A2)	0.01860	0.00100	0.00768	0.32940	0.06480	0.00872	2.50740	0.30000	0.02322

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	!B1	0.01860	0.00100	0.01569	0.32940	0.12960	0.01554	2.50740	0.60000	0.02847
	A2	!B1	0.01860	0.00100	0.01593	0.32940	0.12960	0.01585	2.50740	0.60000	0.02878
	B1	(A1 * !A2)	0.01860	0.00100	0.01373	0.32940	0.12960	0.01422	2.50740	0.60000	0.02856
	B1	(!A1 * A2)	0.01860	0.00100	0.01327	0.32940	0.12960	0.01400	2.50740	0.60000	0.02800
	B1	(!A1 * !A2)	0.01860	0.00100	0.01293	0.32940	0.12960	0.01400	2.50740	0.60000	0.02958
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.01041	0.32940	0.06480	0.01059	2.50740	0.30000	0.02309
	A2	!B1	0.01860	0.00100	0.01043	0.32940	0.06480	0.01075	2.50740	0.30000	0.02288
	B1	(A1 * !A2)	0.01860	0.00100	0.00820	0.32940	0.06480	0.00915	2.50740	0.30000	0.02287
	B1	(!A1 * A2)	0.01860	0.00100	0.00797	0.32940	0.06480	0.00899	2.50740	0.30000	0.02269
	B1	(!A1 * !A2)	0.01860	0.00100	0.00797	0.32940	0.06480	0.00918	2.50740	0.30000	0.02388

BTLx



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

Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	0
1	0	1
-	1	HiZ

Footprint

Cell Name	Area
sg13g2_ebufn_8	45.36000
sg13g2_ebufn_4	27.21600
sg13g2_ebufn_2	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_ebufn_8	0.00570	0.01657	2.40000
sg13g2_ebufn_4	0.00292	0.00994	1.20000
sg13g2_ebufn_2	0.00258	0.00612	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	2462.43000	3998.34000	7045.57000
sg13g2_ebufn_4	1611.89000	2240.96000	3625.90000
sg13g2_ebufn_2	1171.81000	1486.28000	1947.78000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A->Z (RR)	0.01860	0.01969	0.07423	0.32940	0.53709	0.57379	2.50740	2.41869	2.19726
	TE_B->Z (RR)	0.01860	0.01969	0.07383	0.32940	0.53709	0.16800	2.50740	2.41869	0.35322
	TE_B->Z (FR)	0.01860	0.01969	0.03468	0.32940	0.53709	0.52890	2.50740	2.41869	2.60662
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01049	0.07648	0.32940	0.26869	0.57503	2.50740	1.20949	2.20226
	TE_B->Z (RR)	0.01860	0.01049	0.05673	0.32940	0.26869	0.12466	2.50740	1.20949	0.24850
	TE_B->Z (FR)	0.01860	0.01049	0.03476	0.32940	0.26869	0.52731	2.50740	1.20949	2.60190
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00583	0.06453	0.32940	0.13443	0.53838	2.50740	0.60483	2.12061
	TE_B->Z (RR)	0.01860	0.00583	0.04854	0.32940	0.13443	0.10353	2.50740	0.60483	0.20350
	TE_B->Z (FR)	0.01860	0.00583	0.03516	0.32940	0.13443	0.52365	2.50740	0.60483	2.58917

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A->Z (FF)	0.01860	0.02961	0.08243	0.32940	0.54701	0.48555	2.50740	2.42861	1.76067
	TE_B->Z (RF)	0.01860	0.02961	0.03133	0.32940	0.54701	0.05702	2.50740	2.42861	0.25805
	TE_B->Z (FF)	0.01860	0.02961	0.09500	0.32940	0.54701	0.62971	2.50740	2.42861	2.37369
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01556	0.08484	0.32940	0.27376	0.48751	2.50740	1.21456	1.76403
	TE_B->Z (RF)	0.01860	0.01556	0.03039	0.32940	0.27376	0.05549	2.50740	1.21456	0.25535
	TE_B->Z (FF)	0.01860	0.01556	0.07243	0.32940	0.27376	0.57457	2.50740	1.21456	2.24121
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00845	0.06546	0.32940	0.13705	0.44159	2.50740	0.60745	1.65674
	TE_B->Z (RF)	0.01860	0.00845	0.02935	0.32940	0.13705	0.05478	2.50740	0.60745	0.25362
	TE_B->Z (FF)	0.01860	0.00845	0.06136	0.32940	0.13705	0.53788	2.50740	0.60745	2.15567

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A	0.01860	0.01969	0.02279	0.32940	0.53709	0.02805	2.50740	2.41869	0.02431
	TE_B	0.01860	0.01969	0.01286	0.32940	0.53709	0.01127	2.50740	2.41869	0.01159
sg13g2_ebufn_4	A	0.01860	0.01049	0.01149	0.32940	0.26869	0.01408	2.50740	1.20949	0.01050
	TE_B	0.01860	0.01049	0.00630	0.32940	0.26869	0.00568	2.50740	1.20949	0.00562
sg13g2_ebufn_2	A	0.01860	0.00583	0.00619	0.32940	0.13443	0.00698	2.50740	0.60483	0.00507
	TE_B	0.01860	0.00583	0.00325	0.32940	0.13443	0.00286	2.50740	0.60483	0.00280

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A	0.01860	0.02961	0.04023	0.32940	0.54701	0.04383	2.50740	2.42861	0.03568
	TE_B	0.01860	0.02961	0.01373	0.32940	0.54701	0.11404	2.50740	2.42861	0.48019
sg13g2_ebufn_4	A	0.01860	0.01556	0.02009	0.32940	0.27376	0.02188	2.50740	1.21456	0.01880
	TE_B	0.01860	0.01556	0.00708	0.32940	0.27376	0.05629	2.50740	1.21456	0.24089
sg13g2_ebufn_2	A	0.01860	0.00845	0.00992	0.32940	0.13705	0.01072	2.50740	0.60745	0.00937
	TE_B	0.01860	0.00845	0.00372	0.32940	0.13705	0.02812	2.50740	0.60745	0.12036

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.03537	0.32940	0.03736	2.50740	0.07381
sg13g2_ebufn_4	0.01860	0.01804	0.32940	0.01898	2.50740	0.03708
sg13g2_ebufn_2	0.01860	0.00977	0.32940	0.01081	2.50740	0.02694

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.01236	0.32940	0.01495	2.50740	0.05222
sg13g2_ebufn_4	0.01860	0.00660	0.32940	0.00786	2.50740	0.02637
sg13g2_ebufn_2	0.01860	0.00414	0.32940	0.00544	2.50740	0.02196

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	-0.00451	0.32940	-0.00537	2.50740	0.01041
sg13g2_ebufn_4	0.01860	-0.00086	0.32940	-0.00083	2.50740	0.01674
sg13g2_ebufn_2	0.01860	0.00042	0.32940	0.00097	2.50740	0.01693

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.05828	0.32940	0.05905	2.50740	0.07630
sg13g2_ebufn_4	0.01860	0.03042	0.32940	0.03148	2.50740	0.04995
sg13g2_ebufn_2	0.01860	0.01576	0.32940	0.01713	2.50740	0.03354

BU_x



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_buf_16	45.36000
sg13g2_buf_8	23.58720
sg13g2_buf_4	14.51520
sg13g2_buf_1	7.25760
sg13g2_buf_2	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01684	4.80000
sg13g2_buf_8	0.00846	2.40000
sg13g2_buf_4	0.00365	1.20000
sg13g2_buf_1	0.00224	0.30000
sg13g2_buf_2	0.00259	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7855.69000	10631.10000	13406.50000
sg13g2_buf_8	3927.85000	5315.64000	6703.42000
sg13g2_buf_4	1952.91000	2605.01000	3257.11000
sg13g2_buf_1	775.60500	837.68500	899.76500
sg13g2_buf_2	1090.17000	1391.03000	1691.89000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A->X (RR)	0.01860	0.00100	0.05715	0.32940	1.03680	0.34630	2.50740	4.80000	1.23569
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.05727	0.32940	0.51840	0.34546	2.50740	2.40000	1.23487
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.07362	0.32940	0.25920	0.38209	2.50740	1.20000	1.35540
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.05096	0.32940	0.06480	0.31597	2.50740	0.30000	1.17418
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.05759	0.32940	0.12960	0.34183	2.50740	0.60000	1.23254

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A->X (FF)	0.01860	0.00100	0.06199	0.32940	1.03680	0.33598	2.50740	4.80000	1.16115
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.06195	0.32940	0.51840	0.33579	2.50740	2.40000	1.16356
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.06110	0.32940	0.25920	0.33090	2.50740	1.20000	1.10527
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.05257	0.32940	0.06480	0.29689	2.50740	0.30000	1.06842
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.06018	0.32940	0.12960	0.32501	2.50740	0.60000	1.12973

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A	0.01860	0.00100	0.09166	0.32940	1.03680	0.10188	2.50740	4.80000	0.20173
sg13g2_buf_8	A	0.01860	0.00100	0.04614	0.32940	0.51840	0.05139	2.50740	2.40000	0.10136
sg13g2_buf_4	A	0.01860	0.00100	0.02282	0.32940	0.25920	0.02424	2.50740	1.20000	0.04403
sg13g2_buf_1	A	0.01860	0.00100	0.00714	0.32940	0.06480	0.00816	2.50740	0.30000	0.02063
sg13g2_buf_2	A	0.01860	0.00100	0.01211	0.32940	0.12960	0.01352	2.50740	0.60000	0.02783

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A	0.01860	0.00100	0.09023	0.32940	1.03680	0.09879	2.50740	4.80000	0.20469
sg13g2_buf_8	A	0.01860	0.00100	0.04540	0.32940	0.51840	0.04987	2.50740	2.40000	0.10313
sg13g2_buf_4	A	0.01860	0.00100	0.02284	0.32940	0.25920	0.02467	2.50740	1.20000	0.04592
sg13g2_buf_1	A	0.01860	0.00100	0.00704	0.32940	0.06480	0.00816	2.50740	0.30000	0.02114
sg13g2_buf_2	A	0.01860	0.00100	0.01192	0.32940	0.12960	0.01324	2.50740	0.60000	0.02854

DECAP_x



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

Footprint

Cell Name	Area
sg13g2_decap_8	12.70080
sg13g2_decap_4	7.25760

Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_8	850.82400	850.82400	850.82400
sg13g2_decap_4	425.40000	425.40000	425.40000

DFFRRx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dfrbp_2	54.43200
sg13g2_dfrbp_1	52.61760

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00153	0.00508	0.00278	0.60000	0.60000
sg13g2_dfrbp_1	0.00153	0.00503	0.00277	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4377.32000	5083.62000	5902.03000
sg13g2_dfrbp_1	3446.57000	4168.37000	5017.73000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.23935	0.32940	0.12960	0.50487	2.50740	0.60000	1.38340
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.18735	0.32940	0.06480	0.45831	2.50740	0.30000	1.33020

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q (RF)	0.01860	0.00100	0.20801	0.32940	0.12960	0.45823	2.50740	0.60000	1.21657
	RESET_B->Q (FF)	0.01860	0.00100	0.27989	0.32940	0.12960	0.56949	2.50740	0.60000	1.51108
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.17227	0.32940	0.06480	0.42136	2.50740	0.30000	1.17500
	RESET_B->Q (FF)	0.01860	0.00100	0.24346	0.32940	0.06480	0.53224	2.50740	0.30000	1.46890

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	0.13954	0.32940	0.12960	0.44504	2.50740	0.60000	1.29520
	RESET_B->Q_N (FR)	0.01860	0.00100	0.21250	0.32940	0.12960	0.55465	2.50740	0.60000	1.58808
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.13520	0.32940	0.06480	0.43064	2.50740	0.30000	1.27829
	RESET_B->Q_N (FR)	0.01860	0.00100	0.20653	0.32940	0.06480	0.53957	2.50740	0.30000	1.57097

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	0.15495	0.32940	0.12960	0.46802	2.50740	0.60000	1.25630
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.14451	0.32940	0.06480	0.44332	2.50740	0.30000	1.22935

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.18619	2.50740	2.50740	-0.24203
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.22936	2.50740	2.50740	0.28925
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.18619	2.50740	2.50740	-0.24498
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.22666	2.50740	2.50740	0.28630

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.26859
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.25095	2.50740	2.50740	0.34828
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.27154
	setup	CLK (R)	0.01860	0.01860	0.10514	1.26300	1.26300	0.24825	2.50740	2.50740	0.34533

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	recovery	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.25365	2.50740	2.50740	0.36304
	removal	CLK (R)	0.01860	0.01860	-0.10270	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.35419
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.25365	2.50740	2.50740	0.36304
	removal	CLK (R)	0.01860	0.01860	-0.10025	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.35419

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.13428	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.12466	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.12787	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.04842	0.32940	0.12960	0.16643	2.50740	0.60000	0.61509
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03831	0.32940	0.06480	0.09805	2.50740	0.30000	0.33261

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.04804	0.32940	0.12960	0.16733	2.50740	0.60000	0.61614
	RESET_B	0.01860	0.00100	0.03658	0.32940	0.12960	0.15491	2.50740	0.60000	0.59254
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03886	0.32940	0.06480	0.09895	2.50740	0.30000	0.33328
	RESET_B	0.01860	0.00100	0.02728	0.32940	0.06480	0.08639	2.50740	0.30000	0.30987

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.04808	0.32940	0.12960	0.16781	2.50740	0.60000	0.61647
	RESET_B	0.01860	0.00100	0.03661	0.32940	0.12960	0.15551	2.50740	0.60000	0.59322
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03887	0.32940	0.06480	0.09921	2.50740	0.30000	0.33362
	RESET_B	0.01860	0.00100	0.02728	0.32940	0.06480	0.08677	2.50740	0.30000	0.31010

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.04847	0.32940	0.12960	0.16599	2.50740	0.60000	0.61487
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03835	0.32940	0.06480	0.09777	2.50740	0.30000	0.33217

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960
sg13g2_dfrbp_1	0.01860	0.00212	0.32940	0.00258	2.50740	0.00960

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00158	0.32940	0.00208	2.50740	0.00936
sg13g2_dfrbp_1	0.01860	0.00157	0.32940	0.00207	2.50740	0.00935

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960
	(!CLK * RESET_B)	0.01860	0.01486	0.32940	0.01532	2.50740	0.02309
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00011	2.50740	-0.00010
sg13g2_dfrbp_1	CLK	0.01860	0.00212	0.32940	0.00258	2.50740	0.00960
	(!CLK * RESET_B)	0.01860	0.01489	0.32940	0.01536	2.50740	0.02311
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00011	2.50740	-0.00010

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00158	0.32940	0.00208	2.50740	0.00936
	(!CLK * RESET_B)	0.01860	0.01138	0.32940	0.01182	2.50740	0.02036
	(!CLK * !RESET_B)	0.01860	0.00012	0.32940	0.00013	2.50740	0.00013
sg13g2_dfrbp_1	CLK	0.01860	0.00157	0.32940	0.00207	2.50740	0.00935
	(!CLK * RESET_B)	0.01860	0.01135	0.32940	0.01180	2.50740	0.02035
	(!CLK * !RESET_B)	0.01860	0.00013	0.32940	0.00013	2.50740	0.00013

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00436	0.32940	0.00446	2.50740	0.01079
sg13g2_dfrbp_1	0.01860	0.00431	0.32940	0.00440	2.50740	0.01073

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.01152	0.32940	0.01143	2.50740	0.02184
sg13g2_dfrbp_1	0.01860	0.01155	0.32940	0.01145	2.50740	0.02187

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.00436	0.32940	0.00446	2.50740	0.01079
	(CLK * !D * !Q * Q_N)	0.01860	0.00140	0.32940	0.00139	2.50740	0.00140
	(!CLK * D * !Q * Q_N)	0.01860	0.01751	0.32940	0.01764	2.50740	0.02696
	(!CLK * !D * !Q * Q_N)	0.01860	0.00137	0.32940	0.00135	2.50740	0.00136
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00431	0.32940	0.00440	2.50740	0.01073
	(CLK * !D * !Q * Q_N)	0.01860	0.00135	0.32940	0.00135	2.50740	0.00135
	(!CLK * D * !Q * Q_N)	0.01860	0.01749	0.32940	0.01762	2.50740	0.02695
	(!CLK * !D * !Q * Q_N)	0.01860	0.00131	0.32940	0.00130	2.50740	0.00131

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.04757	0.32940	0.04812	2.50740	0.06860
	(CLK * !D * !Q * Q_N)	0.01860	-0.00085	0.32940	-0.00109	2.50740	-0.00117
	(!CLK * D * !Q * Q_N)	0.01860	0.01152	0.32940	0.01143	2.50740	0.02184
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00119	0.32940	-0.00135	2.50740	-0.00136
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03808	0.32940	0.03859	2.50740	0.05885
	(CLK * !D * !Q * Q_N)	0.01860	-0.00081	0.32940	-0.00104	2.50740	-0.00113
	(!CLK * D * !Q * Q_N)	0.01860	0.01155	0.32940	0.01145	2.50740	0.02187
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00114	0.32940	-0.00130	2.50740	-0.00131

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.01384	0.32940	0.01485	2.50740	0.03436
sg13g2_dfrbp_1	0.01860	0.01378	0.32940	0.01479	2.50740	0.03431

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.02605	0.32940	0.02712	2.50740	0.04793
sg13g2_dfrbp_1	0.01860	0.02611	0.32940	0.02718	2.50740	0.04799

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.01384	0.32940	0.01485	2.50740	0.03436
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01446	0.32940	0.01548	2.50740	0.03496
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01363	0.32940	0.01464	2.50740	0.03419
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01428	0.32940	0.01529	2.50740	0.03476
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01378	0.32940	0.01479	2.50740	0.03431
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01433	0.32940	0.01539	2.50740	0.03486
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01351	0.32940	0.01452	2.50740	0.03408
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01415	0.32940	0.01519	2.50740	0.03465

