

sg13g2_stdcell_slow_1p08V_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_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00543	0.00564	0.00532	0.60000
sg13g2_a21oi_1	0.00282	0.00283	0.00272	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	361.20000	878.05400	2041.52000
sg13g2_a21oi_1	180.60800	439.03500	1020.77000

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	0.06257	0.32940	0.12960	0.78672	2.50740	0.60000	3.80449
	A2->Y (FR)	0.01860	0.00100	0.07453	0.32940	0.12960	0.79854	2.50740	0.60000	3.81448
	B1->Y (FR)	0.01860	0.00100	0.05896	0.32940	0.12960	0.79840	2.50740	0.60000	3.98540
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.06946	0.32940	0.06480	0.78670	2.50740	0.30000	3.79911
	A2->Y (FR)	0.01860	0.00100	0.08091	0.32940	0.06480	0.79997	2.50740	0.30000	3.81668
	B1->Y (FR)	0.01860	0.00100	0.06558	0.32940	0.06480	0.79976	2.50740	0.30000	3.98812

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	0.05378	0.32940	0.12960	0.66751	2.50740	0.60000	3.43307
	A2->Y (RF)	0.01860	0.00100	0.06095	0.32940	0.12960	0.66148	2.50740	0.60000	3.31311
	B1->Y (RF)	0.01860	0.00100	0.02744	0.32940	0.12960	0.46367	2.50740	0.60000	2.58923
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.05949	0.32940	0.06480	0.66858	2.50740	0.30000	3.43242
	A2->Y (RF)	0.01860	0.00100	0.06610	0.32940	0.06480	0.66195	2.50740	0.30000	3.31278
	B1->Y (RF)	0.01860	0.00100	0.03077	0.32940	0.06480	0.46495	2.50740	0.30000	2.59177

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	0.05896	0.32940	0.12960	0.79840	2.50740	0.60000	3.98540
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04463	0.32940	0.12960	0.78429	2.50740	0.60000	3.97510
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.03617	0.32940	0.12960	0.63345	2.50740	0.60000	3.32778
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06558	0.32940	0.06480	0.79976	2.50740	0.30000	3.98812
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05161	0.32940	0.06480	0.78367	2.50740	0.30000	3.96722
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04129	0.32940	0.06480	0.63383	2.50740	0.30000	3.32555

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	0.02744	0.32940	0.12960	0.46367	2.50740	0.60000	2.58923
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02718	0.32940	0.12960	0.46306	2.50740	0.60000	2.58684
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02693	0.32940	0.12960	0.46258	2.50740	0.60000	2.58672
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03077	0.32940	0.06480	0.46495	2.50740	0.30000	2.59177
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03052	0.32940	0.06480	0.46434	2.50740	0.30000	2.58940
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03027	0.32940	0.06480	0.46385	2.50740	0.30000	2.58911

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	0.00706	0.32940	0.12960	0.00704	2.50740	0.60000	0.00720
	A2	0.01860	0.00100	0.00754	0.32940	0.12960	0.00733	2.50740	0.60000	0.00701
	B1	0.01860	0.00100	0.00366	0.32940	0.12960	0.00382	2.50740	0.60000	0.00418
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00354	0.32940	0.06480	0.00349	2.50740	0.30000	0.00357
	A2	0.01860	0.00100	0.00374	0.32940	0.06480	0.00359	2.50740	0.30000	0.00382
	B1	0.01860	0.00100	0.00187	0.32940	0.06480	0.00188	2.50740	0.30000	0.00204

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	0.00494	0.32940	0.12960	0.00445	2.50740	0.60000	0.00422
	A2	0.01860	0.00100	0.00741	0.32940	0.12960	0.00696	2.50740	0.60000	0.00641
	B1	0.01860	0.00100	0.00247	0.32940	0.12960	0.00279	2.50740	0.60000	0.00246
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00276	0.32940	0.06480	0.00250	2.50740	0.30000	0.00239
	A2	0.01860	0.00100	0.00393	0.32940	0.06480	0.00369	2.50740	0.30000	0.00345
	B1	0.01860	0.00100	0.00157	0.32940	0.06480	0.00164	2.50740	0.30000	0.00141

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	0.00443	0.32940	0.12960	0.00440	2.50740	0.60000	0.00441
	B1	(!A1 * A2)	0.01860	0.00100	0.00365	0.32940	0.12960	0.00383	2.50740	0.60000	0.00394
	B1	(!A1 * !A2)	0.01860	0.00100	0.00366	0.32940	0.12960	0.00382	2.50740	0.60000	0.00418
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00216	0.32940	0.06480	0.00213	2.50740	0.30000	0.00233
	B1	(!A1 * A2)	0.01860	0.00100	0.00188	0.32940	0.06480	0.00189	2.50740	0.30000	0.00224
	B1	(!A1 * !A2)	0.01860	0.00100	0.00187	0.32940	0.06480	0.00188	2.50740	0.30000	0.00204

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	0.00490	0.32940	0.12960	0.00521	2.50740	0.60000	0.00479
	B1	(!A1 * A2)	0.01860	0.00100	0.00247	0.32940	0.12960	0.00279	2.50740	0.60000	0.00246
	B1	(!A1 * !A2)	0.01860	0.00100	0.00238	0.32940	0.12960	0.00261	2.50740	0.60000	0.00229
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00278	0.32940	0.06480	0.00286	2.50740	0.30000	0.00263
	B1	(!A1 * A2)	0.01860	0.00100	0.00157	0.32940	0.06480	0.00164	2.50740	0.30000	0.00141
	B1	(!A1 * !A2)	0.01860	0.00100	0.00152	0.32940	0.06480	0.00157	2.50740	0.30000	0.00142

A221OI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00278	0.00278	0.00274	0.00281	0.00270	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	226.42400	593.99900	1387.73000

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	0.16208	0.32940	0.06480	1.16964	2.50740	0.30000	5.08197
	A2->Y (FR)	0.01860	0.00100	0.17948	0.32940	0.06480	1.18754	2.50740	0.30000	5.09687
	B1->Y (FR)	0.01860	0.00100	0.14589	0.32940	0.06480	1.15743	2.50740	0.30000	5.23612
	B2->Y (FR)	0.01860	0.00100	0.16316	0.32940	0.06480	1.17506	2.50740	0.30000	5.25056
	C1->Y (FR)	0.01860	0.00100	0.09310	0.32940	0.06480	0.96591	2.50740	0.30000	4.64130

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	0.07933	0.32940	0.06480	0.70073	2.50740	0.30000	3.47320
	A2->Y (RF)	0.01860	0.00100	0.08562	0.32940	0.06480	0.69403	2.50740	0.30000	3.35362
	B1->Y (RF)	0.01860	0.00100	0.06939	0.32940	0.06480	0.68006	2.50740	0.30000	3.45057
	B2->Y (RF)	0.01860	0.00100	0.07603	0.32940	0.06480	0.67348	2.50740	0.30000	3.33041
	C1->Y (RF)	0.01860	0.00100	0.03536	0.32940	0.06480	0.46945	2.50740	0.30000	2.59673

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	0.16208	0.32940	0.06480	1.16964	2.50740	0.30000	5.08197
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.14089	0.32940	0.06480	1.14809	2.50740	0.30000	5.06447
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.12502	0.32940	0.06480	0.98855	2.50740	0.30000	4.43581
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.17948	0.32940	0.06480	1.18754	2.50740	0.30000	5.09687
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.15832	0.32940	0.06480	1.16595	2.50740	0.30000	5.08010
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.13916	0.32940	0.06480	1.00318	2.50740	0.30000	4.44699
	B1->Y (FR)	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.14589	0.32940	0.06480	1.15743	2.50740	0.30000	5.23612
	B1->Y (FR)	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.12466	0.32940	0.06480	1.13557	2.50740	0.30000	5.21615
	B1->Y (FR)	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.10311	0.32940	0.06480	0.96645	2.50740	0.30000	4.51298
	B2->Y (FR)	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.16316	0.32940	0.06480	1.17506	2.50740	0.30000	5.25056
	B2->Y (FR)	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.14219	0.32940	0.06480	1.15286	2.50740	0.30000	5.23123
	B2->Y (FR)	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.11720	0.32940	0.06480	0.98055	2.50740	0.30000	4.52366
	C1->Y (FR)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.08877	0.32940	0.06480	0.96190	2.50740	0.30000	4.63579
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.07106	0.32940	0.06480	0.94381	2.50740	0.30000	4.62034
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.09310	0.32940	0.06480	0.96591	2.50740	0.30000	4.64130
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.07551	0.32940	0.06480	0.94878	2.50740	0.30000	4.62968
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.06164	0.32940	0.06480	0.79071	2.50740	0.30000	3.97067

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	0.07677	0.32940	0.06480	0.69751	2.50740	0.30000	3.47239
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.07606	0.32940	0.06480	0.69605	2.50740	0.30000	3.46796
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.07933	0.32940	0.06480	0.70073	2.50740	0.30000	3.47320
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.08307	0.32940	0.06480	0.69073	2.50740	0.30000	3.35244
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.08236	0.32940	0.06480	0.68918	2.50740	0.30000	3.34811
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.08562	0.32940	0.06480	0.69403	2.50740	0.30000	3.35362
	B1->Y (RF)	(A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.06939	0.32940	0.06480	0.68006	2.50740	0.30000	3.45057
	B1->Y (RF)	(!A1 * A2 * B2 * !C1)	0.01860	0.00100	0.06884	0.32940	0.06480	0.67857	2.50740	0.30000	3.44564
	B1->Y (RF)	(!A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.06850	0.32940	0.06480	0.67781	2.50740	0.30000	3.44527
	B2->Y (RF)	(A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.07603	0.32940	0.06480	0.67348	2.50740	0.30000	3.33041
	B2->Y (RF)	(!A1 * A2 * B1 * !C1)	0.01860	0.00100	0.07544	0.32940	0.06480	0.67204	2.50740	0.30000	3.32615
	B2->Y (RF)	(!A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.07508	0.32940	0.06480	0.67121	2.50740	0.30000	3.32581
	C1->Y (RF)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.03518	0.32940	0.06480	0.46942	2.50740	0.30000	2.59673
	C1->Y (RF)	(!A1 * A2 * !B1 * !B2)	0.01860	0.00100	0.03494	0.32940	0.06480	0.46879	2.50740	0.30000	2.59441
	C1->Y (RF)	(!A1 * !A2 * B1 * !B2)	0.01860	0.00100	0.03536	0.32940	0.06480	0.46945	2.50740	0.30000	2.59673
	C1->Y (RF)	(!A1 * !A2 * !B1 * B2)	0.01860	0.00100	0.03513	0.32940	0.06480	0.46884	2.50740	0.30000	2.59441
	C1->Y (RF)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.03493	0.32940	0.06480	0.46852	2.50740	0.30000	2.59419

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	0.00648	0.32940	0.06480	0.00639	2.50740	0.30000	0.00634
	A2	0.01860	0.00100	0.00662	0.32940	0.06480	0.00653	2.50740	0.30000	0.00648
	B1	0.01860	0.00100	0.00493	0.32940	0.06480	0.00484	2.50740	0.30000	0.00471
	B2	0.01860	0.00100	0.00504	0.32940	0.06480	0.00486	2.50740	0.30000	0.00475
	C1	0.01860	0.00100	0.00324	0.32940	0.06480	0.00321	2.50740	0.30000	0.00342

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	0.00426	0.32940	0.06480	0.00399	2.50740	0.30000	0.00378
	A2	0.01860	0.00100	0.00540	0.32940	0.06480	0.00512	2.50740	0.30000	0.00484
	B1	0.01860	0.00100	0.00285	0.32940	0.06480	0.00266	2.50740	0.30000	0.00248
	B2	0.01860	0.00100	0.00405	0.32940	0.06480	0.00386	2.50740	0.30000	0.00360
	C1	0.01860	0.00100	0.00165	0.32940	0.06480	0.00169	2.50740	0.30000	0.00146

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	0.00648	0.32940	0.06480	0.00639	2.50740	0.30000	0.00634
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00623	0.32940	0.06480	0.00610	2.50740	0.30000	0.00615
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00759	0.32940	0.06480	0.00753	2.50740	0.30000	0.00758
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00662	0.32940	0.06480	0.00653	2.50740	0.30000	0.00648
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00639	0.32940	0.06480	0.00626	2.50740	0.30000	0.00634
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00775	0.32940	0.06480	0.00755	2.50740	0.30000	0.00762
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00516	0.32940	0.06480	0.00500	2.50740	0.30000	0.00495
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00491	0.32940	0.06480	0.00480	2.50740	0.30000	0.00487
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00493	0.32940	0.06480	0.00484	2.50740	0.30000	0.00471
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00526	0.32940	0.06480	0.00508	2.50740	0.30000	0.00481
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00504	0.32940	0.06480	0.00487	2.50740	0.30000	0.00484
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00504	0.32940	0.06480	0.00486	2.50740	0.30000	0.00475
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00352	0.32940	0.06480	0.00345	2.50740	0.30000	0.00338
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00324	0.32940	0.06480	0.00318	2.50740	0.30000	0.00322
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00353	0.32940	0.06480	0.00344	2.50740	0.30000	0.00324
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00325	0.32940	0.06480	0.00317	2.50740	0.30000	0.00332
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00324	0.32940	0.06480	0.00321	2.50740	0.30000	0.00342

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	0.00548	0.32940	0.06480	0.00517	2.50740	0.30000	0.00496
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00426	0.32940	0.06480	0.00399	2.50740	0.30000	0.00378
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00357	0.32940	0.06480	0.00328	2.50740	0.30000	0.00307
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00662	0.32940	0.06480	0.00634	2.50740	0.30000	0.00603
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00540	0.32940	0.06480	0.00512	2.50740	0.30000	0.00484
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00471	0.32940	0.06480	0.00446	2.50740	0.30000	0.00416
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00406	0.32940	0.06480	0.00389	2.50740	0.30000	0.00366
	B1	(!A1 * * A2 * * B2 * * !C1)	0.01860	0.00100	0.00285	0.32940	0.06480	0.00266	2.50740	0.30000	0.00248
	B1	(!A1 * * !A2 * * B2 * * !C1)	0.01860	0.00100	0.00282	0.32940	0.06480	0.00258	2.50740	0.30000	0.00244
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00527	0.32940	0.06480	0.00509	2.50740	0.30000	0.00481
	B2	(!A1 * * A2 * * B1 * * !C1)	0.01860	0.00100	0.00405	0.32940	0.06480	0.00386	2.50740	0.30000	0.00360
	B2	(!A1 * * !A2 * * B1 * * !C1)	0.01860	0.00100	0.00402	0.32940	0.06480	0.00379	2.50740	0.30000	0.00356
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00283	0.32940	0.06480	0.00289	2.50740	0.30000	0.00271
	C1	(!A1 * * A2 * * !B1 * * !B2)	0.01860	0.00100	0.00162	0.32940	0.06480	0.00168	2.50740	0.30000	0.00147
	C1	(!A1 * * !A2 * * B1 * * !B2)	0.01860	0.00100	0.00286	0.32940	0.06480	0.00291	2.50740	0.30000	0.00271
	C1	(!A1 * * !A2 * * !B1 * * B2)	0.01860	0.00100	0.00165	0.32940	0.06480	0.00169	2.50740	0.30000	0.00146
	C1	(!A1 * * !A2 * * !B1 * * !B2)	0.01860	0.00100	0.00161	0.32940	0.06480	0.00163	2.50740	0.30000	0.00147

A22OI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00292	0.00288	0.00285	0.00286	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	90.96350	562.87300	1261.30000

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	0.08106	0.32940	0.06480	0.79964	2.50740	0.30000	3.81243
	A2->Y (FR)	0.01860	0.00100	0.09141	0.32940	0.06480	0.81002	2.50740	0.30000	3.82033
	B1->Y (FR)	0.01860	0.00100	0.08506	0.32940	0.06480	0.81825	2.50740	0.30000	4.00364
	B2->Y (FR)	0.01860	0.00100	0.07339	0.32940	0.06480	0.80453	2.50740	0.30000	3.98460

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	0.06798	0.32940	0.06480	0.67822	2.50740	0.30000	3.44317
	A2->Y (RF)	0.01860	0.00100	0.07396	0.32940	0.06480	0.67087	2.50740	0.30000	3.32191
	B1->Y (RF)	0.01860	0.00100	0.05885	0.32940	0.06480	0.65179	2.50740	0.30000	3.30340
	B2->Y (RF)	0.01860	0.00100	0.05147	0.32940	0.06480	0.65827	2.50740	0.30000	3.42322

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	0.08106	0.32940	0.06480	0.79964	2.50740	0.30000	3.81243
	A2->Y (FR)	(A1 * B1)	0.01860	0.00100	0.09141	0.32940	0.06480	0.81002	2.50740	0.30000	3.82033
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.08506	0.32940	0.06480	0.81825	2.50740	0.30000	4.00364
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.07195	0.32940	0.06480	0.80272	2.50740	0.30000	3.98309
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.07339	0.32940	0.06480	0.80453	2.50740	0.30000	3.98460
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.06018	0.32940	0.06480	0.79180	2.50740	0.30000	3.97607

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	0.06798	0.32940	0.06480	0.67822	2.50740	0.30000	3.44317
	A2->Y (RF)	(A1 * B1)	0.01860	0.00100	0.07396	0.32940	0.06480	0.67087	2.50740	0.30000	3.32191
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.05885	0.32940	0.06480	0.65179	2.50740	0.30000	3.30340
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.05837	0.32940	0.06480	0.65036	2.50740	0.30000	3.29903
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.05147	0.32940	0.06480	0.65827	2.50740	0.30000	3.42322
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.05102	0.32940	0.06480	0.65689	2.50740	0.30000	3.41869

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	0.00380	0.32940	0.06480	0.00374	2.50740	0.30000	0.00358
	A2	0.01860	0.00100	0.00391	0.32940	0.06480	0.00381	2.50740	0.30000	0.00392
	B1	0.01860	0.00100	0.00263	0.32940	0.06480	0.00245	2.50740	0.30000	0.00239
	B2	0.01860	0.00100	0.00244	0.32940	0.06480	0.00238	2.50740	0.30000	0.00233

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	0.00404	0.32940	0.06480	0.00377	2.50740	0.30000	0.00362
	A2	0.01860	0.00100	0.00518	0.32940	0.06480	0.00493	2.50740	0.30000	0.00470
	B1	0.01860	0.00100	0.00475	0.32940	0.06480	0.00468	2.50740	0.30000	0.00444
	B2	0.01860	0.00100	0.00352	0.32940	0.06480	0.00351	2.50740	0.30000	0.00333

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	0.00380	0.32940	0.06480	0.00374	2.50740	0.30000	0.00358
	A2	(A1 * B1)	0.01860	0.00100	0.00391	0.32940	0.06480	0.00381	2.50740	0.30000	0.00392
	B1	(A1 * !A2)	0.01860	0.00100	0.00263	0.32940	0.06480	0.00245	2.50740	0.30000	0.00239
	B1	(!A1 * A2)	0.01860	0.00100	0.00247	0.32940	0.06480	0.00238	2.50740	0.30000	0.00235
	B2	(A1 * !A2)	0.01860	0.00100	0.00244	0.32940	0.06480	0.00238	2.50740	0.30000	0.00233
	B2	(!A1 * A2)	0.01860	0.00100	0.00223	0.32940	0.06480	0.00221	2.50740	0.30000	0.00225

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	0.00404	0.32940	0.06480	0.00377	2.50740	0.30000	0.00362
	A2	(A1 * B1)	0.01860	0.00100	0.00518	0.32940	0.06480	0.00493	2.50740	0.30000	0.00470
	B1	(A1 * !A2)	0.01860	0.00100	0.00475	0.32940	0.06480	0.00468	2.50740	0.30000	0.00444
	B1	(!A1 * A2)	0.01860	0.00100	0.00352	0.32940	0.06480	0.00348	2.50740	0.30000	0.00323
	B2	(A1 * !A2)	0.01860	0.00100	0.00352	0.32940	0.06480	0.00351	2.50740	0.30000	0.00333
	B2	(!A1 * A2)	0.01860	0.00100	0.00229	0.32940	0.06480	0.00230	2.50740	0.30000	0.00215

AND2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00239	0.00239	0.60000
sg13g2_and2_1	0.00238	0.00237	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	989.94900	1027.41000	1069.65000
sg13g2_and2_1	514.62900	635.37000	854.87300

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	0.12785	0.32940	0.12960	0.56434	2.50740	0.60000	1.95095
	B->X (RR)	0.01860	0.00100	0.13476	0.32940	0.12960	0.56766	2.50740	0.60000	1.96804
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.10276	0.32940	0.06480	0.50576	2.50740	0.30000	1.81223
	B->X (RR)	0.01860	0.00100	0.10994	0.32940	0.06480	0.51504	2.50740	0.30000	1.84330

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	0.10375	0.32940	0.12960	0.50243	2.50740	0.60000	1.72866
	B->X (FF)	0.01860	0.00100	0.11073	0.32940	0.12960	0.51643	2.50740	0.60000	1.77255
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.08403	0.32940	0.06480	0.45084	2.50740	0.30000	1.59035
	B->X (FF)	0.01860	0.00100	0.09137	0.32940	0.06480	0.46804	2.50740	0.30000	1.64218

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	0.00817	0.32940	0.12960	0.00864	2.50740	0.60000	0.00907
	B	0.01860	0.00100	0.00919	0.32940	0.12960	0.00975	2.50740	0.60000	0.00955
sg13g2_and2_1	A	0.01860	0.00100	0.00528	0.32940	0.06480	0.00533	2.50740	0.30000	0.00679
	B	0.01860	0.00100	0.00629	0.32940	0.06480	0.00634	2.50740	0.30000	0.00729

