

sg13g2_stdcell_slow_1p08V_125C Library

Cell Groups
AND2
AND3
AND4
AO21
BTLx
BUx
DECAPx
DDFRRx
DLHQ
DLHRQ
DLHR
DLLRQ
DLLR
DLY1
DLY2
DLY4
EINVINx
FILLx
INx
ITL
KEEPSTATE
MUX2
MUX4

NAND2B1
NAND2
NAND3B1
NOR2
NOR3
NOR4
NP_ANT
OR2
OR3
OR4
SDFRRS
TIE0
TIE1
XNOR2_1
XOR2_1

AND2



*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_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_1	0.00222	0.00213	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	514.63100	635.39100	854.90800

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.09876	0.32940	0.06480	0.50121	2.50740	0.30000	1.82446
	B->X (RR)	0.01860	0.00100	0.10619	0.32940	0.06480	0.50992	2.50740	0.30000	1.85910

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.08139	0.32940	0.06480	0.44905	2.50740	0.30000	1.59868
	B->X (FF)	0.01860	0.00100	0.08888	0.32940	0.06480	0.46526	2.50740	0.30000	1.65062

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	0.00508	0.32940	0.06480	0.00499	2.50740	0.30000	0.00685
	B	0.01860	0.00100	0.00608	0.32940	0.06480	0.00592	2.50740	0.30000	0.00757

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	0.00447	0.32940	0.06480	0.00439	2.50740	0.30000	0.00643
	B	0.01860	0.00100	0.00465	0.32940	0.06480	0.00455	2.50740	0.30000	0.00645

AND3



*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_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_1	0.00222	0.00209	0.00211	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	508.20100	629.01000	1214.64000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.13839	0.32940	0.06480	0.55181	2.50740	0.30000	1.92536
	B->X (RR)	0.01860	0.00100	0.15255	0.32940	0.06480	0.56730	2.50740	0.30000	1.96852
	C->X (RR)	0.01860	0.00100	0.15889	0.32940	0.06480	0.56930	2.50740	0.30000	1.94940

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.08763	0.32940	0.06480	0.46160	2.50740	0.30000	1.63139
	B->X (FF)	0.01860	0.00100	0.09550	0.32940	0.06480	0.47755	2.50740	0.30000	1.67789
	C->X (FF)	0.01860	0.00100	0.10066	0.32940	0.06480	0.48954	2.50740	0.30000	1.71834

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	0.00585	0.32940	0.06480	0.00570	2.50740	0.30000	0.00766
	B	0.01860	0.00100	0.00682	0.32940	0.06480	0.00667	2.50740	0.30000	0.00810
	C	0.01860	0.00100	0.00778	0.32940	0.06480	0.00764	2.50740	0.30000	0.00857

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	0.00448	0.32940	0.06480	0.00434	2.50740	0.30000	0.00591
	B	0.01860	0.00100	0.00473	0.32940	0.06480	0.00461	2.50740	0.30000	0.00600
	C	0.01860	0.00100	0.00488	0.32940	0.06480	0.00481	2.50740	0.30000	0.00608

AND4



*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_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_1	0.00192	0.00185	0.00210	0.00211	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	508.39400	599.23900	1574.52000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.18057	0.32940	0.06480	0.60393	2.50740	0.30000	2.02012
	B->X (RR)	0.01860	0.00100	0.20066	0.32940	0.06480	0.62471	2.50740	0.30000	2.05643
	C->X (RR)	0.01860	0.00100	0.21221	0.32940	0.06480	0.63245	2.50740	0.30000	2.04782
	D->X (RR)	0.01860	0.00100	0.21843	0.32940	0.06480	0.63930	2.50740	0.30000	2.03765

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.09339	0.32940	0.06480	0.47050	2.50740	0.30000	1.65035
	B->X (FF)	0.01860	0.00100	0.10101	0.32940	0.06480	0.48533	2.50740	0.30000	1.69257
	C->X (FF)	0.01860	0.00100	0.10646	0.32940	0.06480	0.49625	2.50740	0.30000	1.73068
	D->X (FF)	0.01860	0.00100	0.11054	0.32940	0.06480	0.50611	2.50740	0.30000	1.76709

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	0.00666	0.32940	0.06480	0.00647	2.50740	0.30000	0.00829
	B	0.01860	0.00100	0.00792	0.32940	0.06480	0.00776	2.50740	0.30000	0.00870
	C	0.01860	0.00100	0.00845	0.32940	0.06480	0.00828	2.50740	0.30000	0.00873
	D	0.01860	0.00100	0.00844	0.32940	0.06480	0.00835	2.50740	0.30000	0.00881

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	0.00409	0.32940	0.06480	0.00389	2.50740	0.30000	0.00529
	B	0.01860	0.00100	0.00427	0.32940	0.06480	0.00414	2.50740	0.30000	0.00531
	C	0.01860	0.00100	0.00499	0.32940	0.06480	0.00491	2.50740	0.30000	0.00623
	D	0.01860	0.00100	0.00516	0.32940	0.06480	0.00510	2.50740	0.30000	0.00636

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00026	0.32940	-0.00027	2.50740	-0.00026

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00076	0.32940	0.00078	2.50740	0.00078

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00026	0.32940	-0.00027	2.50740	-0.00026

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00076	0.32940	0.00078	2.50740	0.00078

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00047	0.32940	-0.00048	2.50740	-0.00048

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00067	0.32940	0.00069	2.50740	0.00069

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00047	0.32940	-0.00048	2.50740	-0.00048

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00067	0.32940	0.00069	2.50740	0.00069

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00003	0.32940	-0.00001	2.50740	-0.00000

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00006	0.32940	0.00001	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	-0.00003	0.32940	-0.00001	2.50740	-0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00006	0.32940	0.00001	2.50740	0.00000

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00092	0.32940	0.00095	2.50740	0.00094

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00007	0.32940	0.00001	2.50740	-0.00001

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00092	0.32940	0.00095	2.50740	0.00094

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00007	0.32940	0.00001	2.50740	-0.00001

A021



*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_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_1	0.00230	0.00239	0.00214	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	412.49300	650.18700	1047.70000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.12216	0.32940	0.06480	0.53960	2.50740	0.30000	1.93510
	A2->X (RR)	0.01860	0.00100	0.12845	0.32940	0.06480	0.54380	2.50740	0.30000	1.95857
	B1->X (RR)	0.01860	0.00100	0.07575	0.32940	0.06480	0.48485	2.50740	0.30000	1.83741

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.13651	0.32940	0.06480	0.50882	2.50740	0.30000	1.67096
	A2->X (FF)	0.01860	0.00100	0.14882	0.32940	0.06480	0.52780	2.50740	0.30000	1.72026
	B1->X (FF)	0.01860	0.00100	0.13404	0.32940	0.06480	0.51229	2.50740	0.30000	1.70387

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.07575	0.32940	0.06480	0.48485	2.50740	0.30000	1.83741
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.07062	0.32940	0.06480	0.47007	2.50740	0.30000	1.77340

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.13404	0.32940	0.06480	0.51229	2.50740	0.30000	1.70387
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.11945	0.32940	0.06480	0.49059	2.50740	0.30000	1.64894

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	0.00582	0.32940	0.06480	0.00560	2.50740	0.30000	0.00759
	A2	0.01860	0.00100	0.00683	0.32940	0.06480	0.00669	2.50740	0.30000	0.00802
	B1	0.01860	0.00100	0.00462	0.32940	0.06480	0.00443	2.50740	0.30000	0.00637

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	0.00624	0.32940	0.06480	0.00617	2.50740	0.30000	0.00703
	A2	0.01860	0.00100	0.00627	0.32940	0.06480	0.00635	2.50740	0.30000	0.00700
	B1	0.01860	0.00100	0.00434	0.32940	0.06480	0.00435	2.50740	0.30000	0.00641

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00567	0.32940	0.06480	0.00552	2.50740	0.30000	0.00811
	B1	(!A1 * A2)	0.01860	0.00100	0.00462	0.32940	0.06480	0.00443	2.50740	0.30000	0.00637

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00445	0.32940	0.06480	0.00435	2.50740	0.30000	0.00611
	B1	(!A1 * A2)	0.01860	0.00100	0.00434	0.32940	0.06480	0.00435	2.50740	0.30000	0.00641

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00015	0.32940	-0.00013	2.50740	-0.00013

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00020	0.32940	0.00019	2.50740	0.00019

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00009	0.32940	-0.00003	2.50740	-0.00007
	(!A2 * B1)	0.01860	-0.00015	0.32940	-0.00013	2.50740	-0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00020	0.32940	0.00020	2.50740	0.00020
	(!A2 * B1)	0.01860	0.00020	0.32940	0.00019	2.50740	0.00019

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00009	0.32940	-0.00009	2.50740	-0.00009

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00014	0.32940	0.00015	2.50740	0.00015

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00014	0.32940	0.00002	2.50740	-0.00002
	(!A1 * B1)	0.01860	-0.00009	0.32940	-0.00009	2.50740	-0.00009

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00016	0.32940	0.00016	2.50740	0.00016
	(!A1 * B1)	0.01860	0.00014	0.32940	0.00015	2.50740	0.00015

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00020	0.32940	0.00023	2.50740	0.00023

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00064	0.32940	0.00063	2.50740	0.00064

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00020	0.32940	0.00023	2.50740	0.00023

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00064	0.32940	0.00063	2.50740	0.00064

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	25.40160
sg13g2_ebufn_2	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_ebufn_8	0.00523	0.01395	2.40000
sg13g2_ebufn_4	0.00272	0.00850	1.20000
sg13g2_ebufn_2	0.00231	0.00519	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1655.50000	2491.37000	4310.14000
sg13g2_ebufn_4	1066.80000	1399.03000	2222.84000
sg13g2_ebufn_2	765.92500	931.97500	1199.63000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A->Z (RR)	0.01860	0.01618	0.09453	0.32940	0.53358	0.85444	2.50740	2.41518	3.40756
	TE_B->Z (RR)	0.01860	0.01618	0.09290	0.32940	0.53358	0.22355	2.50740	2.41518	0.55624
	TE_B->Z (FR)	0.01860	0.01618	0.05047	0.32940	0.53358	0.76707	2.50740	2.41518	3.75935
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.00863	0.09774	0.32940	0.26683	0.85443	2.50740	1.20763	3.40564
	TE_B->Z (RR)	0.01860	0.00863	0.07407	0.32940	0.26683	0.17900	2.50740	1.20763	0.40395
	TE_B->Z (FR)	0.01860	0.00863	0.05141	0.32940	0.26683	0.76517	2.50740	1.20763	3.74850
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00485	0.08425	0.32940	0.13345	0.81431	2.50740	0.60385	3.29276
	TE_B->Z (RR)	0.01860	0.00485	0.06432	0.32940	0.13345	0.15515	2.50740	0.60385	0.33606
	TE_B->Z (FR)	0.01860	0.00485	0.05115	0.32940	0.13345	0.76434	2.50740	0.60385	3.74840