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.02768	0.32940	0.02876	2.50740	0.04958
	(D * RESET_B * !Q * Q_N)	0.01860	0.02605	0.32940	0.02712	2.50740	0.04793
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01352	0.32940	0.01460	2.50740	0.03475
	(!D * RESET_B * Q * !Q_N)	0.01860	0.06056	0.32940	0.04942	2.50740	0.06958
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01343	0.32940	0.01451	2.50740	0.03467
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01346	0.32940	0.01452	2.50740	0.03467
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02728	0.32940	0.02836	2.50740	0.04917
	(D * RESET_B * !Q * Q_N)	0.01860	0.02611	0.32940	0.02718	2.50740	0.04799
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01353	0.32940	0.01464	2.50740	0.03479
	(!D * RESET_B * Q * !Q_N)	0.01860	0.08295	0.32940	0.03953	2.50740	0.05979
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01346	0.32940	0.01456	2.50740	0.03471
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01347	0.32940	0.01457	2.50740	0.03471

DFRBPQx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dfrbpq_2	50.80320
sg13g2_dfrbpq_1	48.98880

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	CLK	Q
sg13g2_dfrbpq_2	0.00140	0.00502	0.00275	0.60000
sg13g2_dfrbpq_1	0.00140	0.00497	0.00274	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbpq_2	3945.71000	4302.17000	5288.48000
sg13g2_dfrbpq_1	3240.68000	3777.50000	4563.24000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK->Q (RR)	0.01860	0.00100	0.16878	0.32940	0.12960	0.45194	2.50740	0.60000	1.31723
sg13g2_dfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.15669	0.32940	0.06480	0.43363	2.50740	0.30000	1.29952

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK->Q (RF)	0.01860	0.00100	0.16682	0.32940	0.12960	0.42656	2.50740	0.60000	1.17902
	RESET_B->Q (FF)	0.01860	0.00100	0.23377	0.32940	0.12960	0.53383	2.50740	0.60000	1.46909
sg13g2_dfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.15520	0.32940	0.06480	0.40686	2.50740	0.30000	1.15837
	RESET_B->Q (FF)	0.01860	0.00100	0.22331	0.32940	0.06480	0.51542	2.50740	0.30000	1.44987

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.06358	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.24793
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.22936	2.50740	2.50740	0.28925
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.06113	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.24793
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.22936	2.50740	2.50740	0.28630

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.03912	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.26859
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.24555	2.50740	2.50740	0.34533
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.26859
	setup	CLK (R)	0.01860	0.01860	0.10270	1.26300	1.26300	0.24825	2.50740	2.50740	0.34533

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	recovery	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.25365	2.50740	2.50740	0.36304
	removal	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.24285	2.50740	2.50740	-0.35123
sg13g2_dfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.25365	2.50740	2.50740	0.36304
	removal	CLK (R)	0.01860	0.01860	-0.10025	1.26300	1.26300	-0.24285	2.50740	2.50740	-0.35123

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.10864	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.10864	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.09262	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.09262	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.12787	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.12787	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00100	0.03560	0.32940	0.12960	0.03734	2.50740	0.60000	0.05800
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.03149	0.32940	0.06480	0.03289	2.50740	0.30000	0.05326

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00100	0.03659	0.32940	0.12960	0.03902	2.50740	0.60000	0.05921
	RESET_B	0.01860	0.00100	0.02457	0.32940	0.12960	0.02607	2.50740	0.60000	0.03565
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.03260	0.32940	0.06480	0.03454	2.50740	0.30000	0.05458
	RESET_B	0.01860	0.00100	0.02069	0.32940	0.06480	0.02166	2.50740	0.30000	0.03114

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960
sg13g2_dfrbpq_1	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00158	0.32940	0.00208	2.50740	0.00936
sg13g2_dfrbpq_1	0.01860	0.00157	0.32940	0.00207	2.50740	0.00935

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960
	(!CLK * RESET_B)	0.01860	0.01488	0.32940	0.01533	2.50740	0.02308
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00010	2.50740	-0.00010
sg13g2_dfrbpq_1	CLK	0.01860	0.00213	0.32940	0.00258	2.50740	0.00960
	(!CLK * RESET_B)	0.01860	0.01489	0.32940	0.01536	2.50740	0.02311
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00011	2.50740	-0.00010

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00158	0.32940	0.00208	2.50740	0.00936
	(!CLK * RESET_B)	0.01860	0.01137	0.32940	0.01182	2.50740	0.02035
	(!CLK * !RESET_B)	0.01860	0.00012	0.32940	0.00013	2.50740	0.00013
sg13g2_dfrbpq_1	CLK	0.01860	0.00157	0.32940	0.00207	2.50740	0.00935
	(!CLK * RESET_B)	0.01860	0.01134	0.32940	0.01180	2.50740	0.02035
	(!CLK * !RESET_B)	0.01860	0.00013	0.32940	0.00013	2.50740	0.00013

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00435	0.32940	0.00444	2.50740	0.01077
sg13g2_dfrbpq_1	0.01860	0.00431	0.32940	0.00441	2.50740	0.01073

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.01156	0.32940	0.01143	2.50740	0.02185
sg13g2_dfrbpq_1	0.01860	0.01158	0.32940	0.01145	2.50740	0.02187

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(CLK * D * !Q)	0.01860	0.00435	0.32940	0.00444	2.50740	0.01077
	(CLK * !D * !Q)	0.01860	0.00140	0.32940	0.00138	2.50740	0.00139
	(!CLK * D * !Q)	0.01860	0.01751	0.32940	0.01764	2.50740	0.02695
	(!CLK * !D * !Q)	0.01860	0.00135	0.32940	0.00135	2.50740	0.00135
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.00431	0.32940	0.00441	2.50740	0.01073
	(CLK * !D * !Q)	0.01860	0.00135	0.32940	0.00134	2.50740	0.00135
	(!CLK * D * !Q)	0.01860	0.01749	0.32940	0.01762	2.50740	0.02695
	(!CLK * !D * !Q)	0.01860	0.00132	0.32940	0.00130	2.50740	0.00131

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(CLK * D * !Q)	0.01860	0.03631	0.32940	0.03682	2.50740	0.05684
	(CLK * !D * !Q)	0.01860	-0.00085	0.32940	-0.00108	2.50740	-0.00117
	(!CLK * D * !Q)	0.01860	0.01156	0.32940	0.01143	2.50740	0.02185
	(!CLK * !D * !Q)	0.01860	-0.00118	0.32940	-0.00135	2.50740	-0.00135
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.03239	0.32940	0.03283	2.50740	0.05293
	(CLK * !D * !Q)	0.01860	-0.00081	0.32940	-0.00104	2.50740	-0.00113
	(!CLK * D * !Q)	0.01860	0.01158	0.32940	0.01145	2.50740	0.02187
	(!CLK * !D * !Q)	0.01860	-0.00114	0.32940	-0.00130	2.50740	-0.00131

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.01426	0.32940	0.01534	2.50740	0.03477
sg13g2_dfrbpq_1	0.01860	0.01376	0.32940	0.01479	2.50740	0.03432

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.02604	0.32940	0.02713	2.50740	0.04793
sg13g2_dfrbpq_1	0.01860	0.02608	0.32940	0.02718	2.50740	0.04799

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(D * RESET_B * Q)	0.01860	0.01381	0.32940	0.01484	2.50740	0.03437
	(D * !RESET_B * !Q)	0.01860	0.01445	0.32940	0.01554	2.50740	0.03497
	(!D * RESET_B * !Q)	0.01860	0.01362	0.32940	0.01466	2.50740	0.03420
	(!D * !RESET_B * !Q)	0.01860	0.01426	0.32940	0.01534	2.50740	0.03477
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.01376	0.32940	0.01479	2.50740	0.03432
	(D * !RESET_B * !Q)	0.01860	0.01431	0.32940	0.01541	2.50740	0.03486
	(!D * RESET_B * !Q)	0.01860	0.01350	0.32940	0.01452	2.50740	0.03409
	(!D * !RESET_B * !Q)	0.01860	0.01413	0.32940	0.01523	2.50740	0.03466

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(D * RESET_B * Q)	0.01860	0.03877	0.32940	0.03988	2.50740	0.06068
	(D * RESET_B * !Q)	0.01860	0.02604	0.32940	0.02713	2.50740	0.04793
	(D * !RESET_B * !Q)	0.01860	0.01349	0.32940	0.01460	2.50740	0.03474
	(!D * RESET_B * Q)	0.01860	0.04825	0.32940	0.04969	2.50740	0.06981
	(!D * RESET_B * !Q)	0.01860	0.01339	0.32940	0.01452	2.50740	0.03466
	(!D * !RESET_B * !Q)	0.01860	0.01342	0.32940	0.01452	2.50740	0.03466
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.03282	0.32940	0.03391	2.50740	0.05472
	(D * RESET_B * !Q)	0.01860	0.02608	0.32940	0.02718	2.50740	0.04799
	(D * !RESET_B * !Q)	0.01860	0.01353	0.32940	0.01464	2.50740	0.03479
	(!D * RESET_B * Q)	0.01860	0.03814	0.32940	0.03969	2.50740	0.05998
	(!D * RESET_B * !Q)	0.01860	0.01343	0.32940	0.01456	2.50740	0.03471
	(!D * !RESET_B * !Q)	0.01860	0.01347	0.32940	0.01455	2.50740	0.03471

DLHQ



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

Truth Table

INPUT		OUTPUT
D	GATE	Q
x	0	IQ
0	1	0
1	1	1

Footprint

Cell Name	Area
sg13g2_dlhq_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	GATE	Q
sg13g2_dlhq_1	0.00226	0.00228	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2192.03000	2682.43000	3355.59000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	0.17854	0.32940	0.06480	0.44166	2.50740	0.30000	1.27654
	GATE->Q (RR)	0.01860	0.00100	0.15230	0.32940	0.06480	0.41666	2.50740	0.30000	1.22123

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D->Q (FF)	0.01860	0.00100	0.15605	0.32940	0.06480	0.39813	2.50740	0.30000	1.13877
	GATE->Q (RF)	0.01860	0.00100	0.16242	0.32940	0.06480	0.40281	2.50740	0.30000	1.09260

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.19185
	setup	GATE (F)	0.01860	0.01860	0.10270	1.26300	1.26300	0.20508	2.50740	2.50740	0.24203

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.03912	1.26300	1.26300	0.00000	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.00540	2.50740	2.50740	-0.03542

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	min_pulse_width	GATE ()	0.01860	0.00000	0.07980	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D	0.01860	0.00100	0.01798	0.32940	0.06480	0.01833	2.50740	0.30000	0.01839
	GATE	0.01860	0.00100	0.01487	0.32940	0.06480	0.01520	2.50740	0.30000	0.01620

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D	0.01860	0.00100	0.01905	0.32940	0.06480	0.01945	2.50740	0.30000	0.01974
	GATE	0.01860	0.00100	0.01626	0.32940	0.06480	0.01692	2.50740	0.30000	0.01718

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00467	0.32940	0.00539	2.50740	0.01861

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00466	0.32940	0.00552	2.50740	0.01902

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00467	0.32940	0.00539	2.50740	0.01861
	(!GATE * !Q)	0.01860	0.00423	0.32940	0.00504	2.50740	0.01827

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00442	0.32940	0.00536	2.50740	0.01890
	(!GATE * !Q)	0.01860	0.00466	0.32940	0.00552	2.50740	0.01902

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.01108	0.32940	0.01205	2.50740	0.02868

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.01874	0.32940	0.02030	2.50740	0.03781

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.01108	0.32940	0.01205	2.50740	0.02868

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.01874	0.32940	0.02030	2.50740	0.03781

DLHRQ



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

Truth Table

INPUT			OUTPUT
D	RESET_B	GATE	Q
x	0	x	0
x	1	0	IQ
0	1	1	0
1	1	1	1

Footprint

Cell Name	Area
sg13g2_dlhrq_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE	Q
sg13g2_dlhrq_1	0.00211	0.00288	0.00218	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2461.77000	2911.10000	3378.45000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D->Q (RR)	0.01860	0.00100	0.18776	0.32940	0.06480	0.45549	2.50740	0.30000	1.28798
	GATE->Q (RR)	0.01860	0.00100	0.16928	0.32940	0.06480	0.44007	2.50740	0.30000	1.24407

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D->Q (FF)	0.01860	0.00100	0.16496	0.32940	0.06480	0.40998	2.50740	0.30000	1.15716
	GATE->Q (RF)	0.01860	0.00100	0.17364	0.32940	0.06480	0.41882	2.50740	0.30000	1.12021
	RESET_B->Q (FF)	0.01860	0.00100	0.06557	0.32940	0.06480	0.33084	2.50740	0.30000	1.15404

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.08803	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.17119
	setup	GATE (F)	0.01860	0.01860	0.09781	1.26300	1.26300	0.18619	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)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.04401	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.05135	1.26300	1.26300	0.00540	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)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.20070
	removal	GATE (F)	0.01860	0.01860	0.02934	1.26300	1.26300	0.15111	2.50740	2.50740	0.21546

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.20157	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	min_pulse_width	GATE ()	0.01860	0.00000	0.08301	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D	0.01860	0.00100	0.00117	0.32940	0.06480	0.00103	2.50740	0.30000	0.00081
	GATE	0.01860	0.00100	0.01159	0.32940	0.06480	0.01193	2.50740	0.30000	0.01196

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D	0.01860	0.00100	-0.00117	0.32940	0.06480	-0.00103	2.50740	0.30000	-0.00081
	GATE	0.01860	0.00100	0.01161	0.32940	0.06480	0.01236	2.50740	0.30000	0.01168
	RESET_B	0.01860	0.00100	0.00940	0.32940	0.06480	0.01069	2.50740	0.30000	0.02662

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.02152	0.32940	0.02263	2.50740	0.03623

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.02659	0.32940	0.03155	2.50740	0.04560

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00145	0.32940	0.00220	2.50740	0.01542
	!RESET_B	0.01860	0.02152	0.32940	0.02263	2.50740	0.03623

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00577	0.32940	0.00670	2.50740	0.02024
	!RESET_B	0.01860	0.02659	0.32940	0.03155	2.50740	0.04560

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.00008	0.32940	0.00006	2.50740	0.00008

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.00022	0.32940	0.00008	2.50740	0.00004

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00009	0.32940	0.00007	2.50740	0.00008
	(!D * !GATE * !Q)	0.01860	0.00008	0.32940	0.00006	2.50740	0.00008

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00022	0.32940	0.00009	2.50740	0.00004
	(!D * !GATE * !Q)	0.01860	0.00022	0.32940	0.00008	2.50740	0.00004

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01510	0.32940	0.01591	2.50740	0.03346

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01902	0.32940	0.02065	2.50740	0.03795

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.01510	0.32940	0.01591	2.50740	0.03346
	(!D * !RESET_B * !Q)	0.01860	0.01075	0.32940	0.01168	2.50740	0.02819

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.01493	0.32940	0.01600	2.50740	0.03455
	(!D * RESET_B * !Q)	0.01860	0.01902	0.32940	0.02065	2.50740	0.03795
	(!D * !RESET_B * !Q)	0.01860	0.01908	0.32940	0.02076	2.50740	0.03803

DLHR



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

Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE	Q	Q_N
x	0	x	0	1
x	1	0	IQ	IQN
0	1	1	0	1
1	1	1	1	0

Footprint

Cell Name	Area
sg13g2_dlhr_1	32.65920

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE	Q	Q_N
sg13g2_dlhr_1	0.00206	0.00304	0.00224	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3241.39000	3717.17000	4179.22000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.20291	0.32940	0.06480	0.47737	2.50740	0.30000	1.30927
	GATE->Q (RR)	0.01860	0.00100	0.18518	0.32940	0.06480	0.46334	2.50740	0.30000	1.26847

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q (FF)	0.01860	0.00100	0.17098	0.32940	0.06480	0.41924	2.50740	0.30000	1.16128
	GATE->Q (RF)	0.01860	0.00100	0.17983	0.32940	0.06480	0.42905	2.50740	0.30000	1.12640
	RESET_B->Q (FF)	0.01860	0.00100	0.07140	0.32940	0.06480	0.34814	2.50740	0.30000	1.18299

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q_N (FR)	0.01860	0.00100	0.21011	0.32940	0.06480	0.46979	2.50740	0.30000	1.30573
	GATE->Q_N (RR)	0.01860	0.00100	0.21909	0.32940	0.06480	0.47980	2.50740	0.30000	1.27081
	RESET_B->Q_N (FR)	0.01860	0.00100	0.11042	0.32940	0.06480	0.39376	2.50740	0.30000	1.27456

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q_N (RF)	0.01860	0.00100	0.24560	0.32940	0.06480	0.47971	2.50740	0.30000	1.21737
	GATE->Q_N (RF)	0.01860	0.00100	0.22814	0.32940	0.06480	0.46550	2.50740	0.30000	1.17618

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.09536	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.17414
	setup	GATE (F)	0.01860	0.01860	0.10759	1.26300	1.26300	0.19158	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)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.04401	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.05379	1.26300	1.26300	0.00540	2.50740	2.50740	-0.03247

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	-0.00734	1.26300	1.26300	-0.09174	2.50740	2.50740	-0.13872
	removal	GATE (F)	0.01860	0.01860	0.02201	1.26300	1.26300	0.11063	2.50740	2.50740	0.15348

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.20477	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	min_pulse_width	GATE ()	0.01860	0.00000	0.08942	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00576	0.32940	0.06480	0.00593	2.50740	0.30000	0.00586
	GATE	0.01860	0.00100	0.01081	0.32940	0.06480	0.01122	2.50740	0.30000	0.01132

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00292	0.32940	0.06480	0.00109	2.50740	0.30000	0.00095
	GATE	0.01860	0.00100	0.01080	0.32940	0.06480	0.01128	2.50740	0.30000	0.01093
	RESET_B	0.01860	0.00100	0.00950	0.32940	0.06480	0.01022	2.50740	0.30000	0.01911