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	0.00735	0.32940	0.12960	0.00765	2.50740	0.60000	0.00852
	B	0.01860	0.00100	0.00745	0.32940	0.12960	0.00781	2.50740	0.60000	0.00934
sg13g2_and2_1	A	0.01860	0.00100	0.00459	0.32940	0.06480	0.00459	2.50740	0.30000	0.00612
	B	0.01860	0.00100	0.00472	0.32940	0.06480	0.00480	2.50740	0.30000	0.00645

AND3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00241	0.00236	0.00236	0.60000
sg13g2_and3_1	0.00238	0.00234	0.00235	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	985.88600	1063.90000	1349.75000
sg13g2_and3_1	508.20000	629.02700	1214.68000

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	0.17867	0.32940	0.12960	0.63373	2.50740	0.60000	2.06409
	B->X (RR)	0.01860	0.00100	0.19249	0.32940	0.12960	0.64581	2.50740	0.60000	2.09429
	C->X (RR)	0.01860	0.00100	0.19863	0.32940	0.12960	0.64304	2.50740	0.60000	2.06726
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.14363	0.32940	0.06480	0.56096	2.50740	0.30000	1.90804
	B->X (RR)	0.01860	0.00100	0.15758	0.32940	0.06480	0.57714	2.50740	0.30000	1.94791
	C->X (RR)	0.01860	0.00100	0.16375	0.32940	0.06480	0.57737	2.50740	0.30000	1.93505

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	0.10938	0.32940	0.12960	0.51412	2.50740	0.60000	1.75618
	B->X (FF)	0.01860	0.00100	0.11693	0.32940	0.12960	0.52789	2.50740	0.60000	1.79781
	C->X (FF)	0.01860	0.00100	0.12240	0.32940	0.12960	0.53903	2.50740	0.60000	1.82964
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.09063	0.32940	0.06480	0.46488	2.50740	0.30000	1.62343
	B->X (FF)	0.01860	0.00100	0.09838	0.32940	0.06480	0.48101	2.50740	0.30000	1.67421
	C->X (FF)	0.01860	0.00100	0.10351	0.32940	0.06480	0.49325	2.50740	0.30000	1.71155

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	0.00905	0.32940	0.12960	0.00943	2.50740	0.60000	0.01006
	B	0.01860	0.00100	0.01003	0.32940	0.12960	0.01041	2.50740	0.60000	0.01071
	C	0.01860	0.00100	0.01099	0.32940	0.12960	0.01149	2.50740	0.60000	0.01154
sg13g2_and3_1	A	0.01860	0.00100	0.00602	0.32940	0.06480	0.00606	2.50740	0.30000	0.00723
	B	0.01860	0.00100	0.00703	0.32940	0.06480	0.00714	2.50740	0.30000	0.00787
	C	0.01860	0.00100	0.00799	0.32940	0.06480	0.00812	2.50740	0.30000	0.00850

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	0.00742	0.32940	0.12960	0.00769	2.50740	0.60000	0.00850
	B	0.01860	0.00100	0.00755	0.32940	0.12960	0.00795	2.50740	0.60000	0.00915
	C	0.01860	0.00100	0.00768	0.32940	0.12960	0.00810	2.50740	0.60000	0.00909
sg13g2_and3_1	A	0.01860	0.00100	0.00467	0.32940	0.06480	0.00463	2.50740	0.30000	0.00612
	B	0.01860	0.00100	0.00485	0.32940	0.06480	0.00484	2.50740	0.30000	0.00640
	C	0.01860	0.00100	0.00499	0.32940	0.06480	0.00504	2.50740	0.30000	0.00651

AND4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00223	0.00233	0.00233	0.00233	0.60000
sg13g2_and4_1	0.00222	0.00233	0.00232	0.00233	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	986.09600	1055.54000	1709.59000
sg13g2_and4_1	508.40700	599.26800	1574.53000

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	0.22987	0.32940	0.12960	0.70149	2.50740	0.60000	2.17216
	B->X (RR)	0.01860	0.00100	0.25094	0.32940	0.12960	0.72197	2.50740	0.60000	2.20403
	C->X (RR)	0.01860	0.00100	0.26362	0.32940	0.12960	0.72727	2.50740	0.60000	2.18401
	D->X (RR)	0.01860	0.00100	0.26981	0.32940	0.12960	0.73024	2.50740	0.60000	2.15649
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.18492	0.32940	0.06480	0.61508	2.50740	0.30000	2.00110
	B->X (RR)	0.01860	0.00100	0.20627	0.32940	0.06480	0.63857	2.50740	0.30000	2.04086
	C->X (RR)	0.01860	0.00100	0.21891	0.32940	0.06480	0.64650	2.50740	0.30000	2.03776
	D->X (RR)	0.01860	0.00100	0.22526	0.32940	0.06480	0.65051	2.50740	0.30000	2.02090

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	0.11374	0.32940	0.12960	0.52138	2.50740	0.60000	1.76828
	B->X (FF)	0.01860	0.00100	0.12158	0.32940	0.12960	0.53467	2.50740	0.60000	1.80896
	C->X (FF)	0.01860	0.00100	0.12765	0.32940	0.12960	0.54565	2.50740	0.60000	1.84299
	D->X (FF)	0.01860	0.00100	0.13176	0.32940	0.12960	0.55492	2.50740	0.60000	1.87381
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.09584	0.32940	0.06480	0.47316	2.50740	0.30000	1.63743
	B->X (FF)	0.01860	0.00100	0.10385	0.32940	0.06480	0.48881	2.50740	0.30000	1.68671
	C->X (FF)	0.01860	0.00100	0.10974	0.32940	0.06480	0.50115	2.50740	0.30000	1.72248
	D->X (FF)	0.01860	0.00100	0.11345	0.32940	0.06480	0.51135	2.50740	0.30000	1.75589

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	0.00966	0.32940	0.12960	0.00970	2.50740	0.60000	0.01086
	B	0.01860	0.00100	0.01073	0.32940	0.12960	0.01090	2.50740	0.60000	0.01151
	C	0.01860	0.00100	0.01170	0.32940	0.12960	0.01185	2.50740	0.60000	0.01218
	D	0.01860	0.00100	0.01263	0.32940	0.12960	0.01284	2.50740	0.60000	0.01290
sg13g2_and4_1	A	0.01860	0.00100	0.00656	0.32940	0.06480	0.00659	2.50740	0.30000	0.00779
	B	0.01860	0.00100	0.00768	0.32940	0.06480	0.00781	2.50740	0.30000	0.00834
	C	0.01860	0.00100	0.00864	0.32940	0.06480	0.00876	2.50740	0.30000	0.00915
	D	0.01860	0.00100	0.00957	0.32940	0.06480	0.00962	2.50740	0.30000	0.00969

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	0.00768	0.32940	0.12960	0.00801	2.50740	0.60000	0.00877
	B	0.01860	0.00100	0.00778	0.32940	0.12960	0.00814	2.50740	0.60000	0.00936
	C	0.01860	0.00100	0.00797	0.32940	0.12960	0.00838	2.50740	0.60000	0.00925
	D	0.01860	0.00100	0.00813	0.32940	0.12960	0.00863	2.50740	0.60000	0.00951
sg13g2_and4_1	A	0.01860	0.00100	0.00494	0.32940	0.06480	0.00491	2.50740	0.30000	0.00616
	B	0.01860	0.00100	0.00506	0.32940	0.06480	0.00502	2.50740	0.30000	0.00650
	C	0.01860	0.00100	0.00523	0.32940	0.06480	0.00523	2.50740	0.30000	0.00675
	D	0.01860	0.00100	0.00541	0.32940	0.06480	0.00544	2.50740	0.30000	0.00678

A021x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00271	0.00268	0.00257	0.60000
sg13g2_a21o_1	0.00253	0.00260	0.00246	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	549.67600	929.31200	1228.44000
sg13g2_a21o_1	412.48300	650.17300	1047.70000

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_a21o_2	A1->X (RR)	0.01860	0.00100	0.13455	0.32940	0.12960	0.57327	2.50740	0.60000	1.97124
	A2->X (RR)	0.01860	0.00100	0.14034	0.32940	0.12960	0.57458	2.50740	0.60000	1.98616
	B1->X (RR)	0.01860	0.00100	0.08377	0.32940	0.12960	0.51041	2.50740	0.60000	1.86927
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.12643	0.32940	0.06480	0.54662	2.50740	0.30000	1.91815
	A2->X (RR)	0.01860	0.00100	0.13233	0.32940	0.06480	0.55056	2.50740	0.30000	1.94091
	B1->X (RR)	0.01860	0.00100	0.07938	0.32940	0.06480	0.48665	2.50740	0.30000	1.81820

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	0.17641	0.32940	0.12960	0.57862	2.50740	0.60000	1.80988
	A2->X (FF)	0.01860	0.00100	0.18991	0.32940	0.12960	0.59905	2.50740	0.60000	1.85488
	B1->X (FF)	0.01860	0.00100	0.17594	0.32940	0.12960	0.59092	2.50740	0.60000	1.86756
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.14032	0.32940	0.06480	0.51359	2.50740	0.30000	1.66841
	A2->X (FF)	0.01860	0.00100	0.15225	0.32940	0.06480	0.53249	2.50740	0.30000	1.71177
	B1->X (FF)	0.01860	0.00100	0.13744	0.32940	0.06480	0.51781	2.50740	0.30000	1.69801

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	0.13455	0.32940	0.12960	0.57327	2.50740	0.60000	1.97124
	A2->X (RR)	!B1	0.01860	0.00100	0.14034	0.32940	0.12960	0.57458	2.50740	0.60000	1.98616
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.08377	0.32940	0.12960	0.51041	2.50740	0.60000	1.86927
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.08005	0.32940	0.12960	0.49741	2.50740	0.60000	1.82092
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.07994	0.32940	0.12960	0.49670	2.50740	0.60000	1.82395
sg13g2_a21o_1	A1->X (RR)	!B1	0.01860	0.00100	0.12643	0.32940	0.06480	0.54662	2.50740	0.30000	1.91815
	A2->X (RR)	!B1	0.01860	0.00100	0.13233	0.32940	0.06480	0.55056	2.50740	0.30000	1.94091
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.07938	0.32940	0.06480	0.48665	2.50740	0.30000	1.81820
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.07436	0.32940	0.06480	0.47199	2.50740	0.30000	1.76295
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.07411	0.32940	0.06480	0.47222	2.50740	0.30000	1.76677

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	0.17641	0.32940	0.12960	0.57862	2.50740	0.60000	1.80988
	A2->X (FF)	!B1	0.01860	0.00100	0.18991	0.32940	0.12960	0.59905	2.50740	0.60000	1.85488
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.17594	0.32940	0.12960	0.59092	2.50740	0.60000	1.86756
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.15894	0.32940	0.12960	0.56780	2.50740	0.60000	1.81039
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.12665	0.32940	0.12960	0.52662	2.50740	0.60000	1.74935
sg13g2_a21o_1	A1->X (FF)	!B1	0.01860	0.00100	0.14032	0.32940	0.06480	0.51359	2.50740	0.30000	1.66841
	A2->X (FF)	!B1	0.01860	0.00100	0.15225	0.32940	0.06480	0.53249	2.50740	0.30000	1.71177
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.13744	0.32940	0.06480	0.51781	2.50740	0.30000	1.69801
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.12274	0.32940	0.06480	0.49537	2.50740	0.30000	1.63967
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.09998	0.32940	0.06480	0.46626	2.50740	0.30000	1.59400

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	0.00890	0.32940	0.12960	0.00925	2.50740	0.60000	0.01051
	A2	0.01860	0.00100	0.01004	0.32940	0.12960	0.01061	2.50740	0.60000	0.01108
	B1	0.01860	0.00100	0.00801	0.32940	0.12960	0.00836	2.50740	0.60000	0.00916
sg13g2_a21o_1	A1	0.01860	0.00100	0.00591	0.32940	0.06480	0.00590	2.50740	0.30000	0.00741
	A2	0.01860	0.00100	0.00694	0.32940	0.06480	0.00700	2.50740	0.30000	0.00790
	B1	0.01860	0.00100	0.00502	0.32940	0.06480	0.00501	2.50740	0.30000	0.00668

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	0.00941	0.32940	0.12960	0.00977	2.50740	0.60000	0.01015
	A2	0.01860	0.00100	0.00944	0.32940	0.12960	0.00997	2.50740	0.60000	0.01050
	B1	0.01860	0.00100	0.00798	0.32940	0.12960	0.00840	2.50740	0.60000	0.00970
sg13g2_a21o_1	A1	0.01860	0.00100	0.00653	0.32940	0.06480	0.00659	2.50740	0.30000	0.00761
	A2	0.01860	0.00100	0.00651	0.32940	0.06480	0.00668	2.50740	0.30000	0.00765
	B1	0.01860	0.00100	0.00514	0.32940	0.06480	0.00523	2.50740	0.30000	0.00718

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	0.00890	0.32940	0.12960	0.00925	2.50740	0.60000	0.01051
	A2	!B1	0.01860	0.00100	0.01004	0.32940	0.12960	0.01061	2.50740	0.60000	0.01108
	B1	(A1 * !A2)	0.01860	0.00100	0.00923	0.32940	0.12960	0.00962	2.50740	0.60000	0.01115
	B1	(!A1 * A2)	0.01860	0.00100	0.00801	0.32940	0.12960	0.00836	2.50740	0.60000	0.00916
	B1	(!A1 * !A2)	0.01860	0.00100	0.00798	0.32940	0.12960	0.00827	2.50740	0.60000	0.00935
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.00591	0.32940	0.06480	0.00590	2.50740	0.30000	0.00741
	A2	!B1	0.01860	0.00100	0.00694	0.32940	0.06480	0.00700	2.50740	0.30000	0.00790
	B1	(A1 * !A2)	0.01860	0.00100	0.00608	0.32940	0.06480	0.00607	2.50740	0.30000	0.00806
	B1	(!A1 * A2)	0.01860	0.00100	0.00502	0.32940	0.06480	0.00501	2.50740	0.30000	0.00668
	B1	(!A1 * !A2)	0.01860	0.00100	0.00499	0.32940	0.06480	0.00495	2.50740	0.30000	0.00676

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	0.00941	0.32940	0.12960	0.00977	2.50740	0.60000	0.01015
	A2	!B1	0.01860	0.00100	0.00944	0.32940	0.12960	0.00997	2.50740	0.60000	0.01050
	B1	(A1 * !A2)	0.01860	0.00100	0.00814	0.32940	0.12960	0.00850	2.50740	0.60000	0.01049
	B1	(!A1 * A2)	0.01860	0.00100	0.00798	0.32940	0.12960	0.00840	2.50740	0.60000	0.00970
	B1	(!A1 * !A2)	0.01860	0.00100	0.00797	0.32940	0.12960	0.00834	2.50740	0.60000	0.00982
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.00653	0.32940	0.06480	0.00659	2.50740	0.30000	0.00761
	A2	!B1	0.01860	0.00100	0.00651	0.32940	0.06480	0.00668	2.50740	0.30000	0.00765
	B1	(A1 * !A2)	0.01860	0.00100	0.00519	0.32940	0.06480	0.00528	2.50740	0.30000	0.00716
	B1	(!A1 * A2)	0.01860	0.00100	0.00507	0.32940	0.06480	0.00521	2.50740	0.30000	0.00684
	B1	(!A1 * !A2)	0.01860	0.00100	0.00514	0.32940	0.06480	0.00523	2.50740	0.30000	0.00718

BTLx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00540	0.01657	2.40000
sg13g2_ebufn_4	0.00277	0.00983	1.20000
sg13g2_ebufn_2	0.00244	0.00598	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1655.51000	2491.38000	4310.14000
sg13g2_ebufn_4	1066.82000	1399.03000	2222.84000
sg13g2_ebufn_2	765.92400	931.97300	1199.63000

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	0.01630	0.10842	0.32940	0.53370	0.86029	2.50740	2.41530	3.38312
	TE_B->Z (RR)	0.01860	0.01630	0.09650	0.32940	0.53370	0.22841	2.50740	2.41530	0.56184
	TE_B->Z (FR)	0.01860	0.01630	0.05056	0.32940	0.53370	0.77468	2.50740	2.41530	3.79952
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.00866	0.11208	0.32940	0.26686	0.86232	2.50740	1.20766	3.38746
	TE_B->Z (RR)	0.01860	0.00866	0.07759	0.32940	0.26686	0.18162	2.50740	1.20766	0.40686
	TE_B->Z (FR)	0.01860	0.00866	0.05126	0.32940	0.26686	0.77325	2.50740	1.20766	3.79483
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00486	0.09469	0.32940	0.13346	0.81569	2.50740	0.60386	3.25655
	TE_B->Z (RR)	0.01860	0.00486	0.06712	0.32940	0.13346	0.15479	2.50740	0.60386	0.33849
	TE_B->Z (FR)	0.01860	0.00486	0.05123	0.32940	0.13346	0.76910	2.50740	0.60386	3.77927

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	0.02933	0.12395	0.32940	0.54673	0.73373	2.50740	2.42833	2.71459
	TE_B->Z (RF)	0.01860	0.02933	0.04236	0.32940	0.54673	0.03438	2.50740	2.42833	0.03633
	TE_B->Z (FF)	0.01860	0.02933	0.15348	0.32940	0.54673	1.12901	2.50740	2.42833	4.47239
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01542	0.12809	0.32940	0.27362	0.73728	2.50740	1.21442	2.72103
	TE_B->Z (RF)	0.01860	0.01542	0.04123	0.32940	0.27362	0.03380	2.50740	1.21442	0.03400
	TE_B->Z (FF)	0.01860	0.01542	0.11734	0.32940	0.27362	1.06138	2.50740	1.21442	4.29159
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00838	0.09838	0.32940	0.13698	0.67917	2.50740	0.60738	2.56529
	TE_B->Z (RF)	0.01860	0.00838	0.04000	0.32940	0.13698	0.03375	2.50740	0.60738	0.03599
	TE_B->Z (FF)	0.01860	0.00838	0.09809	0.32940	0.13698	1.01508	2.50740	0.60738	4.17739

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	0.01630	0.01302	0.32940	0.53370	0.01699	2.50740	2.41530	0.01682
	TE_B	0.01860	0.01630	0.00846	0.32940	0.53370	0.00739	2.50740	2.41530	0.00874
sg13g2_ebufn_4	A	0.01860	0.00866	0.00662	0.32940	0.26686	0.00834	2.50740	1.20766	0.00809
	TE_B	0.01860	0.00866	0.00408	0.32940	0.26686	0.00364	2.50740	1.20766	0.00421
sg13g2_ebufn_2	A	0.01860	0.00486	0.00364	0.32940	0.13346	0.00414	2.50740	0.60386	0.00361
	TE_B	0.01860	0.00486	0.00206	0.32940	0.13346	0.00181	2.50740	0.60386	0.00223

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	0.02933	0.02384	0.32940	0.54673	0.02713	2.50740	2.42833	0.02147
	TE_B	0.01860	0.02933	0.00954	0.32940	0.54673	0.10182	2.50740	2.42833	0.45791
sg13g2_ebufn_4	A	0.01860	0.01542	0.01195	0.32940	0.27362	0.01363	2.50740	1.21442	0.01101
	TE_B	0.01860	0.01542	0.00477	0.32940	0.27362	0.05357	2.50740	1.21442	0.23416
sg13g2_ebufn_2	A	0.01860	0.00838	0.00605	0.32940	0.13698	0.00689	2.50740	0.60738	0.00519
	TE_B	0.01860	0.00838	0.00254	0.32940	0.13698	0.02822	2.50740	0.60738	0.11936

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.02325	0.32940	0.02279	2.50740	0.02863
sg13g2_ebufn_4	0.01860	0.01187	0.32940	0.01161	2.50740	0.01448
sg13g2_ebufn_2	0.01860	0.00648	0.32940	0.00630	2.50740	0.00896

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.00817	0.32940	0.00788	2.50740	0.01360
sg13g2_ebufn_4	0.01860	0.00437	0.32940	0.00421	2.50740	0.00701
sg13g2_ebufn_2	0.01860	0.00277	0.32940	0.00268	2.50740	0.00528

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	-0.00230	0.32940	-0.00353	2.50740	-0.00163
sg13g2_ebufn_4	0.01860	-0.00018	0.32940	-0.00101	2.50740	0.00158
sg13g2_ebufn_2	0.01860	0.00052	0.32940	0.00004	2.50740	0.00255

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	0.03612	0.32940	0.03601	2.50740	0.03843
sg13g2_ebufn_4	0.01860	0.01902	0.32940	0.01879	2.50740	0.02162
sg13g2_ebufn_2	0.01860	0.00994	0.32940	0.00986	2.50740	0.01251

BU_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

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

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01592	4.80000
sg13g2_buf_8	0.00800	2.40000
sg13g2_buf_4	0.00346	1.20000
sg13g2_buf_2	0.00245	0.60000
sg13g2_buf_1	0.00212	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	5028.76000	6741.44000	8454.12000
sg13g2_buf_8	2514.38000	3370.78000	4227.19000
sg13g2_buf_4	1257.51000	1653.20000	2048.90000
sg13g2_buf_2	697.53300	882.33600	1067.14000
sg13g2_buf_1	494.46400	531.71200	568.96000

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	0.08307	0.32940	1.03680	0.51319	2.50740	4.80000	1.87814
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.08349	0.32940	0.51840	0.51240	2.50740	2.40000	1.87759
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.10818	0.32940	0.25920	0.55914	2.50740	1.20000	2.02420
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.08429	0.32940	0.12960	0.50816	2.50740	0.60000	1.87111
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.07442	0.32940	0.06480	0.47582	2.50740	0.30000	1.78402