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A->Z (FF)	0.01860	0.02930	0.12955	0.32940	0.54670	0.72852	2.50740	2.42830	2.73535
	TE_B->Z (RF)	0.01860	0.02930	0.06430	0.32940	0.54670	-0.15613	2.50740	2.42830	-1.84249
	TE_B->Z (FF)	0.01860	0.02930	0.14462	0.32940	0.54670	0.94789	2.50740	2.42830	3.68738
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01542	0.13337	0.32940	0.27362	0.73182	2.50740	1.21442	2.74269
	TE_B->Z (RF)	0.01860	0.01542	0.04696	0.32940	0.27362	-0.15518	2.50740	1.21442	-1.84093
	TE_B->Z (FF)	0.01860	0.01542	0.10973	0.32940	0.27362	0.88278	2.50740	1.21442	3.49078
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00839	0.09989	0.32940	0.13699	0.67590	2.50740	0.60739	2.57654
	TE_B->Z (RF)	0.01860	0.00839	0.03378	0.32940	0.13699	-0.18019	2.50740	0.60739	-1.86686
	TE_B->Z (FF)	0.01860	0.00839	0.09228	0.32940	0.13699	0.83505	2.50740	0.60739	3.36396

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A	0.01860	0.01618	0.01354	0.32940	0.53358	0.01951	2.50740	2.41518	0.01825
	TE_B	0.01860	0.01618	0.00792	0.32940	0.53358	0.00673	2.50740	2.41518	0.00415
sg13g2_ebufn_4	A	0.01860	0.00863	0.00692	0.32940	0.26683	0.00964	2.50740	1.20763	0.00795
	TE_B	0.01860	0.00863	0.00396	0.32940	0.26683	0.00316	2.50740	1.20763	0.00147
sg13g2_ebufn_2	A	0.01860	0.00485	0.00369	0.32940	0.13345	0.00494	2.50740	0.60385	0.00469
	TE_B	0.01860	0.00485	0.00195	0.32940	0.13345	0.00155	2.50740	0.60385	0.00097

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_ebufn_8	A	0.01860	0.02930	0.02609	0.32940	0.54670	0.02617	2.50740	2.42830	0.02110
	TE_B	0.01860	0.02930	0.00895	0.32940	0.54670	0.07412	2.50740	2.42830	0.31215
sg13g2_ebufn_4	A	0.01860	0.01542	0.01309	0.32940	0.27362	0.01303	2.50740	1.21442	0.01068
	TE_B	0.01860	0.01542	0.00455	0.32940	0.27362	0.03707	2.50740	1.21442	0.15623
sg13g2_ebufn_2	A	0.01860	0.00839	0.00652	0.32940	0.13699	0.00654	2.50740	0.60739	0.00487
	TE_B	0.01860	0.00839	0.00231	0.32940	0.13699	0.01850	2.50740	0.60739	0.07825

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01888	0.32940	0.01848	2.50740	0.02470
sg13g2_ebufn_4	0.01860	0.00967	0.32940	0.00948	2.50740	0.01252
sg13g2_ebufn_2	0.01860	0.00530	0.32940	0.00517	2.50740	0.00796

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00759	0.32940	0.00738	2.50740	0.01318
sg13g2_ebufn_4	0.01860	0.00400	0.32940	0.00389	2.50740	0.00675
sg13g2_ebufn_2	0.01860	0.00263	0.32940	0.00257	2.50740	0.00523

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	-0.00275	0.32940	-0.00393	2.50740	-0.00187
sg13g2_ebufn_4	0.01860	-0.00044	0.32940	-0.00119	2.50740	0.00155
sg13g2_ebufn_2	0.01860	0.00030	0.32940	-0.00015	2.50740	0.00250

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.03604	0.32940	0.03600	2.50740	0.03876
sg13g2_ebufn_4	0.01860	0.01874	0.32940	0.01883	2.50740	0.02173
sg13g2_ebufn_2	0.01860	0.00997	0.32940	0.01005	2.50740	0.01268

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	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01567	4.80000
sg13g2_buf_8	0.00783	2.40000
sg13g2_buf_4	0.00333	1.20000
sg13g2_buf_2	0.00230	0.60000
sg13g2_buf_1	0.00197	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	5028.75000	6741.44000	8454.12000
sg13g2_buf_8	2514.39000	3370.79000	4227.19000
sg13g2_buf_4	1257.50000	1653.20000	2048.91000
sg13g2_buf_2	697.49800	882.31900	1067.14000
sg13g2_buf_1	494.45700	531.74800	569.03900

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A->X (RR)	0.01860	0.00100	0.08147	0.32940	1.03680	0.51080	2.50740	4.80000	1.90512
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.08046	0.32940	0.51840	0.50929	2.50740	2.40000	1.90262
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.10413	0.32940	0.25920	0.54927	2.50740	1.20000	2.04418
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.08034	0.32940	0.12960	0.50330	2.50740	0.60000	1.89314
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.07141	0.32940	0.06480	0.47569	2.50740	0.30000	1.80408

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A->X (FF)	0.01860	0.00100	0.09220	0.32940	1.03680	0.48855	2.50740	4.80000	1.70716
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.09105	0.32940	0.51840	0.48761	2.50740	2.40000	1.70793
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.08936	0.32940	0.25920	0.48343	2.50740	1.20000	1.67767
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.08765	0.32940	0.12960	0.47277	2.50740	0.60000	1.66033
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.07671	0.32940	0.06480	0.44035	2.50740	0.30000	1.56346

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A	0.01860	0.00100	0.05940	0.32940	1.03680	0.05958	2.50740	4.80000	0.07602
sg13g2_buf_8	A	0.01860	0.00100	0.02878	0.32940	0.51840	0.02904	2.50740	2.40000	0.03689
sg13g2_buf_4	A	0.01860	0.00100	0.01384	0.32940	0.25920	0.01367	2.50740	1.20000	0.01594
sg13g2_buf_2	A	0.01860	0.00100	0.00754	0.32940	0.12960	0.00749	2.50740	0.60000	0.00980
sg13g2_buf_1	A	0.01860	0.00100	0.00448	0.32940	0.06480	0.00443	2.50740	0.30000	0.00607

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_buf_16	A	0.01860	0.00100	0.05594	0.32940	1.03680	0.05788	2.50740	4.80000	0.06864
sg13g2_buf_8	A	0.01860	0.00100	0.02758	0.32940	0.51840	0.02860	2.50740	2.40000	0.03495
sg13g2_buf_4	A	0.01860	0.00100	0.01380	0.32940	0.25920	0.01434	2.50740	1.20000	0.01473
sg13g2_buf_2	A	0.01860	0.00100	0.00731	0.32940	0.12960	0.00740	2.50740	0.60000	0.00910
sg13g2_buf_1	A	0.01860	0.00100	0.00455	0.32940	0.06480	0.00457	2.50740	0.30000	0.00582

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	98.65020	98.65020	98.65020
sg13g2_decap_8	197.29500	197.29500	197.29500

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	47.17440

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00126	0.00454	0.00254	0.60000	0.60000
sg13g2_dfrbp_1	0.00133	0.00506	0.00238	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	2762.66000	3213.97000	3740.65000
sg13g2_dfrbp_1	2077.25000	2501.99000	2984.47000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.36185	0.32940	0.12960	0.75538	2.50740	0.60000	2.14456
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.28156	0.32940	0.06480	0.68170	2.50740	0.30000	2.04218

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q (RF)	0.01860	0.00100	0.31371	0.32940	0.12960	0.67993	2.50740	0.60000	1.87371
	RESET_B->Q (FF)	0.01860	0.00100	0.42390	0.32940	0.12960	0.81734	2.50740	0.60000	2.24078
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.26967	0.32940	0.06480	0.63511	2.50740	0.30000	1.81054
	RESET_B->Q (FF)	0.01860	0.00100	0.36795	0.32940	0.06480	0.76042	2.50740	0.30000	2.15503

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	0.20643	0.32940	0.12960	0.66426	2.50740	0.60000	2.00775
	RESET_B->Q_N (FR)	0.01860	0.00100	0.31921	0.32940	0.12960	0.79889	2.50740	0.60000	2.37394
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.20439	0.32940	0.06480	0.64395	2.50740	0.30000	1.97329
	RESET_B->Q_N (FR)	0.01860	0.00100	0.30354	0.32940	0.06480	0.76611	2.50740	0.30000	2.31834

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	0.23168	0.32940	0.12960	0.69242	2.50740	0.60000	1.92671
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.20869	0.32940	0.06480	0.63272	2.50740	0.30000	1.84959

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.26714	2.50740	2.50740	-0.36599
	setup	CLK (R)	0.01860	0.01860	0.20540	1.26300	1.26300	0.40475	2.50740	2.50740	0.51652
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.07336	1.26300	1.26300	-0.28873	2.50740	2.50740	-0.39846
	setup	CLK (R)	0.01860	0.01860	0.19562	1.26300	1.26300	0.40745	2.50740	2.50740	0.53128

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.27449
	setup	CLK (R)	0.01860	0.01860	0.19317	1.26300	1.26300	0.35888	2.50740	2.50740	0.48405
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.27154
	setup	CLK (R)	0.01860	0.01860	0.18339	1.26300	1.26300	0.35349	2.50740	2.50740	0.48405

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dfrbp_2	recovery	CLK (R)	0.01860	0.01860	0.21518	1.26300	1.26300	0.42634	2.50740	2.50740	0.58145
	removal	CLK (R)	0.01860	0.01860	-0.16872	1.26300	1.26300	-0.38856	2.50740	2.50740	-0.54013
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.20784	1.26300	1.26300	0.43174	2.50740	2.50740	0.59621
	removal	CLK (R)	0.01860	0.01860	-0.15649	1.26300	1.26300	-0.38587	2.50740	2.50740	-0.54013

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dfrbp_2	-	3.3435
sg13g2_dfrbp_1	-	3.3435

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_dfrbp_2	3.3435	3.3435
sg13g2_dfrbp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.01954	0.32940	0.12960	0.09568	2.50740	0.60000	0.37046
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.01436	0.32940	0.06480	0.05200	2.50740	0.30000	0.18865

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.02004	0.32940	0.12960	0.09611	2.50740	0.60000	0.36917
	RESET_B	0.01860	0.00100	0.02156	0.32940	0.12960	0.09724	2.50740	0.60000	0.37070
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.01379	0.32940	0.06480	0.05146	2.50740	0.30000	0.18779
	RESET_B	0.01860	0.00100	0.01493	0.32940	0.06480	0.05225	2.50740	0.30000	0.18941

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.02006	0.32940	0.12960	0.09649	2.50740	0.60000	0.37140
	RESET_B	0.01860	0.00100	0.02160	0.32940	0.12960	0.09764	2.50740	0.60000	0.37257
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.01379	0.32940	0.06480	0.05171	2.50740	0.30000	0.18911
	RESET_B	0.01860	0.00100	0.01492	0.32940	0.06480	0.05247	2.50740	0.30000	0.19060

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.01954	0.32940	0.12960	0.09528	2.50740	0.60000	0.36751
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.01434	0.32940	0.06480	0.05180	2.50740	0.30000	0.18808

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00134	0.32940	0.00126	2.50740	0.00244
sg13g2_dfrbp_1	0.01860	0.00138	0.32940	0.00130	2.50740	0.00247