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00294	0.32940	0.06480	0.00133	2.50740	0.30000	0.00105
	GATE	0.01860	0.00100	0.01812	0.32940	0.06480	0.01921	2.50740	0.30000	0.02762
	RESET_B	0.01860	0.00100	0.00950	0.32940	0.06480	0.01043	2.50740	0.30000	0.01917

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00576	0.32940	0.06480	0.00584	2.50740	0.30000	0.00572
	GATE	0.01860	0.00100	0.01080	0.32940	0.06480	0.01106	2.50740	0.30000	0.01110

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.02099	0.32940	0.02211	2.50740	0.03570

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.02611	0.32940	0.03122	2.50740	0.04534

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00412	0.32940	0.00490	2.50740	0.01819
	!RESET_B	0.01860	0.02099	0.32940	0.02211	2.50740	0.03570

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00832	0.32940	0.00929	2.50740	0.02289
	!RESET_B	0.01860	0.02611	0.32940	0.03122	2.50740	0.04534

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	-0.00006	0.32940	-0.00009	2.50740	-0.00007

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.00034	0.32940	0.00021	2.50740	0.00017

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	-0.00006	0.32940	-0.00009	2.50740	-0.00007
	(!D * !GATE * !Q)	0.01860	-0.00006	0.32940	-0.00009	2.50740	-0.00007

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00034	0.32940	0.00021	2.50740	0.00017
	(!D * !GATE * !Q)	0.01860	0.00034	0.32940	0.00021	2.50740	0.00017

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01464	0.32940	0.01546	2.50740	0.03305

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01876	0.32940	0.02034	2.50740	0.03776

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.01464	0.32940	0.01546	2.50740	0.03305
	(!D * !RESET_B * !Q)	0.01860	0.01033	0.32940	0.01128	2.50740	0.02790

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.01530	0.32940	0.01636	2.50740	0.03493
	(!D * RESET_B * !Q)	0.01860	0.01876	0.32940	0.02034	2.50740	0.03776
	(!D * !RESET_B * !Q)	0.01860	0.01882	0.32940	0.02040	2.50740	0.03781

DLLRQ



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

Truth Table

INPUT			OUTPUT
D	RESET_B	GATE_N	Q
x	0	x	0
0	1	0	0
x	1	1	IQ
1	1	0	1

Footprint

Cell Name	Area
sg13g2_dllrq_1	29.03040

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE_N	Q
sg13g2_dllrq_1	0.00202	0.00291	0.00215	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2461.64000	2910.99000	3378.55000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D->Q (RR)	0.01860	0.00100	0.18679	0.32940	0.06480	0.45358	2.50740	0.30000	1.28558
	GATE_N->Q (FR)	0.01860	0.00100	0.20831	0.32940	0.06480	0.49134	2.50740	0.30000	1.39077
	RESET_B->Q (RR)	0.01860	0.00100	0.08239	0.32940	0.06480	0.34979	2.50740	0.30000	1.22510

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D->Q (FF)	0.01860	0.00100	0.16408	0.32940	0.06480	0.40729	2.50740	0.30000	1.15072
	GATE_N->Q (FF)	0.01860	0.00100	0.15713	0.32940	0.06480	0.41923	2.50740	0.30000	1.24856
	RESET_B->Q (FF)	0.01860	0.00100	0.06627	0.32940	0.06480	0.33047	2.50740	0.30000	1.15149

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.08635	2.50740	2.50740	-0.11806
	setup	GATE_N (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.09444	2.50740	2.50740	0.12397

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.08314	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.30401
	setup	GATE_N (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.25634	2.50740	2.50740	0.34533

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	recovery	GATE_N (R)	0.01860	0.01860	-0.03912	1.26300	1.26300	-0.08905	2.50740	2.50740	-0.08559
	removal	GATE_N (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.09984	2.50740	2.50740	0.09445

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.19836	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE_N falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	min_pulse_width	GATE_N ()	0.01860	0.00000	0.10544	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D	0.01860	0.00100	0.00785	0.32940	0.06480	0.00829	2.50740	0.30000	0.00849
	GATE_N	0.01860	0.00100	0.00854	0.32940	0.06480	0.00837	2.50740	0.30000	0.00816
	RESET_B	0.01860	0.00100	0.01163	0.32940	0.06480	0.01211	2.50740	0.30000	0.02626

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D	0.01860	0.00100	0.00516	0.32940	0.06480	0.00043	2.50740	0.30000	0.00010
	GATE_N	0.01860	0.00100	0.00715	0.32940	0.06480	0.00697	2.50740	0.30000	0.00815
	RESET_B	0.01860	0.00100	0.00958	0.32940	0.06480	0.01087	2.50740	0.30000	0.02686

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.01468	0.32940	0.01527	2.50740	0.02847

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.01720	0.32940	0.02318	2.50740	0.03723

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00137	0.32940	0.00213	2.50740	0.01540
	!RESET_B	0.01860	0.01468	0.32940	0.01527	2.50740	0.02847

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00569	0.32940	0.00665	2.50740	0.02024
	!RESET_B	0.01860	0.01720	0.32940	0.02318	2.50740	0.03723

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00017	0.32940	0.00015	2.50740	0.00016

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00023	0.32940	0.00010	2.50740	0.00005

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00017	0.32940	0.00015	2.50740	0.00016
	(!D * GATE_N * !Q)	0.01860	0.00017	0.32940	0.00015	2.50740	0.00016

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00023	0.32940	0.00010	2.50740	0.00005
	(!D * GATE_N * !Q)	0.01860	0.00023	0.32940	0.00010	2.50740	0.00005

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.01642	0.32940	0.01724	2.50740	0.03359

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.01889	0.32940	0.02053	2.50740	0.03800

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.01642	0.32940	0.01724	2.50740	0.03359
	(!D * !RESET_B * !Q)	0.01860	0.00959	0.32940	0.01054	2.50740	0.02710

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.01586	0.32940	0.01690	2.50740	0.03415
	(!D * RESET_B * !Q)	0.01860	0.01889	0.32940	0.02053	2.50740	0.03800
	(!D * !RESET_B * !Q)	0.01860	0.01896	0.32940	0.02059	2.50740	0.03810

DLLR



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

Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE_N	Q	Q_N
x	0	x	0	1
0	1	0	0	1
x	1	1	IQ	IQN
1	1	0	1	0

Footprint

Cell Name	Area
sg13g2_dllr_1	34.47360

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE_N	Q	Q_N
sg13g2_dllr_1	0.00213	0.00300	0.00229	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3240.99000	3809.48000	4179.07000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q (RR)	0.01860	0.00100	0.20472	0.32940	0.06480	0.47874	2.50740	0.30000	1.30986
	GATE_N->Q (FR)	0.01860	0.00100	0.22616	0.32940	0.06480	0.51724	2.50740	0.30000	1.41660

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q (FF)	0.01860	0.00100	0.17297	0.32940	0.06480	0.42078	2.50740	0.30000	1.16286
	GATE_N->Q (FF)	0.01860	0.00100	0.16695	0.32940	0.06480	0.43493	2.50740	0.30000	1.26651
	RESET_B->Q (FF)	0.01860	0.00100	0.07128	0.32940	0.06480	0.35236	2.50740	0.30000	1.16669

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q_N (FR)	0.01860	0.00100	0.21189	0.32940	0.06480	0.47110	2.50740	0.30000	1.30620
	GATE_N->Q_N (FR)	0.01860	0.00100	0.20607	0.32940	0.06480	0.48535	2.50740	0.30000	1.40872
	RESET_B->Q_N (FR)	0.01860	0.00100	0.11100	0.32940	0.06480	0.39504	2.50740	0.30000	1.28186

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q_N (RF)	0.01860	0.00100	0.24717	0.32940	0.06480	0.48114	2.50740	0.30000	1.21826
	GATE_N->Q_N (FF)	0.01860	0.00100	0.26883	0.32940	0.06480	0.51952	2.50740	0.30000	1.32555

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.07580	1.26300	1.26300	-0.09174	2.50740	2.50740	-0.12101
	setup	GATE_N (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.10254	2.50740	2.50740	0.13282

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.08803	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.30696
	setup	GATE_N (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.25904	2.50740	2.50740	0.35419

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.05127	2.50740	2.50740	-0.02656
	removal	GATE_N (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.06476	2.50740	2.50740	0.03837

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.20477	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE_N falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	min_pulse_width	GATE_N ()	0.01860	0.00000	0.11505	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.01219	0.32940	0.06480	0.07046	2.50740	0.30000	0.28456
	GATE_N	0.01860	0.00100	0.02258	0.32940	0.06480	0.08168	2.50740	0.30000	0.29592

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.00896	0.32940	0.06480	0.05899	2.50740	0.30000	0.27311
	GATE_N	0.01860	0.00100	0.02051	0.32940	0.06480	0.07928	2.50740	0.30000	0.29480
	RESET_B	0.01860	0.00100	0.02953	0.32940	0.06480	0.08850	2.50740	0.30000	0.31746

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.00899	0.32940	0.06480	0.05945	2.50740	0.30000	0.27344
	GATE_N	0.01860	0.00100	0.03670	0.32940	0.06480	0.09695	2.50740	0.30000	0.32934
	RESET_B	0.01860	0.00100	0.02953	0.32940	0.06480	0.08891	2.50740	0.30000	0.31782

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.01219	0.32940	0.06480	0.07013	2.50740	0.30000	0.28414
	GATE_N	0.01860	0.00100	0.02258	0.32940	0.06480	0.08136	2.50740	0.30000	0.29576

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.02181	0.32940	0.02320	2.50740	0.03684

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.02379	0.32940	0.03335	2.50740	0.04737

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00419	0.32940	0.00498	2.50740	0.01826
	!RESET_B	0.01860	0.02181	0.32940	0.02320	2.50740	0.03684

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00401	0.32940	0.00498	2.50740	0.01860
	!RESET_B	0.01860	0.02379	0.32940	0.03335	2.50740	0.04737

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.00338	0.32940	0.00335	2.50740	0.00337

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.00039	0.32940	0.00025	2.50740	0.00021

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00338	0.32940	0.00335	2.50740	0.00337
	(!D * GATE_N * !Q)	0.01860	-0.00009	0.32940	-0.00012	2.50740	-0.00010

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00038	0.32940	0.00025	2.50740	0.00021
	(!D * GATE_N * !Q)	0.01860	0.00039	0.32940	0.00025	2.50740	0.00021

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.01748	0.32940	0.02078	2.50740	0.03740

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.01616	0.32940	0.01720	2.50740	0.03446

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.01648	0.32940	0.01731	2.50740	0.03365
	(!D * RESET_B * !Q)	0.01860	0.01748	0.32940	0.02078	2.50740	0.03740
	(!D * !RESET_B * !Q)	0.01860	0.01755	0.32940	0.02086	2.50740	0.03746

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.01616	0.32940	0.01720	2.50740	0.03446
	(!D * !RESET_B * !Q)	0.01860	0.01059	0.32940	0.01167	2.50740	0.02904

DLY1



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00148	0.30000

Leakage Information

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

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A->X (RR)	0.01860	0.00100	0.11907	0.32940	0.06480	0.38201	2.50740	0.30000	1.15773

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A->X (FF)	0.01860	0.00100	0.13631	0.32940	0.06480	0.40320	2.50740	0.30000	1.26194

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.01569	0.32940	0.06480	0.01629	2.50740	0.30000	0.02449

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.01504	0.32940	0.06480	0.01590	2.50740	0.30000	0.02435

DLY2



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	14.51520

Pin Capacitance Information

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

Leakage Information

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

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	0.17621	0.32940	0.06480	0.45234	2.50740	0.30000	1.27021

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A->X (FF)	0.01860	0.00100	0.19696	0.32940	0.06480	0.48451	2.50740	0.30000	1.38170

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.01864	0.32940	0.06480	0.01917	2.50740	0.30000	0.02676

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.01811	0.32940	0.06480	0.01875	2.50740	0.30000	0.02683

DLY4



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd3_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd3_1	0.00148	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	2554.52000	2742.91000	2931.30000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	0.38601	0.32940	0.06480	0.69729	2.50740	0.30000	1.59349

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A->X (FF)	0.01860	0.00100	0.40435	0.32940	0.06480	0.73207	2.50740	0.30000	1.71723

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.02690	0.32940	0.06480	0.02686	2.50740	0.30000	0.03339

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.02664	0.32940	0.06480	0.02662	2.50740	0.30000	0.03312

EINVIN_x



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

Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	1
1	0	0
-	1	HiZ

Footprint

Cell Name	Area
sg13g2_einvn_4	23.58720
sg13g2_einvn_2	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_4	0.00802	0.00894	1.20000
sg13g2_einvn_2	0.00412	0.00480	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1199.74000	2309.88000	3420.01000
sg13g2_einvn_2	594.24000	1149.30000	1704.37000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A->Z (FR)	0.01860	0.01046	0.02518	0.32940	0.26866	0.55103	2.50740	1.20946	2.86190
	TE_B->Z (RR)	0.01860	0.01046	0.05487	0.32940	0.26866	0.12390	2.50740	1.20946	0.24758
	TE_B->Z (FR)	0.01860	0.01046	0.03188	0.32940	0.26866	0.52334	2.50740	1.20946	2.59282
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00585	0.02714	0.32940	0.13445	0.55055	2.50740	0.60485	2.85924
	TE_B->Z (RR)	0.01860	0.00585	0.05373	0.32940	0.13445	0.12158	2.50740	0.60485	0.25817
	TE_B->Z (FR)	0.01860	0.00585	0.03335	0.32940	0.13445	0.52327	2.50740	0.60485	2.59276

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01558	0.02207	0.32940	0.27377	0.45470	2.50740	1.21458	2.40563
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00848	0.02375	0.32940	0.13708	0.45467	2.50740	0.60748	2.40588

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A	0.01860	0.01046	0.00652	0.32940	0.26866	0.00931	2.50740	1.20946	0.02237
	TE_B	0.01860	0.01046	0.01894	0.32940	0.26866	0.01780	2.50740	1.20946	0.01657
sg13g2_einvn_2	A	0.01860	0.00585	0.00331	0.32940	0.13445	0.00459	2.50740	0.60485	0.01081
	TE_B	0.01860	0.00585	0.00933	0.32940	0.13445	0.00878	2.50740	0.60485	0.00832

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A	0.01860	0.01558	0.00651	0.32940	0.27377	0.00958	2.50740	1.21458	0.02067
sg13g2_einvn_2	A	0.01860	0.00848	0.00345	0.32940	0.13708	0.00487	2.50740	0.60748	0.01034

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_4	0.01860	-0.01451	0.32940	-0.01395	2.50740	0.00388
sg13g2_einvn_2	0.01860	-0.00638	0.32940	-0.00610	2.50740	0.00320

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_4	0.01860	0.01780	0.32940	0.01945	2.50740	0.03884
sg13g2_einvn_2	0.01860	0.00900	0.32940	0.00982	2.50740	0.01979

FILLx



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

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_8	14.51520
sg13g2_fill_4	7.25760
sg13g2_fill_2	3.62880

Pin Capacitance Information Leakage Information

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

GCLK



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

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	0.00229	0.00486	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	2636.05000	2874.13000	3045.12000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.07274	0.32940	0.06480	0.33567	2.50740	0.30000	1.19974

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.06103	0.32940	0.06480	0.31899	2.50740	0.30000	1.12584

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.03900	1.26300	1.26300	-0.15598	2.50740	2.50740	-0.24733
	setup	CLK (R)	0.01860	0.01860	0.07575	1.26300	1.26300	0.21385	2.50740	2.50740	0.31808

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01698	1.26300	1.26300	-0.02578	2.50740	2.50740	-0.03757
	setup	CLK (R)	0.01860	0.01860	0.05186	1.26300	1.26300	0.07326	2.50740	2.50740	0.09400

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.24002	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.09903	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.01056	0.32940	0.06480	0.01105	2.50740	0.30000	0.02326

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.00768	0.32940	0.06480	0.00894	2.50740	0.30000	0.02215

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.02376	0.32940	0.02538	2.50740	0.03857

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.01566	0.32940	0.03571	2.50740	0.04957

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	!CLK	0.01860	0.02376	0.32940	0.02538	2.50740	0.03857

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	!CLK	0.01860	0.01566	0.32940	0.03571	2.50740	0.04957

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.00897	0.32940	0.00994	2.50740	0.02639

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.01031	0.32940	0.01127	2.50740	0.02866

INx



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

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

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

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04267	4.80000
sg13g2_inv_8	0.02199	2.40000
sg13g2_inv_4	0.01099	1.20000
sg13g2_inv_2	0.00556	0.60000
sg13g2_inv_1	0.00281	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3291.05000	7731.68000	12172.30000
sg13g2_inv_8	1645.53000	3865.87000	6086.21000
sg13g2_inv_4	822.76200	1932.92000	3043.07000
sg13g2_inv_2	411.38900	966.47000	1521.55000
sg13g2_inv_1	205.86900	483.36200	760.85600

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A->Y (FR)	0.01860	0.00100	0.01824	0.32940	1.03680	0.36430	2.50740	4.80000	1.99680
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01578	0.32940	0.51840	0.36077	2.50740	2.40000	1.99094
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01615	0.32940	0.25920	0.36045	2.50740	1.20000	1.99021
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01733	0.32940	0.12960	0.36002	2.50740	0.60000	1.98755
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02028	0.32940	0.06480	0.36080	2.50740	0.30000	1.98832

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A->Y (RF)	0.01860	0.00100	0.01826	0.32940	1.03680	0.34319	2.50740	4.80000	1.87170
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01550	0.32940	0.51840	0.34100	2.50740	2.40000	1.86970
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01588	0.32940	0.25920	0.33998	2.50740	1.20000	1.86972
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01703	0.32940	0.12960	0.33872	2.50740	0.60000	1.86332
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01994	0.32940	0.06480	0.33959	2.50740	0.30000	1.86389