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	0.09257	0.32940	1.03680	0.48960	2.50740	4.80000	1.68955
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.09297	0.32940	0.51840	0.48999	2.50740	2.40000	1.69139
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.09177	0.32940	0.25920	0.48594	2.50740	1.20000	1.66701
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.09027	0.32940	0.12960	0.47658	2.50740	0.60000	1.65333
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.07816	0.32940	0.06480	0.43896	2.50740	0.30000	1.55167

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	0.05798	0.32940	1.03680	0.06160	2.50740	4.80000	0.06576
sg13g2_buf_8	A	0.01860	0.00100	0.02922	0.32940	0.51840	0.03069	2.50740	2.40000	0.03246
sg13g2_buf_4	A	0.01860	0.00100	0.01407	0.32940	0.25920	0.01499	2.50740	1.20000	0.01607
sg13g2_buf_2	A	0.01860	0.00100	0.00774	0.32940	0.12960	0.00803	2.50740	0.60000	0.00883
sg13g2_buf_1	A	0.01860	0.00100	0.00464	0.32940	0.06480	0.00465	2.50740	0.30000	0.00609

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	0.05602	0.32940	1.03680	0.06003	2.50740	4.80000	0.06924
sg13g2_buf_8	A	0.01860	0.00100	0.02821	0.32940	0.51840	0.03020	2.50740	2.40000	0.03283
sg13g2_buf_4	A	0.01860	0.00100	0.01422	0.32940	0.25920	0.01514	2.50740	1.20000	0.01636
sg13g2_buf_2	A	0.01860	0.00100	0.00752	0.32940	0.12960	0.00792	2.50740	0.60000	0.00929
sg13g2_buf_1	A	0.01860	0.00100	0.00456	0.32940	0.06480	0.00461	2.50740	0.30000	0.00627

DECAP_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

Footprint

Cell Name	Area
sg13g2_decap_4	7.25760
sg13g2_decap_8	12.70080

Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_4	98.64300	98.64300	98.64300
sg13g2_decap_8	197.30100	197.30100	197.30100

DFFRRx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00147	0.00483	0.00262	0.60000	0.60000
sg13g2_dfrbp_1	0.00146	0.00478	0.00261	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	2762.67000	3213.90000	3739.28000
sg13g2_dfrbp_1	2173.50000	2633.71000	3177.04000

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	0.37513	0.32940	0.12960	0.77017	2.50740	0.60000	2.13655
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.29344	0.32940	0.06480	0.69671	2.50740	0.30000	2.05722

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	0.32730	0.32940	0.12960	0.69555	2.50740	0.60000	1.87746
	RESET_B->Q (FF)	0.01860	0.00100	0.43690	0.32940	0.12960	0.83761	2.50740	0.60000	2.22950
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.26992	0.32940	0.06480	0.63832	2.50740	0.30000	1.81466
	RESET_B->Q (FF)	0.01860	0.00100	0.37912	0.32940	0.06480	0.78009	2.50740	0.30000	2.16813

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	0.21746	0.32940	0.12960	0.67804	2.50740	0.60000	2.01061
	RESET_B->Q_N (FR)	0.01860	0.00100	0.32943	0.32940	0.12960	0.81746	2.50740	0.60000	2.35980
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.21024	0.32940	0.06480	0.65492	2.50740	0.30000	1.98470
	RESET_B->Q_N (FR)	0.01860	0.00100	0.32030	0.32940	0.06480	0.79349	2.50740	0.30000	2.33570

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	0.24237	0.32940	0.12960	0.70726	2.50740	0.60000	1.92516
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.22530	0.32940	0.06480	0.66698	2.50740	0.30000	1.88256

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	-0.09292	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.36009
	setup	CLK (R)	0.01860	0.01860	0.18828	1.26300	1.26300	0.38856	2.50740	2.50740	0.49586
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.09292	1.26300	1.26300	-0.27523	2.50740	2.50740	-0.36304
	setup	CLK (R)	0.01860	0.01860	0.18828	1.26300	1.26300	0.38856	2.50740	2.50740	0.49586

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	-0.04646	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.25973
	setup	CLK (R)	0.01860	0.01860	0.18339	1.26300	1.26300	0.33460	2.50740	2.50740	0.45749
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.25973
	setup	CLK (R)	0.01860	0.01860	0.18339	1.26300	1.26300	0.33190	2.50740	2.50740	0.45454

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	0.20051	1.26300	1.26300	0.41285	2.50740	2.50740	0.55489
	removal	CLK (R)	0.01860	0.01860	-0.17116	1.26300	1.26300	-0.38047	2.50740	2.50740	-0.51652
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.20051	1.26300	1.26300	0.41015	2.50740	2.50740	0.55489
	removal	CLK (R)	0.01860	0.01860	-0.17116	1.26300	1.26300	-0.37777	2.50740	2.50740	-0.51357

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	0.17273	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.16953	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	0.21439	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.17593	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	0.21439	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.21439	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	0.02918	0.32940	0.12960	0.10515	2.50740	0.60000	0.38177
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02391	0.32940	0.06480	0.06130	2.50740	0.30000	0.20118

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	0.02976	0.32940	0.12960	0.10598	2.50740	0.60000	0.38301
	RESET_B	0.01860	0.00100	0.02217	0.32940	0.12960	0.09881	2.50740	0.60000	0.37201
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02453	0.32940	0.06480	0.06202	2.50740	0.30000	0.20245
	RESET_B	0.01860	0.00100	0.01687	0.32940	0.06480	0.05461	2.50740	0.30000	0.19204

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	0.02977	0.32940	0.12960	0.10601	2.50740	0.60000	0.38326
	RESET_B	0.01860	0.00100	0.02220	0.32940	0.12960	0.09841	2.50740	0.60000	0.37339
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02452	0.32940	0.06480	0.06215	2.50740	0.30000	0.20237
	RESET_B	0.01860	0.00100	0.01687	0.32940	0.06480	0.05452	2.50740	0.30000	0.19255

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	0.02918	0.32940	0.12960	0.10512	2.50740	0.60000	0.38165
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02391	0.32940	0.06480	0.06129	2.50740	0.30000	0.20128

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00145	0.32940	0.00136	2.50740	0.00250
sg13g2_dfrbp_1	0.01860	0.00145	0.32940	0.00136	2.50740	0.00248

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00110	0.32940	0.00099	2.50740	0.00210
sg13g2_dfrbp_1	0.01860	0.00109	0.32940	0.00098	2.50740	0.00210

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	0.00145	0.32940	0.00136	2.50740	0.00250
	(!CLK * RESET_B)	0.01860	0.00944	0.32940	0.00937	2.50740	0.01040
	(!CLK * !RESET_B)	0.01860	-0.00004	0.32940	-0.00005	2.50740	-0.00005
sg13g2_dfrbp_1	CLK	0.01860	0.00145	0.32940	0.00136	2.50740	0.00248
	(!CLK * RESET_B)	0.01860	0.00949	0.32940	0.00937	2.50740	0.01041
	(!CLK * !RESET_B)	0.01860	-0.00005	0.32940	-0.00005	2.50740	-0.00005

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	0.00110	0.32940	0.00099	2.50740	0.00210
	(!CLK * RESET_B)	0.01860	0.00713	0.32940	0.00697	2.50740	0.00808
	(!CLK * !RESET_B)	0.01860	0.00004	0.32940	0.00005	2.50740	0.00005
sg13g2_dfrbp_1	CLK	0.01860	0.00109	0.32940	0.00098	2.50740	0.00210
	(!CLK * RESET_B)	0.01860	0.00711	0.32940	0.00697	2.50740	0.00806
	(!CLK * !RESET_B)	0.01860	0.00005	0.32940	0.00005	2.50740	0.00005

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	0.00286	0.32940	0.00274	2.50740	0.00346
sg13g2_dfrbp_1	0.01860	0.00283	0.32940	0.00271	2.50740	0.00343

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	0.00746	0.32940	0.00698	2.50740	0.00810
sg13g2_dfrbp_1	0.01860	0.00747	0.32940	0.00700	2.50740	0.00811

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	0.00286	0.32940	0.00274	2.50740	0.00346
	(CLK * !D * !Q * Q_N)	0.01860	0.00095	0.32940	0.00095	2.50740	0.00096
	(!CLK * D * !Q * Q_N)	0.01860	0.01117	0.32940	0.01093	2.50740	0.01191
	(!CLK * !D * !Q * Q_N)	0.01860	0.00091	0.32940	0.00091	2.50740	0.00092
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00283	0.32940	0.00271	2.50740	0.00343
	(CLK * !D * !Q * Q_N)	0.01860	0.00093	0.32940	0.00092	2.50740	0.00093
	(!CLK * D * !Q * Q_N)	0.01860	0.01116	0.32940	0.01092	2.50740	0.01190
	(!CLK * !D * !Q * Q_N)	0.01860	0.00088	0.32940	0.00088	2.50740	0.00088

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	0.02923	0.32940	0.02856	2.50740	0.03109
	(CLK * !D * !Q * Q_N)	0.01860	-0.00044	0.32940	-0.00060	2.50740	-0.00066
	(!CLK * D * !Q * Q_N)	0.01860	0.00746	0.32940	0.00698	2.50740	0.00810
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00066	0.32940	-0.00079	2.50740	-0.00084
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.02392	0.32940	0.02322	2.50740	0.02571
	(CLK * !D * !Q * Q_N)	0.01860	-0.00041	0.32940	-0.00057	2.50740	-0.00063
	(!CLK * D * !Q * Q_N)	0.01860	0.00747	0.32940	0.00700	2.50740	0.00811
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00063	0.32940	-0.00076	2.50740	-0.00081

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00925	0.32940	0.00883	2.50740	0.01189
sg13g2_dfrbp_1	0.01860	0.00889	0.32940	0.00847	2.50740	0.01154

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.01671	0.32940	0.01628	2.50740	0.01915
sg13g2_dfrbp_1	0.01860	0.01675	0.32940	0.01632	2.50740	0.01918

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	0.00894	0.32940	0.00851	2.50740	0.01156
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00937	0.32940	0.00895	2.50740	0.01200
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00886	0.32940	0.00842	2.50740	0.01151
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00925	0.32940	0.00883	2.50740	0.01189
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.00889	0.32940	0.00847	2.50740	0.01154
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00928	0.32940	0.00887	2.50740	0.01193
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00877	0.32940	0.00835	2.50740	0.01143
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00916	0.32940	0.00876	2.50740	0.01181

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	0.01796	0.32940	0.01753	2.50740	0.02039
	(D * RESET_B * !Q * Q_N)	0.01860	0.01671	0.32940	0.01628	2.50740	0.01915
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00870	0.32940	0.00839	2.50740	0.01128
	(!D * RESET_B * Q * !Q_N)	0.01860	0.02678	0.32940	0.02952	2.50740	0.03220
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00864	0.32940	0.00830	2.50740	0.01122
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00867	0.32940	0.00834	2.50740	0.01124
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01774	0.32940	0.01730	2.50740	0.02016
	(D * RESET_B * !Q * Q_N)	0.01860	0.01675	0.32940	0.01632	2.50740	0.01918
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00873	0.32940	0.00839	2.50740	0.01133
	(!D * RESET_B * Q * !Q_N)	0.01860	0.02746	0.32940	0.02392	2.50740	0.02673
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00865	0.32940	0.00833	2.50740	0.01126
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00870	0.32940	0.00837	2.50740	0.01130

DFRBPQx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00135	0.00479	0.00259	0.60000
sg13g2_dfrbpq_1	0.00135	0.00474	0.00259	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbpq_2	2492.35000	2715.21000	3354.76000
sg13g2_dfrbpq_1	2038.20000	2384.26000	2900.60000

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	0.25919	0.32940	0.12960	0.68285	2.50740	0.60000	2.03735
sg13g2_dfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.24169	0.32940	0.06480	0.65649	2.50740	0.30000	2.01037

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	0.25896	0.32940	0.12960	0.64506	2.50740	0.60000	1.81931
	RESET_B->Q (FF)	0.01860	0.00100	0.36264	0.32940	0.12960	0.78093	2.50740	0.60000	2.16616
sg13g2_dfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.24074	0.32940	0.06480	0.61535	2.50740	0.30000	1.78847
	RESET_B->Q (FF)	0.01860	0.00100	0.34653	0.32940	0.06480	0.75353	2.50740	0.30000	2.13913

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	-0.10025	1.26300	1.26300	-0.28333	2.50740	2.50740	-0.37484
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.39126	2.50740	2.50740	0.50767
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.28333	2.50740	2.50740	-0.37484
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.38856	2.50740	2.50740	0.50176

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	-0.04890	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.25383
	setup	CLK (R)	0.01860	0.01860	0.17850	1.26300	1.26300	0.32920	2.50740	2.50740	0.45159
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.04890	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.17850	1.26300	1.26300	0.32920	2.50740	2.50740	0.45159

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	0.20051	1.26300	1.26300	0.41285	2.50740	2.50740	0.56374
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.37507	2.50740	2.50740	-0.50767
sg13g2_dfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.41015	2.50740	2.50740	0.56079
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.37507	2.50740	2.50740	-0.51062

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	0.16632	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.16632	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	0.14389	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.14389	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	0.21439	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.21439	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	0.02249	0.32940	0.12960	0.02268	2.50740	0.60000	0.02505
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.02000	0.32940	0.06480	0.01988	2.50740	0.30000	0.02257

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	0.02306	0.32940	0.12960	0.02367	2.50740	0.60000	0.02709
	RESET_B	0.01860	0.00100	0.01519	0.32940	0.12960	0.01587	2.50740	0.60000	0.01661
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.02069	0.32940	0.06480	0.02081	2.50740	0.30000	0.02418
	RESET_B	0.01860	0.00100	0.01290	0.32940	0.06480	0.01303	2.50740	0.30000	0.01409

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00145	0.32940	0.00136	2.50740	0.00250
sg13g2_dfrbpq_1	0.01860	0.00145	0.32940	0.00136	2.50740	0.00249

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00110	0.32940	0.00099	2.50740	0.00210
sg13g2_dfrbpq_1	0.01860	0.00109	0.32940	0.00098	2.50740	0.00210

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	0.00145	0.32940	0.00136	2.50740	0.00250
	(!CLK * RESET_B)	0.01860	0.00945	0.32940	0.00936	2.50740	0.01040
	(!CLK * !RESET_B)	0.01860	-0.00004	0.32940	-0.00005	2.50740	-0.00005
sg13g2_dfrbpq_1	CLK	0.01860	0.00145	0.32940	0.00136	2.50740	0.00249
	(!CLK * RESET_B)	0.01860	0.00946	0.32940	0.00938	2.50740	0.01041
	(!CLK * !RESET_B)	0.01860	-0.00005	0.32940	-0.00005	2.50740	-0.00005

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	0.00110	0.32940	0.00099	2.50740	0.00210
	(!CLK * RESET_B)	0.01860	0.00714	0.32940	0.00697	2.50740	0.00808
	(!CLK * !RESET_B)	0.01860	0.00004	0.32940	0.00005	2.50740	0.00005
sg13g2_dfrbpq_1	CLK	0.01860	0.00109	0.32940	0.00098	2.50740	0.00210
	(!CLK * RESET_B)	0.01860	0.00711	0.32940	0.00696	2.50740	0.00806
	(!CLK * !RESET_B)	0.01860	0.00005	0.32940	0.00005	2.50740	0.00005

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	0.00286	0.32940	0.00274	2.50740	0.00346
sg13g2_dfrbpq_1	0.01860	0.00283	0.32940	0.00271	2.50740	0.00343

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	0.00746	0.32940	0.00698	2.50740	0.00810
sg13g2_dfrbpq_1	0.01860	0.00747	0.32940	0.00700	2.50740	0.00811

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	0.00286	0.32940	0.00274	2.50740	0.00346
	(CLK * !D * !Q)	0.01860	0.00095	0.32940	0.00095	2.50740	0.00095
	(!CLK * D * !Q)	0.01860	0.01120	0.32940	0.01093	2.50740	0.01191
	(!CLK * !D * !Q)	0.01860	0.00092	0.32940	0.00091	2.50740	0.00091
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.00283	0.32940	0.00271	2.50740	0.00343
	(CLK * !D * !Q)	0.01860	0.00093	0.32940	0.00092	2.50740	0.00092
	(!CLK * D * !Q)	0.01860	0.01119	0.32940	0.01092	2.50740	0.01190
	(!CLK * !D * !Q)	0.01860	0.00089	0.32940	0.00088	2.50740	0.00088

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	0.02282	0.32940	0.02211	2.50740	0.02462
	(CLK * !D * !Q)	0.01860	-0.00043	0.32940	-0.00060	2.50740	-0.00066
	(!CLK * D * !Q)	0.01860	0.00746	0.32940	0.00698	2.50740	0.00810
	(!CLK * !D * !Q)	0.01860	-0.00065	0.32940	-0.00079	2.50740	-0.00083
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.02053	0.32940	0.01981	2.50740	0.02230
	(CLK * !D * !Q)	0.01860	-0.00041	0.32940	-0.00057	2.50740	-0.00063
	(!CLK * D * !Q)	0.01860	0.00747	0.32940	0.00700	2.50740	0.00811
	(!CLK * !D * !Q)	0.01860	-0.00063	0.32940	-0.00076	2.50740	-0.00080

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00924	0.32940	0.00882	2.50740	0.01187
sg13g2_dfrbpq_1	0.01860	0.00889	0.32940	0.00847	2.50740	0.01153

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.01670	0.32940	0.01629	2.50740	0.01915
sg13g2_dfrbpq_1	0.01860	0.01674	0.32940	0.01633	2.50740	0.01919

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	0.00892	0.32940	0.00849	2.50740	0.01156
	(D * !RESET_B * !Q)	0.01860	0.00933	0.32940	0.00894	2.50740	0.01199
	(!D * RESET_B * !Q)	0.01860	0.00885	0.32940	0.00841	2.50740	0.01149
	(!D * !RESET_B * !Q)	0.01860	0.00924	0.32940	0.00882	2.50740	0.01187
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.00889	0.32940	0.00847	2.50740	0.01153
	(D * !RESET_B * !Q)	0.01860	0.00925	0.32940	0.00887	2.50740	0.01192
	(!D * RESET_B * !Q)	0.01860	0.00876	0.32940	0.00835	2.50740	0.01141
	(!D * !RESET_B * !Q)	0.01860	0.00916	0.32940	0.00875	2.50740	0.01180

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	0.02480	0.32940	0.02439	2.50740	0.02725
	(D * RESET_B * !Q)	0.01860	0.01670	0.32940	0.01629	2.50740	0.01915
	(D * !RESET_B * !Q)	0.01860	0.00869	0.32940	0.00838	2.50740	0.01127
	(!D * RESET_B * Q)	0.01860	0.03064	0.32940	0.03007	2.50740	0.03295
	(!D * RESET_B * !Q)	0.01860	0.00862	0.32940	0.00831	2.50740	0.01122
	(!D * !RESET_B * !Q)	0.01860	0.00865	0.32940	0.00833	2.50740	0.01124
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.02114	0.32940	0.02073	2.50740	0.02359
	(D * RESET_B * !Q)	0.01860	0.01674	0.32940	0.01633	2.50740	0.01919
	(D * !RESET_B * !Q)	0.01860	0.00871	0.32940	0.00840	2.50740	0.01134
	(!D * RESET_B * Q)	0.01860	0.02889	0.32940	0.02404	2.50740	0.02703
	(!D * RESET_B * !Q)	0.01860	0.00865	0.32940	0.00834	2.50740	0.01126
	(!D * !RESET_B * !Q)	0.01860	0.00868	0.32940	0.00836	2.50740	0.01130

DLHQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00213	0.00213	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	1392.37000	1700.59000	2124.80000

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	0.27312	0.32940	0.06480	0.67277	2.50740	0.30000	1.97291
	GATE->Q (RR)	0.01860	0.00100	0.23272	0.32940	0.06480	0.63394	2.50740	0.30000	1.92900

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	0.24124	0.32940	0.06480	0.60099	2.50740	0.30000	1.70445
	GATE->Q (RF)	0.01860	0.00100	0.25029	0.32940	0.06480	0.61399	2.50740	0.30000	1.72578

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	-0.14671	1.26300	1.26300	-0.33190	2.50740	2.50740	-0.41617
	setup	GATE (F)	0.01860	0.01860	0.15894	1.26300	1.26300	0.39126	2.50740	2.50740	0.53423

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	-0.06113	1.26300	1.26300	-0.03778	2.50740	2.50740	-0.01181
	setup	GATE (F)	0.01860	0.01860	0.07580	1.26300	1.26300	0.05127	2.50740	2.50740	0.02656

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	0.12146	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_dlhq_1	D	0.01860	0.00100	0.01123	0.32940	0.06480	0.01160	2.50740	0.30000	0.01101
	GATE	0.01860	0.00100	0.00929	0.32940	0.06480	0.00957	2.50740	0.30000	0.00907

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	0.01195	0.32940	0.06480	0.01233	2.50740	0.30000	0.01210
	GATE	0.01860	0.00100	0.01017	0.32940	0.06480	0.01066	2.50740	0.30000	0.01074

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00308	0.32940	0.00286	2.50740	0.00496

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00304	0.32940	0.00286	2.50740	0.00490

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	0.00308	0.32940	0.00286	2.50740	0.00496
	(!GATE * !Q)	0.01860	0.00278	0.32940	0.00260	2.50740	0.00474

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	0.00287	0.32940	0.00274	2.50740	0.00482
	(!GATE * !Q)	0.01860	0.00304	0.32940	0.00286	2.50740	0.00490

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00722	0.32940	0.00696	2.50740	0.00958

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.01171	0.32940	0.01210	2.50740	0.01480

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	0.00722	0.32940	0.00696	2.50740	0.00958