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00123	0.32940	0.00113	2.50740	0.00227
sg13g2_dfrbp_1	0.01860	0.00131	0.32940	0.00121	2.50740	0.00234

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00134	0.32940	0.00126	2.50740	0.00244
	(!CLK * RESET_B)	0.01860	0.00884	0.32940	0.00867	2.50740	0.00985
	(!CLK * !RESET_B)	0.01860	-0.00014	0.32940	-0.00015	2.50740	-0.00015
sg13g2_dfrbp_1	CLK	0.01860	0.00138	0.32940	0.00130	2.50740	0.00247
	(!CLK * RESET_B)	0.01860	0.00760	0.32940	0.00747	2.50740	0.00868
	(!CLK * !RESET_B)	0.01860	-0.00009	0.32940	-0.00010	2.50740	-0.00010

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00123	0.32940	0.00113	2.50740	0.00227
	(!CLK * RESET_B)	0.01860	0.00712	0.32940	0.00694	2.50740	0.00815
	(!CLK * !RESET_B)	0.01860	0.00029	0.32940	0.00030	2.50740	0.00031
sg13g2_dfrbp_1	CLK	0.01860	0.00131	0.32940	0.00121	2.50740	0.00234
	(!CLK * RESET_B)	0.01860	0.00644	0.32940	0.00627	2.50740	0.00747
	(!CLK * !RESET_B)	0.01860	0.00027	0.32940	0.00028	2.50740	0.00028

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00270	0.32940	0.00261	2.50740	0.00338
sg13g2_dfrbp_1	0.01860	0.00304	0.32940	0.00295	2.50740	0.00370

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00744	0.32940	0.00703	2.50740	0.00813
sg13g2_dfrbp_1	0.01860	0.00647	0.32940	0.00604	2.50740	0.00719

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.00270	0.32940	0.00261	2.50740	0.00338
	(CLK * !D * !Q * Q_N)	0.01860	0.00082	0.32940	0.00081	2.50740	0.00080
	(!CLK * D * !Q * Q_N)	0.01860	0.01049	0.32940	0.01021	2.50740	0.01135
	(!CLK * !D * !Q * Q_N)	0.01860	0.00092	0.32940	0.00090	2.50740	0.00090
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00304	0.32940	0.00295	2.50740	0.00370
	(CLK * !D * !Q * Q_N)	0.01860	0.00115	0.32940	0.00114	2.50740	0.00113
	(!CLK * D * !Q * Q_N)	0.01860	0.00957	0.32940	0.00930	2.50740	0.01049
	(!CLK * !D * !Q * Q_N)	0.01860	0.00118	0.32940	0.00117	2.50740	0.00116

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.02863	0.32940	0.02793	2.50740	0.03059
	(CLK * !D * !Q * Q_N)	0.01860	-0.00024	0.32940	-0.00039	2.50740	-0.00045
	(!CLK * D * !Q * Q_N)	0.01860	0.00744	0.32940	0.00703	2.50740	0.00813
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00044	0.32940	-0.00055	2.50740	-0.00059
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.02086	0.32940	0.02014	2.50740	0.02281
	(CLK * !D * !Q * Q_N)	0.01860	-0.00056	0.32940	-0.00071	2.50740	-0.00077
	(!CLK * D * !Q * Q_N)	0.01860	0.00647	0.32940	0.00604	2.50740	0.00719
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00064	0.32940	-0.00077	2.50740	-0.00082

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00842	0.32940	0.00810	2.50740	0.01140
sg13g2_dfrbp_1	0.01860	0.00804	0.32940	0.00777	2.50740	0.01083

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01565	0.32940	0.01517	2.50740	0.01829
sg13g2_dfrbp_1	0.01860	0.01390	0.32940	0.01344	2.50740	0.01633

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.00842	0.32940	0.00810	2.50740	0.01140
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00865	0.32940	0.00835	2.50740	0.01162
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00818	0.32940	0.00788	2.50740	0.01115
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00856	0.32940	0.00825	2.50740	0.01153
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.00841	0.32940	0.00810	2.50740	0.01118
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00804	0.32940	0.00777	2.50740	0.01083
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00794	0.32940	0.00767	2.50740	0.01072
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00793	0.32940	0.00766	2.50740	0.01071

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.01565	0.32940	0.01517	2.50740	0.01829
	(D * RESET_B * !Q * Q_N)	0.01860	0.01565	0.32940	0.01517	2.50740	0.01829
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00825	0.32940	0.00794	2.50740	0.01105
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00197	0.32940	0.03580	2.50740	0.03847
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00825	0.32940	0.00792	2.50740	0.01105
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00823	0.32940	0.00791	2.50740	0.01103
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01390	0.32940	0.01344	2.50740	0.01633
	(D * RESET_B * !Q * Q_N)	0.01860	0.01390	0.32940	0.01344	2.50740	0.01633
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00780	0.32940	0.00750	2.50740	0.01038
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00179	0.32940	0.02854	2.50740	0.03105
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00775	0.32940	0.00745	2.50740	0.01033
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00777	0.32940	0.00747	2.50740	0.01035

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	0.00195	0.00200	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	1392.36000	1694.94000	2124.80000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	0.26040	0.32940	0.06480	0.66068	2.50740	0.30000	1.97055
	GATE->Q (RR)	0.01860	0.00100	0.22079	0.32940	0.06480	0.62067	2.50740	0.30000	1.92432

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D->Q (FF)	0.01860	0.00100	0.23155	0.32940	0.06480	0.59103	2.50740	0.30000	1.70078
	GATE->Q (RF)	0.01860	0.00100	0.23612	0.32940	0.06480	0.59987	2.50740	0.30000	1.72030

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.13938	1.26300	1.26300	-0.33730	2.50740	2.50740	-0.42502
	setup	GATE (F)	0.01860	0.01860	0.15894	1.26300	1.26300	0.41555	2.50740	2.50740	0.55784

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00885
	setup	GATE (F)	0.01860	0.01860	0.08069	1.26300	1.26300	0.04857	2.50740	2.50740	0.02361

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhq_1	3.3435	-

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D	0.01860	0.00100	0.01109	0.32940	0.06480	0.01124	2.50740	0.30000	0.01090
	GATE	0.01860	0.00100	0.00888	0.32940	0.06480	0.00889	2.50740	0.30000	0.00886

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhq_1	D	0.01860	0.00100	0.01146	0.32940	0.06480	0.01169	2.50740	0.30000	0.01121
	GATE	0.01860	0.00100	0.00968	0.32940	0.06480	0.01004	2.50740	0.30000	0.00983

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00264	0.32940	0.00253	2.50740	0.00478

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00282	0.32940	0.00268	2.50740	0.00477

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00295	0.32940	0.00279	2.50740	0.00500
	(!GATE * !Q)	0.01860	0.00264	0.32940	0.00253	2.50740	0.00478

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00263	0.32940	0.00254	2.50740	0.00468
	(!GATE * !Q)	0.01860	0.00282	0.32940	0.00268	2.50740	0.00477

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00668	0.32940	0.00647	2.50740	0.00929

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00165	0.32940	0.01131	2.50740	0.01405

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.00668	0.32940	0.00647	2.50740	0.00929

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.00165	0.32940	0.01131	2.50740	0.01405

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	0.00181	0.00246	0.00192	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1556.95000	1833.47000	2128.14000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D->Q (RR)	0.01860	0.00100	0.27285	0.32940	0.06480	0.67899	2.50740	0.30000	1.98585
	GATE->Q (RR)	0.01860	0.00100	0.24351	0.32940	0.06480	0.65058	2.50740	0.30000	1.95277

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D->Q (FF)	0.01860	0.00100	0.24301	0.32940	0.06480	0.60339	2.50740	0.30000	1.71438
	GATE->Q (RF)	0.01860	0.00100	0.24847	0.32940	0.06480	0.61583	2.50740	0.30000	1.74041
	RESET_B->Q (FF)	0.01860	0.00100	0.09245	0.32940	0.06480	0.47297	2.50740	0.30000	1.67522

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.11737	1.26300	1.26300	-0.30761	2.50740	2.50740	-0.38665
	setup	GATE (F)	0.01860	0.01860	0.15160	1.26300	1.26300	0.38856	2.50740	2.50740	0.51652

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.09292	1.26300	1.26300	0.05127	2.50740	2.50740	0.02656

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00978	1.26300	1.26300	-0.08635	2.50740	2.50740	-0.14167
	removal	GATE (F)	0.01860	0.01860	0.03912	1.26300	1.26300	0.15651	2.50740	2.50740	0.20956

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dlhrq_1	-	3.3435

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhrq_1	3.3435	-

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D	0.01860	0.00100	0.00184	0.32940	0.06480	0.00092	2.50740	0.30000	0.00061
	GATE	0.01860	0.00100	0.00951	0.32940	0.06480	0.00954	2.50740	0.30000	0.00962

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhrq_1	D	0.01860	0.00100	0.00537	0.32940	0.06480	-0.00092	2.50740	0.30000	-0.00061
	GATE	0.01860	0.00100	0.00931	0.32940	0.06480	0.00974	2.50740	0.30000	0.00940
	RESET_B	0.01860	0.00100	0.00523	0.32940	0.06480	0.00528	2.50740	0.30000	0.00737

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01185	0.32940	0.01281	2.50740	0.01509

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00779	0.32940	0.01830	2.50740	0.02042

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00287	0.32940	0.00273	2.50740	0.00496
	!RESET_B	0.01860	0.01185	0.32940	0.01281	2.50740	0.01509

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00257	0.32940	0.00250	2.50740	0.00462
	!RESET_B	0.01860	0.00779	0.32940	0.01830	2.50740	0.02042

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003
	(!D * !GATE * !Q)	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026
	(!D * !GATE * !Q)	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00640	0.32940	0.00616	2.50740	0.00898

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00170	0.32940	0.01127	2.50740	0.01399

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.00874	0.32940	0.00832	2.50740	0.01134
	(!D * !RESET_B * !Q)	0.01860	0.00640	0.32940	0.00616	2.50740	0.00898

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.00894	0.32940	0.00859	2.50740	0.01153
	(!D * RESET_B * !Q)	0.01860	0.00170	0.32940	0.01127	2.50740	0.01399
	(!D * !RESET_B * !Q)	0.01860	0.00175	0.32940	0.01131	2.50740	0.01404

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	0.00183	0.00261	0.00198	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	2052.80000	2357.21000	2640.87000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.29584	0.32940	0.06480	0.71285	2.50740	0.30000	2.01648
	GATE->Q (RR)	0.01860	0.00100	0.26809	0.32940	0.06480	0.68680	2.50740	0.30000	1.98936

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (FF)	0.01860	0.00100	0.25261	0.32940	0.06480	0.61813	2.50740	0.30000	1.72013
	GATE->Q (RF)	0.01860	0.00100	0.25795	0.32940	0.06480	0.63115	2.50740	0.30000	1.74997
	RESET_B->Q (FF)	0.01860	0.00100	0.10058	0.32940	0.06480	0.49506	2.50740	0.30000	1.73469