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A	0.01860	0.00100	0.02561	0.32940	1.03680	0.03608	2.50740	4.80000	0.10683
sg13g2_inv_8	A	0.01860	0.00100	0.01283	0.32940	0.51840	0.01801	2.50740	2.40000	0.05391
sg13g2_inv_4	A	0.01860	0.00100	0.00646	0.32940	0.25920	0.00898	2.50740	1.20000	0.02700
sg13g2_inv_2	A	0.01860	0.00100	0.00327	0.32940	0.12960	0.00446	2.50740	0.60000	0.01324
sg13g2_inv_1	A	0.01860	0.00100	0.00191	0.32940	0.06480	0.00242	2.50740	0.30000	0.00677

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A	0.01860	0.00100	0.02323	0.32940	1.03680	0.03615	2.50740	4.80000	0.10557
sg13g2_inv_8	A	0.01860	0.00100	0.01164	0.32940	0.51840	0.01719	2.50740	2.40000	0.05203
sg13g2_inv_4	A	0.01860	0.00100	0.00588	0.32940	0.25920	0.00889	2.50740	1.20000	0.02621
sg13g2_inv_2	A	0.01860	0.00100	0.00310	0.32940	0.12960	0.00450	2.50740	0.60000	0.01313
sg13g2_inv_1	A	0.01860	0.00100	0.00202	0.32940	0.06480	0.00261	2.50740	0.30000	0.00685

ITL



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

Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	1
1	0	0
-	1	HiZ

Footprint

Cell Name	Area
sg13g2_einvn_8	39.91680

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01586	0.01532	2.40000

Leakage Information

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

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A->Z (FR)	0.01860	0.01996	0.02428	0.32940	0.53736	0.55254	2.50740	2.41896	2.86843
	TE_B->Z (RR)	0.01860	0.01996	0.07208	0.32940	0.53736	0.16790	2.50740	2.41896	0.35204
	TE_B->Z (FR)	0.01860	0.01996	0.03247	0.32940	0.53736	0.52578	2.50740	2.41896	2.59758

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A->Z (RF)	0.01860	0.03000	0.02133	0.32940	0.54740	0.45712	2.50740	2.42900	2.41382

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A	0.01860	0.01996	0.01292	0.32940	0.53736	0.01828	2.50740	2.41896	0.04319
	TE_B	0.01860	0.01996	0.04228	0.32940	0.53736	0.03757	2.50740	2.41896	0.03548

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A	0.01860	0.03000	0.01268	0.32940	0.54740	0.01873	2.50740	2.42900	0.04018

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_8	0.01860	-0.02899	0.32940	-0.03310	2.50740	-0.02066

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_8	0.01860	0.02899	0.32940	0.03310	2.50740	0.05196

KEEPSTATE



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

Truth Table

INPUT	OUTPUT
SH	SH
x	-

Footprint

Cell Name	Area
sg13g2_sighold	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	SH	SH
sg13g2_sighold	0.01405	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	333.84800	875.32400	1416.80000

Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sighold	0.01860	0.00620	0.32940	0.01119	2.50740	0.05336

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sighold	0.01860	0.00524	0.32940	0.00869	2.50740	0.05379

MUX2x



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

Truth Table

INPUT			OUTPUT
A0	A1	S	X
0	0	x	0
0	1	0	0
x	1	1	1
1	x	0	1
1	0	1	0

Footprint

Cell Name	Area
sg13g2_mux2_2	19.95840
sg13g2_mux2_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_2	0.00273	0.00283	0.00497	0.60000
sg13g2_mux2_1	0.00273	0.00285	0.00498	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	1618.97000	2163.24000	2560.33000
sg13g2_mux2_1	1203.82000	1680.13000	2354.83000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0->X (RR)	0.01860	0.00100	0.08419	0.32940	0.12960	0.38663	2.50740	0.60000	1.28875
	A1->X (RR)	0.01860	0.00100	0.08464	0.32940	0.12960	0.38992	2.50740	0.60000	1.29680
	S->X (-R)	0.01860	0.00100	0.09349	0.32940	0.12960	0.38496	2.50740	0.60000	1.28660
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.07864	0.32940	0.06480	0.35699	2.50740	0.30000	1.21902
	A1->X (RR)	0.01860	0.00100	0.07435	0.32940	0.06480	0.35629	2.50740	0.30000	1.22904
	S->X (-R)	0.01860	0.00100	0.08209	0.32940	0.06480	0.35493	2.50740	0.30000	1.22318

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0->X (FF)	0.01860	0.00100	0.11522	0.32940	0.12960	0.42616	2.50740	0.60000	1.35392
	A1->X (FF)	0.01860	0.00100	0.11492	0.32940	0.12960	0.42643	2.50740	0.60000	1.35591
	S->X (-F)	0.01860	0.00100	0.12772	0.32940	0.12960	0.40959	2.50740	0.60000	1.28910
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.09584	0.32940	0.06480	0.38030	2.50740	0.30000	1.26975
	A1->X (FF)	0.01860	0.00100	0.09573	0.32940	0.06480	0.38077	2.50740	0.30000	1.27193
	S->X (-F)	0.01860	0.00100	0.10796	0.32940	0.06480	0.36765	2.50740	0.30000	1.21358

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.09349	0.32940	0.12960	0.38496	2.50740	0.60000	1.28660
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.12838	0.32940	0.12960	0.40697	2.50740	0.60000	1.24832
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.08209	0.32940	0.06480	0.35493	2.50740	0.30000	1.22318
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.11679	0.32940	0.06480	0.38559	2.50740	0.30000	1.22309

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.12772	0.32940	0.12960	0.40959	2.50740	0.60000	1.28910
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.16022	0.32940	0.12960	0.42841	2.50740	0.60000	1.17594
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.10796	0.32940	0.06480	0.36765	2.50740	0.30000	1.21358
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.14035	0.32940	0.06480	0.39311	2.50740	0.30000	1.13903

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0	0.01860	0.00100	0.01616	0.32940	0.12960	0.01686	2.50740	0.60000	0.03042
	A1	0.01860	0.00100	0.01621	0.32940	0.12960	0.01705	2.50740	0.60000	0.03063
	S	0.01860	0.00100	0.01692	0.32940	0.12960	0.01756	2.50740	0.60000	0.02988
sg13g2_mux2_1	A0	0.01860	0.00100	0.00990	0.32940	0.06480	0.01042	2.50740	0.30000	0.02391
	A1	0.01860	0.00100	0.01120	0.32940	0.06480	0.01197	2.50740	0.30000	0.02608
	S	0.01860	0.00100	0.01198	0.32940	0.06480	0.01247	2.50740	0.30000	0.02524

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0	0.01860	0.00100	0.01660	0.32940	0.12960	0.01673	2.50740	0.60000	0.03123
	A1	0.01860	0.00100	0.01650	0.32940	0.12960	0.01661	2.50740	0.60000	0.03130
	S	0.01860	0.00100	0.01648	0.32940	0.12960	0.01663	2.50740	0.60000	0.02991
sg13g2_mux2_1	A0	0.01860	0.00100	0.01106	0.32940	0.06480	0.01200	2.50740	0.30000	0.02650
	A1	0.01860	0.00100	0.01097	0.32940	0.06480	0.01187	2.50740	0.30000	0.02650
	S	0.01860	0.00100	0.01129	0.32940	0.06480	0.01185	2.50740	0.30000	0.02521

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S	(A0 * !A1)	0.01860	0.00100	0.01670	0.32940	0.12960	0.01734	2.50740	0.60000	0.01724
	S	(!A0 * A1)	0.01860	0.00100	0.01692	0.32940	0.12960	0.01756	2.50740	0.60000	0.02988
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01182	0.32940	0.06480	0.01216	2.50740	0.30000	0.01212
	S	(!A0 * A1)	0.01860	0.00100	0.01198	0.32940	0.06480	0.01247	2.50740	0.30000	0.02524

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S	(A0 * !A1)	0.01860	0.00100	0.01770	0.32940	0.12960	0.01765	2.50740	0.60000	0.01800
	S	(!A0 * A1)	0.01860	0.00100	0.01648	0.32940	0.12960	0.01663	2.50740	0.60000	0.02991
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01243	0.32940	0.06480	0.01265	2.50740	0.30000	0.01291
	S	(!A0 * A1)	0.01860	0.00100	0.01129	0.32940	0.06480	0.01185	2.50740	0.30000	0.02521

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00464	0.32940	0.00537	2.50740	0.01839
sg13g2_mux2_1	0.01860	0.00465	0.32940	0.00538	2.50740	0.01839

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00502	0.32940	0.00581	2.50740	0.01931
sg13g2_mux2_1	0.01860	0.00502	0.32940	0.00581	2.50740	0.01930

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	(A0 * A1)	0.01860	0.00452	0.32940	0.00509	2.50740	0.01828
	(!A0 * !A1)	0.01860	0.00464	0.32940	0.00537	2.50740	0.01839
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00452	0.32940	0.00510	2.50740	0.01829
	(!A0 * !A1)	0.01860	0.00465	0.32940	0.00538	2.50740	0.01839

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	(A0 * A1)	0.01860	0.00460	0.32940	0.00554	2.50740	0.01890
	(!A0 * !A1)	0.01860	0.00502	0.32940	0.00581	2.50740	0.01931
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00459	0.32940	0.00554	2.50740	0.01889
	(!A0 * !A1)	0.01860	0.00502	0.32940	0.00581	2.50740	0.01930

MUX4



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

Truth Table

INPUT						OUTPUT
A0	A1	A2	A3	S0	S1	X
0	0	0	0	x	x	0
0	x	0	1	0	x	0
x	0	x	1	1	0	0
x	x	x	1	1	1	1
0	0	1	x	x	0	0
0	x	1	x	0	1	1
0	x	1	0	1	1	0
0	1	0	x	0	x	0
0	1	x	x	1	0	1
0	1	x	0	1	1	0
0	1	1	x	0	0	0
1	0	0	x	0	0	1
1	x	0	0	x	1	0
1	0	x	0	1	x	0
1	x	0	1	0	1	0
1	x	1	x	0	x	1
1	1	0	x	x	0	1
1	1	1	x	1	0	1
1	1	1	0	1	1	0

Footprint

Cell Name	Area
sg13g2_mux4_1	38.10240

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)
	A0	A1	A2	A3	S0	S1	X
sg13g2_mux4_1	0.00275	0.00273	0.00275	0.00281	0.00816	0.00494	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	1583.43000	3711.46000	5416.67000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0->X (RR)	0.01860	0.00100	0.13784	0.32940	0.06480	0.43706	2.50740	0.30000	1.39086
	A1->X (RR)	0.01860	0.00100	0.13262	0.32940	0.06480	0.43466	2.50740	0.30000	1.38624
	A2->X (RR)	0.01860	0.00100	0.14207	0.32940	0.06480	0.44727	2.50740	0.30000	1.41124
	A3->X (RR)	0.01860	0.00100	0.13928	0.32940	0.06480	0.44527	2.50740	0.30000	1.40981
	S0->X (-R)	0.01860	0.00100	0.12125	0.32940	0.06480	0.43357	2.50740	0.30000	1.38851
	S1->X (-R)	0.01860	0.00100	0.06957	0.32940	0.06480	0.35175	2.50740	0.30000	1.21855

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0->X (FF)	0.01860	0.00100	0.15702	0.32940	0.06480	0.44411	2.50740	0.30000	1.30886
	A1->X (FF)	0.01860	0.00100	0.15910	0.32940	0.06480	0.44484	2.50740	0.30000	1.30993
	A2->X (FF)	0.01860	0.00100	0.16815	0.32940	0.06480	0.45945	2.50740	0.30000	1.33566
	A3->X (FF)	0.01860	0.00100	0.16838	0.32940	0.06480	0.45866	2.50740	0.30000	1.33462
	S0->X (-F)	0.01860	0.00100	0.14541	0.32940	0.06480	0.45139	2.50740	0.30000	1.35483
	S1->X (-F)	0.01860	0.00100	0.08342	0.32940	0.06480	0.35932	2.50740	0.30000	1.19842

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0->X (RR)	(!A2 * A3 * S1)	0.01860	0.00100	0.12125	0.32940	0.06480	0.43357	2.50740	0.30000	1.38851
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.11327	0.32940	0.06480	0.41892	2.50740	0.30000	1.35854
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.17631	0.32940	0.06480	0.47435	2.50740	0.30000	1.36883
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.17045	0.32940	0.06480	0.46603	2.50740	0.30000	1.35663
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.06957	0.32940	0.06480	0.35175	2.50740	0.30000	1.21855
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.06941	0.32940	0.06480	0.35166	2.50740	0.30000	1.21850
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.09280	0.32940	0.06480	0.37348	2.50740	0.30000	1.21108
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.09246	0.32940	0.06480	0.37296	2.50740	0.30000	1.21130

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0->X (FF)	(!A2 * A3 * S1)	0.01860	0.00100	0.14541	0.32940	0.06480	0.45139	2.50740	0.30000	1.35483
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.13140	0.32940	0.06480	0.43109	2.50740	0.30000	1.31764
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.19396	0.32940	0.06480	0.48400	2.50740	0.30000	1.28167
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.18300	0.32940	0.06480	0.47007	2.50740	0.30000	1.26323
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.08342	0.32940	0.06480	0.35932	2.50740	0.30000	1.19842
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.08319	0.32940	0.06480	0.35922	2.50740	0.30000	1.19833
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.10307	0.32940	0.06480	0.37696	2.50740	0.30000	1.12977
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.10324	0.32940	0.06480	0.37702	2.50740	0.30000	1.12980

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0	0.01860	0.00100	0.02342	0.32940	0.06480	0.02354	2.50740	0.30000	0.03412
	A1	0.01860	0.00100	0.01466	0.32940	0.06480	0.01485	2.50740	0.30000	0.02535
	A2	0.01860	0.00100	0.01680	0.32940	0.06480	0.01696	2.50740	0.30000	0.02739
	A3	0.01860	0.00100	0.02261	0.32940	0.06480	0.02268	2.50740	0.30000	0.03316
	S0	0.01860	0.00100	0.01155	0.32940	0.06480	0.01224	2.50740	0.30000	0.02448
	S1	0.01860	0.00100	0.00604	0.32940	0.06480	0.00687	2.50740	0.30000	0.01802

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0	0.01860	0.00100	0.01594	0.32940	0.06480	0.01593	2.50740	0.30000	0.02732
	A1	0.01860	0.00100	0.01630	0.32940	0.06480	0.01636	2.50740	0.30000	0.02779
	A2	0.01860	0.00100	0.01682	0.32940	0.06480	0.01674	2.50740	0.30000	0.02797
	A3	0.01860	0.00100	0.02369	0.32940	0.06480	0.02369	2.50740	0.30000	0.03500
	S0	0.01860	0.00100	0.01070	0.32940	0.06480	0.01131	2.50740	0.30000	0.02425
	S1	0.01860	0.00100	0.00597	0.32940	0.06480	0.00692	2.50740	0.30000	0.01878

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.01662	0.32940	0.06480	0.01349	2.50740	0.30000	0.00049
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01658	0.32940	0.06480	0.01351	2.50740	0.30000	0.00023
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02067	0.32940	0.06480	0.02257	2.50740	0.30000	0.02178
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01155	0.32940	0.06480	0.01224	2.50740	0.30000	0.02448
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00917	0.32940	0.06480	0.01073	2.50740	0.30000	0.01908
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00956	0.32940	0.06480	0.01109	2.50740	0.30000	0.01985
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00604	0.32940	0.06480	0.00687	2.50740	0.30000	0.01802
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00550	0.32940	0.06480	0.00635	2.50740	0.30000	0.01751

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.02552	0.32940	0.06480	0.02666	2.50740	0.30000	0.01431
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02525	0.32940	0.06480	0.02711	2.50740	0.30000	0.01450
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01125	0.32940	0.06480	0.01068	2.50740	0.30000	0.02404
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01070	0.32940	0.06480	0.01131	2.50740	0.30000	0.02425
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00968	0.32940	0.06480	0.01116	2.50740	0.30000	0.01983
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00969	0.32940	0.06480	0.01117	2.50740	0.30000	0.01983
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00597	0.32940	0.06480	0.00692	2.50740	0.30000	0.01878
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00566	0.32940	0.06480	0.00663	2.50740	0.30000	0.01845

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01017	0.32940	0.01175	2.50740	0.04092

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01424	0.32940	0.01811	2.50740	0.04831

Passive power(pJ) for S0 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.00958	0.32940	0.01137	2.50740	0.04091
	(A0 * A1 * !S1)	0.01860	0.01017	0.32940	0.01175	2.50740	0.04092
	(!A2 * !A3 * S1)	0.01860	0.00983	0.32940	0.01168	2.50740	0.04134
	(!A0 * !A1 * !S1)	0.01860	0.01104	0.32940	0.01267	2.50740	0.04178

Passive power(pJ) for S0 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.01272	0.32940	0.01567	2.50740	0.04632
	(A0 * A1 * !S1)	0.01860	0.01424	0.32940	0.01811	2.50740	0.04831
	(!A2 * !A3 * S1)	0.01860	0.01509	0.32940	0.01572	2.50740	0.03215
	(!A0 * !A1 * !S1)	0.01860	0.01959	0.32940	0.02432	2.50740	0.04077

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00500	0.32940	0.00621	2.50740	0.02258

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00484	0.32940	0.00628	2.50740	0.02309

Passive power(pJ) for S1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00375	0.32940	0.00494	2.50740	0.02118
	(A0 * A2 * !S0)	0.01860	0.00374	0.32940	0.00494	2.50740	0.02119
	(!A1 * !A3 * S0)	0.01860	0.00500	0.32940	0.00621	2.50740	0.02258
	(!A0 * !A2 * !S0)	0.01860	0.00506	0.32940	0.00630	2.50740	0.02260

Passive power(pJ) for S1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00368	0.32940	0.00522	2.50740	0.02197
	(A0 * A2 * !S0)	0.01860	0.00368	0.32940	0.00522	2.50740	0.02195
	(!A1 * !A3 * S0)	0.01860	0.00481	0.32940	0.00624	2.50740	0.02335
	(!A0 * !A2 * !S0)	0.01860	0.00484	0.32940	0.00628	2.50740	0.02309