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	0.01171	0.32940	0.01210	2.50740	0.01480

DLHRQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00199	0.00272	0.00204	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1556.96000	1837.18000	2128.14000

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	0.29005	0.32940	0.06480	0.69762	2.50740	0.30000	1.99576
	GATE->Q (RR)	0.01860	0.00100	0.26153	0.32940	0.06480	0.67264	2.50740	0.30000	1.96946

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	0.25632	0.32940	0.06480	0.61947	2.50740	0.30000	1.73127
	GATE->Q (RF)	0.01860	0.00100	0.26924	0.32940	0.06480	0.63874	2.50740	0.30000	1.76422
	RESET_B->Q (FF)	0.01860	0.00100	0.09770	0.32940	0.06480	0.48085	2.50740	0.30000	1.68047

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	-0.13204	1.26300	1.26300	-0.29952	2.50740	2.50740	-0.37780
	setup	GATE (F)	0.01860	0.01860	0.15405	1.26300	1.26300	0.36698	2.50740	2.50740	0.49291

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	-0.06847	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.08558	1.26300	1.26300	0.05127	2.50740	2.50740	0.02361

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	-0.02201	1.26300	1.26300	-0.12143	2.50740	2.50740	-0.16824
	removal	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.16730	2.50740	2.50740	0.22432

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	0.29129	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	0.12787	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_dlhrq_1	D	0.01860	0.00100	0.00070	0.32940	0.06480	0.00064	2.50740	0.30000	0.00011
	GATE	0.01860	0.00100	0.00721	0.32940	0.06480	0.00758	2.50740	0.30000	0.00709

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	-0.00070	0.32940	0.06480	-0.00064	2.50740	0.30000	-0.00011
	GATE	0.01860	0.00100	0.00721	0.32940	0.06480	0.00782	2.50740	0.30000	0.00789
	RESET_B	0.01860	0.00100	0.00593	0.32940	0.06480	0.00610	2.50740	0.30000	0.00840

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01363	0.32940	0.01377	2.50740	0.01594

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01603	0.32940	0.01940	2.50740	0.02150

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	0.00111	0.32940	0.00091	2.50740	0.00303
	!RESET_B	0.01860	0.01363	0.32940	0.01377	2.50740	0.01594

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	0.00377	0.32940	0.00364	2.50740	0.00572
	!RESET_B	0.01860	0.01603	0.32940	0.01940	2.50740	0.02150

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	0.00011	0.32940	0.00010	2.50740	0.00010

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	0.00020	0.32940	0.00011	2.50740	0.00007

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	0.00011	0.32940	0.00010	2.50740	0.00010
	(!D * !GATE * !Q)	0.01860	0.00011	0.32940	0.00010	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_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00020	0.32940	0.00011	2.50740	0.00007
	(!D * !GATE * !Q)	0.01860	0.00020	0.32940	0.00011	2.50740	0.00007

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.00980	0.32940	0.00938	2.50740	0.01202

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01187	0.32940	0.01234	2.50740	0.01497

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	0.00980	0.32940	0.00938	2.50740	0.01202
	(!D * !RESET_B * !Q)	0.01860	0.00700	0.32940	0.00674	2.50740	0.00932

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	0.00952	0.32940	0.00914	2.50740	0.01197
	(!D * RESET_B * !Q)	0.01860	0.01187	0.32940	0.01234	2.50740	0.01497
	(!D * !RESET_B * !Q)	0.01860	0.01193	0.32940	0.01241	2.50740	0.01502

DLHR



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00193	0.00288	0.00209	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	2052.82000	2349.90000	2640.92000

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	0.31403	0.32940	0.06480	0.73280	2.50740	0.30000	2.02785
	GATE->Q (RR)	0.01860	0.00100	0.28683	0.32940	0.06480	0.71020	2.50740	0.30000	2.00676

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	0.26572	0.32940	0.06480	0.63458	2.50740	0.30000	1.73773
	GATE->Q (RF)	0.01860	0.00100	0.27870	0.32940	0.06480	0.65482	2.50740	0.30000	1.77539
	RESET_B->Q (FF)	0.01860	0.00100	0.10660	0.32940	0.06480	0.50400	2.50740	0.30000	1.73927

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	0.32622	0.32940	0.06480	0.71592	2.50740	0.30000	1.97227
	GATE->Q_N (RR)	0.01860	0.00100	0.33946	0.32940	0.06480	0.73594	2.50740	0.30000	2.01022
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16664	0.32940	0.06480	0.58146	2.50740	0.30000	1.92390

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	0.38206	0.32940	0.06480	0.73413	2.50740	0.30000	1.87564
	GATE->Q_N (RF)	0.01860	0.00100	0.35526	0.32940	0.06480	0.71128	2.50740	0.30000	1.85476

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	-0.14182	1.26300	1.26300	-0.30761	2.50740	2.50740	-0.38370
	setup	GATE (F)	0.01860	0.01860	0.16627	1.26300	1.26300	0.37237	2.50740	2.50740	0.49881

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	-0.07091	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.09047	1.26300	1.26300	0.05127	2.50740	2.50740	0.02361

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	-0.05667	2.50740	2.50740	-0.07969
	removal	GATE (F)	0.01860	0.01860	0.03423	1.26300	1.26300	0.11603	2.50740	2.50740	0.14758

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	0.30090	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	0.14069	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	0.00357	0.32940	0.06480	0.00381	2.50740	0.30000	0.00349
	GATE	0.01860	0.00100	0.00673	0.32940	0.06480	0.00709	2.50740	0.30000	0.00677

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	0.00221	0.32940	0.06480	0.00076	2.50740	0.30000	0.00043
	GATE	0.01860	0.00100	0.00674	0.32940	0.06480	0.00720	2.50740	0.30000	0.00707
	RESET_B	0.01860	0.00100	0.00598	0.32940	0.06480	0.00612	2.50740	0.30000	0.00718

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	0.00222	0.32940	0.06480	0.00084	2.50740	0.30000	0.00044
	GATE	0.01860	0.00100	0.01149	0.32940	0.06480	0.01178	2.50740	0.30000	0.01300
	RESET_B	0.01860	0.00100	0.00598	0.32940	0.06480	0.00623	2.50740	0.30000	0.00723

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	0.00357	0.32940	0.06480	0.00374	2.50740	0.30000	0.00352
	GATE	0.01860	0.00100	0.00672	0.32940	0.06480	0.00703	2.50740	0.30000	0.00695

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01329	0.32940	0.01341	2.50740	0.01561

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01572	0.32940	0.01916	2.50740	0.02130

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	0.00278	0.32940	0.00258	2.50740	0.00472
	!RESET_B	0.01860	0.01329	0.32940	0.01341	2.50740	0.01561

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	0.00535	0.32940	0.00523	2.50740	0.00734
	!RESET_B	0.01860	0.01572	0.32940	0.01916	2.50740	0.02130

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	0.00002	0.32940	0.00001	2.50740	0.00001

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	0.00028	0.32940	0.00019	2.50740	0.00016

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	0.00002	0.32940	0.00001	2.50740	0.00001
	(!D * !GATE * !Q)	0.01860	0.00002	0.32940	0.00001	2.50740	0.00001

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	0.00028	0.32940	0.00019	2.50740	0.00016
	(!D * !GATE * !Q)	0.01860	0.00028	0.32940	0.00019	2.50740	0.00016

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.00950	0.32940	0.00910	2.50740	0.01174

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01173	0.32940	0.01216	2.50740	0.01470

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	0.00950	0.32940	0.00910	2.50740	0.01174
	(!D * !RESET_B * !Q)	0.01860	0.00672	0.32940	0.00646	2.50740	0.00906

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	0.00976	0.32940	0.00937	2.50740	0.01220
	(!D * RESET_B * !Q)	0.01860	0.01173	0.32940	0.01216	2.50740	0.01470
	(!D * !RESET_B * !Q)	0.01860	0.01177	0.32940	0.01218	2.50740	0.01483

DLLRQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00190	0.00273	0.00202	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1556.62000	1837.09000	2128.23000

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_dllrq_1	D->Q (RR)	0.01860	0.00100	0.28861	0.32940	0.06480	0.69506	2.50740	0.30000	1.99152
	GATE_N->Q (FR)	0.01860	0.00100	0.32484	0.32940	0.06480	0.74234	2.50740	0.30000	2.05738
	RESET_B->Q (RR)	0.01860	0.00100	0.12892	0.32940	0.06480	0.53336	2.50740	0.30000	1.88551

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	0.25512	0.32940	0.06480	0.61605	2.50740	0.30000	1.72144
	GATE_N->Q (FF)	0.01860	0.00100	0.24413	0.32940	0.06480	0.62318	2.50740	0.30000	1.82145
	RESET_B->Q (FF)	0.01860	0.00100	0.09855	0.32940	0.06480	0.48039	2.50740	0.30000	1.67735

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	-0.10514	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.15643
	setup	GATE_N (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.14571	2.50740	2.50740	0.18004

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	-0.13204	1.26300	1.26300	-0.31841	2.50740	2.50740	-0.40731
	setup	GATE_N (R)	0.01860	0.01860	0.14671	1.26300	1.26300	0.36968	2.50740	2.50740	0.49586

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	-0.05379	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.16529
	removal	GATE_N (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.17269	2.50740	2.50740	0.20070

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	0.29129	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	0.16632	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	0.00472	0.32940	0.06480	0.00516	2.50740	0.30000	0.00466
	GATE_N	0.01860	0.00100	0.00561	0.32940	0.06480	0.00519	2.50740	0.30000	0.00493
	RESET_B	0.01860	0.00100	0.00728	0.32940	0.06480	0.00735	2.50740	0.30000	0.00860

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	0.00416	0.32940	0.06480	0.00037	2.50740	0.30000	0.00009
	GATE_N	0.01860	0.00100	0.00471	0.32940	0.06480	0.00435	2.50740	0.30000	0.00426
	RESET_B	0.01860	0.00100	0.00605	0.32940	0.06480	0.00620	2.50740	0.30000	0.00862

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00953	0.32940	0.00919	2.50740	0.01131

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00999	0.32940	0.01396	2.50740	0.01606

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	0.00105	0.32940	0.00086	2.50740	0.00298
	!RESET_B	0.01860	0.00953	0.32940	0.00919	2.50740	0.01131

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	0.00372	0.32940	0.00359	2.50740	0.00569
	!RESET_B	0.01860	0.00999	0.32940	0.01396	2.50740	0.01606

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	0.00016	0.32940	0.00016	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	0.00021	0.32940	0.00012	2.50740	0.00009

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	0.00016	0.32940	0.00016	2.50740	0.00016
	(!D * GATE_N * !Q)	0.01860	0.00016	0.32940	0.00016	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	0.00021	0.32940	0.00012	2.50740	0.00008
	(!D * GATE_N * !Q)	0.01860	0.00021	0.32940	0.00012	2.50740	0.00009

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	0.01060	0.32940	0.01024	2.50740	0.01264

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	0.01181	0.32940	0.01226	2.50740	0.01482

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	0.01060	0.32940	0.01024	2.50740	0.01264
	(!D * !RESET_B * !Q)	0.01860	0.00629	0.32940	0.00602	2.50740	0.00861

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	0.01020	0.32940	0.00994	2.50740	0.01244
	(!D * RESET_B * !Q)	0.01860	0.01181	0.32940	0.01226	2.50740	0.01482
	(!D * !RESET_B * !Q)	0.01860	0.01186	0.32940	0.01231	2.50740	0.01494

DLLR



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00200	0.00284	0.00215	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	2052.71000	2408.13000	2640.82000

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	0.31693	0.32940	0.06480	0.73514	2.50740	0.30000	2.02883
	GATE_N->Q (FR)	0.01860	0.00100	0.35298	0.32940	0.06480	0.78336	2.50740	0.30000	2.09608

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	0.26907	0.32940	0.06480	0.63708	2.50740	0.30000	1.73910
	GATE_N->Q (FF)	0.01860	0.00100	0.25951	0.32940	0.06480	0.64703	2.50740	0.30000	1.84860
	RESET_B->Q (FF)	0.01860	0.00100	0.10664	0.32940	0.06480	0.51157	2.50740	0.30000	1.74636

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	0.32932	0.32940	0.06480	0.71834	2.50740	0.30000	1.97159
	GATE_N->Q_N (FR)	0.01860	0.00100	0.32005	0.32940	0.06480	0.72808	2.50740	0.30000	2.07993
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16786	0.32940	0.06480	0.58296	2.50740	0.30000	1.93296

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	0.38453	0.32940	0.06480	0.73652	2.50740	0.30000	1.87723
	GATE_N->Q_N (FF)	0.01860	0.00100	0.42102	0.32940	0.06480	0.78468	2.50740	0.30000	1.94705

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	-0.11737	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.16234
	setup	GATE_N (R)	0.01860	0.01860	0.13693	1.26300	1.26300	0.15381	2.50740	2.50740	0.18890

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	-0.13693	1.26300	1.26300	-0.32380	2.50740	2.50740	-0.41026
	setup	GATE_N (R)	0.01860	0.01860	0.15405	1.26300	1.26300	0.37777	2.50740	2.50740	0.50471

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	-0.04157	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.08855
	removal	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.12952	2.50740	2.50740	0.13282

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	0.30090	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	0.18555	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	0.00746	0.32940	0.06480	0.04513	2.50740	0.30000	0.18148
	GATE_N	0.01860	0.00100	0.01409	0.32940	0.06480	0.05198	2.50740	0.30000	0.18877

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	0.00669	0.32940	0.06480	0.03799	2.50740	0.30000	0.17439
	GATE_N	0.01860	0.00100	0.01282	0.32940	0.06480	0.05060	2.50740	0.30000	0.18697
	RESET_B	0.01860	0.00100	0.01866	0.32940	0.06480	0.05584	2.50740	0.30000	0.19424

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	0.00671	0.32940	0.06480	0.03806	2.50740	0.30000	0.17450
	GATE_N	0.01860	0.00100	0.02323	0.32940	0.06480	0.06094	2.50740	0.30000	0.20023
	RESET_B	0.01860	0.00100	0.01866	0.32940	0.06480	0.05612	2.50740	0.30000	0.19468

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	0.00745	0.32940	0.06480	0.04500	2.50740	0.30000	0.18156
	GATE_N	0.01860	0.00100	0.01407	0.32940	0.06480	0.05195	2.50740	0.30000	0.18885

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.01393	0.32940	0.01406	2.50740	0.01628

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.01398	0.32940	0.02042	2.50740	0.02256

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	0.00282	0.32940	0.00263	2.50740	0.00477
	!RESET_B	0.01860	0.01393	0.32940	0.01406	2.50740	0.01628

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	0.00265	0.32940	0.00253	2.50740	0.00464
	!RESET_B	0.01860	0.01398	0.32940	0.02042	2.50740	0.02256

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	0.00215	0.32940	0.00214	2.50740	0.00214

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	0.00030	0.32940	0.00022	2.50740	0.00018

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	0.00215	0.32940	0.00214	2.50740	0.00214
	(!D * GATE_N * !Q)	0.01860	-0.00000	0.32940	-0.00001	2.50740	-0.00001

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	0.00031	0.32940	0.00022	2.50740	0.00018
	(!D * GATE_N * !Q)	0.01860	0.00030	0.32940	0.00022	2.50740	0.00018

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	0.01046	0.32940	0.01250	2.50740	0.01508

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	0.01040	0.32940	0.01014	2.50740	0.01264

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	0.01063	0.32940	0.01028	2.50740	0.01267
	(!D * RESET_B * !Q)	0.01860	0.01046	0.32940	0.01250	2.50740	0.01508
	(!D * !RESET_B * !Q)	0.01860	0.01051	0.32940	0.01254	2.50740	0.01511

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	0.01040	0.32940	0.01014	2.50740	0.01264
	(!D * !RESET_B * !Q)	0.01860	0.00683	0.32940	0.00659	2.50740	0.00924

DLY1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00140	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	797.60500	914.86200	1032.12000

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	0.18047	0.32940	0.06480	0.58465	2.50740	0.30000	1.86078

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	0.21054	0.32940	0.06480	0.59497	2.50740	0.30000	1.83148

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	0.01004	0.32940	0.06480	0.01005	2.50740	0.30000	0.01078

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	0.00960	0.32940	0.06480	0.00971	2.50740	0.30000	0.01069

DLY2



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00139	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	840.62300	957.87700	1075.13000

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	0.25740	0.32940	0.06480	0.67339	2.50740	0.30000	1.99890

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	0.29284	0.32940	0.06480	0.69831	2.50740	0.30000	1.99538

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	0.01169	0.32940	0.06480	0.01179	2.50740	0.30000	0.01235

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	0.01133	0.32940	0.06480	0.01141	2.50740	0.30000	0.01220

DLY4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00142	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1694.06000	1811.32000	1928.58000

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	0.53818	0.32940	0.06480	0.99527	2.50740	0.30000	2.43191

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	0.56948	0.32940	0.06480	1.02218	2.50740	0.30000	2.44372

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	0.01643	0.32940	0.06480	0.01631	2.50740	0.30000	0.01669

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	0.01613	0.32940	0.06480	0.01607	2.50740	0.30000	0.01660

EINVIN_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00780	0.00843	1.20000
sg13g2_einvn_2	0.00401	0.00453	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	717.43200	1402.49000	2087.55000
sg13g2_einvn_2	355.00500	697.53300	1040.06000

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	0.00879	0.03654	0.32940	0.26699	0.78039	2.50740	1.20779	3.96752
	TE_B->Z (RR)	0.01860	0.00879	0.07559	0.32940	0.26699	0.17956	2.50740	1.20779	0.39969
	TE_B->Z (FR)	0.01860	0.00879	0.04516	0.32940	0.26699	0.76783	2.50740	1.20779	3.78204
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00492	0.03961	0.32940	0.13352	0.77992	2.50740	0.60392	3.96567
	TE_B->Z (RR)	0.01860	0.00492	0.07464	0.32940	0.13352	0.17878	2.50740	0.60392	0.41672
	TE_B->Z (FR)	0.01860	0.00492	0.04757	0.32940	0.13352	0.76808	2.50740	0.60392	3.78244

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	0.01543	0.03181	0.32940	0.27363	0.64953	2.50740	1.21443	3.42440
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00841	0.03426	0.32940	0.13701	0.64910	2.50740	0.60741	3.42474

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	0.00879	0.00442	0.32940	0.26699	0.00540	2.50740	1.20779	0.00628
	TE_B	0.01860	0.00879	0.01192	0.32940	0.26699	0.01119	2.50740	1.20779	0.01168
sg13g2_einvn_2	A	0.01860	0.00492	0.00227	0.32940	0.13352	0.00267	2.50740	0.60392	0.00313
	TE_B	0.01860	0.00492	0.00585	0.32940	0.13352	0.00551	2.50740	0.60392	0.00557

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	0.01543	0.00427	0.32940	0.27363	0.00544	2.50740	1.21443	0.00466
sg13g2_einvn_2	A	0.01860	0.00841	0.00228	0.32940	0.13701	0.00275	2.50740	0.60741	0.00248

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	-0.00826	0.32940	-0.00871	2.50740	-0.00601
sg13g2_einvn_2	0.01860	-0.00355	0.32940	-0.00381	2.50740	-0.00245

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	0.01124	0.32940	0.01126	2.50740	0.01443
sg13g2_einvn_2	0.01860	0.00569	0.32940	0.00568	2.50740	0.00728

FILLx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_8	14.51520
sg13g2_fill_2	3.62880
sg13g2_fill_4	7.25760

Pin Capacitance Information Leakage Information

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

GCLK



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00217	0.00459	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	1657.85000	1819.50000	1934.01000

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	0.11291	0.32940	0.06480	0.51421	2.50740	0.30000	1.84299

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	0.09046	0.32940	0.06480	0.46580	2.50740	0.30000	1.63654

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	-0.06202	1.26300	1.26300	-0.22308	2.50740	2.50740	-0.32766
	setup	CLK (R)	0.01860	0.01860	0.11983	1.26300	1.26300	0.32089	2.50740	2.50740	0.48840

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	-0.03031	1.26300	1.26300	-0.02259	2.50740	2.50740	-0.01330
	setup	CLK (R)	0.01860	0.01860	0.08771	1.26300	1.26300	0.08969	2.50740	2.50740	0.09760

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	0.36179	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	0.15991	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	0.00655	0.32940	0.06480	0.00666	2.50740	0.30000	0.00775

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	0.00484	0.32940	0.06480	0.00505	2.50740	0.30000	0.00690

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.01486	0.32940	0.01563	2.50740	0.01731

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.00869	0.32940	0.02181	2.50740	0.02378

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	0.01486	0.32940	0.01563	2.50740	0.01731

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	0.00869	0.32940	0.02181	2.50740	0.02378

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.00594	0.32940	0.00565	2.50740	0.00826

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.00670	0.32940	0.00638	2.50740	0.00901

INx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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_1	5.44320
sg13g2_inv_2	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04114	4.80000
sg13g2_inv_8	0.02112	2.40000
sg13g2_inv_4	0.01055	1.20000
sg13g2_inv_1	0.00270	0.30000
sg13g2_inv_2	0.00534	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	2162.56000	4902.84000	7643.12000
sg13g2_inv_8	1081.28000	2451.44000	3821.60000
sg13g2_inv_4	540.64000	1225.71000	1910.78000
sg13g2_inv_1	135.28800	306.52100	477.75300
sg13g2_inv_2	270.32500	612.86400	955.40300

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	0.02457	0.32940	1.03680	0.49187	2.50740	4.80000	2.70428
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.02195	0.32940	0.51840	0.48799	2.50740	2.40000	2.69972
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.02254	0.32940	0.25920	0.48781	2.50740	1.20000	2.69894
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02821	0.32940	0.06480	0.48851	2.50740	0.30000	2.69729
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.02407	0.32940	0.12960	0.48735	2.50740	0.60000	2.69578