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q_N (FR)	0.01860	0.00100	0.31055	0.32940	0.06480	0.69815	2.50740	0.30000	1.95442
	GATE->Q_N (RR)	0.01860	0.00100	0.31615	0.32940	0.06480	0.71122	2.50740	0.30000	1.98215
	RESET_B->Q_N (FR)	0.01860	0.00100	0.15822	0.32940	0.06480	0.56992	2.50740	0.30000	1.91536

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q_N (RF)	0.01860	0.00100	0.36089	0.32940	0.06480	0.71247	2.50740	0.30000	1.86369
	GATE->Q_N (RF)	0.01860	0.00100	0.33353	0.32940	0.06480	0.68663	2.50740	0.30000	1.83759

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.12470	1.26300	1.26300	-0.31301	2.50740	2.50740	-0.39255
	setup	GATE (F)	0.01860	0.01860	0.16383	1.26300	1.26300	0.39126	2.50740	2.50740	0.51652

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.10025	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)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	0.00489	1.26300	1.26300	-0.03238	2.50740	2.50740	-0.05313
	removal	GATE (F)	0.01860	0.01860	0.02934	1.26300	1.26300	0.10524	2.50740	2.50740	0.13282

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dlhr_1	-	3.3435

Min Pulse Width (ns) for GATE:

Cell Name	High	Low
sg13g2_dlhr_1	3.3435	-

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	0.00405	0.32940	0.06480	0.00383	2.50740	0.30000	0.00353
	GATE	0.01860	0.00100	0.00776	0.32940	0.06480	0.00797	2.50740	0.30000	0.00779

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	0.00574	0.32940	0.06480	0.00059	2.50740	0.30000	-0.00020
	GATE	0.01860	0.00100	0.00767	0.32940	0.06480	0.00793	2.50740	0.30000	0.00728
	RESET_B	0.01860	0.00100	0.00551	0.32940	0.06480	0.00558	2.50740	0.30000	0.00634

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	0.00575	0.32940	0.06480	0.00073	2.50740	0.30000	0.00062
	GATE	0.01860	0.00100	0.00767	0.32940	0.06480	0.00807	2.50740	0.30000	0.00778
	RESET_B	0.01860	0.00100	0.00552	0.32940	0.06480	0.00562	2.50740	0.30000	0.00714

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	0.00404	0.32940	0.06480	0.00373	2.50740	0.30000	0.00318
	GATE	0.01860	0.00100	0.00776	0.32940	0.06480	0.00787	2.50740	0.30000	0.00746

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01154	0.32940	0.01244	2.50740	0.01475

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00751	0.32940	0.01802	2.50740	0.02013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00285	0.32940	0.00271	2.50740	0.00496
	!RESET_B	0.01860	0.01154	0.32940	0.01244	2.50740	0.01475

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00238	0.32940	0.00232	2.50740	0.00446
	!RESET_B	0.01860	0.00751	0.32940	0.01802	2.50740	0.02013

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013
	(!D * !GATE * !Q)	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036
	(!D * !GATE * !Q)	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00610	0.32940	0.00589	2.50740	0.00870

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00171	0.32940	0.01105	2.50740	0.01378

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.00844	0.32940	0.00804	2.50740	0.01104
	(!D * !RESET_B * !Q)	0.01860	0.00610	0.32940	0.00589	2.50740	0.00870

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.00916	0.32940	0.00877	2.50740	0.01175
	(!D * RESET_B * !Q)	0.01860	0.00171	0.32940	0.01105	2.50740	0.01378
	(!D * !RESET_B * !Q)	0.01860	0.00176	0.32940	0.01109	2.50740	0.01383

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	0.00180	0.00247	0.00192	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1451.71000	1806.12000	2128.09000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D->Q (RR)	0.01860	0.00100	0.27258	0.32940	0.06480	0.67738	2.50740	0.30000	1.98186
	GATE_N->Q (FR)	0.01860	0.00100	0.30333	0.32940	0.06480	0.71680	2.50740	0.30000	2.02781
	RESET_B->Q (RR)	0.01860	0.00100	0.12219	0.32940	0.06480	0.52375	2.50740	0.30000	1.89011

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D->Q (FF)	0.01860	0.00100	0.24225	0.32940	0.06480	0.59991	2.50740	0.30000	1.70308
	GATE_N->Q (FF)	0.01860	0.00100	0.22874	0.32940	0.06480	0.60384	2.50740	0.30000	1.80653
	RESET_B->Q (FF)	0.01860	0.00100	0.09360	0.32940	0.06480	0.47296	2.50740	0.30000	1.67184

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.11492	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.16234
	setup	GATE_N (R)	0.01860	0.01860	0.12715	1.26300	1.26300	0.14841	2.50740	2.50740	0.18299

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.12715	1.26300	1.26300	-0.32110	2.50740	2.50740	-0.40731
	setup	GATE_N (R)	0.01860	0.01860	0.14427	1.26300	1.26300	0.39126	2.50740	2.50740	0.52537

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	recovery	GATE_N (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.11603	2.50740	2.50740	-0.13872
	removal	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.15920	2.50740	2.50740	0.18004

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dllrq_1	-	3.3435

Min Pulse Width (ns) for GATE_N:

Cell Name	High	Low
sg13g2_dllrq_1	-	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D	0.01860	0.00100	0.00473	0.32940	0.06480	0.00506	2.50740	0.30000	0.00472
	GATE_N	0.01860	0.00100	0.01462	0.32940	0.06480	0.00514	2.50740	0.30000	0.00504
	RESET_B	0.01860	0.00100	0.00723	0.32940	0.06480	0.00722	2.50740	0.30000	0.00914

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D	0.01860	0.00100	0.01189	0.32940	0.06480	0.00001	2.50740	0.30000	-0.00033
	GATE_N	0.01860	0.00100	0.01360	0.32940	0.06480	0.00403	2.50740	0.30000	0.00384
	RESET_B	0.01860	0.00100	0.00539	0.32940	0.06480	0.00544	2.50740	0.30000	0.00789

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00895	0.32940	0.00865	2.50740	0.01088

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00133	0.32940	0.01328	2.50740	0.01544

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00286	0.32940	0.00272	2.50740	0.00496
	!RESET_B	0.01860	0.00895	0.32940	0.00865	2.50740	0.01088

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00244	0.32940	0.00237	2.50740	0.00452
	!RESET_B	0.01860	0.00133	0.32940	0.01328	2.50740	0.01544

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003
	(!D * GATE_N * !Q)	0.01860	-0.00001	0.32940	-0.00003	2.50740	-0.00003

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026
	(!D * GATE_N * !Q)	0.01860	0.00038	0.32940	0.00030	2.50740	0.00026

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00562	0.32940	0.00541	2.50740	0.00822

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00168	0.32940	0.01114	2.50740	0.01391

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.01002	0.32940	0.00970	2.50740	0.01235
	(!D * !RESET_B * !Q)	0.01860	0.00562	0.32940	0.00541	2.50740	0.00822

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.00917	0.32940	0.00889	2.50740	0.01161
	(!D * RESET_B * !Q)	0.01860	0.00168	0.32940	0.01114	2.50740	0.01391
	(!D * !RESET_B * !Q)	0.01860	0.00173	0.32940	0.01119	2.50740	0.01396

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	0.00184	0.00261	0.00199	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1946.82000	2405.38000	2656.31000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q (RR)	0.01860	0.00100	0.29975	0.32940	0.06480	0.71654	2.50740	0.30000	2.02058
	GATE_N->Q (FR)	0.01860	0.00100	0.33103	0.32940	0.06480	0.75740	2.50740	0.30000	2.07072

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q (FF)	0.01860	0.00100	0.25591	0.32940	0.06480	0.62129	2.50740	0.30000	1.72345
	GATE_N->Q (FF)	0.01860	0.00100	0.24385	0.32940	0.06480	0.62753	2.50740	0.30000	1.83403
	RESET_B->Q (FF)	0.01860	0.00100	0.10073	0.32940	0.06480	0.50251	2.50740	0.30000	1.74248

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q_N (FR)	0.01860	0.00100	0.31377	0.32940	0.06480	0.70120	2.50740	0.30000	1.95615
	GATE_N->Q_N (FR)	0.01860	0.00100	0.30193	0.32940	0.06480	0.70717	2.50740	0.30000	2.06443
	RESET_B->Q_N (FR)	0.01860	0.00100	0.15963	0.32940	0.06480	0.57215	2.50740	0.30000	1.92520

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D->Q_N (RF)	0.01860	0.00100	0.36457	0.32940	0.06480	0.71637	2.50740	0.30000	1.86889
	GATE_N->Q_N (FF)	0.01860	0.00100	0.39629	0.32940	0.06480	0.75723	2.50740	0.30000	1.91771

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.12959	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.16824
	setup	GATE_N (R)	0.01860	0.01860	0.14427	1.26300	1.26300	0.15920	2.50740	2.50740	0.19480

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.13204	1.26300	1.26300	-0.32380	2.50740	2.50740	-0.41321
	setup	GATE_N (R)	0.01860	0.01860	0.15405	1.26300	1.26300	0.39666	2.50740	2.50740	0.53128

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.07286	2.50740	2.50740	-0.06789
	removal	GATE_N (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.11873	2.50740	2.50740	0.11216

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

Min Pulse Width (ns) for GATE_N:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	0.00777	0.32940	0.06480	0.04524	2.50740	0.30000	0.18173
	GATE_N	0.01860	0.00100	0.01692	0.32940	0.06480	0.05476	2.50740	0.30000	0.19143

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	0.01169	0.32940	0.06480	0.03786	2.50740	0.30000	0.17334
	GATE_N	0.01860	0.00100	0.01554	0.32940	0.06480	0.05298	2.50740	0.30000	0.18910
	RESET_B	0.01860	0.00100	0.01777	0.32940	0.06480	0.05475	2.50740	0.30000	0.19255

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	0.01171	0.32940	0.06480	0.03813	2.50740	0.30000	0.17458
	GATE_N	0.01860	0.00100	0.01555	0.32940	0.06480	0.05329	2.50740	0.30000	0.19008
	RESET_B	0.01860	0.00100	0.01778	0.32940	0.06480	0.05483	2.50740	0.30000	0.19383

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	0.00777	0.32940	0.06480	0.04505	2.50740	0.30000	0.18146
	GATE_N	0.01860	0.00100	0.01691	0.32940	0.06480	0.05457	2.50740	0.30000	0.19057

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01277	0.32940	0.01297	2.50740	0.01534

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00794	0.32940	0.01919	2.50740	0.02143

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00286	0.32940	0.00269	2.50740	0.00497
	!RESET_B	0.01860	0.01277	0.32940	0.01297	2.50740	0.01534

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00238	0.32940	0.00232	2.50740	0.00445
	!RESET_B	0.01860	0.00794	0.32940	0.01919	2.50740	0.02143

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013
	(!D * GATE_N * !Q)	0.01860	-0.00010	0.32940	-0.00012	2.50740	-0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036
	(!D * GATE_N * !Q)	0.01860	0.00047	0.32940	0.00039	2.50740	0.00036

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00135	0.32940	0.01139	2.50740	0.01420

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00633	0.32940	0.00608	2.50740	0.00887