NAND2B1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_1	0.00222	0.00298	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	330.21900	860.18800	1660.51000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N->Y (RR)	0.01860	0.00100	0.05343	0.32940	0.06480	0.31848	2.50740	0.30000	1.17877
	B->Y (FR)	0.01860	0.00100	0.02613	0.32940	0.06480	0.36826	2.50740	0.30000	1.99608

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N->Y (FF)	0.01860	0.00100	0.06248	0.32940	0.06480	0.41575	2.50740	0.30000	1.58983
	B->Y (RF)	0.01860	0.00100	0.03768	0.32940	0.06480	0.43848	2.50740	0.30000	2.23273

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00275	0.32940	0.06480	0.00292	2.50740	0.30000	0.00217
	B	0.01860	0.00100	0.00265	0.32940	0.06480	0.00288	2.50740	0.30000	0.00680

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00507	0.32940	0.06480	0.00527	2.50740	0.30000	0.00441
	B	0.01860	0.00100	0.00516	0.32940	0.06480	0.00529	2.50740	0.30000	0.00824

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	0.01860	0.00475	0.32940	0.00566	2.50740	0.01906

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	0.01860	0.00293	0.32940	0.00392	2.50740	0.01755

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	!B	0.01860	0.00475	0.32940	0.00566	2.50740	0.01906

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	!B	0.01860	0.00293	0.32940	0.00392	2.50740	0.01755

NAND2B2



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2b_2	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_2	0.00217	0.00549	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	585.22700	1357.36000	3178.70000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N->Y (RR)	0.01860	0.00100	0.07034	0.32940	0.12960	0.35744	2.50740	0.60000	1.25859
	B->Y (FR)	0.01860	0.00100	0.01989	0.32940	0.12960	0.36266	2.50740	0.60000	1.98837

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N->Y (FF)	0.01860	0.00100	0.08307	0.32940	0.12960	0.47486	2.50740	0.60000	1.74817
	B->Y (RF)	0.01860	0.00100	0.02709	0.32940	0.12960	0.46675	2.50740	0.60000	2.45913

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N	0.01860	0.00100	0.00495	0.32940	0.12960	0.00505	2.50740	0.60000	0.00447
	B	0.01860	0.00100	0.00364	0.32940	0.12960	0.00471	2.50740	0.60000	0.01209

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N	0.01860	0.00100	0.01056	0.32940	0.12960	0.01155	2.50740	0.60000	0.01123
	B	0.01860	0.00100	0.00563	0.32940	0.12960	0.00671	2.50740	0.60000	0.01304

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	0.01860	0.00817	0.32940	0.00867	2.50740	0.02100

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	0.01860	0.00727	0.32940	0.00785	2.50740	0.02062

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	!B	0.01860	0.00817	0.32940	0.00867	2.50740	0.02100

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	!B	0.01860	0.00727	0.32940	0.00785	2.50740	0.02062

NAND2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2_2	10.88640
sg13g2_nand2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_2	0.00547	0.00563	0.60000
sg13g2_nand2_1	0.00282	0.00294	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	155.98400	1003.02000	3039.74000
sg13g2_nand2_1	79.50780	505.77400	1521.50000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A->Y (FR)	0.01860	0.00100	0.02008	0.32940	0.12960	0.36300	2.50740	0.60000	1.99014
	B->Y (FR)	0.01860	0.00100	0.02449	0.32940	0.12960	0.36800	2.50740	0.60000	1.99724
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.02247	0.32940	0.06480	0.36299	2.50740	0.30000	1.98886
	B->Y (FR)	0.01860	0.00100	0.02651	0.32940	0.06480	0.36765	2.50740	0.30000	1.99444

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A->Y (RF)	0.01860	0.00100	0.02740	0.32940	0.12960	0.46629	2.50740	0.60000	2.45874
	B->Y (RF)	0.01860	0.00100	0.03349	0.32940	0.12960	0.44824	2.50740	0.60000	2.28777
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.03002	0.32940	0.06480	0.45422	2.50740	0.30000	2.39615
	B->Y (RF)	0.01860	0.00100	0.03518	0.32940	0.06480	0.43544	2.50740	0.30000	2.22774

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A	0.01860	0.00100	0.00368	0.32940	0.12960	0.00472	2.50740	0.60000	0.01178
	B	0.01860	0.00100	0.00499	0.32940	0.12960	0.00545	2.50740	0.60000	0.01326
sg13g2_nand2_1	A	0.01860	0.00100	0.00211	0.32940	0.06480	0.00257	2.50740	0.30000	0.00623
	B	0.01860	0.00100	0.00249	0.32940	0.06480	0.00270	2.50740	0.30000	0.00669

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A	0.01860	0.00100	0.00565	0.32940	0.12960	0.00664	2.50740	0.60000	0.01310
	B	0.01860	0.00100	0.00978	0.32940	0.12960	0.01021	2.50740	0.60000	0.01601
sg13g2_nand2_1	A	0.01860	0.00100	0.00299	0.32940	0.06480	0.00340	2.50740	0.30000	0.00688
	B	0.01860	0.00100	0.00513	0.32940	0.06480	0.00527	2.50740	0.30000	0.00836

NAND3B1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand3b_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A_N	B	C	Y
sg13g2_nand3b_1	0.00220	0.00293	0.00295	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	221.53200	766.47900	2421.19000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N->Y (RR)	0.01860	0.00100	0.05649	0.32940	0.06480	0.32020	2.50740	0.30000	1.17810
	B->Y (FR)	0.01860	0.00100	0.02942	0.32940	0.06480	0.37134	2.50740	0.30000	1.99802
	C->Y (FR)	0.01860	0.00100	0.03199	0.32940	0.06480	0.37542	2.50740	0.30000	2.00316

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N->Y (FF)	0.01860	0.00100	0.07592	0.32940	0.06480	0.54034	2.50740	0.30000	2.12598
	B->Y (RF)	0.01860	0.00100	0.05588	0.32940	0.06480	0.56623	2.50740	0.30000	2.78987
	C->Y (RF)	0.01860	0.00100	0.06025	0.32940	0.06480	0.54785	2.50740	0.30000	2.59915

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.00279	0.32940	0.06480	0.00287	2.50740	0.30000	0.00217
	B	0.01860	0.00100	0.00293	0.32940	0.06480	0.00309	2.50740	0.30000	0.00640
	C	0.01860	0.00100	0.00326	0.32940	0.06480	0.00330	2.50740	0.30000	0.00686

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.00698	0.32940	0.06480	0.00704	2.50740	0.30000	0.00625
	B	0.01860	0.00100	0.00678	0.32940	0.06480	0.00697	2.50740	0.30000	0.00902
	C	0.01860	0.00100	0.00867	0.32940	0.06480	0.00866	2.50740	0.30000	0.01092

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	0.01860	0.00490	0.32940	0.00582	2.50740	0.01921

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	0.01860	0.00265	0.32940	0.00363	2.50740	0.01728

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00490	0.32940	0.00582	2.50740	0.01921

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00265	0.32940	0.00363	2.50740	0.01728

NAND3



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nand3_1	0.00281	0.00296	0.00294	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	79.68280	412.09900	2282.24000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A->Y (FR)	0.01860	0.00100	0.02558	0.32940	0.06480	0.36615	2.50740	0.30000	1.99170
	B->Y (FR)	0.01860	0.00100	0.02977	0.32940	0.06480	0.37103	2.50740	0.30000	1.99751
	C->Y (FR)	0.01860	0.00100	0.03185	0.32940	0.06480	0.37509	2.50740	0.30000	2.00219

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A->Y (RF)	0.01860	0.00100	0.04366	0.32940	0.06480	0.57146	2.50740	0.30000	2.91387
	B->Y (RF)	0.01860	0.00100	0.05313	0.32940	0.06480	0.56331	2.50740	0.30000	2.78475
	C->Y (RF)	0.01860	0.00100	0.05735	0.32940	0.06480	0.54460	2.50740	0.30000	2.59441

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A	0.01860	0.00100	0.00232	0.32940	0.06480	0.00268	2.50740	0.30000	0.00612
	B	0.01860	0.00100	0.00270	0.32940	0.06480	0.00284	2.50740	0.30000	0.00632
	C	0.01860	0.00100	0.00306	0.32940	0.06480	0.00309	2.50740	0.30000	0.00664

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A	0.01860	0.00100	0.00467	0.32940	0.06480	0.00511	2.50740	0.30000	0.00770
	B	0.01860	0.00100	0.00684	0.32940	0.06480	0.00690	2.50740	0.30000	0.00910
	C	0.01860	0.00100	0.00867	0.32940	0.06480	0.00874	2.50740	0.30000	0.01087

NAND4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nand4_1	0.00280	0.00296	0.00298	0.00296	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	82.16050	314.81600	3043.08000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A->Y (FR)	0.01860	0.00100	0.02723	0.32940	0.06480	0.36792	2.50740	0.30000	1.99203
	B->Y (FR)	0.01860	0.00100	0.03158	0.32940	0.06480	0.37286	2.50740	0.30000	1.99856
	C->Y (FR)	0.01860	0.00100	0.03401	0.32940	0.06480	0.37722	2.50740	0.30000	2.00483
	D->Y (FR)	0.01860	0.00100	0.03486	0.32940	0.06480	0.38092	2.50740	0.30000	2.00943

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A->Y (RF)	0.01860	0.00100	0.05614	0.32940	0.06480	0.69053	2.50740	0.30000	3.41986
	B->Y (RF)	0.01860	0.00100	0.07016	0.32940	0.06480	0.69021	2.50740	0.30000	3.32385
	C->Y (RF)	0.01860	0.00100	0.07839	0.32940	0.06480	0.67928	2.50740	0.30000	3.16346
	D->Y (RF)	0.01860	0.00100	0.08256	0.32940	0.06480	0.67021	2.50740	0.30000	3.02427

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A	0.01860	0.00100	0.00240	0.32940	0.06480	0.00277	2.50740	0.30000	0.00584
	B	0.01860	0.00100	0.00280	0.32940	0.06480	0.00291	2.50740	0.30000	0.00603
	C	0.01860	0.00100	0.00320	0.32940	0.06480	0.00317	2.50740	0.30000	0.00634
	D	0.01860	0.00100	0.00350	0.32940	0.06480	0.00345	2.50740	0.30000	0.00654

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A	0.01860	0.00100	0.00560	0.32940	0.06480	0.00579	2.50740	0.30000	0.00870
	B	0.01860	0.00100	0.00776	0.32940	0.06480	0.00775	2.50740	0.30000	0.00996
	C	0.01860	0.00100	0.00964	0.32940	0.06480	0.00952	2.50740	0.30000	0.01174
	D	0.01860	0.00100	0.01144	0.32940	0.06480	0.01127	2.50740	0.30000	0.01347

NOR2Bx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor2b_2	12.70080
sg13g2_nor2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B_N	Y
sg13g2_nor2b_2	0.00555	0.00265	0.60000
sg13g2_nor2b_1	0.00286	0.00224	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	982.75100	1706.23000	2233.89000
sg13g2_nor2b_1	546.90000	999.46000	1348.17000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A->Y (FR)	0.01860	0.00100	0.03029	0.32940	0.12960	0.55159	2.50740	0.60000	2.85782
	B_N->Y (RR)	0.01860	0.00100	0.07985	0.32940	0.12960	0.55437	2.50740	0.60000	2.14521
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.03519	0.32940	0.06480	0.55297	2.50740	0.30000	2.86183
	B_N->Y (RR)	0.01860	0.00100	0.07300	0.32940	0.06480	0.52937	2.50740	0.30000	2.08791

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A->Y (RF)	0.01860	0.00100	0.02006	0.32940	0.12960	0.34977	2.50740	0.60000	1.90784
	B_N->Y (FF)	0.01860	0.00100	0.07023	0.32940	0.12960	0.33726	2.50740	0.60000	1.15930
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.02213	0.32940	0.06480	0.34161	2.50740	0.30000	1.86399
	B_N->Y (FF)	0.01860	0.00100	0.05956	0.32940	0.06480	0.30413	2.50740	0.30000	1.07727

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A	0.01860	0.00100	0.00526	0.32940	0.12960	0.00621	2.50740	0.60000	0.01326
	B_N	0.01860	0.00100	0.01159	0.32940	0.12960	0.01196	2.50740	0.60000	0.01096
sg13g2_nor2b_1	A	0.01860	0.00100	0.00266	0.32940	0.06480	0.00304	2.50740	0.30000	0.00692
	B_N	0.01860	0.00100	0.00601	0.32940	0.06480	0.00606	2.50740	0.30000	0.00550

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A	0.01860	0.00100	0.00380	0.32940	0.12960	0.00495	2.50740	0.60000	0.01231
	B_N	0.01860	0.00100	0.00567	0.32940	0.12960	0.00539	2.50740	0.60000	0.00512
sg13g2_nor2b_1	A	0.01860	0.00100	0.00244	0.32940	0.06480	0.00295	2.50740	0.30000	0.00654
	B_N	0.01860	0.00100	0.00308	0.32940	0.06480	0.00291	2.50740	0.30000	0.00245

Passive power(pJ) for B_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	0.01860	0.00782	0.32940	0.00858	2.50740	0.02394
sg13g2_nor2b_1	0.01860	0.00451	0.32940	0.00531	2.50740	0.01852

Passive power(pJ) for B_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	0.01860	0.00773	0.32940	0.00858	2.50740	0.02414
sg13g2_nor2b_1	0.01860	0.00456	0.32940	0.00550	2.50740	0.01887

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	A	0.01860	0.00782	0.32940	0.00858	2.50740	0.02394
sg13g2_nor2b_1	A	0.01860	0.00451	0.32940	0.00531	2.50740	0.01852

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	A	0.01860	0.00773	0.32940	0.00858	2.50740	0.02414
sg13g2_nor2b_1	A	0.01860	0.00456	0.32940	0.00550	2.50740	0.01887

NOR2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor2_2	10.88640
sg13g2_nor2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_2	0.00572	0.00549	0.30000
sg13g2_nor2_1	0.00299	0.00286	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	815.92400	1290.26000	1965.37000
sg13g2_nor2_1	407.93500	645.12500	982.69500

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A->Y (FR)	0.01860	0.00100	0.03909	0.32940	0.06480	0.33008	2.50740	0.30000	1.63824
	B->Y (FR)	0.01860	0.00100	0.03061	0.32940	0.06480	0.35147	2.50740	0.30000	1.84576
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.04178	0.32940	0.06480	0.52738	2.50740	0.30000	2.61320
	B->Y (FR)	0.01860	0.00100	0.03534	0.32940	0.06480	0.55271	2.50740	0.30000	2.86040

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A->Y (RF)	0.01860	0.00100	0.02407	0.32940	0.06480	0.23894	2.50740	0.30000	1.25865
	B->Y (RF)	0.01860	0.00100	0.01976	0.32940	0.06480	0.23200	2.50740	0.30000	1.24795
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.02577	0.32940	0.06480	0.34632	2.50740	0.30000	1.87045
	B->Y (RF)	0.01860	0.00100	0.02221	0.32940	0.06480	0.34161	2.50740	0.30000	1.86430

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A	0.01860	0.00100	0.01077	0.32940	0.06480	0.01102	2.50740	0.30000	0.02115
	B	0.01860	0.00100	0.00537	0.32940	0.06480	0.00655	2.50740	0.30000	0.01831
sg13g2_nor2_1	A	0.01860	0.00100	0.00533	0.32940	0.06480	0.00536	2.50740	0.30000	0.00863
	B	0.01860	0.00100	0.00267	0.32940	0.06480	0.00308	2.50740	0.30000	0.00677

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A	0.01860	0.00100	0.00543	0.32940	0.06480	0.00624	2.50740	0.30000	0.01723
	B	0.01860	0.00100	0.00372	0.32940	0.06480	0.00531	2.50740	0.30000	0.01570
sg13g2_nor2_1	A	0.01860	0.00100	0.00267	0.32940	0.06480	0.00284	2.50740	0.30000	0.00666
	B	0.01860	0.00100	0.00243	0.32940	0.06480	0.00294	2.50740	0.30000	0.00649

NOR3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor3_2	16.32960
sg13g2_nor3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_2	0.00567	0.00564	0.00545	0.60000
sg13g2_nor3_1	0.00297	0.00297	0.00284	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	762.67100	1487.96000	2547.72000
sg13g2_nor3_1	385.09800	750.23300	1275.10000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A->Y (FR)	0.01860	0.00100	0.06954	0.32940	0.12960	0.73162	2.50740	0.60000	3.33952
	B->Y (FR)	0.01860	0.00100	0.06458	0.32940	0.12960	0.74773	2.50740	0.60000	3.55496
	C->Y (FR)	0.01860	0.00100	0.04573	0.32940	0.12960	0.74986	2.50740	0.60000	3.71837
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.07712	0.32940	0.06480	0.73150	2.50740	0.30000	3.33327
	B->Y (FR)	0.01860	0.00100	0.07180	0.32940	0.06480	0.74699	2.50740	0.30000	3.54568
	C->Y (FR)	0.01860	0.00100	0.05513	0.32940	0.06480	0.75117	2.50740	0.30000	3.71084

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A->Y (RF)	0.01860	0.00100	0.02708	0.32940	0.12960	0.35375	2.50740	0.60000	1.87929
	B->Y (RF)	0.01860	0.00100	0.02676	0.32940	0.12960	0.34973	2.50740	0.60000	1.87408
	C->Y (RF)	0.01860	0.00100	0.02210	0.32940	0.12960	0.34387	2.50740	0.60000	1.86641
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02891	0.32940	0.06480	0.34501	2.50740	0.30000	1.83066
	B->Y (RF)	0.01860	0.00100	0.02836	0.32940	0.06480	0.34138	2.50740	0.30000	1.82778
	C->Y (RF)	0.01860	0.00100	0.02440	0.32940	0.06480	0.33625	2.50740	0.30000	1.82045