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	0.02456	0.32940	1.03680	0.46394	2.50740	4.80000	2.59142
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.02172	0.32940	0.51840	0.46097	2.50740	2.40000	2.58848
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.02226	0.32940	0.25920	0.46058	2.50740	1.20000	2.58760
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.02763	0.32940	0.06480	0.46034	2.50740	0.30000	2.58223
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.02370	0.32940	0.12960	0.45936	2.50740	0.60000	2.58122

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	0.01699	0.32940	1.03680	0.02126	2.50740	4.80000	0.01679
sg13g2_inv_8	A	0.01860	0.00100	0.00856	0.32940	0.51840	0.01051	2.50740	2.40000	0.00899
sg13g2_inv_4	A	0.01860	0.00100	0.00433	0.32940	0.25920	0.00531	2.50740	1.20000	0.00452
sg13g2_inv_1	A	0.01860	0.00100	0.00131	0.32940	0.06480	0.00145	2.50740	0.30000	0.00122
sg13g2_inv_2	A	0.01860	0.00100	0.00222	0.32940	0.12960	0.00254	2.50740	0.60000	0.00219

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	0.01531	0.32940	1.03680	0.01886	2.50740	4.80000	0.01702
sg13g2_inv_8	A	0.01860	0.00100	0.00773	0.32940	0.51840	0.00932	2.50740	2.40000	0.00812
sg13g2_inv_4	A	0.01860	0.00100	0.00392	0.32940	0.25920	0.00460	2.50740	1.20000	0.00413
sg13g2_inv_1	A	0.01860	0.00100	0.00137	0.32940	0.06480	0.00143	2.50740	0.30000	0.00131
sg13g2_inv_2	A	0.01860	0.00100	0.00208	0.32940	0.12960	0.00236	2.50740	0.60000	0.00210

ITL



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.01543	0.01451	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	1299.58000	2669.69000	4039.80000

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	0.01656	0.03507	0.32940	0.53396	0.78167	2.50740	2.41556	3.97500
	TE_B->Z (RR)	0.01860	0.01656	0.09463	0.32940	0.53396	0.22693	2.50740	2.41556	0.55939
	TE_B->Z (FR)	0.01860	0.01656	0.04550	0.32940	0.53396	0.77029	2.50740	2.41556	3.78884

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	0.02971	0.03059	0.32940	0.54711	0.65014	2.50740	2.42871	3.43205

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	0.01656	0.00871	0.32940	0.53396	0.01100	2.50740	2.41556	0.01247
	TE_B	0.01860	0.01656	0.02666	0.32940	0.53396	0.02343	2.50740	2.41556	0.02271

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	0.02971	0.00827	0.32940	0.54711	0.01076	2.50740	2.42871	0.00987

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	-0.01797	0.32940	-0.01986	2.50740	-0.02003

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	0.01797	0.32940	0.01986	2.50740	0.02277

KEEPSTATE



sg13g2_stdcell_slow_1p08V_125C Cell
Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage
1.08, 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	0.01149	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	140.38500	571.88300	1003.38000

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	0.00396	0.32940	0.00641	2.50740	0.02556

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sighold	0.01860	0.00334	0.32940	0.00430	2.50740	0.02289

MUX2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00260	0.00270	0.00463	0.60000
sg13g2_mux2_1	0.00259	0.00270	0.00464	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	1020.27000	1363.34000	1627.00000
sg13g2_mux2_1	751.57700	1057.00000	1491.98000

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	0.14044	0.32940	0.12960	0.58017	2.50740	0.60000	1.98111
	A1->X (RR)	0.01860	0.00100	0.14045	0.32940	0.12960	0.58094	2.50740	0.60000	1.98317
	S->X (-R)	0.01860	0.00100	0.14503	0.32940	0.12960	0.58074	2.50740	0.60000	2.00195
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.12112	0.32940	0.06480	0.53415	2.50740	0.30000	1.87149
	A1->X (RR)	0.01860	0.00100	0.12113	0.32940	0.06480	0.53468	2.50740	0.30000	1.87285
	S->X (-R)	0.01860	0.00100	0.12621	0.32940	0.06480	0.53923	2.50740	0.30000	1.90140

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	0.17927	0.32940	0.12960	0.61544	2.50740	0.60000	1.92069
	A1->X (FF)	0.01860	0.00100	0.17904	0.32940	0.12960	0.61622	2.50740	0.60000	1.91937
	S->X (-F)	0.01860	0.00100	0.19668	0.32940	0.12960	0.60672	2.50740	0.60000	1.87619
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.15043	0.32940	0.06480	0.55185	2.50740	0.30000	1.78849
	A1->X (FF)	0.01860	0.00100	0.15034	0.32940	0.06480	0.55251	2.50740	0.30000	1.79052
	S->X (-F)	0.01860	0.00100	0.16517	0.32940	0.06480	0.54691	2.50740	0.30000	1.75707

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	0.14503	0.32940	0.12960	0.58074	2.50740	0.60000	2.00195
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.19935	0.32940	0.12960	0.61741	2.50740	0.60000	1.88084
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.12621	0.32940	0.06480	0.53923	2.50740	0.30000	1.90140
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.18021	0.32940	0.06480	0.58373	2.50740	0.30000	1.84338

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	0.19668	0.32940	0.12960	0.60672	2.50740	0.60000	1.87619
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.24587	0.32940	0.12960	0.64804	2.50740	0.60000	1.80416
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.16517	0.32940	0.06480	0.54691	2.50740	0.30000	1.75707
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.21421	0.32940	0.06480	0.59328	2.50740	0.30000	1.74830

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	0.00920	0.32940	0.12960	0.00957	2.50740	0.60000	0.01054
	A1	0.01860	0.00100	0.00930	0.32940	0.12960	0.00965	2.50740	0.60000	0.01068
	S	0.01860	0.00100	0.01032	0.32940	0.12960	0.01093	2.50740	0.60000	0.01154
sg13g2_mux2_1	A0	0.01860	0.00100	0.00628	0.32940	0.06480	0.00621	2.50740	0.30000	0.00781
	A1	0.01860	0.00100	0.00640	0.32940	0.06480	0.00633	2.50740	0.30000	0.00796
	S	0.01860	0.00100	0.00747	0.32940	0.06480	0.00758	2.50740	0.30000	0.00872

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	0.00982	0.32940	0.12960	0.01010	2.50740	0.60000	0.01243
	A1	0.01860	0.00100	0.00978	0.32940	0.12960	0.01006	2.50740	0.60000	0.01212
	S	0.01860	0.00100	0.01043	0.32940	0.12960	0.01106	2.50740	0.60000	0.01103
sg13g2_mux2_1	A0	0.01860	0.00100	0.00697	0.32940	0.06480	0.00704	2.50740	0.30000	0.00931
	A1	0.01860	0.00100	0.00692	0.32940	0.06480	0.00697	2.50740	0.30000	0.00921
	S	0.01860	0.00100	0.00765	0.32940	0.06480	0.00791	2.50740	0.30000	0.00794

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	0.01026	0.32940	0.12960	0.01117	2.50740	0.60000	0.01047
	S	(!A0 * A1)	0.01860	0.00100	0.01032	0.32940	0.12960	0.01093	2.50740	0.60000	0.01154
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00738	0.32940	0.06480	0.00781	2.50740	0.30000	0.00731
	S	(!A0 * A1)	0.01860	0.00100	0.00747	0.32940	0.06480	0.00758	2.50740	0.30000	0.00872

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	0.01043	0.32940	0.12960	0.01106	2.50740	0.60000	0.01103
	S	(!A0 * A1)	0.01860	0.00100	0.00974	0.32940	0.12960	0.01042	2.50740	0.60000	0.01135
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00765	0.32940	0.06480	0.00791	2.50740	0.30000	0.00794
	S	(!A0 * A1)	0.01860	0.00100	0.00699	0.32940	0.06480	0.00730	2.50740	0.30000	0.00867

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00312	0.32940	0.00291	2.50740	0.00500
sg13g2_mux2_1	0.01860	0.00312	0.32940	0.00292	2.50740	0.00501

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00333	0.32940	0.00309	2.50740	0.00513
sg13g2_mux2_1	0.01860	0.00332	0.32940	0.00308	2.50740	0.00513

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	0.00304	0.32940	0.00271	2.50740	0.00480
	(!A0 * !A1)	0.01860	0.00312	0.32940	0.00291	2.50740	0.00500
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00304	0.32940	0.00272	2.50740	0.00481
	(!A0 * !A1)	0.01860	0.00312	0.32940	0.00292	2.50740	0.00501

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	0.00302	0.32940	0.00286	2.50740	0.00492
	(!A0 * !A1)	0.01860	0.00333	0.32940	0.00309	2.50740	0.00513
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00301	0.32940	0.00285	2.50740	0.00492
	(!A0 * !A1)	0.01860	0.00332	0.32940	0.00308	2.50740	0.00513

MUX4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00256	0.00254	0.00256	0.00262	0.00782	0.00473	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	997.58000	2353.50000	3423.64000

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	0.22151	0.32940	0.06480	0.66243	2.50740	0.30000	2.15334
	A1->X (RR)	0.01860	0.00100	0.21204	0.32940	0.06480	0.65907	2.50740	0.30000	2.14723
	A2->X (RR)	0.01860	0.00100	0.23153	0.32940	0.06480	0.67798	2.50740	0.30000	2.18850
	A3->X (RR)	0.01860	0.00100	0.22315	0.32940	0.06480	0.67415	2.50740	0.30000	2.18409
	S0->X (-R)	0.01860	0.00100	0.19533	0.32940	0.06480	0.64828	2.50740	0.30000	2.12216
	S1->X (-R)	0.01860	0.00100	0.11124	0.32940	0.06480	0.53202	2.50740	0.30000	1.84943

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	0.24863	0.32940	0.06480	0.66445	2.50740	0.30000	1.94393
	A1->X (FF)	0.01860	0.00100	0.25199	0.32940	0.06480	0.66470	2.50740	0.30000	1.94415
	A2->X (FF)	0.01860	0.00100	0.26739	0.32940	0.06480	0.68705	2.50740	0.30000	1.98643
	A3->X (FF)	0.01860	0.00100	0.26933	0.32940	0.06480	0.68659	2.50740	0.30000	1.98402
	S0->X (-F)	0.01860	0.00100	0.23375	0.32940	0.06480	0.66007	2.50740	0.30000	1.95938
	S1->X (-F)	0.01860	0.00100	0.16536	0.32940	0.06480	0.56870	2.50740	0.30000	1.70304

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	0.19533	0.32940	0.06480	0.64828	2.50740	0.30000	2.12216
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.18186	0.32940	0.06480	0.62681	2.50740	0.30000	2.07165
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.28081	0.32940	0.06480	0.72149	2.50740	0.30000	2.05834
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.27033	0.32940	0.06480	0.70814	2.50740	0.30000	2.03824
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.11158	0.32940	0.06480	0.53202	2.50740	0.30000	1.84916
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.11124	0.32940	0.06480	0.53202	2.50740	0.30000	1.84943
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.14908	0.32940	0.06480	0.56594	2.50740	0.30000	1.80749
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.14852	0.32940	0.06480	0.56541	2.50740	0.30000	1.80722

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	0.23375	0.32940	0.06480	0.66007	2.50740	0.30000	1.95938
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.21130	0.32940	0.06480	0.63049	2.50740	0.30000	1.89975
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.30511	0.32940	0.06480	0.73451	2.50740	0.30000	1.95318
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.28711	0.32940	0.06480	0.71158	2.50740	0.30000	1.92569
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.13528	0.32940	0.06480	0.52950	2.50740	0.30000	1.68161
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.13503	0.32940	0.06480	0.52932	2.50740	0.30000	1.68134
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.16510	0.32940	0.06480	0.56899	2.50740	0.30000	1.70293
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.16536	0.32940	0.06480	0.56870	2.50740	0.30000	1.70304

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	0.01470	0.32940	0.06480	0.01484	2.50740	0.30000	0.01560
	A1	0.01860	0.00100	0.00949	0.32940	0.06480	0.00961	2.50740	0.30000	0.01035
	A2	0.01860	0.00100	0.01470	0.32940	0.06480	0.01488	2.50740	0.30000	0.01553
	A3	0.01860	0.00100	0.00971	0.32940	0.06480	0.00984	2.50740	0.30000	0.01056
	S0	0.01860	0.00100	0.00502	0.32940	0.06480	0.00389	2.50740	0.30000	0.00559
	S1	0.01860	0.00100	0.00582	0.32940	0.06480	0.00666	2.50740	0.30000	0.00823

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	0.00940	0.32940	0.06480	0.00960	2.50740	0.30000	0.01050
	A1	0.01860	0.00100	0.00978	0.32940	0.06480	0.00997	2.50740	0.30000	0.01096
	A2	0.01860	0.00100	0.01011	0.32940	0.06480	0.01030	2.50740	0.30000	0.01130
	A3	0.01860	0.00100	0.01007	0.32940	0.06480	0.01026	2.50740	0.30000	0.01117
	S0	0.01860	0.00100	0.00493	0.32940	0.06480	0.00682	2.50740	0.30000	0.01152
	S1	0.01860	0.00100	0.00387	0.32940	0.06480	0.00407	2.50740	0.30000	0.00624

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	0.00924	0.32940	0.06480	0.00949	2.50740	0.30000	0.00911
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00919	0.32940	0.06480	0.00954	2.50740	0.30000	0.00904
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00502	0.32940	0.06480	0.00389	2.50740	0.30000	0.00559
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00262	0.32940	0.06480	0.00033	2.50740	0.30000	0.00431
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00582	0.32940	0.06480	0.00666	2.50740	0.30000	0.00823
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00620	0.32940	0.06480	0.00705	2.50740	0.30000	0.00839
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00378	0.32940	0.06480	0.00395	2.50740	0.30000	0.00561
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00384	0.32940	0.06480	0.00401	2.50740	0.30000	0.00561

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	0.01010	0.32940	0.06480	0.01034	2.50740	0.30000	0.01008
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00973	0.32940	0.06480	0.01071	2.50740	0.30000	0.01048
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00548	0.32940	0.06480	0.00633	2.50740	0.30000	0.01117
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00493	0.32940	0.06480	0.00682	2.50740	0.30000	0.01152
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00623	0.32940	0.06480	0.00715	2.50740	0.30000	0.00905
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00629	0.32940	0.06480	0.00720	2.50740	0.30000	0.00912
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00368	0.32940	0.06480	0.00391	2.50740	0.30000	0.00598
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00387	0.32940	0.06480	0.00407	2.50740	0.30000	0.00624

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01130	0.32940	0.01322	2.50740	0.01579

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01023	0.32940	0.01002	2.50740	0.01217

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	0.01130	0.32940	0.01322	2.50740	0.01579
	(A0 * A1 * !S1)	0.01860	0.01139	0.32940	0.01411	2.50740	0.01656
	(!A2 * !A3 * S1)	0.01860	0.00652	0.32940	0.00615	2.50740	0.01124
	(!A0 * !A1 * !S1)	0.01860	0.00733	0.32940	0.00685	2.50740	0.01183

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	0.00980	0.32940	0.00952	2.50740	0.01168
	(A0 * A1 * !S1)	0.01860	0.01023	0.32940	0.01002	2.50740	0.01217
	(!A2 * !A3 * S1)	0.01860	0.00972	0.32940	0.00941	2.50740	0.01154
	(!A0 * !A1 * !S1)	0.01860	0.01169	0.32940	0.01478	2.50740	0.01697

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00330	0.32940	0.00318	2.50740	0.00592

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00319	0.32940	0.00315	2.50740	0.00589

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	0.00257	0.32940	0.00246	2.50740	0.00520
	(A0 * A2 * !S0)	0.01860	0.00257	0.32940	0.00246	2.50740	0.00519
	(!A1 * !A3 * S0)	0.01860	0.00330	0.32940	0.00318	2.50740	0.00592
	(!A0 * !A2 * !S0)	0.01860	0.00333	0.32940	0.00322	2.50740	0.00597

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	0.00246	0.32940	0.00244	2.50740	0.00528
	(A0 * A2 * !S0)	0.01860	0.00246	0.32940	0.00244	2.50740	0.00527
	(!A1 * !A3 * S0)	0.01860	0.00319	0.32940	0.00315	2.50740	0.00589
	(!A0 * !A2 * !S0)	0.01860	0.00323	0.32940	0.00318	2.50740	0.00591

NAND2B1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00209	0.00283	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	215.73000	541.44500	1046.64000

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	0.07817	0.32940	0.06480	0.47937	2.50740	0.30000	1.78877
	B->Y (FR)	0.01860	0.00100	0.03643	0.32940	0.06480	0.49822	2.50740	0.30000	2.70774

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	0.09425	0.32940	0.06480	0.64510	2.50740	0.30000	2.46845
	B->Y (RF)	0.01860	0.00100	0.05694	0.32940	0.06480	0.64842	2.50740	0.30000	3.29969

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	0.00180	0.32940	0.06480	0.00198	2.50740	0.30000	0.00122
	B	0.01860	0.00100	0.00179	0.32940	0.06480	0.00170	2.50740	0.30000	0.00140

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	0.00322	0.32940	0.06480	0.00333	2.50740	0.30000	0.00269
	B	0.01860	0.00100	0.00334	0.32940	0.06480	0.00328	2.50740	0.30000	0.00301

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	0.00307	0.32940	0.00296	2.50740	0.00514

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	0.00198	0.32940	0.00187	2.50740	0.00398

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	0.00307	0.32940	0.00296	2.50740	0.00514

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	0.00198	0.32940	0.00187	2.50740	0.00398

NAND2B2



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00206	0.00529	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	360.32300	852.36700	2001.46000

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	0.10281	0.32940	0.12960	0.53005	2.50740	0.60000	1.91612
	B->Y (FR)	0.01860	0.00100	0.02763	0.32940	0.12960	0.49070	2.50740	0.60000	2.69952

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	0.12757	0.32940	0.12960	0.72749	2.50740	0.60000	2.72480
	B->Y (RF)	0.01860	0.00100	0.04004	0.32940	0.12960	0.66780	2.50740	0.60000	3.49744

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	0.00310	0.32940	0.12960	0.00326	2.50740	0.60000	0.00201
	B	0.01860	0.00100	0.00248	0.32940	0.12960	0.00283	2.50740	0.60000	0.00224

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	0.00673	0.32940	0.12960	0.00726	2.50740	0.60000	0.00665
	B	0.01860	0.00100	0.00382	0.32940	0.12960	0.00391	2.50740	0.60000	0.00379

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	0.00528	0.32940	0.00497	2.50740	0.00676

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	0.00463	0.32940	0.00441	2.50740	0.00623

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	0.00528	0.32940	0.00497	2.50740	0.00676

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	0.00463	0.32940	0.00441	2.50740	0.00623

NAND2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00527	0.00534	0.60000
sg13g2_nand2_1	0.00272	0.00279	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	88.79480	627.16600	1910.22000
sg13g2_nand2_1	45.54620	316.19300	955.36800

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	0.02794	0.32940	0.12960	0.49145	2.50740	0.60000	2.70126
	B->Y (FR)	0.01860	0.00100	0.03373	0.32940	0.12960	0.49787	2.50740	0.60000	2.71013
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.03144	0.32940	0.06480	0.49156	2.50740	0.30000	2.69915
	B->Y (FR)	0.01860	0.00100	0.03675	0.32940	0.06480	0.49747	2.50740	0.30000	2.70620

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	0.04047	0.32940	0.12960	0.66751	2.50740	0.60000	3.49634
	B->Y (RF)	0.01860	0.00100	0.04949	0.32940	0.12960	0.66226	2.50740	0.60000	3.37730
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.04456	0.32940	0.06480	0.65010	2.50740	0.30000	3.41195
	B->Y (RF)	0.01860	0.00100	0.05219	0.32940	0.06480	0.64371	2.50740	0.30000	3.29233

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	0.00250	0.32940	0.12960	0.00277	2.50740	0.60000	0.00224
	B	0.01860	0.00100	0.00337	0.32940	0.12960	0.00330	2.50740	0.60000	0.00273
sg13g2_nand2_1	A	0.01860	0.00100	0.00145	0.32940	0.06480	0.00155	2.50740	0.30000	0.00124
	B	0.01860	0.00100	0.00168	0.32940	0.06480	0.00164	2.50740	0.30000	0.00130

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	0.00383	0.32940	0.12960	0.00395	2.50740	0.60000	0.00369
	B	0.01860	0.00100	0.00635	0.32940	0.12960	0.00626	2.50740	0.60000	0.00594
sg13g2_nand2_1	A	0.01860	0.00100	0.00203	0.32940	0.06480	0.00203	2.50740	0.30000	0.00191
	B	0.01860	0.00100	0.00332	0.32940	0.06480	0.00326	2.50740	0.30000	0.00304

NAND3B1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00207	0.00278	0.00280	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	138.73100	476.68900	1524.28000

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	0.08280	0.32940	0.06480	0.48225	2.50740	0.30000	1.78784
	B->Y (FR)	0.01860	0.00100	0.04133	0.32940	0.06480	0.50271	2.50740	0.30000	2.71270
	C->Y (FR)	0.01860	0.00100	0.04462	0.32940	0.06480	0.50777	2.50740	0.30000	2.71796

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	0.11710	0.32940	0.06480	0.86202	2.50740	0.30000	3.40626
	B->Y (RF)	0.01860	0.00100	0.08766	0.32940	0.06480	0.86583	2.50740	0.30000	4.19727
	C->Y (RF)	0.01860	0.00100	0.09386	0.32940	0.06480	0.85715	2.50740	0.30000	4.03595