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.01013	0.32940	0.00977	2.50740	0.01243
	(!D * RESET_B * !Q)	0.01860	0.00130	0.32940	0.01133	2.50740	0.01415
	(!D * !RESET_B * !Q)	0.01860	0.00135	0.32940	0.01139	2.50740	0.01420

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.00950	0.32940	0.00919	2.50740	0.01196
	(!D * !RESET_B * !Q)	0.01860	0.00633	0.32940	0.00608	2.50740	0.00887

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	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00120	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	797.64000	914.88000	1032.12000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A->X (RR)	0.01860	0.00100	0.17104	0.32940	0.06480	0.57385	2.50740	0.30000	1.85370

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A->X (FF)	0.01860	0.00100	0.19986	0.32940	0.06480	0.58189	2.50740	0.30000	1.82547

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.00968	0.32940	0.06480	0.00957	2.50740	0.30000	0.01103

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.00919	0.32940	0.06480	0.00920	2.50740	0.30000	0.01014

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	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00121	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	840.62500	957.87200	1075.12000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	0.24572	0.32940	0.06480	0.65936	2.50740	0.30000	1.99606

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (FF)	0.01860	0.00100	0.28033	0.32940	0.06480	0.68244	2.50740	0.30000	1.99333

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.01130	0.32940	0.06480	0.01124	2.50740	0.30000	0.01186

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.01087	0.32940	0.06480	0.01087	2.50740	0.30000	0.01152

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	0.00119	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)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	0.52348	0.32940	0.06480	0.97406	2.50740	0.30000	2.43679

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (FF)	0.01860	0.00100	0.55410	0.32940	0.06480	0.99535	2.50740	0.30000	2.44648

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.01591	0.32940	0.06480	0.01584	2.50740	0.30000	0.01626

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.01574	0.32940	0.06480	0.01562	2.50740	0.30000	0.01597

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	0.00733	0.00806	1.20000
sg13g2_einvn_2	0.00368	0.00422	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	717.43400	1402.48000	2087.53000
sg13g2_einvn_2	355.00100	697.53100	1040.06000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (FR)	0.01860	0.00876	0.03449	0.32940	0.26696	0.75717	2.50740	1.20776	3.85313
	TE_B->Z (RR)	0.01860	0.00876	0.07186	0.32940	0.26696	0.17701	2.50740	1.20776	0.40327
	TE_B->Z (FR)	0.01860	0.00876	0.04422	0.32940	0.26696	0.75870	2.50740	1.20776	3.73492
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00490	0.03669	0.32940	0.13350	0.75644	2.50740	0.60390	3.84457
	TE_B->Z (RR)	0.01860	0.00490	0.07085	0.32940	0.13350	0.17633	2.50740	0.60390	0.41664
	TE_B->Z (FR)	0.01860	0.00490	0.04682	0.32940	0.13350	0.75872	2.50740	0.60390	3.73413

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01536	0.03358	0.32940	0.27356	0.61942	2.50740	1.21436	3.23907
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00838	0.03571	0.32940	0.13698	0.61975	2.50740	0.60738	3.23959

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.00876	0.00448	0.32940	0.26696	0.00411	2.50740	1.20776	0.00398
	TE_B	0.01860	0.00876	0.01729	0.32940	0.26696	0.01078	2.50740	1.20776	0.00883
sg13g2_einvn_2	A	0.01860	0.00490	0.00228	0.32940	0.13350	0.00204	2.50740	0.60390	0.00145
	TE_B	0.01860	0.00490	0.00863	0.32940	0.13350	0.00528	2.50740	0.60390	0.00435

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.01536	0.00934	0.32940	0.27356	0.01027	2.50740	1.21436	0.00741
sg13g2_einvn_2	A	0.01860	0.00838	0.00471	0.32940	0.13698	0.00510	2.50740	0.60738	0.00362

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	-0.00201	0.32940	-0.00202	2.50740	-0.00204
sg13g2_einvn_2	0.01860	-0.00095	0.32940	-0.00095	2.50740	-0.00096

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00318	0.32940	0.00313	2.50740	0.00306
sg13g2_einvn_2	0.01860	0.00156	0.32940	0.00153	2.50740	0.00150

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	-0.00089	0.32940	-0.00128	2.50740	0.00157
sg13g2_einvn_2	0.01860	-0.00030	0.32940	-0.00053	2.50740	0.00089

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00537	0.32940	0.01130	2.50740	0.01452
sg13g2_einvn_2	0.01860	0.00273	0.32940	0.00572	2.50740	0.00732

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_2	3.62880
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

Pin Capacitance Information Leakage Information

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

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_2	7.25760
sg13g2_inv_1	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04278	4.80000
sg13g2_inv_8	0.02079	2.40000
sg13g2_inv_4	0.01040	1.20000
sg13g2_inv_2	0.00520	0.60000
sg13g2_inv_1	0.00261	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	2162.55000	4902.83000	7643.12000
sg13g2_inv_8	1081.28000	2451.42000	3821.56000
sg13g2_inv_4	540.63900	1225.71000	1910.78000
sg13g2_inv_2	270.32000	612.85500	955.39000
sg13g2_inv_1	135.29100	306.49600	477.70200

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A->Y (FR)	0.01860	0.00100	0.02221	0.32940	1.03680	0.46699	2.50740	4.80000	2.62669
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.02207	0.32940	0.51840	0.46515	2.50740	2.40000	2.62474
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.02256	0.32940	0.25920	0.46478	2.50740	1.20000	2.62477
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.02397	0.32940	0.12960	0.46430	2.50740	0.60000	2.62190
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02798	0.32940	0.06480	0.46659	2.50740	0.30000	2.62285

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A->Y (RF)	0.01860	0.00100	0.02128	0.32940	1.03680	0.42857	2.50740	4.80000	2.46056
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.02117	0.32940	0.51840	0.42873	2.50740	2.40000	2.46176
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.02161	0.32940	0.25920	0.42820	2.50740	1.20000	2.46133
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.02276	0.32940	0.12960	0.42667	2.50740	0.60000	2.45787
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.02628	0.32940	0.06480	0.42775	2.50740	0.30000	2.45230

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A	0.01860	0.00100	0.01818	0.32940	1.03680	0.01909	2.50740	4.80000	0.01526
sg13g2_inv_8	A	0.01860	0.00100	0.00868	0.32940	0.51840	0.00843	2.50740	2.40000	0.00674
sg13g2_inv_4	A	0.01860	0.00100	0.00439	0.32940	0.25920	0.00417	2.50740	1.20000	0.00350
sg13g2_inv_2	A	0.01860	0.00100	0.00226	0.32940	0.12960	0.00212	2.50740	0.60000	0.00178
sg13g2_inv_1	A	0.01860	0.00100	0.00137	0.32940	0.06480	0.00128	2.50740	0.30000	0.00079

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_inv_16	A	0.01860	0.00100	0.01562	0.32940	1.03680	0.01697	2.50740	4.80000	0.00055
sg13g2_inv_8	A	0.01860	0.00100	0.00744	0.32940	0.51840	0.00829	2.50740	2.40000	-0.00017
sg13g2_inv_4	A	0.01860	0.00100	0.00379	0.32940	0.25920	0.00400	2.50740	1.20000	-0.00009
sg13g2_inv_2	A	0.01860	0.00100	0.00197	0.32940	0.12960	0.00200	2.50740	0.60000	0.00044
sg13g2_inv_1	A	0.01860	0.00100	0.00131	0.32940	0.06480	0.00123	2.50740	0.30000	-0.00005

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	39.84120

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01458	0.01380	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)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (FR)	0.01860	0.01651	0.03344	0.32940	0.53392	0.75820	2.50740	2.41551	3.85712
	TE_B->Z (RR)	0.01860	0.01651	0.08898	0.32940	0.53392	0.22048	2.50740	2.41551	0.54797
	TE_B->Z (FR)	0.01860	0.01651	0.04482	0.32940	0.53392	0.76156	2.50740	2.41551	3.74288

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (RF)	0.01860	0.02960	0.03498	0.32940	0.54700	0.62070	2.50740	2.42860	3.24687

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A	0.01860	0.01651	0.00874	0.32940	0.53392	0.00805	2.50740	2.41551	0.00797
	TE_B	0.01860	0.01651	0.03500	0.32940	0.53392	0.02257	2.50740	2.41551	0.01935

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A	0.01860	0.02960	0.01838	0.32940	0.54700	0.02065	2.50740	2.42860	0.01498

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	-0.00418	0.32940	-0.00420	2.50740	-0.00425

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00643	0.32940	0.00634	2.50740	0.00622

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	-0.00340	0.32940	-0.00384	2.50740	-0.00157

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00877	0.32940	0.01986	2.50740	0.02291

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	0.00000	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	140.46200	162.95500	185.44700

Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

MUX2



*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_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_1	0.00179	0.00177	0.00447	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
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)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.11229	0.32940	0.06480	0.52390	2.50740	0.30000	1.88993
	A1->X (RR)	0.01860	0.00100	0.07650	0.32940	0.06480	0.53079	2.50740	0.30000	1.91238
	S->X (-R)	0.01860	0.00100	0.12260	0.32940	0.06480	0.53459	2.50740	0.30000	1.91948

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.08442	0.32940	0.06480	0.53603	2.50740	0.30000	1.78223
	A1->X (FF)	0.01860	0.00100	0.14970	0.32940	0.06480	0.54592	2.50740	0.30000	1.80436
	S->X (-F)	0.01860	0.00100	0.16178	0.32940	0.06480	0.54193	2.50740	0.30000	1.76727

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.12260	0.32940	0.06480	0.53459	2.50740	0.30000	1.91948
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.17785	0.32940	0.06480	0.58149	2.50740	0.30000	1.85009

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.16178	0.32940	0.06480	0.54193	2.50740	0.30000	1.76727
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.21021	0.32940	0.06480	0.59091	2.50740	0.30000	1.76252

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	0.00774	0.32940	0.06480	0.00762	2.50740	0.30000	0.01046
	A1	0.01860	0.00100	0.00640	0.32940	0.06480	0.00955	2.50740	0.30000	0.01203
	S	0.01860	0.00100	0.00754	0.32940	0.06480	0.00776	2.50740	0.30000	0.00927

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	0.00609	0.32940	0.06480	0.00963	2.50740	0.30000	0.01161
	A1	0.01860	0.00100	0.00773	0.32940	0.06480	0.00771	2.50740	0.30000	0.00995
	S	0.01860	0.00100	0.00683	0.32940	0.06480	0.00724	2.50740	0.30000	0.00836

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00750	0.32940	0.06480	0.00769	2.50740	0.30000	0.00785
	S	(!A0 * A1)	0.01860	0.00100	0.00754	0.32940	0.06480	0.00776	2.50740	0.30000	0.00927

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00755	0.32940	0.06480	0.00772	2.50740	0.30000	0.00739
	S	(!A0 * A1)	0.01860	0.00100	0.00683	0.32940	0.06480	0.00724	2.50740	0.30000	0.00836

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00302	0.32940	0.00286	2.50740	0.00506