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A	0.01860	0.00100	0.01761	0.32940	0.12960	0.01743	2.50740	0.60000	0.02205
	B	0.01860	0.00100	0.01302	0.32940	0.12960	0.01311	2.50740	0.60000	0.01738
	C	0.01860	0.00100	0.00768	0.32940	0.12960	0.00822	2.50740	0.60000	0.01453
sg13g2_nor3_1	A	0.01860	0.00100	0.00912	0.32940	0.06480	0.00924	2.50740	0.30000	0.01160
	B	0.01860	0.00100	0.00683	0.32940	0.06480	0.00682	2.50740	0.30000	0.00935
	C	0.01860	0.00100	0.00421	0.32940	0.06480	0.00476	2.50740	0.30000	0.00772

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A	0.01860	0.00100	0.00679	0.32940	0.12960	0.00668	2.50740	0.60000	0.01356
	B	0.01860	0.00100	0.00606	0.32940	0.12960	0.00636	2.50740	0.60000	0.01268
	C	0.01860	0.00100	0.00413	0.32940	0.12960	0.00537	2.50740	0.60000	0.01165
sg13g2_nor3_1	A	0.01860	0.00100	0.00370	0.32940	0.06480	0.00365	2.50740	0.30000	0.00709
	B	0.01860	0.00100	0.00326	0.32940	0.06480	0.00339	2.50740	0.30000	0.00661
	C	0.01860	0.00100	0.00262	0.32940	0.06480	0.00316	2.50740	0.30000	0.00628

NOR4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor4_2	21.77280
sg13g2_nor4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_2	0.00567	0.00561	0.00556	0.00541	0.60000
sg13g2_nor4_1	0.00294	0.00295	0.00292	0.00277	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	778.35100	1449.31000	3123.67000
sg13g2_nor4_1	389.16800	724.65200	1561.85000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A->Y (FR)	0.01860	0.00100	0.11083	0.32940	0.12960	0.96078	2.50740	0.60000	4.15992
	B->Y (FR)	0.01860	0.00100	0.10624	0.32940	0.12960	0.96684	2.50740	0.60000	4.30755
	C->Y (FR)	0.01860	0.00100	0.09110	0.32940	0.12960	0.96630	2.50740	0.60000	4.46989
	D->Y (FR)	0.01860	0.00100	0.06108	0.32940	0.12960	0.95277	2.50740	0.60000	4.58115
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.11584	0.32940	0.06480	0.95448	2.50740	0.30000	4.14148
	B->Y (FR)	0.01860	0.00100	0.11114	0.32940	0.06480	0.96005	2.50740	0.30000	4.28654
	C->Y (FR)	0.01860	0.00100	0.09777	0.32940	0.06480	0.96216	2.50740	0.30000	4.45397
	D->Y (FR)	0.01860	0.00100	0.07086	0.32940	0.06480	0.95126	2.50740	0.30000	4.56344

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A->Y (RF)	0.01860	0.00100	0.02864	0.32940	0.12960	0.36005	2.50740	0.60000	1.88775
	B->Y (RF)	0.01860	0.00100	0.02962	0.32940	0.12960	0.35785	2.50740	0.60000	1.88275
	C->Y (RF)	0.01860	0.00100	0.02854	0.32940	0.12960	0.35282	2.50740	0.60000	1.87562
	D->Y (RF)	0.01860	0.00100	0.02396	0.32940	0.12960	0.34554	2.50740	0.60000	1.86570
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.03084	0.32940	0.06480	0.35972	2.50740	0.30000	1.88699
	B->Y (RF)	0.01860	0.00100	0.03166	0.32940	0.06480	0.35785	2.50740	0.30000	1.88385
	C->Y (RF)	0.01860	0.00100	0.03044	0.32940	0.06480	0.35318	2.50740	0.30000	1.87678
	D->Y (RF)	0.01860	0.00100	0.02615	0.32940	0.06480	0.34667	2.50740	0.30000	1.86944

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A	0.01860	0.00100	0.02416	0.32940	0.12960	0.02382	2.50740	0.60000	0.02818
	B	0.01860	0.00100	0.01971	0.32940	0.12960	0.01934	2.50740	0.60000	0.02314
	C	0.01860	0.00100	0.01521	0.32940	0.12960	0.01496	2.50740	0.60000	0.01983
	D	0.01860	0.00100	0.00994	0.32940	0.12960	0.01032	2.50740	0.60000	0.01691
sg13g2_nor4_1	A	0.01860	0.00100	0.01191	0.32940	0.06480	0.01168	2.50740	0.30000	0.01434
	B	0.01860	0.00100	0.00966	0.32940	0.06480	0.00953	2.50740	0.30000	0.01158
	C	0.01860	0.00100	0.00742	0.32940	0.06480	0.00732	2.50740	0.30000	0.00921
	D	0.01860	0.00100	0.00485	0.32940	0.06480	0.00503	2.50740	0.30000	0.00795

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A	0.01860	0.00100	0.00859	0.32940	0.12960	0.00819	2.50740	0.60000	0.01454
	B	0.01860	0.00100	0.00790	0.32940	0.12960	0.00763	2.50740	0.60000	0.01345
	C	0.01860	0.00100	0.00622	0.32940	0.12960	0.00657	2.50740	0.60000	0.01269
	D	0.01860	0.00100	0.00428	0.32940	0.12960	0.00553	2.50740	0.60000	0.01098
sg13g2_nor4_1	A	0.01860	0.00100	0.00431	0.32940	0.06480	0.00409	2.50740	0.30000	0.00721
	B	0.01860	0.00100	0.00399	0.32940	0.06480	0.00387	2.50740	0.30000	0.00690
	C	0.01860	0.00100	0.00342	0.32940	0.06480	0.00359	2.50740	0.30000	0.00659
	D	0.01860	0.00100	0.00271	0.32940	0.06480	0.00321	2.50740	0.30000	0.00607

NP_ANT



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

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00110

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.54685	5.55024	5.55362

Passive Power Information

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_antennanp	0.01860	-0.00037	0.32940	-0.00037	2.50740	-0.00037

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_antennanp	0.01860	0.00037	0.32940	0.00037	2.50740	0.00037

O21AI



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_o21ai_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_o21ai_1	0.00334	0.00329	0.00315	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	178.55400	778.44000	1640.42000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1->Y (FR)	0.01860	0.00100	0.06748	0.32940	0.06480	0.62261	2.50740	0.30000	2.96034
	A2->Y (FR)	0.01860	0.00100	0.05911	0.32940	0.06480	0.64610	2.50740	0.30000	3.22814
	B1->Y (FR)	0.01860	0.00100	0.02589	0.32940	0.06480	0.40686	2.50740	0.30000	2.21410

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1->Y (RF)	0.01860	0.00100	0.04902	0.32940	0.06480	0.45811	2.50740	0.30000	2.24939
	A2->Y (RF)	0.01860	0.00100	0.04112	0.32940	0.06480	0.44857	2.50740	0.30000	2.23598
	B1->Y (RF)	0.01860	0.00100	0.03146	0.32940	0.06480	0.46450	2.50740	0.30000	2.42654

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02589	0.32940	0.06480	0.40686	2.50740	0.30000	2.21410

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03146	0.32940	0.06480	0.46450	2.50740	0.30000	2.42654

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1	0.01860	0.00100	0.00656	0.32940	0.06480	0.00638	2.50740	0.30000	0.00959
	A2	0.01860	0.00100	0.00363	0.32940	0.06480	0.00377	2.50740	0.30000	0.00708
	B1	0.01860	0.00100	0.00221	0.32940	0.06480	0.00276	2.50740	0.30000	0.00641

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1	0.01860	0.00100	0.00612	0.32940	0.06480	0.00600	2.50740	0.30000	0.00893
	A2	0.01860	0.00100	0.00568	0.32940	0.06480	0.00598	2.50740	0.30000	0.00885
	B1	0.01860	0.00100	0.00307	0.32940	0.06480	0.00357	2.50740	0.30000	0.00715

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1	(!A1 * A2)	0.01860	0.00100	0.00221	0.32940	0.06480	0.00276	2.50740	0.30000	0.00641

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1	(!A1 * A2)	0.01860	0.00100	0.00307	0.32940	0.06480	0.00357	2.50740	0.30000	0.00715

OR2x



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

Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
x	1	1
1	x	1

Footprint

Cell Name	Area
sg13g2_or2_2	10.88640
sg13g2_or2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_2	0.00243	0.00225	0.60000
sg13g2_or2_1	0.00245	0.00227	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	714.66500	1163.64000	1799.21000
sg13g2_or2_1	509.16900	819.33200	1038.47000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A->X (RR)	0.01860	0.00100	0.06939	0.32940	0.12960	0.36809	2.50740	0.60000	1.27678
	B->X (RR)	0.01860	0.00100	0.06471	0.32940	0.12960	0.35618	2.50740	0.60000	1.23789
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.05846	0.32940	0.06480	0.33448	2.50740	0.30000	1.19875
	B->X (RR)	0.01860	0.00100	0.05368	0.32940	0.06480	0.31992	2.50740	0.30000	1.15286

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A->X (FF)	0.01860	0.00100	0.11777	0.32940	0.12960	0.39652	2.50740	0.60000	1.25013
	B->X (FF)	0.01860	0.00100	0.11141	0.32940	0.12960	0.40916	2.50740	0.60000	1.30481
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.09118	0.32940	0.06480	0.34322	2.50740	0.30000	1.15685
	B->X (FF)	0.01860	0.00100	0.08450	0.32940	0.06480	0.34988	2.50740	0.30000	1.19438

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A	0.01860	0.00100	0.01259	0.32940	0.12960	0.01337	2.50740	0.60000	0.02429
	B	0.01860	0.00100	0.01231	0.32940	0.12960	0.01311	2.50740	0.60000	0.02357
sg13g2_or2_1	A	0.01860	0.00100	0.00770	0.32940	0.06480	0.00844	2.50740	0.30000	0.01972
	B	0.01860	0.00100	0.00740	0.32940	0.06480	0.00814	2.50740	0.30000	0.01932

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A	0.01860	0.00100	0.01501	0.32940	0.12960	0.01475	2.50740	0.60000	0.02479
	B	0.01860	0.00100	0.01322	0.32940	0.12960	0.01344	2.50740	0.60000	0.02405
sg13g2_or2_1	A	0.01860	0.00100	0.00945	0.32940	0.06480	0.00978	2.50740	0.30000	0.02069
	B	0.01860	0.00100	0.00759	0.32940	0.06480	0.00846	2.50740	0.30000	0.01981

OR3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or3_2	14.51520
sg13g2_or3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_2	0.00256	0.00249	0.00236	0.60000
sg13g2_or3_1	0.00257	0.00250	0.00237	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	736.48600	1155.60000	1946.54000
sg13g2_or3_1	530.83500	880.58700	1338.03000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A->X (RR)	0.01860	0.00100	0.07848	0.32940	0.12960	0.39002	2.50740	0.60000	1.33545
	B->X (RR)	0.01860	0.00100	0.07514	0.32940	0.12960	0.37973	2.50740	0.60000	1.30213
	C->X (RR)	0.01860	0.00100	0.06879	0.32940	0.12960	0.36565	2.50740	0.60000	1.25952
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.06790	0.32940	0.06480	0.35954	2.50740	0.30000	1.26996
	B->X (RR)	0.01860	0.00100	0.06492	0.32940	0.06480	0.34840	2.50740	0.30000	1.22541
	C->X (RR)	0.01860	0.00100	0.05846	0.32940	0.06480	0.33178	2.50740	0.30000	1.17902

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A->X (FF)	0.01860	0.00100	0.16372	0.32940	0.12960	0.44479	2.50740	0.60000	1.26860
	B->X (FF)	0.01860	0.00100	0.15913	0.32940	0.12960	0.45553	2.50740	0.60000	1.34071
	C->X (FF)	0.01860	0.00100	0.14375	0.32940	0.12960	0.45473	2.50740	0.60000	1.36814
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.13084	0.32940	0.06480	0.38731	2.50740	0.30000	1.18091
	B->X (FF)	0.01860	0.00100	0.12613	0.32940	0.06480	0.39421	2.50740	0.30000	1.24117
	C->X (FF)	0.01860	0.00100	0.11046	0.32940	0.06480	0.38877	2.50740	0.30000	1.25505

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A	0.01860	0.00100	0.01324	0.32940	0.12960	0.01375	2.50740	0.60000	0.02438
	B	0.01860	0.00100	0.01292	0.32940	0.12960	0.01344	2.50740	0.60000	0.02421
	C	0.01860	0.00100	0.01244	0.32940	0.12960	0.01324	2.50740	0.60000	0.02340
sg13g2_or3_1	A	0.01860	0.00100	0.00826	0.32940	0.06480	0.00877	2.50740	0.30000	0.02029
	B	0.01860	0.00100	0.00800	0.32940	0.06480	0.00853	2.50740	0.30000	0.01962
	C	0.01860	0.00100	0.00751	0.32940	0.06480	0.00818	2.50740	0.30000	0.01924

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A	0.01860	0.00100	0.01966	0.32940	0.12960	0.01856	2.50740	0.60000	0.02859
	B	0.01860	0.00100	0.01772	0.32940	0.12960	0.01668	2.50740	0.60000	0.02639
	C	0.01860	0.00100	0.01553	0.32940	0.12960	0.01486	2.50740	0.60000	0.02507
sg13g2_or3_1	A	0.01860	0.00100	0.01348	0.32940	0.06480	0.01356	2.50740	0.30000	0.02422
	B	0.01860	0.00100	0.01151	0.32940	0.06480	0.01165	2.50740	0.30000	0.02236
	C	0.01860	0.00100	0.00928	0.32940	0.06480	0.00997	2.50740	0.30000	0.02120

OR4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or4_2	16.32960
sg13g2_or4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_2	0.00254	0.00246	0.00243	0.00234	0.60000
sg13g2_or4_1	0.00256	0.00247	0.00244	0.00235	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	738.04700	1106.80000	2087.87000
sg13g2_or4_1	532.49600	866.55600	1594.54000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A->X (RR)	0.01860	0.00100	0.08215	0.32940	0.12960	0.40191	2.50740	0.60000	1.35991
	B->X (RR)	0.01860	0.00100	0.08080	0.32940	0.12960	0.39416	2.50740	0.60000	1.32683
	C->X (RR)	0.01860	0.00100	0.07616	0.32940	0.12960	0.38223	2.50740	0.60000	1.28799
	D->X (RR)	0.01860	0.00100	0.06970	0.32940	0.12960	0.36828	2.50740	0.60000	1.24766
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.07117	0.32940	0.06480	0.37239	2.50740	0.30000	1.29055
	B->X (RR)	0.01860	0.00100	0.07038	0.32940	0.06480	0.36414	2.50740	0.30000	1.25519
	C->X (RR)	0.01860	0.00100	0.06619	0.32940	0.06480	0.35143	2.50740	0.30000	1.21447
	D->X (RR)	0.01860	0.00100	0.05954	0.32940	0.06480	0.33518	2.50740	0.30000	1.16785

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A->X (FF)	0.01860	0.00100	0.22681	0.32940	0.12960	0.52286	2.50740	0.60000	1.33674
	B->X (FF)	0.01860	0.00100	0.22205	0.32940	0.12960	0.52677	2.50740	0.60000	1.40828
	C->X (FF)	0.01860	0.00100	0.20665	0.32940	0.12960	0.52290	2.50740	0.60000	1.45749
	D->X (FF)	0.01860	0.00100	0.18114	0.32940	0.12960	0.51226	2.50740	0.60000	1.47138
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.18217	0.32940	0.06480	0.45308	2.50740	0.30000	1.24309
	B->X (FF)	0.01860	0.00100	0.17761	0.32940	0.06480	0.45543	2.50740	0.30000	1.30518
	C->X (FF)	0.01860	0.00100	0.16234	0.32940	0.06480	0.44843	2.50740	0.30000	1.34306
	D->X (FF)	0.01860	0.00100	0.13613	0.32940	0.06480	0.43370	2.50740	0.30000	1.34346

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A	0.01860	0.00100	0.01417	0.32940	0.12960	0.01450	2.50740	0.60000	0.02436
	B	0.01860	0.00100	0.01383	0.32940	0.12960	0.01429	2.50740	0.60000	0.02353
	C	0.01860	0.00100	0.01298	0.32940	0.12960	0.01350	2.50740	0.60000	0.02301
	D	0.01860	0.00100	0.01246	0.32940	0.12960	0.01316	2.50740	0.60000	0.02234
sg13g2_or4_1	A	0.01860	0.00100	0.00917	0.32940	0.06480	0.00950	2.50740	0.30000	0.01991
	B	0.01860	0.00100	0.00882	0.32940	0.06480	0.00913	2.50740	0.30000	0.01904
	C	0.01860	0.00100	0.00804	0.32940	0.06480	0.00854	2.50740	0.30000	0.01841
	D	0.01860	0.00100	0.00753	0.32940	0.06480	0.00822	2.50740	0.30000	0.01818

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A	0.01860	0.00100	0.02335	0.32940	0.12960	0.02078	2.50740	0.60000	0.02907
	B	0.01860	0.00100	0.02140	0.32940	0.12960	0.01888	2.50740	0.60000	0.02725
	C	0.01860	0.00100	0.01938	0.32940	0.12960	0.01716	2.50740	0.60000	0.02542
	D	0.01860	0.00100	0.01721	0.32940	0.12960	0.01529	2.50740	0.60000	0.02436
sg13g2_or4_1	A	0.01860	0.00100	0.01605	0.32940	0.06480	0.01580	2.50740	0.30000	0.02503
	B	0.01860	0.00100	0.01414	0.32940	0.06480	0.01387	2.50740	0.30000	0.02321
	C	0.01860	0.00100	0.01216	0.32940	0.06480	0.01206	2.50740	0.30000	0.02137
	D	0.01860	0.00100	0.00990	0.32940	0.06480	0.01030	2.50740	0.30000	0.02037