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	0.00181	0.32940	0.06480	0.00196	2.50740	0.30000	0.00116
	B	0.01860	0.00100	0.00195	0.32940	0.06480	0.00191	2.50740	0.30000	0.00154
	C	0.01860	0.00100	0.00215	0.32940	0.06480	0.00204	2.50740	0.30000	0.00167

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	0.00448	0.32940	0.06480	0.00470	2.50740	0.30000	0.00450
	B	0.01860	0.00100	0.00439	0.32940	0.06480	0.00436	2.50740	0.30000	0.00456
	C	0.01860	0.00100	0.00551	0.32940	0.06480	0.00543	2.50740	0.30000	0.00549

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	0.00317	0.32940	0.00305	2.50740	0.00524

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	0.00181	0.32940	0.00169	2.50740	0.00381

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	0.00317	0.32940	0.00305	2.50740	0.00524

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	0.00181	0.32940	0.00169	2.50740	0.00381

NAND3



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00272	0.00282	0.00279	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	38.55740	251.45900	1433.05000

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	0.03591	0.32940	0.06480	0.49605	2.50740	0.30000	2.70471
	B->Y (FR)	0.01860	0.00100	0.04162	0.32940	0.06480	0.50220	2.50740	0.30000	2.71170
	C->Y (FR)	0.01860	0.00100	0.04421	0.32940	0.06480	0.50730	2.50740	0.30000	2.71730

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	0.06872	0.32940	0.06480	0.85383	2.50740	0.30000	4.25251
	B->Y (RF)	0.01860	0.00100	0.08298	0.32940	0.06480	0.86113	2.50740	0.30000	4.18991
	C->Y (RF)	0.01860	0.00100	0.08906	0.32940	0.06480	0.85235	2.50740	0.30000	4.02846

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	0.00157	0.32940	0.06480	0.00164	2.50740	0.30000	0.00130
	B	0.01860	0.00100	0.00181	0.32940	0.06480	0.00168	2.50740	0.30000	0.00135
	C	0.01860	0.00100	0.00203	0.32940	0.06480	0.00187	2.50740	0.30000	0.00152

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	0.00312	0.32940	0.06480	0.00311	2.50740	0.30000	0.00335
	B	0.01860	0.00100	0.00443	0.32940	0.06480	0.00438	2.50740	0.30000	0.00456
	C	0.01860	0.00100	0.00551	0.32940	0.06480	0.00547	2.50740	0.30000	0.00562

NAND4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00271	0.00282	0.00284	0.00281	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	39.19550	184.41800	1910.79000

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	0.03825	0.32940	0.06480	0.49846	2.50740	0.30000	2.70879
	B->Y (FR)	0.01860	0.00100	0.04415	0.32940	0.06480	0.50477	2.50740	0.30000	2.71443
	C->Y (FR)	0.01860	0.00100	0.04731	0.32940	0.06480	0.51030	2.50740	0.30000	2.72280
	D->Y (FR)	0.01860	0.00100	0.04832	0.32940	0.06480	0.51472	2.50740	0.30000	2.72958

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	0.09171	0.32940	0.06480	1.06269	2.50740	0.30000	5.11221
	B->Y (RF)	0.01860	0.00100	0.11324	0.32940	0.06480	1.08153	2.50740	0.30000	5.09375
	C->Y (RF)	0.01860	0.00100	0.12561	0.32940	0.06480	1.08260	2.50740	0.30000	4.96387
	D->Y (RF)	0.01860	0.00100	0.13152	0.32940	0.06480	1.08288	2.50740	0.30000	4.85366

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	0.00160	0.32940	0.06480	0.00169	2.50740	0.30000	0.00135
	B	0.01860	0.00100	0.00184	0.32940	0.06480	0.00175	2.50740	0.30000	0.00138
	C	0.01860	0.00100	0.00209	0.32940	0.06480	0.00189	2.50740	0.30000	0.00157
	D	0.01860	0.00100	0.00229	0.32940	0.06480	0.00211	2.50740	0.30000	0.00182

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	0.00375	0.32940	0.06480	0.00374	2.50740	0.30000	0.00347
	B	0.01860	0.00100	0.00504	0.32940	0.06480	0.00490	2.50740	0.30000	0.00469
	C	0.01860	0.00100	0.00616	0.32940	0.06480	0.00608	2.50740	0.30000	0.00580
	D	0.01860	0.00100	0.00723	0.32940	0.06480	0.00714	2.50740	0.30000	0.00677

NOR2Bx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00535	0.00251	0.60000
sg13g2_nor2b_1	0.00276	0.00212	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	612.90500	1082.38000	1394.65000
sg13g2_nor2b_1	342.14900	634.14600	843.06700

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	0.04470	0.32940	0.12960	0.78212	2.50740	0.60000	3.96169
	B_N->Y (RR)	0.01860	0.00100	0.11884	0.32940	0.12960	0.84095	2.50740	0.60000	3.31257
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.05237	0.32940	0.06480	0.78416	2.50740	0.30000	3.96498
	B_N->Y (RR)	0.01860	0.00100	0.10852	0.32940	0.06480	0.80838	2.50740	0.30000	3.22544

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	0.02758	0.32940	0.12960	0.47275	2.50740	0.60000	2.63983
	B_N->Y (FF)	0.01860	0.00100	0.10429	0.32940	0.12960	0.49403	2.50740	0.60000	1.69698
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.03040	0.32940	0.06480	0.46336	2.50740	0.30000	2.58525
	B_N->Y (FF)	0.01860	0.00100	0.08777	0.32940	0.06480	0.44810	2.50740	0.30000	1.56625

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	0.00358	0.32940	0.12960	0.00374	2.50740	0.60000	0.00413
	B_N	0.01860	0.00100	0.00735	0.32940	0.12960	0.00756	2.50740	0.60000	0.00767
sg13g2_nor2b_1	A	0.01860	0.00100	0.00182	0.32940	0.06480	0.00183	2.50740	0.30000	0.00200
	B_N	0.01860	0.00100	0.00378	0.32940	0.06480	0.00379	2.50740	0.30000	0.00380

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	0.00252	0.32940	0.12960	0.00277	2.50740	0.60000	0.00220
	B_N	0.01860	0.00100	0.00355	0.32940	0.12960	0.00366	2.50740	0.60000	0.00251
sg13g2_nor2b_1	A	0.01860	0.00100	0.00162	0.32940	0.06480	0.00166	2.50740	0.30000	0.00144
	B_N	0.01860	0.00100	0.00194	0.32940	0.06480	0.00189	2.50740	0.30000	0.00152

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	0.00500	0.32940	0.00473	2.50740	0.00709
sg13g2_nor2b_1	0.01860	0.00295	0.32940	0.00278	2.50740	0.00490

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	0.00500	0.32940	0.00476	2.50740	0.00697
sg13g2_nor2b_1	0.01860	0.00299	0.32940	0.00283	2.50740	0.00485

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	0.00500	0.32940	0.00473	2.50740	0.00709
sg13g2_nor2b_1	A	0.01860	0.00295	0.32940	0.00278	2.50740	0.00490

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	0.00500	0.32940	0.00476	2.50740	0.00697
sg13g2_nor2b_1	A	0.01860	0.00299	0.32940	0.00283	2.50740	0.00485

NOR2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00540	0.00527	0.30000
sg13g2_nor2_1	0.00284	0.00276	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	501.84400	817.90200	1261.26000
sg13g2_nor2_1	250.90500	408.94600	630.63300

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	0.05725	0.32940	0.06480	0.48226	2.50740	0.30000	2.37841
	B->Y (FR)	0.01860	0.00100	0.04521	0.32940	0.06480	0.48813	2.50740	0.30000	2.54426
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.06143	0.32940	0.06480	0.77408	2.50740	0.30000	3.78247
	B->Y (FR)	0.01860	0.00100	0.05258	0.32940	0.06480	0.78365	2.50740	0.30000	3.96350

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	0.03274	0.32940	0.06480	0.33229	2.50740	0.30000	1.82429
	B->Y (RF)	0.01860	0.00100	0.02719	0.32940	0.06480	0.32412	2.50740	0.30000	1.81327
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.03513	0.32940	0.06480	0.46908	2.50740	0.30000	2.59282
	B->Y (RF)	0.01860	0.00100	0.03051	0.32940	0.06480	0.46342	2.50740	0.30000	2.58520

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	0.00692	0.32940	0.06480	0.00689	2.50740	0.30000	0.00692
	B	0.01860	0.00100	0.00365	0.32940	0.06480	0.00376	2.50740	0.30000	0.00429
sg13g2_nor2_1	A	0.01860	0.00100	0.00342	0.32940	0.06480	0.00334	2.50740	0.30000	0.00363
	B	0.01860	0.00100	0.00183	0.32940	0.06480	0.00185	2.50740	0.30000	0.00204

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	0.00361	0.32940	0.06480	0.00335	2.50740	0.30000	0.00424
	B	0.01860	0.00100	0.00246	0.32940	0.06480	0.00271	2.50740	0.30000	0.00363
sg13g2_nor2_1	A	0.01860	0.00100	0.00179	0.32940	0.06480	0.00160	2.50740	0.30000	0.00148
	B	0.01860	0.00100	0.00162	0.32940	0.06480	0.00166	2.50740	0.30000	0.00145

NOR3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00536	0.00537	0.00526	0.60000
sg13g2_nor3_1	0.00281	0.00283	0.00274	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	435.65700	936.23400	1629.82000
sg13g2_nor3_1	218.47100	471.46400	815.12200

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	0.10452	0.32940	0.12960	1.10954	2.50740	0.60000	5.01661
	B->Y (FR)	0.01860	0.00100	0.09760	0.32940	0.12960	1.11367	2.50740	0.60000	5.18981
	C->Y (FR)	0.01860	0.00100	0.07082	0.32940	0.12960	1.09588	2.50740	0.60000	5.27778
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.11625	0.32940	0.06480	1.11034	2.50740	0.30000	5.00753
	B->Y (FR)	0.01860	0.00100	0.10888	0.32940	0.06480	1.11326	2.50740	0.30000	5.17843
	C->Y (FR)	0.01860	0.00100	0.08545	0.32940	0.06480	1.09862	2.50740	0.30000	5.26933

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	0.03672	0.32940	0.12960	0.47839	2.50740	0.60000	2.60464
	B->Y (RF)	0.01860	0.00100	0.03629	0.32940	0.12960	0.47275	2.50740	0.60000	2.59951
	C->Y (RF)	0.01860	0.00100	0.03016	0.32940	0.12960	0.46600	2.50740	0.60000	2.58996
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.03934	0.32940	0.06480	0.46713	2.50740	0.30000	2.54357
	B->Y (RF)	0.01860	0.00100	0.03856	0.32940	0.06480	0.46254	2.50740	0.30000	2.53923
	C->Y (RF)	0.01860	0.00100	0.03329	0.32940	0.06480	0.45599	2.50740	0.30000	2.53094

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	0.01118	0.32940	0.12960	0.01098	2.50740	0.60000	0.01098
	B	0.01860	0.00100	0.00839	0.32940	0.12960	0.00820	2.50740	0.60000	0.00808
	C	0.01860	0.00100	0.00519	0.32940	0.12960	0.00516	2.50740	0.60000	0.00527
sg13g2_nor3_1	A	0.01860	0.00100	0.00579	0.32940	0.06480	0.00566	2.50740	0.30000	0.00566
	B	0.01860	0.00100	0.00440	0.32940	0.06480	0.00429	2.50740	0.30000	0.00427
	C	0.01860	0.00100	0.00285	0.32940	0.06480	0.00279	2.50740	0.30000	0.00300

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	0.00443	0.32940	0.12960	0.00394	2.50740	0.60000	0.00344
	B	0.01860	0.00100	0.00396	0.32940	0.12960	0.00362	2.50740	0.60000	0.00321
	C	0.01860	0.00100	0.00268	0.32940	0.12960	0.00295	2.50740	0.60000	0.00256
sg13g2_nor3_1	A	0.01860	0.00100	0.00242	0.32940	0.06480	0.00216	2.50740	0.30000	0.00206
	B	0.01860	0.00100	0.00213	0.32940	0.06480	0.00194	2.50740	0.30000	0.00184
	C	0.01860	0.00100	0.00171	0.32940	0.06480	0.00176	2.50740	0.30000	0.00169

NOR4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00535	0.00533	0.00530	0.00522	0.60000
sg13g2_nor4_1	0.00278	0.00281	0.00278	0.00268	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	418.34400	895.97400	1991.75000
sg13g2_nor4_1	209.16800	447.98500	995.88700

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	0.16865	0.32940	0.12960	1.47284	2.50740	0.60000	6.36294
	B->Y (FR)	0.01860	0.00100	0.16239	0.32940	0.12960	1.46977	2.50740	0.60000	6.47487
	C->Y (FR)	0.01860	0.00100	0.14069	0.32940	0.12960	1.45328	2.50740	0.60000	6.59887
	D->Y (FR)	0.01860	0.00100	0.09738	0.32940	0.12960	1.41440	2.50740	0.60000	6.63212
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.17619	0.32940	0.06480	1.46474	2.50740	0.30000	6.33764
	B->Y (FR)	0.01860	0.00100	0.16987	0.32940	0.06480	1.46098	2.50740	0.30000	6.44856
	C->Y (FR)	0.01860	0.00100	0.15077	0.32940	0.06480	1.44811	2.50740	0.30000	6.57651
	D->Y (FR)	0.01860	0.00100	0.11252	0.32940	0.06480	1.41501	2.50740	0.30000	6.61385

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	0.03885	0.32940	0.12960	0.48647	2.50740	0.60000	2.61693
	B->Y (RF)	0.01860	0.00100	0.04018	0.32940	0.12960	0.48257	2.50740	0.60000	2.61147
	C->Y (RF)	0.01860	0.00100	0.03867	0.32940	0.12960	0.47641	2.50740	0.60000	2.60278
	D->Y (RF)	0.01860	0.00100	0.03264	0.32940	0.12960	0.46754	2.50740	0.60000	2.59104
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.04201	0.32940	0.06480	0.48612	2.50740	0.30000	2.61594
	B->Y (RF)	0.01860	0.00100	0.04313	0.32940	0.06480	0.48259	2.50740	0.30000	2.61250
	C->Y (RF)	0.01860	0.00100	0.04136	0.32940	0.06480	0.47684	2.50740	0.30000	2.60436
	D->Y (RF)	0.01860	0.00100	0.03568	0.32940	0.06480	0.46979	2.50740	0.30000	2.59523

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	0.01519	0.32940	0.12960	0.01496	2.50740	0.60000	0.01473
	B	0.01860	0.00100	0.01252	0.32940	0.12960	0.01228	2.50740	0.60000	0.01224
	C	0.01860	0.00100	0.00982	0.32940	0.12960	0.00957	2.50740	0.60000	0.00974
	D	0.01860	0.00100	0.00663	0.32940	0.12960	0.00660	2.50740	0.60000	0.00688
sg13g2_nor4_1	A	0.01860	0.00100	0.00748	0.32940	0.06480	0.00735	2.50740	0.30000	0.00729
	B	0.01860	0.00100	0.00613	0.32940	0.06480	0.00601	2.50740	0.30000	0.00591
	C	0.01860	0.00100	0.00479	0.32940	0.06480	0.00465	2.50740	0.30000	0.00465
	D	0.01860	0.00100	0.00326	0.32940	0.06480	0.00320	2.50740	0.30000	0.00338

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	0.00552	0.32940	0.12960	0.00493	2.50740	0.60000	0.00434
	B	0.01860	0.00100	0.00508	0.32940	0.12960	0.00458	2.50740	0.60000	0.00402
	C	0.01860	0.00100	0.00399	0.32940	0.12960	0.00383	2.50740	0.60000	0.00349
	D	0.01860	0.00100	0.00276	0.32940	0.12960	0.00302	2.50740	0.60000	0.00256
sg13g2_nor4_1	A	0.01860	0.00100	0.00279	0.32940	0.06480	0.00251	2.50740	0.30000	0.00221
	B	0.01860	0.00100	0.00258	0.32940	0.06480	0.00234	2.50740	0.30000	0.00207
	C	0.01860	0.00100	0.00220	0.32940	0.06480	0.00211	2.50740	0.30000	0.00184
	D	0.01860	0.00100	0.00175	0.32940	0.06480	0.00186	2.50740	0.30000	0.00161

NP_ANT



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00112

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	3.56270	3.56540	3.56810

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	-0.00025	0.32940	-0.00025	2.50740	-0.00025

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_antennanp	0.01860	0.00025	0.32940	0.00025	2.50740	0.00025

O21AI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00313	0.00314	0.00303	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	110.29500	493.33800	1064.93000

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	0.09722	0.32940	0.06480	0.90822	2.50740	0.30000	4.24816
	A2->Y (FR)	0.01860	0.00100	0.08640	0.32940	0.06480	0.91514	2.50740	0.30000	4.45320
	B1->Y (FR)	0.01860	0.00100	0.03619	0.32940	0.06480	0.54801	2.50740	0.30000	2.96479

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	0.07059	0.32940	0.06480	0.66383	2.50740	0.30000	3.26747
	A2->Y (RF)	0.01860	0.00100	0.05943	0.32940	0.06480	0.65004	2.50740	0.30000	3.24969
	B1->Y (RF)	0.01860	0.00100	0.04567	0.32940	0.06480	0.65169	2.50740	0.30000	3.38808

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	0.03619	0.32940	0.06480	0.54801	2.50740	0.30000	2.96479

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	0.04567	0.32940	0.06480	0.65169	2.50740	0.30000	3.38808

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	0.00414	0.32940	0.06480	0.00394	2.50740	0.30000	0.00410
	A2	0.01860	0.00100	0.00242	0.32940	0.06480	0.00222	2.50740	0.30000	0.00255
	B1	0.01860	0.00100	0.00151	0.32940	0.06480	0.00159	2.50740	0.30000	0.00152

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	0.00390	0.32940	0.06480	0.00367	2.50740	0.30000	0.00361
	A2	0.01860	0.00100	0.00365	0.32940	0.06480	0.00364	2.50740	0.30000	0.00353
	B1	0.01860	0.00100	0.00208	0.32940	0.06480	0.00209	2.50740	0.30000	0.00218

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	0.00151	0.32940	0.06480	0.00159	2.50740	0.30000	0.00152

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	0.00208	0.32940	0.06480	0.00209	2.50740	0.30000	0.00218

OR2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00230	0.00215	0.60000
sg13g2_or2_1	0.00231	0.00215	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	458.47700	743.40600	1137.69000
sg13g2_or2_1	323.45300	522.71900	660.01500

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	0.10162	0.32940	0.12960	0.54414	2.50740	0.60000	1.97244
	B->X (RR)	0.01860	0.00100	0.09506	0.32940	0.12960	0.52936	2.50740	0.60000	1.92052
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.08504	0.32940	0.06480	0.50007	2.50740	0.30000	1.84868
	B->X (RR)	0.01860	0.00100	0.07832	0.32940	0.06480	0.48282	2.50740	0.30000	1.79202

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	0.18292	0.32940	0.12960	0.59049	2.50740	0.60000	1.83601
	B->X (FF)	0.01860	0.00100	0.17434	0.32940	0.12960	0.59234	2.50740	0.60000	1.85422
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.14116	0.32940	0.06480	0.51579	2.50740	0.30000	1.68226
	B->X (FF)	0.01860	0.00100	0.13206	0.32940	0.06480	0.51126	2.50740	0.30000	1.67891

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	0.00797	0.32940	0.12960	0.00842	2.50740	0.60000	0.00906
	B	0.01860	0.00100	0.00777	0.32940	0.12960	0.00813	2.50740	0.60000	0.00826
sg13g2_or2_1	A	0.01860	0.00100	0.00497	0.32940	0.06480	0.00501	2.50740	0.30000	0.00626
	B	0.01860	0.00100	0.00477	0.32940	0.06480	0.00475	2.50740	0.30000	0.00595

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	0.00884	0.32940	0.12960	0.00931	2.50740	0.60000	0.00957
	B	0.01860	0.00100	0.00778	0.32940	0.12960	0.00820	2.50740	0.60000	0.00869
sg13g2_or2_1	A	0.01860	0.00100	0.00592	0.32940	0.06480	0.00606	2.50740	0.30000	0.00693
	B	0.01860	0.00100	0.00482	0.32940	0.06480	0.00497	2.50740	0.30000	0.00634

OR3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00241	0.00235	0.00225	0.60000
sg13g2_or3_1	0.00241	0.00235	0.00225	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	462.34600	738.67100	1231.97000
sg13g2_or3_1	327.22500	560.74800	862.22700

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	0.11518	0.32940	0.12960	0.57150	2.50740	0.60000	2.05505
	B->X (RR)	0.01860	0.00100	0.11023	0.32940	0.12960	0.55945	2.50740	0.60000	2.01477
	C->X (RR)	0.01860	0.00100	0.10142	0.32940	0.12960	0.54262	2.50740	0.60000	1.95940
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.09921	0.32940	0.06480	0.53159	2.50740	0.30000	1.94542
	B->X (RR)	0.01860	0.00100	0.09465	0.32940	0.06480	0.51806	2.50740	0.30000	1.90333
	C->X (RR)	0.01860	0.00100	0.08560	0.32940	0.06480	0.49858	2.50740	0.30000	1.83952

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	0.25573	0.32940	0.12960	0.67602	2.50740	0.60000	1.88899
	B->X (FF)	0.01860	0.00100	0.24933	0.32940	0.12960	0.67795	2.50740	0.60000	1.93880
	C->X (FF)	0.01860	0.00100	0.22793	0.32940	0.12960	0.66103	2.50740	0.60000	1.93173
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.20494	0.32940	0.06480	0.59031	2.50740	0.30000	1.74714
	B->X (FF)	0.01860	0.00100	0.19851	0.32940	0.06480	0.58978	2.50740	0.30000	1.77817
	C->X (FF)	0.01860	0.00100	0.17651	0.32940	0.06480	0.56826	2.50740	0.30000	1.75198