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00325	0.32940	0.00303	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	0.00237	0.00237	0.00237	0.00238	0.00698	0.00440	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	997.59000	2353.51000	3423.66000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0->X (RR)	0.01860	0.00100	0.21571	0.32940	0.06480	0.65133	2.50740	0.30000	2.17907
	A1->X (RR)	0.01860	0.00100	0.20925	0.32940	0.06480	0.64875	2.50740	0.30000	2.17361
	A2->X (RR)	0.01860	0.00100	0.22572	0.32940	0.06480	0.66450	2.50740	0.30000	2.21151
	A3->X (RR)	0.01860	0.00100	0.21941	0.32940	0.06480	0.66096	2.50740	0.30000	2.20808
	S0->X (-R)	0.01860	0.00100	0.18757	0.32940	0.06480	0.63376	2.50740	0.30000	2.14658
	S1->X (-R)	0.01860	0.00100	0.00676	0.32940	0.06480	0.44868	2.50740	0.30000	1.85931

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0->X (FF)	0.01860	0.00100	0.24685	0.32940	0.06480	0.65957	2.50740	0.30000	1.95970
	A1->X (FF)	0.01860	0.00100	0.24744	0.32940	0.06480	0.65842	2.50740	0.30000	1.95832
	A2->X (FF)	0.01860	0.00100	0.26403	0.32940	0.06480	0.68032	2.50740	0.30000	2.00158
	A3->X (FF)	0.01860	0.00100	0.26411	0.32940	0.06480	0.67952	2.50740	0.30000	1.99854
	S0->X (-F)	0.01860	0.00100	0.22592	0.32940	0.06480	0.64809	2.50740	0.30000	1.97134
	S1->X (-F)	0.01860	0.00100	0.00680	0.32940	0.06480	0.55368	2.50740	0.30000	1.70213

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0->X (RR)	(!A2 * A3 * S1)	0.01860	0.00100	0.18757	0.32940	0.06480	0.63376	2.50740	0.30000	2.14658
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.17508	0.32940	0.06480	0.61485	2.50740	0.30000	2.09387
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.26954	0.32940	0.06480	0.70640	2.50740	0.30000	2.03995
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.25945	0.32940	0.06480	0.69347	2.50740	0.30000	2.02117
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00147	0.32940	0.06480	0.41239	2.50740	0.30000	1.85864
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.00676	0.32940	0.06480	0.44868	2.50740	0.30000	1.85931
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00255	0.32940	0.06480	0.51985	2.50740	0.30000	1.80168
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.00155	0.32940	0.06480	0.53577	2.50740	0.30000	1.80206

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0->X (FF)	(!A2 * A3 * S1)	0.01860	0.00100	0.22592	0.32940	0.06480	0.64809	2.50740	0.30000	1.97134
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.20553	0.32940	0.06480	0.62065	2.50740	0.30000	1.91153
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.29119	0.32940	0.06480	0.71843	2.50740	0.30000	1.94282
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.27481	0.32940	0.06480	0.69583	2.50740	0.30000	1.91584
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.05250	0.32940	0.06480	0.48266	2.50740	0.30000	1.68211
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00330	0.32940	0.06480	0.40795	2.50740	0.30000	1.67770
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.00680	0.32940	0.06480	0.55368	2.50740	0.30000	1.70213
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00419	0.32940	0.06480	0.53733	2.50740	0.30000	1.69975

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0	0.01860	0.00100	0.00950	0.32940	0.06480	0.00944	2.50740	0.30000	0.01030
	A1	0.01860	0.00100	0.00910	0.32940	0.06480	0.00903	2.50740	0.30000	0.00988
	A2	0.01860	0.00100	0.00971	0.32940	0.06480	0.00963	2.50740	0.30000	0.01061
	A3	0.01860	0.00100	0.00958	0.32940	0.06480	0.00951	2.50740	0.30000	0.01056
	S0	0.01860	0.00100	0.00625	0.32940	0.06480	-0.00097	2.50740	0.30000	0.00402
	S1	0.01860	0.00100	0.00747	0.32940	0.06480	0.01239	2.50740	0.30000	0.02366

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0	0.01860	0.00100	0.00920	0.32940	0.06480	0.00928	2.50740	0.30000	0.00963
	A1	0.01860	0.00100	0.01252	0.32940	0.06480	0.01263	2.50740	0.30000	0.01329
	A2	0.01860	0.00100	0.01380	0.32940	0.06480	0.01396	2.50740	0.30000	0.01446
	A3	0.01860	0.00100	0.01279	0.32940	0.06480	0.01292	2.50740	0.30000	0.01347
	S0	0.01860	0.00100	0.01140	0.32940	0.06480	0.00614	2.50740	0.30000	0.00528
	S1	0.01860	0.00100	0.00938	0.32940	0.06480	0.01932	2.50740	0.30000	0.02174

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.01387	0.32940	0.06480	0.00876	2.50740	0.30000	0.00575
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01384	0.32940	0.06480	0.00880	2.50740	0.30000	0.00559
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00625	0.32940	0.06480	-0.00097	2.50740	0.30000	0.00402
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00631	0.32940	0.06480	-0.00097	2.50740	0.30000	0.00341
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00783	0.32940	0.06480	0.02289	2.50740	0.30000	0.02868
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00890	0.32940	0.06480	0.02186	2.50740	0.30000	0.02578
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00747	0.32940	0.06480	0.01239	2.50740	0.30000	0.02366
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00817	0.32940	0.06480	0.01353	2.50740	0.30000	0.02122

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.01001	0.32940	0.06480	0.00736	2.50740	0.30000	0.00728
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00979	0.32940	0.06480	0.00807	2.50740	0.30000	0.00783
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01140	0.32940	0.06480	0.00614	2.50740	0.30000	0.00528
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01064	0.32940	0.06480	0.00551	2.50740	0.30000	0.00469
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00938	0.32940	0.06480	0.01932	2.50740	0.30000	0.02174
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00891	0.32940	0.06480	0.02473	2.50740	0.30000	0.02875
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00863	0.32940	0.06480	0.01364	2.50740	0.30000	0.01786
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00817	0.32940	0.06480	0.01375	2.50740	0.30000	0.02397

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00653	0.32940	0.01354	2.50740	0.01629

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00468	0.32940	0.00975	2.50740	0.01481

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.00656	0.32940	0.01265	2.50740	0.01558
	(A0 * A1 * !S1)	0.01860	0.00653	0.32940	0.01354	2.50740	0.01629
	(!A2 * !A3 * S1)	0.01860	0.00674	0.32940	0.01283	2.50740	0.01577
	(!A0 * !A1 * !S1)	0.01860	0.00710	0.32940	0.01412	2.50740	0.01689

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.00429	0.32940	0.00807	2.50740	0.01331
	(A0 * A1 * !S1)	0.01860	0.00468	0.32940	0.00975	2.50740	0.01481
	(!A2 * !A3 * S1)	0.01860	0.00430	0.32940	0.00804	2.50740	0.01325
	(!A0 * !A1 * !S1)	0.01860	0.00737	0.32940	0.01433	2.50740	0.01684

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00291	0.32940	0.00280	2.50740	0.00572

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00285	0.32940	0.00291	2.50740	0.00564

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00286	0.32940	0.00275	2.50740	0.00567
	(A0 * A2 * !S0)	0.01860	0.00291	0.32940	0.00280	2.50740	0.00572
	(!A1 * !A3 * S0)	0.01860	0.00307	0.32940	0.00305	2.50740	0.00594
	(!A0 * !A2 * !S0)	0.01860	0.00311	0.32940	0.00309	2.50740	0.00598

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00282	0.32940	0.00286	2.50740	0.00560
	(A0 * A2 * !S0)	0.01860	0.00285	0.32940	0.00291	2.50740	0.00564
	(!A1 * !A3 * S0)	0.01860	0.00315	0.32940	0.00308	2.50740	0.00585
	(!A0 * !A2 * !S0)	0.01860	0.00318	0.32940	0.00312	2.50740	0.00589

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	0.00205	0.00276	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	215.66200	541.40500	1046.65000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N->Y (RR)	0.01860	0.00100	0.07506	0.32940	0.06480	0.47866	2.50740	0.30000	1.80643
	B->Y (FR)	0.01860	0.00100	0.03518	0.32940	0.06480	0.47448	2.50740	0.30000	2.63386

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N->Y (FF)	0.01860	0.00100	0.09254	0.32940	0.06480	0.64440	2.50740	0.30000	2.47198
	B->Y (RF)	0.01860	0.00100	0.05619	0.32940	0.06480	0.62713	2.50740	0.30000	3.16903

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00166	0.32940	0.06480	0.00172	2.50740	0.30000	0.00096
	B	0.01860	0.00100	0.00167	0.32940	0.06480	0.00138	2.50740	0.30000	0.00094

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00331	0.32940	0.06480	0.00338	2.50740	0.30000	0.00265
	B	0.01860	0.00100	0.00337	0.32940	0.06480	0.00328	2.50740	0.30000	0.00227

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	0.01860	0.00314	0.32940	0.00303	2.50740	0.00533

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	0.01860	0.00179	0.32940	0.00171	2.50740	0.00383

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	!B	0.01860	0.00314	0.32940	0.00303	2.50740	0.00533

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_1	!B	0.01860	0.00179	0.32940	0.00171	2.50740	0.00383

NAND2



*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_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_1	0.00258	0.00263	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	124.40000	406.41300	955.38800

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.03079	0.32940	0.06480	0.46843	2.50740	0.30000	2.62542
	B->Y (FR)	0.01860	0.00100	0.03551	0.32940	0.06480	0.47347	2.50740	0.30000	2.63119

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.04293	0.32940	0.06480	0.61923	2.50740	0.30000	3.23151
	B->Y (RF)	0.01860	0.00100	0.04971	0.32940	0.06480	0.62083	2.50740	0.30000	3.16984

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	0.00149	0.32940	0.06480	0.00134	2.50740	0.30000	0.00085
	B	0.01860	0.00100	0.00159	0.32940	0.06480	0.00128	2.50740	0.30000	0.00082

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	0.00191	0.32940	0.06480	0.00182	2.50740	0.30000	0.00146
	B	0.01860	0.00100	0.00320	0.32940	0.06480	0.00307	2.50740	0.30000	0.00236

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	0.00196	0.00263	0.00264	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	138.75200	476.72400	1524.34000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N->Y (RR)	0.01860	0.00100	0.07916	0.32940	0.06480	0.48015	2.50740	0.30000	1.80177
	B->Y (FR)	0.01860	0.00100	0.04006	0.32940	0.06480	0.47906	2.50740	0.30000	2.63857
	C->Y (FR)	0.01860	0.00100	0.04361	0.32940	0.06480	0.48398	2.50740	0.30000	2.64332

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N->Y (FF)	0.01860	0.00100	0.11485	0.32940	0.06480	0.86123	2.50740	0.30000	3.40673
	B->Y (RF)	0.01860	0.00100	0.08753	0.32940	0.06480	0.84838	2.50740	0.30000	4.06397
	C->Y (RF)	0.01860	0.00100	0.09576	0.32940	0.06480	0.84983	2.50740	0.30000	3.95964

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.00157	0.32940	0.06480	0.00160	2.50740	0.30000	0.00081
	B	0.01860	0.00100	0.00192	0.32940	0.06480	0.00162	2.50740	0.30000	0.00122
	C	0.01860	0.00100	0.00219	0.32940	0.06480	0.00180	2.50740	0.30000	0.00138