SDFRBPQ_x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_sdfrbpq_2	72.57600
sg13g2_sdfrbpq_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	D	SCD	SCE	RESET_B	CLK	Q
sg13g2_sdfrbpq_2	0.00273	0.00285	0.00465	0.00504	0.00290	0.60000
sg13g2_sdfrbpq_1	0.00273	0.00285	0.00465	0.00502	0.00290	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbpq_2	4901.52000	5771.34000	7472.90000
sg13g2_sdfrbpq_1	4439.66000	5239.24000	6712.19000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RR)	0.01860	0.00100	0.20019	0.32940	0.12960	0.50177	2.50740	0.60000	1.35197
sg13g2_sdfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.17463	0.32940	0.06480	0.46079	2.50740	0.30000	1.30885

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RF)	0.01860	0.00100	0.20749	0.32940	0.12960	0.48804	2.50740	0.60000	1.23826
	RESET_B->Q (FF)	0.01860	0.00100	0.12068	0.32940	0.12960	0.45640	2.50740	0.60000	1.43459
sg13g2_sdfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.18204	0.32940	0.06480	0.44648	2.50740	0.30000	1.19788
	RESET_B->Q (FF)	0.01860	0.00100	0.09617	0.32940	0.06480	0.40556	2.50740	0.30000	1.32886

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RR)	SCE	0.01860	0.00100	0.20019	0.32940	0.12960	0.50177	2.50740	0.60000	1.35197
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.20018	0.32940	0.12960	0.50177	2.50740	0.60000	1.35197
sg13g2_sdfrbpq_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.17463	0.32940	0.06480	0.46079	2.50740	0.30000	1.30885
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.17463	0.32940	0.06480	0.46079	2.50740	0.30000	1.30885

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RF)	SCE	0.01860	0.00100	0.20749	0.32940	0.12960	0.48804	2.50740	0.60000	1.23826
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.20726	0.32940	0.12960	0.48822	2.50740	0.60000	1.23811
sg13g2_sdfrbpq_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.18204	0.32940	0.06480	0.44648	2.50740	0.30000	1.19788
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.18203	0.32940	0.06480	0.44672	2.50740	0.30000	1.19786

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.25365	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.18828	1.26300	1.26300	0.27523	2.50740	2.50740	0.31582
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.25365	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27793	2.50740	2.50740	0.31286

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.28040
	setup	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.26714	2.50740	2.50740	0.32467
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.28040
	setup	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.26984	2.50740	2.50740	0.32467

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.25365	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.18828	1.26300	1.26300	0.27793	2.50740	2.50740	0.31582
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.25365	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27793	2.50740	2.50740	0.31582

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.22666	2.50740	2.50740	-0.27744
	setup	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.26984	2.50740	2.50740	0.32467
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.22666	2.50740	2.50740	-0.27744
	setup	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.26984	2.50740	2.50740	0.32467

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.15405	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27254	2.50740	2.50740	0.31582
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.15405	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.19317	1.26300	1.26300	0.27523	2.50740	2.50740	0.31582

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.15894	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.23317
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.24285	2.50740	2.50740	0.28040
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.15894	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.23317
	setup	CLK (R)	0.01860	0.01860	0.21273	1.26300	1.26300	0.24285	2.50740	2.50740	0.28040

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	recovery	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.29412	2.50740	2.50740	0.67885
	removal	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.24285	2.50740	2.50740	-0.35123
sg13g2_sdfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.28333	2.50740	2.50740	0.48995
	removal	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.24285	2.50740	2.50740	-0.35123

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.13107	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.11505	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.09583	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.07980	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.12146	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.12466	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	0.01860	0.00100	0.03180	0.32940	0.12960	0.03265	2.50740	0.60000	0.05355
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.02597	0.32940	0.06480	0.02736	2.50740	0.30000	0.04808

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	0.01860	0.00100	0.03320	0.32940	0.12960	0.03440	2.50740	0.60000	0.05469
	RESET_B	0.01860	0.00100	0.03120	0.32940	0.12960	0.03059	2.50740	0.60000	0.04704
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.02754	0.32940	0.06480	0.02935	2.50740	0.30000	0.04950
	RESET_B	0.01860	0.00100	0.02559	0.32940	0.06480	0.02574	2.50740	0.30000	0.04209

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	SCE	0.01860	0.00100	0.03180	0.32940	0.12960	0.03265	2.50740	0.60000	0.05355
	CLK	!SCE	0.01860	0.00100	0.01830	0.32940	0.12960	0.01807	2.50740	0.60000	0.01943
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.02597	0.32940	0.06480	0.02736	2.50740	0.30000	0.04808
	CLK	!SCE	0.01860	0.00100	0.01247	0.32940	0.06480	0.01279	2.50740	0.30000	0.01397

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	SCE	0.01860	0.00100	0.03320	0.32940	0.12960	0.03440	2.50740	0.60000	0.05469
	CLK	!SCE	0.01860	0.00100	0.02062	0.32940	0.12960	0.02074	2.50740	0.60000	0.02155
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.02754	0.32940	0.06480	0.02935	2.50740	0.30000	0.04950
	CLK	!SCE	0.01860	0.00100	0.01500	0.32940	0.06480	0.01576	2.50740	0.30000	0.01631

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.04437	0.32940	0.04492	2.50740	0.06041
sg13g2_sdfrbpq_1	0.01860	0.03884	0.32940	0.03939	2.50740	0.05488

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02875	0.32940	0.02982	2.50740	0.04682
sg13g2_sdfrbpq_1	0.01860	0.02426	0.32940	0.02533	2.50740	0.04232

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * !SCE)	0.01860	0.04437	0.32940	0.04492	2.50740	0.06041
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.03884	0.32940	0.03939	2.50740	0.05488

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * !SCE)	0.01860	0.02875	0.32940	0.02982	2.50740	0.04682
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.02426	0.32940	0.02533	2.50740	0.04232

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.04457	0.32940	0.04511	2.50740	0.06060
sg13g2_sdfrbpq_1	0.01860	0.03905	0.32940	0.03958	2.50740	0.05507

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02835	0.32940	0.02943	2.50740	0.04644
sg13g2_sdfrbpq_1	0.01860	0.02279	0.32940	0.02387	2.50740	0.04089

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * SCE)	0.01860	0.04457	0.32940	0.04511	2.50740	0.06060
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.03905	0.32940	0.03958	2.50740	0.05507

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * SCE)	0.01860	0.02835	0.32940	0.02943	2.50740	0.04644
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.02279	0.32940	0.02387	2.50740	0.04089

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.03220	0.32940	0.03368	2.50740	0.06110
sg13g2_sdfrbpq_1	0.01860	0.03222	0.32940	0.03371	2.50740	0.06112

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02743	0.32940	0.05227	2.50740	0.08079
sg13g2_sdfrbpq_1	0.01860	0.02516	0.32940	0.05002	2.50740	0.07852

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.03110	0.32940	0.03181	2.50740	0.04506
	(!CLK * !D * RESET_B * SCD)	0.01860	0.03220	0.32940	0.03368	2.50740	0.06110
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.02880	0.32940	0.02953	2.50740	0.04277
	(!CLK * !D * RESET_B * SCD)	0.01860	0.03222	0.32940	0.03371	2.50740	0.06112

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.03275	0.32940	0.03348	2.50740	0.04727
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02743	0.32940	0.05227	2.50740	0.08079
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.03277	0.32940	0.03351	2.50740	0.04730
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02516	0.32940	0.05002	2.50740	0.07852

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01351	0.32940	0.01457	2.50740	0.03411
sg13g2_sdfrbpq_1	0.01860	0.01350	0.32940	0.01457	2.50740	0.03411

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01372	0.32940	0.01484	2.50740	0.03502
sg13g2_sdfrbpq_1	0.01860	0.01369	0.32940	0.01485	2.50740	0.03501

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(RESET_B * SCD * SCE * Q)	0.01860	0.01377	0.32940	0.01483	2.50740	0.03437
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01351	0.32940	0.01457	2.50740	0.03411
	(D * RESET_B * !SCE * Q)	0.01860	0.01377	0.32940	0.01483	2.50740	0.03437
	(!RESET_B * !Q)	0.01860	0.00636	0.32940	0.00742	2.50740	0.02691
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01362	0.32940	0.01467	2.50740	0.03421
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.01377	0.32940	0.01482	2.50740	0.03436
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01350	0.32940	0.01457	2.50740	0.03411
	(D * RESET_B * !SCE * Q)	0.01860	0.01377	0.32940	0.01483	2.50740	0.03436
	(!RESET_B * !Q)	0.01860	0.00408	0.32940	0.00517	2.50740	0.02462
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01360	0.32940	0.01467	2.50740	0.03421

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(RESET_B * SCD * SCE * Q)	0.01860	0.01372	0.32940	0.01484	2.50740	0.03502
	(RESET_B * SCD * SCE * !Q)	0.01860	0.02601	0.32940	0.02713	2.50740	0.04793
	(RESET_B * !SCD * SCE * Q)	0.01860	0.02455	0.32940	0.02580	2.50740	0.04677
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01310	0.32940	0.01424	2.50740	0.03438
	(D * RESET_B * !SCE * Q)	0.01860	0.01372	0.32940	0.01484	2.50740	0.03502
	(!RESET_B * !Q)	0.01860	0.00730	0.32940	0.00841	2.50740	0.02856
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01327	0.32940	0.01441	2.50740	0.03455
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.01369	0.32940	0.01484	2.50740	0.03501
	(RESET_B * SCD * SCE * !Q)	0.01860	0.02601	0.32940	0.02713	2.50740	0.04793
	(RESET_B * !SCD * SCE * Q)	0.01860	0.02453	0.32940	0.02579	2.50740	0.04677
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01310	0.32940	0.01423	2.50740	0.03439
	(D * RESET_B * !SCE * Q)	0.01860	0.01369	0.32940	0.01485	2.50740	0.03501
	(!RESET_B * !Q)	0.01860	0.00501	0.32940	0.00612	2.50740	0.02627
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01327	0.32940	0.01441	2.50740	0.03456

SDFRBP_x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_sdfrbp_2	72.57600
sg13g2_sdfrbp_1	68.94720

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)	
	D	SCD	SCE	RESET_B	CLK	Q	Q_N
sg13g2_sdfrbp_2	0.00273	0.00285	0.00465	0.00513	0.00290	0.60000	0.60000
sg13g2_sdfrbp_1	0.00273	0.00285	0.00465	0.00508	0.00290	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbp_2	5782.17000	6950.88000	8056.51000
sg13g2_sdfrbp_1	4815.92000	5984.66000	7090.28000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.23927	0.32940	0.12960	0.50464	2.50740	0.60000	1.38347
sg13g2_sdfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.18827	0.32940	0.06480	0.46013	2.50740	0.30000	1.33559

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RF)	0.01860	0.00100	0.20811	0.32940	0.12960	0.45814	2.50740	0.60000	1.21631
	RESET_B->Q (FF)	0.01860	0.00100	0.28111	0.32940	0.12960	0.57140	2.50740	0.60000	1.51676
sg13g2_sdfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.17245	0.32940	0.06480	0.42138	2.50740	0.30000	1.17523
	RESET_B->Q (FF)	0.01860	0.00100	0.24387	0.32940	0.06480	0.53339	2.50740	0.30000	1.47362

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RR)	SCE	0.01860	0.00100	0.23927	0.32940	0.12960	0.50464	2.50740	0.60000	1.38347
sg13g2_sdfrbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.18827	0.32940	0.06480	0.46013	2.50740	0.30000	1.33559

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RF)	SCE	0.01860	0.00100	0.20811	0.32940	0.12960	0.45814	2.50740	0.60000	1.21631
sg13g2_sdfrbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.17245	0.32940	0.06480	0.42138	2.50740	0.30000	1.17523

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	0.13953	0.32940	0.12960	0.44491	2.50740	0.60000	1.29480
	RESET_B->Q_N (FR)	0.01860	0.00100	0.21374	0.32940	0.12960	0.55645	2.50740	0.60000	1.59391
sg13g2_sdfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.13329	0.32940	0.06480	0.42697	2.50740	0.30000	1.27486
	RESET_B->Q_N (FR)	0.01860	0.00100	0.20489	0.32940	0.06480	0.53693	2.50740	0.30000	1.57219

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	0.15499	0.32940	0.12960	0.46802	2.50740	0.60000	1.25629
sg13g2_sdfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.14100	0.32940	0.06480	0.43709	2.50740	0.30000	1.22226

Delay(ns) to Q_N rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.13953	0.32940	0.12960	0.44491	2.50740	0.60000	1.29480
sg13g2_sdfrbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.13329	0.32940	0.06480	0.42697	2.50740	0.30000	1.27486

Delay(ns) to Q_N falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.15499	0.32940	0.12960	0.46802	2.50740	0.60000	1.25629
sg13g2_sdfrbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.14100	0.32940	0.06480	0.43709	2.50740	0.30000	1.22226

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.14182	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27523	2.50740	2.50740	0.30991
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14427	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27523	2.50740	2.50740	0.30991

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.14427	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.27254	2.50740	2.50740	0.33057
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14427	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.27254	2.50740	2.50740	0.32762

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.14182	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27793	2.50740	2.50740	0.30991
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14427	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.27523	2.50740	2.50740	0.30991

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.13938	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.27523	2.50740	2.50740	0.33057
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14182	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.27254	2.50740	2.50740	0.33057

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.14427	1.26300	1.26300	-0.24285	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.19317	1.26300	1.26300	0.27254	2.50740	2.50740	0.31286
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14671	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.19562	1.26300	1.26300	0.27254	2.50740	2.50740	0.30991

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.24203
	setup	CLK (R)	0.01860	0.01860	0.22007	1.26300	1.26300	0.24825	2.50740	2.50740	0.28335
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.14916	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.24203
	setup	CLK (R)	0.01860	0.01860	0.22007	1.26300	1.26300	0.24825	2.50740	2.50740	0.28335

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	recovery	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.25634	2.50740	2.50740	0.36599
	removal	CLK (R)	0.01860	0.01860	-0.10514	1.26300	1.26300	-0.24825	2.50740	2.50740	-0.35714
sg13g2_sdfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.25365	2.50740	2.50740	0.36304
	removal	CLK (R)	0.01860	0.01860	-0.10270	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.35419

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	min_pulse_width	RESET_B 0	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbp_1	min_pulse_width	RESET_B 0	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.13428	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.10864	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.04842	0.32940	0.12960	0.16644	2.50740	0.60000	0.61514
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.03730	0.32940	0.06480	0.09707	2.50740	0.30000	0.33166

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.04803	0.32940	0.12960	0.16735	2.50740	0.60000	0.61615
	RESET_B	0.01860	0.00100	0.06328	0.32940	0.12960	0.19114	2.50740	0.60000	0.65842
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.03988	0.32940	0.06480	0.10003	2.50740	0.30000	0.33427
	RESET_B	0.01860	0.00100	0.05336	0.32940	0.06480	0.11947	2.50740	0.30000	0.36309

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.04842	0.32940	0.12960	0.16644	2.50740	0.60000	0.61514
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.03730	0.32940	0.06480	0.09707	2.50740	0.30000	0.33166

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.04803	0.32940	0.12960	0.16735	2.50740	0.60000	0.61615
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.03988	0.32940	0.06480	0.10003	2.50740	0.30000	0.33427

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.04809	0.32940	0.12960	0.16779	2.50740	0.60000	0.61665
	RESET_B	0.01860	0.00100	0.06331	0.32940	0.12960	0.18916	2.50740	0.60000	0.64662
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.03991	0.32940	0.06480	0.10030	2.50740	0.30000	0.33463
	RESET_B	0.01860	0.00100	0.04016	0.32940	0.06480	0.10084	2.50740	0.30000	0.33950

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.04846	0.32940	0.12960	0.16600	2.50740	0.60000	0.61483
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.03732	0.32940	0.06480	0.09675	2.50740	0.30000	0.33135

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.04809	0.32940	0.12960	0.16779	2.50740	0.60000	0.61665
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.03991	0.32940	0.06480	0.10030	2.50740	0.30000	0.33463

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.04846	0.32940	0.12960	0.16600	2.50740	0.60000	0.61483
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.03732	0.32940	0.06480	0.09675	2.50740	0.30000	0.33135

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02654	0.32940	0.02709	2.50740	0.04258
sg13g2_sdfrbp_1	0.01860	0.02656	0.32940	0.02712	2.50740	0.04261

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.03595	0.32940	0.03700	2.50740	0.05400
sg13g2_sdfrbp_1	0.01860	0.03594	0.32940	0.03700	2.50740	0.05400

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * !SCE)	0.01860	0.02654	0.32940	0.02709	2.50740	0.04258
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.02656	0.32940	0.02712	2.50740	0.04261

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * !SCE)	0.01860	0.03595	0.32940	0.03700	2.50740	0.05400
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.03594	0.32940	0.03700	2.50740	0.05400

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02674	0.32940	0.02728	2.50740	0.04278
sg13g2_sdfrbp_1	0.01860	0.02677	0.32940	0.02731	2.50740	0.04280

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01215	0.32940	0.01325	2.50740	0.03025
sg13g2_sdfrbp_1	0.01860	0.01216	0.32940	0.01324	2.50740	0.03025

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * SCE)	0.01860	0.02674	0.32940	0.02728	2.50740	0.04278
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.02677	0.32940	0.02731	2.50740	0.04280

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * SCE)	0.01860	0.01215	0.32940	0.01325	2.50740	0.03025
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.01216	0.32940	0.01324	2.50740	0.03025

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.03220	0.32940	0.03368	2.50740	0.06107
sg13g2_sdfrbp_1	0.01860	0.03223	0.32940	0.03371	2.50740	0.06112

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02146	0.32940	0.04629	2.50740	0.07480
sg13g2_sdfrbp_1	0.01860	0.02149	0.32940	0.04632	2.50740	0.07482

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.02511	0.32940	0.02584	2.50740	0.03908
	(!CLK * !D * RESET_B * SCD)	0.01860	0.03220	0.32940	0.03368	2.50740	0.06107
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.02512	0.32940	0.02584	2.50740	0.03908
	(!CLK * !D * RESET_B * SCD)	0.01860	0.03223	0.32940	0.03371	2.50740	0.06112