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	0.00822	0.32940	0.12960	0.00863	2.50740	0.60000	0.00940
	B	0.01860	0.00100	0.00806	0.32940	0.12960	0.00838	2.50740	0.60000	0.00911
	C	0.01860	0.00100	0.00780	0.32940	0.12960	0.00813	2.50740	0.60000	0.00820
sg13g2_or3_1	A	0.01860	0.00100	0.00529	0.32940	0.06480	0.00531	2.50740	0.30000	0.00658
	B	0.01860	0.00100	0.00512	0.32940	0.06480	0.00507	2.50740	0.30000	0.00635
	C	0.01860	0.00100	0.00482	0.32940	0.06480	0.00475	2.50740	0.30000	0.00596

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	0.01134	0.32940	0.12960	0.01174	2.50740	0.60000	0.01177
	B	0.01860	0.00100	0.01016	0.32940	0.12960	0.01054	2.50740	0.60000	0.01091
	C	0.01860	0.00100	0.00886	0.32940	0.12960	0.00912	2.50740	0.60000	0.00984
sg13g2_or3_1	A	0.01860	0.00100	0.00833	0.32940	0.06480	0.00854	2.50740	0.30000	0.00897
	B	0.01860	0.00100	0.00714	0.32940	0.06480	0.00733	2.50740	0.30000	0.00825
	C	0.01860	0.00100	0.00583	0.32940	0.06480	0.00594	2.50740	0.30000	0.00727

OR4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00239	0.00232	0.00229	0.00223	0.60000
sg13g2_or4_1	0.00241	0.00232	0.00229	0.00223	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	453.55100	704.31600	1323.92000
sg13g2_or4_1	318.49400	547.84600	1023.41000

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	0.12070	0.32940	0.12960	0.58610	2.50740	0.60000	2.09539
	B->X (RR)	0.01860	0.00100	0.11838	0.32940	0.12960	0.57678	2.50740	0.60000	2.06263
	C->X (RR)	0.01860	0.00100	0.11167	0.32940	0.12960	0.56332	2.50740	0.60000	2.01947
	D->X (RR)	0.01860	0.00100	0.10271	0.32940	0.12960	0.54538	2.50740	0.60000	1.96504
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.10422	0.32940	0.06480	0.54812	2.50740	0.30000	1.99511
	B->X (RR)	0.01860	0.00100	0.10258	0.32940	0.06480	0.53808	2.50740	0.30000	1.95990
	C->X (RR)	0.01860	0.00100	0.09633	0.32940	0.06480	0.52287	2.50740	0.30000	1.90936
	D->X (RR)	0.01860	0.00100	0.08728	0.32940	0.06480	0.50331	2.50740	0.30000	1.84520

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	0.35386	0.32940	0.12960	0.80420	2.50740	0.60000	2.01590
	B->X (FF)	0.01860	0.00100	0.34765	0.32940	0.12960	0.80048	2.50740	0.60000	2.05813
	C->X (FF)	0.01860	0.00100	0.32613	0.32940	0.12960	0.78135	2.50740	0.60000	2.07862
	D->X (FF)	0.01860	0.00100	0.28954	0.32940	0.12960	0.74811	2.50740	0.60000	2.05582
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.28664	0.32940	0.06480	0.69581	2.50740	0.30000	1.85979
	B->X (FF)	0.01860	0.00100	0.28071	0.32940	0.06480	0.69147	2.50740	0.30000	1.88531
	C->X (FF)	0.01860	0.00100	0.25831	0.32940	0.06480	0.67084	2.50740	0.30000	1.89085
	D->X (FF)	0.01860	0.00100	0.22135	0.32940	0.06480	0.63444	2.50740	0.30000	1.85182

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	0.00876	0.32940	0.12960	0.00925	2.50740	0.60000	0.00935
	B	0.01860	0.00100	0.00854	0.32940	0.12960	0.00902	2.50740	0.60000	0.00943
	C	0.01860	0.00100	0.00806	0.32940	0.12960	0.00851	2.50740	0.60000	0.00910
	D	0.01860	0.00100	0.00781	0.32940	0.12960	0.00805	2.50740	0.60000	0.00818
sg13g2_or4_1	A	0.01860	0.00100	0.00583	0.32940	0.06480	0.00583	2.50740	0.30000	0.00692
	B	0.01860	0.00100	0.00560	0.32940	0.06480	0.00558	2.50740	0.30000	0.00671
	C	0.01860	0.00100	0.00512	0.32940	0.06480	0.00510	2.50740	0.30000	0.00622
	D	0.01860	0.00100	0.00482	0.32940	0.06480	0.00483	2.50740	0.30000	0.00577

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	0.01301	0.32940	0.12960	0.01313	2.50740	0.60000	0.01325
	B	0.01860	0.00100	0.01186	0.32940	0.12960	0.01206	2.50740	0.60000	0.01180
	C	0.01860	0.00100	0.01069	0.32940	0.12960	0.01085	2.50740	0.60000	0.01102
	D	0.01860	0.00100	0.00936	0.32940	0.12960	0.00950	2.50740	0.60000	0.01012
sg13g2_or4_1	A	0.01860	0.00100	0.00975	0.32940	0.06480	0.00995	2.50740	0.30000	0.01015
	B	0.01860	0.00100	0.00863	0.32940	0.06480	0.00880	2.50740	0.30000	0.00911
	C	0.01860	0.00100	0.00741	0.32940	0.06480	0.00759	2.50740	0.30000	0.00823
	D	0.01860	0.00100	0.00608	0.32940	0.06480	0.00620	2.50740	0.30000	0.00743

SDFRBPQ_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library:
Process sg13g2_stdcell_slow_1p08V_125C, Voltage
1.08, 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	0.00259	0.00271	0.00439	0.00484	0.00275	0.60000
sg13g2_sdfrbpq_1	0.00259	0.00271	0.00439	0.00483	0.00275	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbpq_2	3100.18000	3640.43000	4734.94000
sg13g2_sdfrbpq_1	2778.65000	3303.87000	4257.28000

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_sdfrbpq_2	CLK->Q (RR)	0.01860	0.00100	0.31186	0.32940	0.12960	0.76917	2.50740	0.60000	2.10366
sg13g2_sdfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.27176	0.32940	0.06480	0.70325	2.50740	0.30000	2.03529

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	0.32218	0.32940	0.12960	0.74193	2.50740	0.60000	1.91654
	RESET_B->Q (FF)	0.01860	0.00100	0.18538	0.32940	0.12960	0.65337	2.50740	0.60000	2.11629
sg13g2_sdfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.28312	0.32940	0.06480	0.67711	2.50740	0.30000	1.85051
	RESET_B->Q (FF)	0.01860	0.00100	0.14753	0.32940	0.06480	0.58286	2.50740	0.30000	1.95552

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	0.31167	0.32940	0.12960	0.76917	2.50740	0.60000	2.10366
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.31186	0.32940	0.12960	0.76917	2.50740	0.60000	2.10366
sg13g2_sdfrbpq_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.27178	0.32940	0.06480	0.70325	2.50740	0.30000	2.03529
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.27176	0.32940	0.06480	0.70325	2.50740	0.30000	2.03529

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	0.32235	0.32940	0.12960	0.74206	2.50740	0.60000	1.91423
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.32218	0.32940	0.12960	0.74193	2.50740	0.60000	1.91654
sg13g2_sdfrbpq_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.28310	0.32940	0.06480	0.67711	2.50740	0.30000	1.85052
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.28312	0.32940	0.06480	0.67711	2.50740	0.30000	1.85051

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	-0.23963	1.26300	1.26300	-0.39936	2.50740	2.50740	-0.46930
	setup	CLK (R)	0.01860	0.01860	0.31788	1.26300	1.26300	0.46952	2.50740	2.50740	0.55194
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.23963	1.26300	1.26300	-0.39936	2.50740	2.50740	-0.47225
	setup	CLK (R)	0.01860	0.01860	0.31788	1.26300	1.26300	0.46952	2.50740	2.50740	0.55194

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	-0.23229	1.26300	1.26300	-0.27523	2.50740	2.50740	-0.29811
	setup	CLK (R)	0.01860	0.01860	0.33988	1.26300	1.26300	0.36428	2.50740	2.50740	0.38960
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.23229	1.26300	1.26300	-0.27523	2.50740	2.50740	-0.29811
	setup	CLK (R)	0.01860	0.01860	0.34233	1.26300	1.26300	0.36428	2.50740	2.50740	0.38960

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	-0.23963	1.26300	1.26300	-0.39936	2.50740	2.50740	-0.47225
	setup	CLK (R)	0.01860	0.01860	0.31543	1.26300	1.26300	0.46952	2.50740	2.50740	0.55194
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.23963	1.26300	1.26300	-0.39936	2.50740	2.50740	-0.47225
	setup	CLK (R)	0.01860	0.01860	0.31788	1.26300	1.26300	0.47221	2.50740	2.50740	0.55194

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	-0.22985	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.29220
	setup	CLK (R)	0.01860	0.01860	0.33988	1.26300	1.26300	0.36428	2.50740	2.50740	0.38960
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.22985	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.29220
	setup	CLK (R)	0.01860	0.01860	0.34233	1.26300	1.26300	0.36428	2.50740	2.50740	0.38960

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	-0.24452	1.26300	1.26300	-0.41015	2.50740	2.50740	-0.49291
	setup	CLK (R)	0.01860	0.01860	0.32277	1.26300	1.26300	0.48301	2.50740	2.50740	0.57850
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.24452	1.26300	1.26300	-0.41285	2.50740	2.50740	-0.49586
	setup	CLK (R)	0.01860	0.01860	0.32277	1.26300	1.26300	0.48301	2.50740	2.50740	0.57850

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	-0.23963	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.34966	1.26300	1.26300	0.36428	2.50740	2.50740	0.38370
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.23963	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.28335
	setup	CLK (R)	0.01860	0.01860	0.35211	1.26300	1.26300	0.36428	2.50740	2.50740	0.38370

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	0.19806	1.26300	1.26300	0.45602	2.50740	2.50740	1.05075
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.37237	2.50740	2.50740	-0.50767
sg13g2_sdfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.20051	1.26300	1.26300	0.43983	2.50740	2.50740	0.81167
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.37237	2.50740	2.50740	-0.50767

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	0.19836	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.17593	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	0.14710	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.12146	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	0.20798	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.20798	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	0.01963	0.32940	0.12960	0.01964	2.50740	0.60000	0.02220
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.01651	0.32940	0.06480	0.01641	2.50740	0.30000	0.01913

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	0.02030	0.32940	0.12960	0.02082	2.50740	0.60000	0.02430
	RESET_B	0.01860	0.00100	0.01896	0.32940	0.12960	0.01891	2.50740	0.60000	0.02002
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.01743	0.32940	0.06480	0.01761	2.50740	0.30000	0.02104
	RESET_B	0.01860	0.00100	0.01615	0.32940	0.06480	0.01579	2.50740	0.30000	0.01733

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	0.01963	0.32940	0.12960	0.01964	2.50740	0.60000	0.02220
	CLK	!SCE	0.01860	0.00100	0.01085	0.32940	0.12960	0.01126	2.50740	0.60000	0.01077
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.01651	0.32940	0.06480	0.01641	2.50740	0.30000	0.01913
	CLK	!SCE	0.01860	0.00100	0.00770	0.32940	0.06480	0.00803	2.50740	0.30000	0.00774

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	0.02030	0.32940	0.12960	0.02082	2.50740	0.60000	0.02430
	CLK	!SCE	0.01860	0.00100	0.01209	0.32940	0.12960	0.01302	2.50740	0.60000	0.01339
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.01743	0.32940	0.06480	0.01761	2.50740	0.30000	0.02104
	CLK	!SCE	0.01860	0.00100	0.00862	0.32940	0.06480	0.00923	2.50740	0.30000	0.00960

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02818	0.32940	0.02778	2.50740	0.03031
sg13g2_sdfrbpq_1	0.01860	0.02478	0.32940	0.02437	2.50740	0.02690

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01768	0.32940	0.01737	2.50740	0.02012
sg13g2_sdfrbpq_1	0.01860	0.01525	0.32940	0.01494	2.50740	0.01768

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	0.02818	0.32940	0.02778	2.50740	0.03031
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.02478	0.32940	0.02437	2.50740	0.02690

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	0.01768	0.32940	0.01737	2.50740	0.02012
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.01525	0.32940	0.01494	2.50740	0.01768

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02830	0.32940	0.02790	2.50740	0.03043
sg13g2_sdfrbpq_1	0.01860	0.02490	0.32940	0.02450	2.50740	0.02701

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01744	0.32940	0.01712	2.50740	0.01987
sg13g2_sdfrbpq_1	0.01860	0.01401	0.32940	0.01370	2.50740	0.01644

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	0.02830	0.32940	0.02790	2.50740	0.03043
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.02490	0.32940	0.02450	2.50740	0.02701

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	0.01744	0.32940	0.01712	2.50740	0.01987
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.01401	0.32940	0.01370	2.50740	0.01644

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02054	0.32940	0.02021	2.50740	0.02425
sg13g2_sdfrbpq_1	0.01860	0.02054	0.32940	0.02023	2.50740	0.02427

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01211	0.32940	0.03151	2.50740	0.03557
sg13g2_sdfrbpq_1	0.01860	0.01067	0.32940	0.03011	2.50740	0.03420

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	0.01948	0.32940	0.01916	2.50740	0.02122
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02054	0.32940	0.02021	2.50740	0.02425
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.01806	0.32940	0.01775	2.50740	0.01981
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02054	0.32940	0.02023	2.50740	0.02427

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	0.02082	0.32940	0.02063	2.50740	0.02253
	(!CLK * !D * RESET_B * SCD)	0.01860	0.01211	0.32940	0.03151	2.50740	0.03557
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.02083	0.32940	0.02064	2.50740	0.02254
	(!CLK * !D * RESET_B * SCD)	0.01860	0.01067	0.32940	0.03011	2.50740	0.03420

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.00880	0.32940	0.00838	2.50740	0.01143
sg13g2_sdfrbpq_1	0.01860	0.00880	0.32940	0.00838	2.50740	0.01143

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.00884	0.32940	0.00853	2.50740	0.01146
sg13g2_sdfrbpq_1	0.01860	0.00884	0.32940	0.00853	2.50740	0.01146

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	0.00890	0.32940	0.00850	2.50740	0.01156
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.00880	0.32940	0.00838	2.50740	0.01143
	(D * RESET_B * !SCE * Q)	0.01860	0.00889	0.32940	0.00850	2.50740	0.01156
	(!RESET_B * !Q)	0.01860	0.00406	0.32940	0.00366	2.50740	0.00671
	(!D * RESET_B * !SCE * !Q)	0.01860	0.00883	0.32940	0.00841	2.50740	0.01147
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.00889	0.32940	0.00850	2.50740	0.01156
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.00880	0.32940	0.00838	2.50740	0.01143
	(D * RESET_B * !SCE * Q)	0.01860	0.00889	0.32940	0.00850	2.50740	0.01156
	(!RESET_B * !Q)	0.01860	0.00265	0.32940	0.00226	2.50740	0.00530
	(!D * RESET_B * !SCE * !Q)	0.01860	0.00884	0.32940	0.00841	2.50740	0.01147

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	0.00884	0.32940	0.00853	2.50740	0.01146
	(RESET_B * SCD * SCE * !Q)	0.01860	0.01668	0.32940	0.01627	2.50740	0.01915
	(RESET_B * !SCD * SCE * Q)	0.01860	0.01553	0.32940	0.01531	2.50740	0.01849
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.00845	0.32940	0.00814	2.50740	0.01107
	(D * RESET_B * !SCE * Q)	0.01860	0.00884	0.32940	0.00853	2.50740	0.01146
	(!RESET_B * !Q)	0.01860	0.00459	0.32940	0.00429	2.50740	0.00719
	(!D * RESET_B * !SCE * !Q)	0.01860	0.00856	0.32940	0.00826	2.50740	0.01118
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.00884	0.32940	0.00853	2.50740	0.01146
	(RESET_B * SCD * SCE * !Q)	0.01860	0.01669	0.32940	0.01627	2.50740	0.01915
	(RESET_B * !SCD * SCE * Q)	0.01860	0.01553	0.32940	0.01531	2.50740	0.01849
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.00845	0.32940	0.00815	2.50740	0.01107
	(D * RESET_B * !SCE * Q)	0.01860	0.00884	0.32940	0.00853	2.50740	0.01146
	(!RESET_B * !Q)	0.01860	0.00318	0.32940	0.00288	2.50740	0.00578
	(!D * RESET_B * !SCE * !Q)	0.01860	0.00856	0.32940	0.00826	2.50740	0.01118

SDFRBP_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00259	0.00271	0.00439	0.00516	0.00275	0.60000	0.60000
sg13g2_sdfrbp_1	0.00259	0.00271	0.00439	0.00520	0.00275	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbp_2	3638.24000	4389.98000	5117.04000
sg13g2_sdfrbp_1	3025.75000	3777.30000	4504.36000

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	0.37534	0.32940	0.12960	0.77002	2.50740	0.60000	2.13606
sg13g2_sdfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.29416	0.32940	0.06480	0.69836	2.50740	0.30000	2.06472

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	0.32723	0.32940	0.12960	0.69535	2.50740	0.60000	1.87710
	RESET_B->Q (FF)	0.01860	0.00100	0.43900	0.32940	0.12960	0.84085	2.50740	0.60000	2.24534
sg13g2_sdfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.26970	0.32940	0.06480	0.63832	2.50740	0.30000	1.81459
	RESET_B->Q (FF)	0.01860	0.00100	0.37988	0.32940	0.06480	0.78204	2.50740	0.30000	2.18145

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	0.37534	0.32940	0.12960	0.77002	2.50740	0.60000	2.13606
sg13g2_sdfrbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.29416	0.32940	0.06480	0.69836	2.50740	0.30000	2.06472

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	0.32723	0.32940	0.12960	0.69535	2.50740	0.60000	1.87710
sg13g2_sdfrbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.26970	0.32940	0.06480	0.63832	2.50740	0.30000	1.81459

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	0.21744	0.32940	0.12960	0.67756	2.50740	0.60000	2.01018
	RESET_B->Q_N (FR)	0.01860	0.00100	0.33175	0.32940	0.12960	0.81981	2.50740	0.60000	2.36828
sg13g2_sdfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.20697	0.32940	0.06480	0.64936	2.50740	0.30000	1.97889
	RESET_B->Q_N (FR)	0.01860	0.00100	0.31814	0.32940	0.06480	0.78903	2.50740	0.30000	2.33454

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	0.24239	0.32940	0.12960	0.70722	2.50740	0.60000	1.92514
sg13g2_sdfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.21895	0.32940	0.06480	0.65664	2.50740	0.30000	1.87204

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	0.21744	0.32940	0.12960	0.67756	2.50740	0.60000	2.01018
sg13g2_sdfrbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.20697	0.32940	0.06480	0.64936	2.50740	0.30000	1.97889

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	0.24239	0.32940	0.12960	0.70722	2.50740	0.60000	1.92514
sg13g2_sdfrbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.21895	0.32940	0.06480	0.65664	2.50740	0.30000	1.87204

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	-0.22496	1.26300	1.26300	-0.38317	2.50740	2.50740	-0.45454
	setup	CLK (R)	0.01860	0.01860	0.32032	1.26300	1.26300	0.46682	2.50740	2.50740	0.53423
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.22740	1.26300	1.26300	-0.38856	2.50740	2.50740	-0.46044
	setup	CLK (R)	0.01860	0.01860	0.32032	1.26300	1.26300	0.46682	2.50740	2.50740	0.53423

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	-0.21518	1.26300	1.26300	-0.26714	2.50740	2.50740	-0.30106
	setup	CLK (R)	0.01860	0.01860	0.35211	1.26300	1.26300	0.37237	2.50740	2.50740	0.39551
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.21762	1.26300	1.26300	-0.26984	2.50740	2.50740	-0.30106
	setup	CLK (R)	0.01860	0.01860	0.35211	1.26300	1.26300	0.36968	2.50740	2.50740	0.39551

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	-0.22496	1.26300	1.26300	-0.38317	2.50740	2.50740	-0.45454
	setup	CLK (R)	0.01860	0.01860	0.32032	1.26300	1.26300	0.46952	2.50740	2.50740	0.53718
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.22740	1.26300	1.26300	-0.39126	2.50740	2.50740	-0.46044
	setup	CLK (R)	0.01860	0.01860	0.32032	1.26300	1.26300	0.46682	2.50740	2.50740	0.53718

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	-0.21518	1.26300	1.26300	-0.26444	2.50740	2.50740	-0.29515
	setup	CLK (R)	0.01860	0.01860	0.35211	1.26300	1.26300	0.37237	2.50740	2.50740	0.39846
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.21518	1.26300	1.26300	-0.26444	2.50740	2.50740	-0.29515
	setup	CLK (R)	0.01860	0.01860	0.35211	1.26300	1.26300	0.36968	2.50740	2.50740	0.39551

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	-0.22985	1.26300	1.26300	-0.39666	2.50740	2.50740	-0.47815
	setup	CLK (R)	0.01860	0.01860	0.32521	1.26300	1.26300	0.48031	2.50740	2.50740	0.56079
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.23229	1.26300	1.26300	-0.40206	2.50740	2.50740	-0.48405
	setup	CLK (R)	0.01860	0.01860	0.32521	1.26300	1.26300	0.47761	2.50740	2.50740	0.56079