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.00450	0.32940	0.06480	0.00453	2.50740	0.30000	0.00386
	B	0.01860	0.00100	0.00437	0.32940	0.06480	0.00426	2.50740	0.30000	0.00338
	C	0.01860	0.00100	0.00566	0.32940	0.06480	0.00555	2.50740	0.30000	0.00490

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	0.01860	0.00328	0.32940	0.00316	2.50740	0.00547

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	0.01860	0.00167	0.32940	0.00157	2.50740	0.00372

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00328	0.32940	0.00316	2.50740	0.00547

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00167	0.32940	0.00157	2.50740	0.00372

NOR2



*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_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_1	0.00264	0.00258	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	250.89900	408.93800	630.62400

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.06084	0.32940	0.06480	0.76425	2.50740	0.30000	3.73200
	B->Y (FR)	0.01860	0.00100	0.05201	0.32940	0.06480	0.76705	2.50740	0.30000	3.84565

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.03311	0.32940	0.06480	0.43605	2.50740	0.30000	2.46392
	B->Y (RF)	0.01860	0.00100	0.02868	0.32940	0.06480	0.43013	2.50740	0.30000	2.45509

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	0.00349	0.32940	0.06480	0.00338	2.50740	0.30000	0.00275
	B	0.01860	0.00100	0.00190	0.32940	0.06480	0.00186	2.50740	0.30000	0.00133

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	0.00163	0.32940	0.06480	0.00138	2.50740	0.30000	0.00024
	B	0.01860	0.00100	0.00146	0.32940	0.06480	0.00140	2.50740	0.30000	0.00011

NOR3



*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_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_1	0.00262	0.00258	0.00254	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	217.83200	468.13000	814.90800

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.11267	0.32940	0.06480	1.10139	2.50740	0.30000	4.98143
	B->Y (FR)	0.01860	0.00100	0.10604	0.32940	0.06480	1.10156	2.50740	0.30000	5.12249
	C->Y (FR)	0.01860	0.00100	0.08364	0.32940	0.06480	1.08316	2.50740	0.30000	5.17174

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.03788	0.32940	0.06480	0.44486	2.50740	0.30000	2.47464
	B->Y (RF)	0.01860	0.00100	0.03711	0.32940	0.06480	0.44134	2.50740	0.30000	2.47403
	C->Y (RF)	0.01860	0.00100	0.03186	0.32940	0.06480	0.43390	2.50740	0.30000	2.46641

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	0.00576	0.32940	0.06480	0.00565	2.50740	0.30000	0.00512
	B	0.01860	0.00100	0.00441	0.32940	0.06480	0.00426	2.50740	0.30000	0.00365
	C	0.01860	0.00100	0.00283	0.32940	0.06480	0.00274	2.50740	0.30000	0.00219

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	0.00209	0.32940	0.06480	0.00176	2.50740	0.30000	0.00068
	B	0.01860	0.00100	0.00187	0.32940	0.06480	0.00167	2.50740	0.30000	0.00066
	C	0.01860	0.00100	0.00154	0.32940	0.06480	0.00146	2.50740	0.30000	0.00047

NOR4



*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_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_1	0.00262	0.00257	0.00226	0.00234	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	209.17800	447.99400	995.89200

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.17605	0.32940	0.06480	1.46070	2.50740	0.30000	6.32503
	B->Y (FR)	0.01860	0.00100	0.17024	0.32940	0.06480	1.45751	2.50740	0.30000	6.42925
	C->Y (FR)	0.01860	0.00100	0.15040	0.32940	0.06480	1.43901	2.50740	0.30000	6.52789
	D->Y (FR)	0.01860	0.00100	0.11059	0.32940	0.06480	1.40139	2.50740	0.30000	6.53195

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.03960	0.32940	0.06480	0.45005	2.50740	0.30000	2.48103
	B->Y (RF)	0.01860	0.00100	0.04084	0.32940	0.06480	0.44848	2.50740	0.30000	2.48106
	C->Y (RF)	0.01860	0.00100	0.03921	0.32940	0.06480	0.44228	2.50740	0.30000	2.48055
	D->Y (RF)	0.01860	0.00100	0.03356	0.32940	0.06480	0.43579	2.50740	0.30000	2.46843

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	0.00735	0.32940	0.06480	0.00719	2.50740	0.30000	0.00667
	B	0.01860	0.00100	0.00608	0.32940	0.06480	0.00592	2.50740	0.30000	0.00540
	C	0.01860	0.00100	0.00502	0.32940	0.06480	0.00486	2.50740	0.30000	0.00426
	D	0.01860	0.00100	0.00296	0.32940	0.06480	0.00282	2.50740	0.30000	0.00232

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	0.00258	0.32940	0.06480	0.00221	2.50740	0.30000	0.00109
	B	0.01860	0.00100	0.00239	0.32940	0.06480	0.00217	2.50740	0.30000	0.00108
	C	0.01860	0.00100	0.00158	0.32940	0.06480	0.00131	2.50740	0.30000	0.00075
	D	0.01860	0.00100	0.00031	0.32940	0.06480	0.00024	2.50740	0.30000	-0.00070

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00004	0.32940	-0.00007	2.50740	-0.00011

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00020	0.32940	0.00022	2.50740	0.00022

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00004	0.32940	-0.00007	2.50740	-0.00011

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00020	0.32940	0.00022	2.50740	0.00022

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00007	0.32940	-0.00007	2.50740	-0.00010

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00017	0.32940	0.00018	2.50740	0.00018

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00007	0.32940	-0.00007	2.50740	-0.00010

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00017	0.32940	0.00018	2.50740	0.00018

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00046	0.32940	0.00047	2.50740	0.00047

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00012	0.32940	-0.00013	2.50740	-0.00012

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00046	0.32940	0.00047	2.50740	0.00047

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00012	0.32940	-0.00013	2.50740	-0.00012

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00129	0.32940	0.00130	2.50740	0.00130

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00037	0.32940	0.00037	2.50740	0.00039

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00129	0.32940	0.00130	2.50740	0.00130

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00037	0.32940	0.00037	2.50740	0.00039

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	0.00113

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	3.56330	3.56330	3.56330

Passive Power Information

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	-0.00029	0.32940	-0.00030	2.50740	-0.00030

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00029	0.32940	0.00030	2.50740	0.00030

OR2



*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_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_1	0.00197	0.00195	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	323.45700	522.72800	660.04400

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.08112	0.32940	0.06480	0.49516	2.50740	0.30000	1.86311
	B->X (RR)	0.01860	0.00100	0.07474	0.32940	0.06480	0.48045	2.50740	0.30000	1.80685

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.13763	0.32940	0.06480	0.50957	2.50740	0.30000	1.68785
	B->X (FF)	0.01860	0.00100	0.12946	0.32940	0.06480	0.50720	2.50740	0.30000	1.68870

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	0.00465	0.32940	0.06480	0.00448	2.50740	0.30000	0.00638
	B	0.01860	0.00100	0.00463	0.32940	0.06480	0.00451	2.50740	0.30000	0.00566

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	0.00593	0.32940	0.06480	0.00595	2.50740	0.30000	0.00664
	B	0.01860	0.00100	0.00476	0.32940	0.06480	0.00481	2.50740	0.30000	0.00620

OR3



*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_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_1	0.00217	0.00214	0.00210	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	327.27400	560.77000	862.18200

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.09533	0.32940	0.06480	0.52515	2.50740	0.30000	1.96750
	B->X (RR)	0.01860	0.00100	0.09034	0.32940	0.06480	0.51211	2.50740	0.30000	1.91582
	C->X (RR)	0.01860	0.00100	0.08190	0.32940	0.06480	0.49459	2.50740	0.30000	1.85897

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.20021	0.32940	0.06480	0.58268	2.50740	0.30000	1.75603
	B->X (FF)	0.01860	0.00100	0.19274	0.32940	0.06480	0.57853	2.50740	0.30000	1.77688
	C->X (FF)	0.01860	0.00100	0.17239	0.32940	0.06480	0.56019	2.50740	0.30000	1.75915

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	0.00509	0.32940	0.06480	0.00490	2.50740	0.30000	0.00656
	B	0.01860	0.00100	0.00483	0.32940	0.06480	0.00462	2.50740	0.30000	0.00622
	C	0.01860	0.00100	0.00468	0.32940	0.06480	0.00445	2.50740	0.30000	0.00618

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	0.00826	0.32940	0.06480	0.00827	2.50740	0.30000	0.00872
	B	0.01860	0.00100	0.00706	0.32940	0.06480	0.00699	2.50740	0.30000	0.00768
	C	0.01860	0.00100	0.00570	0.32940	0.06480	0.00567	2.50740	0.30000	0.00682

OR4



*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_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_1	0.00218	0.00213	0.00185	0.00193	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	318.49500	547.84600	1023.39000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.09986	0.32940	0.06480	0.53897	2.50740	0.30000	2.01590
	B->X (RR)	0.01860	0.00100	0.09800	0.32940	0.06480	0.52963	2.50740	0.30000	1.97378
	C->X (RR)	0.01860	0.00100	0.09211	0.32940	0.06480	0.51654	2.50740	0.30000	1.92276
	D->X (RR)	0.01860	0.00100	0.08340	0.32940	0.06480	0.49850	2.50740	0.30000	1.86435

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.27816	0.32940	0.06480	0.68316	2.50740	0.30000	1.86601
	B->X (FF)	0.01860	0.00100	0.27137	0.32940	0.06480	0.67631	2.50740	0.30000	1.88747
	C->X (FF)	0.01860	0.00100	0.25136	0.32940	0.06480	0.65669	2.50740	0.30000	1.89629
	D->X (FF)	0.01860	0.00100	0.21591	0.32940	0.06480	0.62177	2.50740	0.30000	1.86255

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	0.00556	0.32940	0.06480	0.00547	2.50740	0.30000	0.00698
	B	0.01860	0.00100	0.00529	0.32940	0.06480	0.00517	2.50740	0.30000	0.00635
	C	0.01860	0.00100	0.00459	0.32940	0.06480	0.00442	2.50740	0.30000	0.00553
	D	0.01860	0.00100	0.00363	0.32940	0.06480	0.00343	2.50740	0.30000	0.00499

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	0.00898	0.32940	0.06480	0.00908	2.50740	0.30000	0.00945
	B	0.01860	0.00100	0.00836	0.32940	0.06480	0.00842	2.50740	0.30000	0.00880
	C	0.01860	0.00100	0.00730	0.32940	0.06480	0.00731	2.50740	0.30000	0.00807
	D	0.01860	0.00100	0.00523	0.32940	0.06480	0.00515	2.50740	0.30000	0.00670

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00006	0.32940	-0.00016	2.50740	-0.00020

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00067	0.32940	0.00069	2.50740	0.00068

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00006	0.32940	-0.00016	2.50740	-0.00020

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00067	0.32940	0.00069	2.50740	0.00068

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00004	0.32940	-0.00013	2.50740	-0.00014

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00013	0.32940	0.00013	2.50740	0.00014

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00004	0.32940	-0.00013	2.50740	-0.00014