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.03275	0.32940	0.03348	2.50740	0.04727
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02146	0.32940	0.04629	2.50740	0.07480
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.03278	0.32940	0.03351	2.50740	0.04730
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02149	0.32940	0.04632	2.50740	0.07482

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01353	0.32940	0.01454	2.50740	0.03408
sg13g2_sdfrbp_1	0.01860	0.01354	0.32940	0.01454	2.50740	0.03409

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01338	0.32940	0.01443	2.50740	0.03459
sg13g2_sdfrbp_1	0.01860	0.01336	0.32940	0.01443	2.50740	0.03459

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01383	0.32940	0.01484	2.50740	0.03436
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01353	0.32940	0.01454	2.50740	0.03408
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01383	0.32940	0.01484	2.50740	0.03436
	(!RESET_B * !Q * Q_N)	0.01860	0.00041	0.32940	0.00147	2.50740	0.02091
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01363	0.32940	0.01464	2.50740	0.03418
sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01382	0.32940	0.01484	2.50740	0.03437
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01354	0.32940	0.01454	2.50740	0.03409
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01383	0.32940	0.01483	2.50740	0.03437
	(!RESET_B * !Q * Q_N)	0.01860	0.00041	0.32940	0.00147	2.50740	0.02091
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01364	0.32940	0.01464	2.50740	0.03419

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01338	0.32940	0.01443	2.50740	0.03459
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.02605	0.32940	0.02712	2.50740	0.04793
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.02431	0.32940	0.02554	2.50740	0.04650
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01316	0.32940	0.01424	2.50740	0.03439
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01338	0.32940	0.01443	2.50740	0.03459
	(!RESET_B * !Q * Q_N)	0.01860	0.00137	0.32940	0.00244	2.50740	0.02258
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01333	0.32940	0.01441	2.50740	0.03456

sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01336	0.32940	0.01443	2.50740	0.03459
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.02604	0.32940	0.02713	2.50740	0.04794
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.02430	0.32940	0.02556	2.50740	0.04651
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01312	0.32940	0.01424	2.50740	0.03439
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01337	0.32940	0.01443	2.50740	0.03459
	(!RESET_B * !Q * Q_N)	0.01860	0.00135	0.32940	0.00244	2.50740	0.02259
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01331	0.32940	0.01441	2.50740	0.03457

SDFRRS



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00195	0.00196	0.00350	0.00171	0.00517	0.00299	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	3962.80000	5790.66000	7346.23000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.30402	0.32940	0.06480	0.57602	2.50740	0.30000	1.43046
	SET_B->Q (FR)	0.01860	0.00100	0.12372	0.32940	0.06480	0.41690	2.50740	0.30000	1.34432

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RF)	0.01860	0.00100	0.25010	0.32940	0.06480	0.50133	2.50740	0.30000	1.27528
	RESET_B->Q (FF)	0.01860	0.00100	0.20565	0.32940	0.06480	0.47364	2.50740	0.30000	1.30427

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.30402	0.32940	0.06480	0.57602	2.50740	0.30000	1.43046

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.25010	0.32940	0.06480	0.50133	2.50740	0.30000	1.27528

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.20635	0.32940	0.06480	0.49995	2.50740	0.30000	1.37046
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16090	0.32940	0.06480	0.47865	2.50740	0.30000	1.40985

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.25293	0.32940	0.06480	0.54287	2.50740	0.30000	1.30683
	SET_B->Q_N (FF)	0.01860	0.00100	0.08162	0.32940	0.06480	0.37736	2.50740	0.30000	1.23534

Delay(ns) to Q_N rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.20635	0.32940	0.06480	0.49995	2.50740	0.30000	1.37046

Delay(ns) to Q_N falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.25293	0.32940	0.06480	0.54287	2.50740	0.30000	1.30683

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.25095	2.50740	2.50740	-0.33352
	setup	CLK (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.26714	2.50740	2.50740	0.35419

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.10514	1.26300	1.26300	-0.20508	2.50740	2.50740	-0.26564
	setup	CLK (R)	0.01860	0.01860	0.15160	1.26300	1.26300	0.23746	2.50740	2.50740	0.30991

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.12470	1.26300	1.26300	-0.29682	2.50740	2.50740	-0.39551
	setup	CLK (R)	0.01860	0.01860	0.14671	1.26300	1.26300	0.31031	2.50740	2.50740	0.41321

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.13693	1.26300	1.26300	-0.21317	2.50740	2.50740	-0.27154
	setup	CLK (R)	0.01860	0.01860	0.18339	1.26300	1.26300	0.24555	2.50740	2.50740	0.31582

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.10759	1.26300	1.26300	-0.28603	2.50740	2.50740	-0.38370
	setup	CLK (R)	0.01860	0.01860	0.12959	1.26300	1.26300	0.29952	2.50740	2.50740	0.40141

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.10514	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.19185
	setup	CLK (R)	0.01860	0.01860	0.15160	1.26300	1.26300	0.18619	2.50740	2.50740	0.23612

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.11333	2.50740	2.50740	0.14167
	removal	CLK (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.09174	2.50740	2.50740	-0.11511

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.14069	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for SET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.01467	1.26300	1.26300	0.06746	2.50740	2.50740	0.28925
	removal	CLK (R)	0.01860	0.01860	0.03912	1.26300	1.26300	0.09444	2.50740	2.50740	0.09445
	hold	RESET_B (R)	0.01860	0.01860	-0.07580	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.24498
	setup	RESET_B (R)	0.01860	0.01860	0.09781	1.26300	1.26300	0.20777	2.50740	2.50740	0.28335

Constraints(ns) for SET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	SET_B ()	0.01860	0.00000	0.09262	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.09583	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.12146	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.02092	0.32940	0.06480	0.02182	2.50740	0.30000	0.03136
	SET_B	0.01860	0.00100	0.03913	0.32940	0.06480	0.09857	2.50740	0.30000	0.33832

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.02047	0.32940	0.06480	0.02121	2.50740	0.30000	0.03120
	RESET_B	0.01860	0.00100	0.04390	0.32940	0.06480	0.10269	2.50740	0.30000	0.32771

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.02092	0.32940	0.06480	0.02182	2.50740	0.30000	0.03136

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.02047	0.32940	0.06480	0.02121	2.50740	0.30000	0.03120

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.02049	0.32940	0.06480	0.02135	2.50740	0.30000	0.03130
	RESET_B	0.01860	0.00100	0.04389	0.32940	0.06480	0.10303	2.50740	0.30000	0.32774

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.02093	0.32940	0.06480	0.02163	2.50740	0.30000	0.03136
	SET_B	0.01860	0.00100	0.03909	0.32940	0.06480	0.09818	2.50740	0.30000	0.33796

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.02049	0.32940	0.06480	0.02135	2.50740	0.30000	0.03130

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.02093	0.32940	0.06480	0.02163	2.50740	0.30000	0.03136

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01408	0.32940	0.01431	2.50740	0.02234

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01418	0.32940	0.01437	2.50740	0.02263

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.01408	0.32940	0.01431	2.50740	0.02234
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	-0.00007	0.32940	0.00003	2.50740	0.00716

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.01418	0.32940	0.01437	2.50740	0.02263
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00625	0.32940	0.00642	2.50740	0.01360

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01603	0.32940	0.01613	2.50740	0.02275

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01852	0.32940	0.01845	2.50740	0.02578

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.01603	0.32940	0.01613	2.50740	0.02275
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00751	0.32940	0.00750	2.50740	0.01346

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.01852	0.32940	0.01845	2.50740	0.02578
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	-0.00238	0.32940	-0.00233	2.50740	0.00399

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01338	0.32940	0.01335	2.50740	0.02312

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01863	0.32940	0.01922	2.50740	0.02901

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.01876	0.32940	0.01937	2.50740	0.02906
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01338	0.32940	0.01335	2.50740	0.02312
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01641	0.32940	0.01743	2.50740	0.03512
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00781	0.32940	0.00866	2.50740	0.02560

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.01863	0.32940	0.01922	2.50740	0.02901
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01674	0.32940	0.02466	2.50740	0.03459
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00646	0.32940	0.03009	2.50740	0.04869
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	-0.00475	0.32940	-0.00402	2.50740	0.01261

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01497	0.32940	0.01599	2.50740	0.03530

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01399	0.32940	0.01509	2.50740	0.03495

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01531	0.32940	0.01632	2.50740	0.03552
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01576	0.32940	0.01675	2.50740	0.03583
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01497	0.32940	0.01599	2.50740	0.03530
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00869	0.32940	0.00969	2.50740	0.02890
	(!RESET_B * !Q * Q_N)	0.01860	0.00336	0.32940	0.00442	2.50740	0.02366
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01495	0.32940	0.01598	2.50740	0.03529

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01375	0.32940	0.01483	2.50740	0.03479
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02517	0.32940	0.02620	2.50740	0.04662
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00665	0.32940	0.00786	2.50740	0.02851
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02726	0.32940	0.02847	2.50740	0.04917
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01399	0.32940	0.01509	2.50740	0.03495
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01376	0.32940	0.01484	2.50740	0.03479
	(!RESET_B * !Q * Q_N)	0.01860	0.00123	0.32940	0.00234	2.50740	0.02220
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01395	0.32940	0.01505	2.50740	0.03491

SGCLK



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

Truth Table

INPUT			OUTPUT
GATE	SCE	CLK	GCLK
x	x	0	0
x	x	1	GCLK

Footprint

Cell Name	Area
sg13g2_slgcp_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	GATE	SCE	CLK	GCLK
sg13g2_slgcp_1	0.00191	0.00230	0.00490	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	2647.30000	3176.78000	3734.63000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.07332	0.32940	0.06480	0.33748	2.50740	0.30000	1.20482

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.06118	0.32940	0.06480	0.31971	2.50740	0.30000	1.12727

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.04274	1.26300	1.26300	-0.17611	2.50740	2.50740	-0.24204
	setup	CLK (R)	0.01860	0.01860	0.06574	1.26300	1.26300	0.23901	2.50740	2.50740	0.33343

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.06910	1.26300	1.26300	-0.20147	2.50740	2.50740	-0.29670
	setup	CLK (R)	0.01860	0.01860	0.11422	1.26300	1.26300	0.24421	2.50740	2.50740	0.35230

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.04551	1.26300	1.26300	-0.20127	2.50740	2.50740	-0.28361
	setup	CLK (R)	0.01860	0.01860	0.07398	1.26300	1.26300	0.26417	2.50740	2.50740	0.37475

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.07233	1.26300	1.26300	-0.16823	2.50740	2.50740	-0.24109
	setup	CLK (R)	0.01860	0.01860	0.12088	1.26300	1.26300	0.20622	2.50740	2.50740	0.28904

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.24322	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.09903	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.01035	0.32940	0.06480	0.01077	2.50740	0.30000	0.02306

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.00876	0.32940	0.06480	0.01000	2.50740	0.30000	0.02336

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.02346	0.32940	0.02482	2.50740	0.03746

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01839	0.32940	0.03720	2.50740	0.05027

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	!CLK	0.01860	0.02346	0.32940	0.02482	2.50740	0.03746

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	!CLK	0.01860	0.01839	0.32940	0.03720	2.50740	0.05027

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00792	0.32940	0.00849	2.50740	0.02111

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01891	0.32940	0.03598	2.50740	0.04799

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00961	0.32940	0.01066	2.50740	0.02721

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00772	0.32940	0.00878	2.50740	0.02625

TIE0



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

Footprint

Cell Name	Area
sg13g2_tielo	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_LO
sg13g2_tielo	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tielo	57.44150	57.44150	57.44150

TIE1



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

Footprint

Cell Name	Area
sg13g2_tiehi	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_HI
sg13g2_tiehi	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tiehi	55.10960	55.10960	55.10960

XNOR2_1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xnor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_xnor2_1	0.00559	0.00502	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	436.47400	1366.74000	1932.02000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (-R)	0.01860	0.00100	0.05539	0.32940	0.06480	0.54366	2.50740	0.30000	2.62805
	B->Y (-R)	0.01860	0.00100	0.04799	0.32940	0.06480	0.56697	2.50740	0.30000	2.87407

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (-F)	0.01860	0.00100	0.04908	0.32940	0.06480	0.45295	2.50740	0.30000	2.25058
	B->Y (-F)	0.01860	0.00100	0.04205	0.32940	0.06480	0.44434	2.50740	0.30000	2.23675

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (RR)	B	0.01860	0.00100	0.07306	0.32940	0.06480	0.33823	2.50740	0.30000	1.20181
	A->Y (FR)	!B	0.01860	0.00100	0.05539	0.32940	0.06480	0.54366	2.50740	0.30000	2.62805
	B->Y (RR)	A	0.01860	0.00100	0.06798	0.32940	0.06480	0.33653	2.50740	0.30000	1.20815
	B->Y (FR)	!A	0.01860	0.00100	0.04799	0.32940	0.06480	0.56697	2.50740	0.30000	2.87407

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (FF)	B	0.01860	0.00100	0.07128	0.32940	0.06480	0.43817	2.50740	0.30000	1.64954
	A->Y (RF)	!B	0.01860	0.00100	0.04908	0.32940	0.06480	0.45295	2.50740	0.30000	2.25058
	B->Y (FF)	A	0.01860	0.00100	0.07206	0.32940	0.06480	0.42546	2.50740	0.30000	1.61788
	B->Y (RF)	!A	0.01860	0.00100	0.04205	0.32940	0.06480	0.44434	2.50740	0.30000	2.23675

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	0.01860	0.00100	0.00975	0.32940	0.06480	0.01028	2.50740	0.30000	0.02234
	B	0.01860	0.00100	0.00999	0.32940	0.06480	0.01059	2.50740	0.30000	0.02360

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	0.01860	0.00100	0.00887	0.32940	0.06480	0.01004	2.50740	0.30000	0.02277
	B	0.01860	0.00100	0.00944	0.32940	0.06480	0.00907	2.50740	0.30000	0.02218

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	B	0.01860	0.00100	0.00975	0.32940	0.06480	0.01028	2.50740	0.30000	0.02234
	A	!B	0.01860	0.00100	0.00633	0.32940	0.06480	0.00614	2.50740	0.30000	0.00882
	B	A	0.01860	0.00100	0.00999	0.32940	0.06480	0.01059	2.50740	0.30000	0.02360
	B	!A	0.01860	0.00100	0.00423	0.32940	0.06480	0.00438	2.50740	0.30000	0.00769

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	B	0.01860	0.00100	0.00887	0.32940	0.06480	0.01004	2.50740	0.30000	0.02277
	A	!B	0.01860	0.00100	0.00629	0.32940	0.06480	0.00618	2.50740	0.30000	0.00869
	B	A	0.01860	0.00100	0.00944	0.32940	0.06480	0.00907	2.50740	0.30000	0.02218
	B	!A	0.01860	0.00100	0.00520	0.32940	0.06480	0.00542	2.50740	0.30000	0.00783

XOR2_1



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

Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
0	1	1
1	0	1
1	1	0

Footprint

Cell Name	Area
sg13g2_xor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00571	0.00506	0.30000

Leakage Information

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

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (-R)	0.01860	0.00100	0.05942	0.32940	0.06480	0.54941	2.50740	0.30000	2.63789
	B->X (-R)	0.01860	0.00100	0.05074	0.32940	0.06480	0.53997	2.50740	0.30000	2.62403

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (-F)	0.01860	0.00100	0.04517	0.32940	0.06480	0.44860	2.50740	0.30000	2.24012
	B->X (-F)	0.01860	0.00100	0.03967	0.32940	0.06480	0.46669	2.50740	0.30000	2.40683

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (RR)	!B	0.01860	0.00100	0.07420	0.32940	0.06480	0.54388	2.50740	0.30000	2.12935
	A->X (FR)	B	0.01860	0.00100	0.05942	0.32940	0.06480	0.54941	2.50740	0.30000	2.63789
	B->X (RR)	!A	0.01860	0.00100	0.07713	0.32940	0.06480	0.52950	2.50740	0.30000	2.08274
	B->X (FR)	A	0.01860	0.00100	0.05074	0.32940	0.06480	0.53997	2.50740	0.30000	2.62403

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (FF)	!B	0.01860	0.00100	0.08681	0.32940	0.06480	0.33157	2.50740	0.30000	1.11214
	A->X (RF)	B	0.01860	0.00100	0.04517	0.32940	0.06480	0.44860	2.50740	0.30000	2.24012
	B->X (FF)	!A	0.01860	0.00100	0.08011	0.32940	0.06480	0.33533	2.50740	0.30000	1.14218
	B->X (RF)	A	0.01860	0.00100	0.03967	0.32940	0.06480	0.46669	2.50740	0.30000	2.40683

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	0.01860	0.00100	0.00871	0.32940	0.06480	0.00974	2.50740	0.30000	0.02176
	B	0.01860	0.00100	0.00939	0.32940	0.06480	0.00901	2.50740	0.30000	0.02097

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	0.01860	0.00100	0.01061	0.32940	0.06480	0.01093	2.50740	0.30000	0.02331
	B	0.01860	0.00100	0.00987	0.32940	0.06480	0.01029	2.50740	0.30000	0.02325

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	B	0.01860	0.00100	0.00653	0.32940	0.06480	0.00635	2.50740	0.30000	0.00912
	A	!B	0.01860	0.00100	0.00871	0.32940	0.06480	0.00974	2.50740	0.30000	0.02176
	B	A	0.01860	0.00100	0.00526	0.32940	0.06480	0.00535	2.50740	0.30000	0.00769
	B	!A	0.01860	0.00100	0.00939	0.32940	0.06480	0.00901	2.50740	0.30000	0.02097

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	B	0.01860	0.00100	0.00644	0.32940	0.06480	0.00611	2.50740	0.30000	0.00867
	A	!B	0.01860	0.00100	0.01061	0.32940	0.06480	0.01093	2.50740	0.30000	0.02331
	B	A	0.01860	0.00100	0.00524	0.32940	0.06480	0.00533	2.50740	0.30000	0.00818
	B	!A	0.01860	0.00100	0.00987	0.32940	0.06480	0.01029	2.50740	0.30000	0.02325