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	-0.22496	1.26300	1.26300	-0.26174	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.36189	1.26300	1.26300	0.36968	2.50740	2.50740	0.39255
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.22496	1.26300	1.26300	-0.26444	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.36189	1.26300	1.26300	0.36968	2.50740	2.50740	0.38960

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	0.20295	1.26300	1.26300	0.41285	2.50740	2.50740	0.55784
	removal	CLK (R)	0.01860	0.01860	-0.17605	1.26300	1.26300	-0.38047	2.50740	2.50740	-0.51947
sg13g2_sdfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.41285	2.50740	2.50740	0.55784
	removal	CLK (R)	0.01860	0.01860	-0.17361	1.26300	1.26300	-0.37777	2.50740	2.50740	-0.51357

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	0.17273	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	0.16953	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	0.01860	0.00000	0.21439	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbp_1	min_pulse_width	CLK 0	0.01860	0.00000	0.17273	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	0.02920	0.32940	0.12960	0.10514	2.50740	0.60000	0.38157
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.02335	0.32940	0.06480	0.06075	2.50740	0.30000	0.20059

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	0.02976	0.32940	0.12960	0.10589	2.50740	0.60000	0.38332
	RESET_B	0.01860	0.00100	0.03708	0.32940	0.12960	0.09643	2.50740	0.60000	0.31223
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.02424	0.32940	0.06480	0.06175	2.50740	0.30000	0.20217
	RESET_B	0.01860	0.00100	0.02471	0.32940	0.06480	0.05392	2.50740	0.30000	0.16260

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	0.02920	0.32940	0.12960	0.10514	2.50740	0.60000	0.38157
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.02335	0.32940	0.06480	0.06075	2.50740	0.30000	0.20059

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	0.02976	0.32940	0.12960	0.10589	2.50740	0.60000	0.38332
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.02424	0.32940	0.06480	0.06175	2.50740	0.30000	0.20217

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	0.03070	0.32940	0.12960	0.10694	2.50740	0.60000	0.38403
	RESET_B	0.01860	0.00100	0.03006	0.32940	0.12960	0.08945	2.50740	0.60000	0.30690
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.02423	0.32940	0.06480	0.06196	2.50740	0.30000	0.20201
	RESET_B	0.01860	0.00100	0.02472	0.32940	0.06480	0.05384	2.50740	0.30000	0.16330

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	0.02918	0.32940	0.12960	0.10512	2.50740	0.60000	0.38178
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.02333	0.32940	0.06480	0.06068	2.50740	0.30000	0.20059

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	0.03070	0.32940	0.12960	0.10694	2.50740	0.60000	0.38403
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.02423	0.32940	0.06480	0.06196	2.50740	0.30000	0.20201

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	0.02918	0.32940	0.12960	0.10512	2.50740	0.60000	0.38178
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.02333	0.32940	0.06480	0.06068	2.50740	0.30000	0.20059

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01818	0.32940	0.01778	2.50740	0.02030
sg13g2_sdfrbp_1	0.01860	0.01695	0.32940	0.01655	2.50740	0.01907

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02283	0.32940	0.02251	2.50740	0.02525
sg13g2_sdfrbp_1	0.01860	0.02282	0.32940	0.02250	2.50740	0.02525

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	0.01818	0.32940	0.01778	2.50740	0.02030
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.01695	0.32940	0.01655	2.50740	0.01907

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	0.02283	0.32940	0.02251	2.50740	0.02525
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.02282	0.32940	0.02250	2.50740	0.02525

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01831	0.32940	0.01790	2.50740	0.02042
sg13g2_sdfrbp_1	0.01860	0.01709	0.32940	0.01667	2.50740	0.01919

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01499	0.32940	0.01469	2.50740	0.01743
sg13g2_sdfrbp_1	0.01860	0.00742	0.32940	0.00712	2.50740	0.00986

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	0.01831	0.32940	0.01790	2.50740	0.02042
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.01709	0.32940	0.01667	2.50740	0.01919

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	0.01499	0.32940	0.01469	2.50740	0.01743
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.00742	0.32940	0.00712	2.50740	0.00986

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02053	0.32940	0.02021	2.50740	0.02425
sg13g2_sdfrbp_1	0.01860	0.02055	0.32940	0.02022	2.50740	0.02427

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.00843	0.32940	0.02782	2.50740	0.03189
sg13g2_sdfrbp_1	0.01860	0.00843	0.32940	0.02784	2.50740	0.03193

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	0.01580	0.32940	0.01549	2.50740	0.01755
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02053	0.32940	0.02021	2.50740	0.02425
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.01580	0.32940	0.01549	2.50740	0.01755
	(!CLK * !D * RESET_B * SCD)	0.01860	0.02055	0.32940	0.02022	2.50740	0.02427

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	0.02082	0.32940	0.02063	2.50740	0.02252
	(!CLK * !D * RESET_B * SCD)	0.01860	0.00843	0.32940	0.02782	2.50740	0.03189
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.02084	0.32940	0.02064	2.50740	0.02254
	(!CLK * !D * RESET_B * SCD)	0.01860	0.00843	0.32940	0.02784	2.50740	0.03193

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.00882	0.32940	0.00839	2.50740	0.01148
sg13g2_sdfrbp_1	0.01860	0.00881	0.32940	0.00838	2.50740	0.01147

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.00863	0.32940	0.00829	2.50740	0.01120
sg13g2_sdfrbp_1	0.01860	0.00863	0.32940	0.00829	2.50740	0.01120

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	0.00894	0.32940	0.00851	2.50740	0.01156
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.00882	0.32940	0.00839	2.50740	0.01148
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.00892	0.32940	0.00851	2.50740	0.01156
	(!RESET_B * !Q * Q_N)	0.01860	0.00041	0.32940	-0.00000	2.50740	0.00305
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.00883	0.32940	0.00843	2.50740	0.01151
sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.00893	0.32940	0.00850	2.50740	0.01156
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.00881	0.32940	0.00838	2.50740	0.01147
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.00892	0.32940	0.00850	2.50740	0.01156
	(!RESET_B * !Q * Q_N)	0.01860	0.00041	0.32940	-0.00000	2.50740	0.00305
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.00885	0.32940	0.00841	2.50740	0.01151

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	0.00863	0.32940	0.00829	2.50740	0.01120
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.01671	0.32940	0.01628	2.50740	0.01915
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.01541	0.32940	0.01517	2.50740	0.01835
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.00848	0.32940	0.00815	2.50740	0.01106
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.00863	0.32940	0.00829	2.50740	0.01120
	(!RESET_B * !Q * Q_N)	0.01860	0.00094	0.32940	0.00062	2.50740	0.00351
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.00860	0.32940	0.00826	2.50740	0.01118

sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.00862	0.32940	0.00829	2.50740	0.01120
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.01671	0.32940	0.01628	2.50740	0.01915
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.01538	0.32940	0.01517	2.50740	0.01836
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.00847	0.32940	0.00815	2.50740	0.01106
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.00863	0.32940	0.00829	2.50740	0.01120
	(!RESET_B * !Q * Q_N)	0.01860	0.00094	0.32940	0.00061	2.50740	0.00351
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.00859	0.32940	0.00826	2.50740	0.01118

SDFRRS



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00188	0.00184	0.00334	0.00163	0.00493	0.00283	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	2507.40000	3658.31000	4660.45000

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_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.47634	0.32940	0.06480	0.88263	2.50740	0.30000	2.22409
	SET_B->Q (FR)	0.01860	0.00100	0.18817	0.32940	0.06480	0.61180	2.50740	0.30000	2.01409

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	0.39002	0.32940	0.06480	0.75949	2.50740	0.30000	1.96712
	RESET_B->Q (FF)	0.01860	0.00100	0.32105	0.32940	0.06480	0.70443	2.50740	0.30000	1.95737

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	0.47634	0.32940	0.06480	0.88263	2.50740	0.30000	2.22409

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	0.39002	0.32940	0.06480	0.75949	2.50740	0.30000	1.96712

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	0.32021	0.32940	0.06480	0.75921	2.50740	0.30000	2.12301
	RESET_B->Q_N (FR)	0.01860	0.00100	0.24950	0.32940	0.06480	0.71499	2.50740	0.30000	2.12626

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	0.39504	0.32940	0.06480	0.82508	2.50740	0.30000	2.01816
	SET_B->Q_N (FF)	0.01860	0.00100	0.12299	0.32940	0.06480	0.54394	2.50740	0.30000	1.83637

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	0.32021	0.32940	0.06480	0.75921	2.50740	0.30000	2.12301

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	0.39504	0.32940	0.06480	0.82508	2.50740	0.30000	2.01816

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	-0.15649	1.26300	1.26300	-0.37237	2.50740	2.50740	-0.49881
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.41555	2.50740	2.50740	0.54899

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	-0.16138	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.25919	1.26300	1.26300	0.34269	2.50740	2.50740	0.42797

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	-0.19806	1.26300	1.26300	-0.45872	2.50740	2.50740	-0.62277
	setup	CLK (R)	0.01860	0.01860	0.25185	1.26300	1.26300	0.49920	2.50740	2.50740	0.66705

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	-0.21029	1.26300	1.26300	-0.28063	2.50740	2.50740	-0.34533
	setup	CLK (R)	0.01860	0.01860	0.30809	1.26300	1.26300	0.38856	2.50740	2.50740	0.48405

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	-0.17116	1.26300	1.26300	-0.41285	2.50740	2.50740	-0.55489
	setup	CLK (R)	0.01860	0.01860	0.22496	1.26300	1.26300	0.45602	2.50740	2.50740	0.60506

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	-0.16138	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.23612
	setup	CLK (R)	0.01860	0.01860	0.25919	1.26300	1.26300	0.30761	2.50740	2.50740	0.38075

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	0.11003	1.26300	1.26300	0.21047	2.50740	2.50740	0.26859
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.20366

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	0.22400	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	0.03912	1.26300	1.26300	0.14031	2.50740	2.50740	0.56079
	removal	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.14301	2.50740	2.50740	0.17414
	hold	RESET_B (R)	0.01860	0.01860	-0.12470	1.26300	1.26300	-0.30222	2.50740	2.50740	-0.38665
	setup	RESET_B (R)	0.01860	0.01860	0.15894	1.26300	1.26300	0.35349	2.50740	2.50740	0.47225

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	0.13748	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	0.15991	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	0.20798	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	0.01314	0.32940	0.06480	0.01330	2.50740	0.30000	0.01463
	SET_B	0.01860	0.00100	0.02476	0.32940	0.06480	0.06193	2.50740	0.30000	0.20183

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	0.01309	0.32940	0.06480	0.01318	2.50740	0.30000	0.01449
	RESET_B	0.01860	0.00100	0.02770	0.32940	0.06480	0.06526	2.50740	0.30000	0.20268

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	0.01314	0.32940	0.06480	0.01330	2.50740	0.30000	0.01463

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	0.01309	0.32940	0.06480	0.01318	2.50740	0.30000	0.01449

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	0.01310	0.32940	0.06480	0.01317	2.50740	0.30000	0.01440
	RESET_B	0.01860	0.00100	0.02771	0.32940	0.06480	0.06533	2.50740	0.30000	0.20319

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	0.01316	0.32940	0.06480	0.01336	2.50740	0.30000	0.01459
	SET_B	0.01860	0.00100	0.02475	0.32940	0.06480	0.06166	2.50740	0.30000	0.20143

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	0.01310	0.32940	0.06480	0.01317	2.50740	0.30000	0.01440

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	0.01316	0.32940	0.06480	0.01336	2.50740	0.30000	0.01459

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.00894	0.32940	0.00873	2.50740	0.00984

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.00895	0.32940	0.00872	2.50740	0.00985

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	0.00894	0.32940	0.00873	2.50740	0.00984
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	-0.00013	0.32940	-0.00031	2.50740	0.00066

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	0.00895	0.32940	0.00872	2.50740	0.00985
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00415	0.32940	0.00396	2.50740	0.00495

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01014	0.32940	0.01002	2.50740	0.01061

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01157	0.32940	0.01137	2.50740	0.01197

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	0.01014	0.32940	0.01002	2.50740	0.01061
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00482	0.32940	0.00473	2.50740	0.00524

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	0.01157	0.32940	0.01137	2.50740	0.01197
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	-0.00149	0.32940	-0.00156	2.50740	-0.00107

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.00886	0.32940	0.00814	2.50740	0.00960

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.01178	0.32940	0.01165	2.50740	0.01301

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	0.01181	0.32940	0.01169	2.50740	0.01317
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.00886	0.32940	0.00814	2.50740	0.00960
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01051	0.32940	0.01025	2.50740	0.01293
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00511	0.32940	0.00487	2.50740	0.00745

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	0.01178	0.32940	0.01165	2.50740	0.01301
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01016	0.32940	0.01474	2.50740	0.01645
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00350	0.32940	0.01295	2.50740	0.02096
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	-0.00291	0.32940	-0.00313	2.50740	-0.00100

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.00972	0.32940	0.00924	2.50740	0.01225

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.00898	0.32940	0.00865	2.50740	0.01152

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	0.00993	0.32940	0.00949	2.50740	0.01247
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01015	0.32940	0.00972	2.50740	0.01261
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00974	0.32940	0.00925	2.50740	0.01225
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00568	0.32940	0.00526	2.50740	0.00824
	(!RESET_B * !Q * Q_N)	0.01860	0.00229	0.32940	0.00181	2.50740	0.00482
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00972	0.32940	0.00924	2.50740	0.01225

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	0.00885	0.32940	0.00853	2.50740	0.01139
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01607	0.32940	0.01564	2.50740	0.01846
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00425	0.32940	0.00398	2.50740	0.00705
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01729	0.32940	0.01698	2.50740	0.02009
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00898	0.32940	0.00865	2.50740	0.01152
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00887	0.32940	0.00852	2.50740	0.01139
	(!RESET_B * !Q * Q_N)	0.01860	0.00080	0.32940	0.00048	2.50740	0.00334
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00896	0.32940	0.00863	2.50740	0.01150

SGCLK



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00182	0.00218	0.00461	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	1673.79000	2008.50000	2370.65000

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	0.11397	0.32940	0.06480	0.51648	2.50740	0.30000	1.85003

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	0.09092	0.32940	0.06480	0.46704	2.50740	0.30000	1.64058

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	-0.06573	1.26300	1.26300	-0.27401	2.50740	2.50740	-0.38333
	setup	CLK (R)	0.01860	0.01860	0.10512	1.26300	1.26300	0.36957	2.50740	2.50740	0.51278

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	-0.11081	1.26300	1.26300	-0.21670	2.50740	2.50740	-0.29195
	setup	CLK (R)	0.01860	0.01860	0.19112	1.26300	1.26300	0.29052	2.50740	2.50740	0.37678

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	-0.07250	1.26300	1.26300	-0.30715	2.50740	2.50740	-0.43308
	setup	CLK (R)	0.01860	0.01860	0.11354	1.26300	1.26300	0.40380	2.50740	2.50740	0.55951

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	-0.11913	1.26300	1.26300	-0.20514	2.50740	2.50740	-0.27619
	setup	CLK (R)	0.01860	0.01860	0.20073	1.26300	1.26300	0.27205	2.50740	2.50740	0.35027

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	0.36179	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	0.15991	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	0.00640	0.32940	0.06480	0.00645	2.50740	0.30000	0.00764

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	0.00557	0.32940	0.06480	0.00573	2.50740	0.30000	0.00771

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01477	0.32940	0.01518	2.50740	0.01704

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01013	0.32940	0.02233	2.50740	0.02472

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	0.01477	0.32940	0.01518	2.50740	0.01704

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	0.01013	0.32940	0.02233	2.50740	0.02472

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00511	0.32940	0.00493	2.50740	0.00672

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00997	0.32940	0.02182	2.50740	0.02344

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00638	0.32940	0.00612	2.50740	0.00874

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00501	0.32940	0.00473	2.50740	0.00732

TIE0



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	12.60110	12.60110	12.60110

TIE1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	14.33880	14.33880	14.33880

XNOR2_1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00520	0.00479	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	279.16200	857.22300	1222.57000

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	0.08067	0.32940	0.06480	0.79791	2.50740	0.30000	3.80957
	B->Y (-R)	0.01860	0.00100	0.07071	0.32940	0.06480	0.80460	2.50740	0.30000	3.98641

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	0.07322	0.32940	0.06480	0.67006	2.50740	0.30000	3.32794
	B->Y (-F)	0.01860	0.00100	0.06327	0.32940	0.06480	0.65785	2.50740	0.30000	3.30859

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	0.11272	0.32940	0.06480	0.51659	2.50740	0.30000	1.84637
	A->Y (FR)	!B	0.01860	0.00100	0.08067	0.32940	0.06480	0.79791	2.50740	0.30000	3.80957
	B->Y (RR)	A	0.01860	0.00100	0.10558	0.32940	0.06480	0.50586	2.50740	0.30000	1.81284
	B->Y (FR)	!A	0.01860	0.00100	0.07071	0.32940	0.06480	0.80460	2.50740	0.30000	3.98641

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	0.10665	0.32940	0.06480	0.67345	2.50740	0.30000	2.55662
	A->Y (RF)	!B	0.01860	0.00100	0.07322	0.32940	0.06480	0.67006	2.50740	0.30000	3.32794
	B->Y (FF)	A	0.01860	0.00100	0.10886	0.32940	0.06480	0.65807	2.50740	0.30000	2.51036
	B->Y (RF)	!A	0.01860	0.00100	0.06327	0.32940	0.06480	0.65785	2.50740	0.30000	3.30859

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	0.00619	0.32940	0.06480	0.00623	2.50740	0.30000	0.00725
	B	0.01860	0.00100	0.00635	0.32940	0.06480	0.00612	2.50740	0.30000	0.00769

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	0.00572	0.32940	0.06480	0.00579	2.50740	0.30000	0.00741
	B	0.01860	0.00100	0.00612	0.32940	0.06480	0.00509	2.50740	0.30000	0.00644

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	0.00619	0.32940	0.06480	0.00623	2.50740	0.30000	0.00725
	A	!B	0.01860	0.00100	0.00406	0.32940	0.06480	0.00386	2.50740	0.30000	0.00399
	B	A	0.01860	0.00100	0.00635	0.32940	0.06480	0.00612	2.50740	0.30000	0.00769
	B	!A	0.01860	0.00100	0.00277	0.32940	0.06480	0.00270	2.50740	0.30000	0.00275

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	0.00572	0.32940	0.06480	0.00579	2.50740	0.30000	0.00741
	A	!B	0.01860	0.00100	0.00405	0.32940	0.06480	0.00384	2.50740	0.30000	0.00361
	B	A	0.01860	0.00100	0.00612	0.32940	0.06480	0.00509	2.50740	0.30000	0.00644
	B	!A	0.01860	0.00100	0.00338	0.32940	0.06480	0.00338	2.50740	0.30000	0.00310

XOR2_1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, 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	0.00531	0.00484	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	674.43600	861.63500	1243.37000

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	0.08712	0.32940	0.06480	0.80697	2.50740	0.30000	3.82398
	B->X (-R)	0.01860	0.00100	0.07578	0.32940	0.06480	0.79434	2.50740	0.30000	3.80682

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	0.06676	0.32940	0.06480	0.66284	2.50740	0.30000	3.31316
	B->X (-F)	0.01860	0.00100	0.05896	0.32940	0.06480	0.66866	2.50740	0.30000	3.43158

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	0.10920	0.32940	0.06480	0.82393	2.50740	0.30000	3.28769
	A->X (FR)	B	0.01860	0.00100	0.08712	0.32940	0.06480	0.80697	2.50740	0.30000	3.82398
	B->X (RR)	!A	0.01860	0.00100	0.11377	0.32940	0.06480	0.80788	2.50740	0.30000	3.22945
	B->X (FR)	A	0.01860	0.00100	0.07578	0.32940	0.06480	0.79434	2.50740	0.30000	3.80682

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	0.13354	0.32940	0.06480	0.49977	2.50740	0.30000	1.63756
	A->X (RF)	B	0.01860	0.00100	0.06676	0.32940	0.06480	0.66284	2.50740	0.30000	3.31316
	B->X (FF)	!A	0.01860	0.00100	0.12465	0.32940	0.06480	0.49271	2.50740	0.30000	1.62730
	B->X (RF)	A	0.01860	0.00100	0.05896	0.32940	0.06480	0.66866	2.50740	0.30000	3.43158

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	0.00565	0.32940	0.06480	0.00561	2.50740	0.30000	0.00756
	B	0.01860	0.00100	0.00606	0.32940	0.06480	0.00511	2.50740	0.30000	0.00696

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	0.00665	0.32940	0.06480	0.00674	2.50740	0.30000	0.00794
	B	0.01860	0.00100	0.00622	0.32940	0.06480	0.00601	2.50740	0.30000	0.00778

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	0.00418	0.32940	0.06480	0.00409	2.50740	0.30000	0.00427
	A	!B	0.01860	0.00100	0.00565	0.32940	0.06480	0.00561	2.50740	0.30000	0.00756
	B	A	0.01860	0.00100	0.00340	0.32940	0.06480	0.00340	2.50740	0.30000	0.00344
	B	!A	0.01860	0.00100	0.00606	0.32940	0.06480	0.00511	2.50740	0.30000	0.00696

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	0.00415	0.32940	0.06480	0.00378	2.50740	0.30000	0.00349
	A	!B	0.01860	0.00100	0.00665	0.32940	0.06480	0.00674	2.50740	0.30000	0.00794
	B	A	0.01860	0.00100	0.00341	0.32940	0.06480	0.00319	2.50740	0.30000	0.00308
	B	!A	0.01860	0.00100	0.00622	0.32940	0.06480	0.00601	2.50740	0.30000	0.00778