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00013	0.32940	0.00013	2.50740	0.00014

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00031	0.32940	0.00032	2.50740	0.00032

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00002	0.32940	-0.00002	2.50740	-0.00002

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !D) + (!A * B * !D)	0.01860	0.00031	0.32940	0.00032	2.50740	0.00032

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !D) + (!A * B * !D)	0.01860	-0.00002	0.32940	-0.00002	2.50740	-0.00002

Passive power(pJ) for D rising :

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

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00069	0.32940	0.00069	2.50740	0.00071

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !C) + (!A * B * !C)	0.01860	0.00106	0.32940	0.00107	2.50740	0.00107

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(A * !C) + (!A * B * !C)	0.01860	0.00069	0.32940	0.00069	2.50740	0.00071

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

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00157	0.00170	0.00301	0.00146	0.00451	0.00271	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	2642.51000	3706.55000	4660.47000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.43707	0.32940	0.06480	0.83613	2.50740	0.30000	2.17462
	SET_B->Q (FR)	0.01860	0.00100	0.17783	0.32940	0.06480	0.59877	2.50740	0.30000	2.00702

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RF)	0.01860	0.00100	0.36172	0.32940	0.06480	0.72484	2.50740	0.30000	1.93012
	RESET_B->Q (FF)	0.01860	0.00100	0.30161	0.32940	0.06480	0.68151	2.50740	0.30000	1.93840

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.43707	0.32940	0.06480	0.83613	2.50740	0.30000	2.17462

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.36172	0.32940	0.06480	0.72484	2.50740	0.30000	1.93012

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.29547	0.32940	0.06480	0.72700	2.50740	0.30000	2.08975
	RESET_B->Q_N (FR)	0.01860	0.00100	0.23393	0.32940	0.06480	0.69495	2.50740	0.30000	2.11725

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.36029	0.32940	0.06480	0.77926	2.50740	0.30000	1.96647
	SET_B->Q_N (FF)	0.01860	0.00100	0.11600	0.32940	0.06480	0.53221	2.50740	0.30000	1.83525

Delay(ns) to Q_N rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.29547	0.32940	0.06480	0.72700	2.50740	0.30000	2.08975

Delay(ns) to Q_N falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.36029	0.32940	0.06480	0.77926	2.50740	0.30000	1.96647

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.14182	1.26300	1.26300	-0.38047	2.50740	2.50740	-0.52242
	setup	CLK (R)	0.01860	0.01860	0.21273	1.26300	1.26300	0.42634	2.50740	2.50740	0.56965

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.24555	2.50740	2.50740	-0.30106
	setup	CLK (R)	0.01860	0.01860	0.27142	1.26300	1.26300	0.36158	2.50740	2.50740	0.46044

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.18094	1.26300	1.26300	-0.46952	2.50740	2.50740	-0.65524
	setup	CLK (R)	0.01860	0.01860	0.25430	1.26300	1.26300	0.50999	2.50740	2.50740	0.69951

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.19806	1.26300	1.26300	-0.29682	2.50740	2.50740	-0.37484
	setup	CLK (R)	0.01860	0.01860	0.32277	1.26300	1.26300	0.41015	2.50740	2.50740	0.52242

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.15405	1.26300	1.26300	-0.42364	2.50740	2.50740	-0.58440
	setup	CLK (R)	0.01860	0.01860	0.22740	1.26300	1.26300	0.46682	2.50740	2.50740	0.63458

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.15160	1.26300	1.26300	-0.21047	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.27142	1.26300	1.26300	0.32920	2.50740	2.50740	0.41617

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.12226	1.26300	1.26300	0.22666	2.50740	2.50740	0.29515
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.23022

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_sdfbbp_1	-	3.3435

Constraints(ns) for SET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.17809	2.50740	2.50740	0.59621
	removal	CLK (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.11333	2.50740	2.50740	0.13872
	hold	RESET_B (R)	0.01860	0.01860	-0.11981	1.26300	1.26300	-0.31031	2.50740	2.50740	-0.39846
	setup	RESET_B (R)	0.01860	0.01860	0.15160	1.26300	1.26300	0.37777	2.50740	2.50740	0.49586

Min Pulse Width (ns) for SET_B:

Cell Name	High	Low
sg13g2_sdfbbp_1	-	3.3435

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_sdfbbp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.00768	0.32940	0.06480	0.00805	2.50740	0.30000	0.00818
	SET_B	0.01860	0.00100	0.02326	0.32940	0.06480	0.06021	2.50740	0.30000	0.20089

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.00775	0.32940	0.06480	0.00790	2.50740	0.30000	0.00722
	RESET_B	0.01860	0.00100	0.02645	0.32940	0.06480	0.06369	2.50740	0.30000	0.20082

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.00768	0.32940	0.06480	0.00805	2.50740	0.30000	0.00818

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.00775	0.32940	0.06480	0.00790	2.50740	0.30000	0.00722

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.00763	0.32940	0.06480	0.00787	2.50740	0.30000	0.00767
	RESET_B	0.01860	0.00100	0.02646	0.32940	0.06480	0.06388	2.50740	0.30000	0.20211

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.00768	0.32940	0.06480	0.00793	2.50740	0.30000	0.00741
	SET_B	0.01860	0.00100	0.02325	0.32940	0.06480	0.05997	2.50740	0.30000	0.19944

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.00763	0.32940	0.06480	0.00787	2.50740	0.30000	0.00767

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.00768	0.32940	0.06480	0.00793	2.50740	0.30000	0.00741

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00439	0.32940	0.00417	2.50740	0.00531

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00381	0.32940	0.00363	2.50740	0.00467

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.00803	0.32940	0.00778	2.50740	0.00902
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00439	0.32940	0.00417	2.50740	0.00531

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.00858	0.32940	0.00835	2.50740	0.00955
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00381	0.32940	0.00363	2.50740	0.00467

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00571	0.32940	0.00556	2.50740	0.00620

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00626	0.32940	0.00616	2.50740	0.00675

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.00933	0.32940	0.00918	2.50740	0.00987
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00571	0.32940	0.00556	2.50740	0.00620

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.01144	0.32940	0.01103	2.50740	0.01175
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00626	0.32940	0.00616	2.50740	0.00675

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00955	0.32940	0.00928	2.50740	0.01225

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00244	0.32940	0.00827	2.50740	0.02155

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.01086	0.32940	0.01075	2.50740	0.01235
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01434	0.32940	0.01360	2.50740	0.01520
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00955	0.32940	0.00928	2.50740	0.01225
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00590	0.32940	0.00566	2.50740	0.00851

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.01088	0.32940	0.01075	2.50740	0.01221
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01206	0.32940	0.01707	2.50740	0.01901
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00244	0.32940	0.00827	2.50740	0.02155
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00613	0.32940	0.00597	2.50740	0.00826

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00871	0.32940	0.00843	2.50740	0.01179

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01046	0.32940	0.01014	2.50740	0.01354

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.00871	0.32940	0.00843	2.50740	0.01179
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01151	0.32940	0.01118	2.50740	0.01444
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00865	0.32940	0.00831	2.50740	0.01166
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00871	0.32940	0.00843	2.50740	0.01179
	(!RESET_B * !Q * Q_N)	0.01860	0.00873	0.32940	0.00840	2.50740	0.01177
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00864	0.32940	0.00830	2.50740	0.01166

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.00724	0.32940	0.00692	2.50740	0.01007
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01371	0.32940	0.01329	2.50740	0.01645
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01046	0.32940	0.01014	2.50740	0.01354
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01524	0.32940	0.01491	2.50740	0.01832
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00753	0.32940	0.00722	2.50740	0.01042
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00724	0.32940	0.00692	2.50740	0.01007
	(!RESET_B * !Q * Q_N)	0.01860	0.00746	0.32940	0.00716	2.50740	0.01036
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00750	0.32940	0.00719	2.50740	0.01040

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	12.59420	12.59420	12.59420

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	14.33120	14.33120	14.33120

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	0.00478	0.00429	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	279.14600	857.20400	1222.54000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A->Y (RR)	0.01860	0.00100	0.10922	0.32940	0.06480	0.51172	2.50740	0.30000	1.86441
	A->Y (FR)	0.01860	0.00100	0.07837	0.32940	0.06480	0.78643	2.50740	0.30000	3.75475
	B->Y (RR)	0.01860	0.00100	0.10189	0.32940	0.06480	0.50197	2.50740	0.30000	1.82811
	B->Y (FR)	0.01860	0.00100	0.06998	0.32940	0.06480	0.78737	2.50740	0.30000	3.87308

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A->Y (FF)	0.01860	0.00100	0.10409	0.32940	0.06480	0.67119	2.50740	0.30000	2.56041
	A->Y (RF)	0.01860	0.00100	0.06896	0.32940	0.06480	0.64696	2.50740	0.30000	3.20098
	B->Y (FF)	0.01860	0.00100	0.10633	0.32940	0.06480	0.65672	2.50740	0.30000	2.51787
	B->Y (RF)	0.01860	0.00100	0.05868	0.32940	0.06480	0.63410	2.50740	0.30000	3.18194

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A	0.01860	0.00100	0.00595	0.32940	0.06480	0.00576	2.50740	0.30000	0.00745
	B	0.01860	0.00100	0.00594	0.32940	0.06480	0.00555	2.50740	0.30000	0.00734

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xnor2_1	A	0.01860	0.00100	0.00546	0.32940	0.06480	0.00549	2.50740	0.30000	0.00700
	B	0.01860	0.00100	0.00619	0.32940	0.06480	0.00510	2.50740	0.30000	0.00642

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	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00496	0.00438	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	674.44000	861.65800	1243.38000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A->X (RR)	0.01860	0.00100	0.10644	0.32940	0.06480	0.82199	2.50740	0.30000	3.30549
	A->X (FR)	0.01860	0.00100	0.08712	0.32940	0.06480	0.79862	2.50740	0.30000	3.77510
	B->X (RR)	0.01860	0.00100	0.11131	0.32940	0.06480	0.80524	2.50740	0.30000	3.24628
	B->X (FR)	0.01860	0.00100	0.07584	0.32940	0.06480	0.78535	2.50740	0.30000	3.75466

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A->X (FF)	0.01860	0.00100	0.13132	0.32940	0.06480	0.49608	2.50740	0.30000	1.63873
	A->X (RF)	0.01860	0.00100	0.06571	0.32940	0.06480	0.64307	2.50740	0.30000	3.18701
	B->X (FF)	0.01860	0.00100	0.12255	0.32940	0.06480	0.48902	2.50740	0.30000	1.63149
	B->X (RF)	0.01860	0.00100	0.05787	0.32940	0.06480	0.63818	2.50740	0.30000	3.24485

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A	0.01860	0.00100	0.00540	0.32940	0.06480	0.00533	2.50740	0.30000	0.00690
	B	0.01860	0.00100	0.00575	0.32940	0.06480	0.00474	2.50740	0.30000	0.00671

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_xor2_1	A	0.01860	0.00100	0.00679	0.32940	0.06480	0.00675	2.50740	0.30000	0.00800
	B	0.01860	0.00100	0.00634	0.32940	0.06480	0.00603	2.50740	0.30000	0.00800