

sg13g2_stdcell_slow_1p35V_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_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_1	0.00235	0.00228	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	823.86600	1010.78000	1352.79000

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	0.06356	0.32940	0.06480	0.33581	2.50740	0.30000	1.21565
	B->X (RR)	0.01860	0.00100	0.06894	0.32940	0.06480	0.33690	2.50740	0.30000	1.21156

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	0.05492	0.32940	0.06480	0.30579	2.50740	0.30000	1.08927
	B->X (FF)	0.01860	0.00100	0.06033	0.32940	0.06480	0.32123	2.50740	0.30000	1.12961

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	0.00791	0.32940	0.06480	0.00891	2.50740	0.30000	0.02204
	B	0.01860	0.00100	0.00959	0.32940	0.06480	0.01016	2.50740	0.30000	0.02244

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	0.00695	0.32940	0.06480	0.00795	2.50740	0.30000	0.02090
	B	0.01860	0.00100	0.00726	0.32940	0.06480	0.00833	2.50740	0.30000	0.02145

AND3



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and3_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_1	0.00235	0.00225	0.00227	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	822.26300	1009.25000	1926.14000

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	0.08526	0.32940	0.06480	0.37166	2.50740	0.30000	1.29997
	B->X (RR)	0.01860	0.00100	0.09493	0.32940	0.06480	0.37529	2.50740	0.30000	1.30179
	C->X (RR)	0.01860	0.00100	0.09947	0.32940	0.06480	0.37122	2.50740	0.30000	1.26829

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	0.05884	0.32940	0.06480	0.31513	2.50740	0.30000	1.09205
	B->X (FF)	0.01860	0.00100	0.06454	0.32940	0.06480	0.32902	2.50740	0.30000	1.13079
	C->X (FF)	0.01860	0.00100	0.06822	0.32940	0.06480	0.33994	2.50740	0.30000	1.16442

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	0.00916	0.32940	0.06480	0.00986	2.50740	0.30000	0.02248
	B	0.01860	0.00100	0.01080	0.32940	0.06480	0.01097	2.50740	0.30000	0.02279
	C	0.01860	0.00100	0.01241	0.32940	0.06480	0.01244	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_and3_1	A	0.01860	0.00100	0.00703	0.32940	0.06480	0.00790	2.50740	0.30000	0.01987
	B	0.01860	0.00100	0.00745	0.32940	0.06480	0.00815	2.50740	0.30000	0.02058
	C	0.01860	0.00100	0.00768	0.32940	0.06480	0.00839	2.50740	0.30000	0.02060

AND4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_1	0.00200	0.00194	0.00225	0.00227	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	824.35200	969.92000	2499.70000

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_and4_1	A->X (RR)	0.01860	0.00100	0.10832	0.32940	0.06480	0.40706	2.50740	0.30000	1.37741
	B->X (RR)	0.01860	0.00100	0.12163	0.32940	0.06480	0.41411	2.50740	0.30000	1.38557
	C->X (RR)	0.01860	0.00100	0.12943	0.32940	0.06480	0.41318	2.50740	0.30000	1.35745
	D->X (RR)	0.01860	0.00100	0.13400	0.32940	0.06480	0.41166	2.50740	0.30000	1.31776

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	0.06241	0.32940	0.06480	0.32158	2.50740	0.30000	1.09059
	B->X (FF)	0.01860	0.00100	0.06799	0.32940	0.06480	0.33398	2.50740	0.30000	1.12399
	C->X (FF)	0.01860	0.00100	0.07198	0.32940	0.06480	0.34444	2.50740	0.30000	1.15951
	D->X (FF)	0.01860	0.00100	0.07479	0.32940	0.06480	0.35423	2.50740	0.30000	1.19118

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	0.01050	0.32940	0.06480	0.01093	2.50740	0.30000	0.02351
	B	0.01860	0.00100	0.01257	0.32940	0.06480	0.01262	2.50740	0.30000	0.02384
	C	0.01860	0.00100	0.01342	0.32940	0.06480	0.01329	2.50740	0.30000	0.02411
	D	0.01860	0.00100	0.01341	0.32940	0.06480	0.01324	2.50740	0.30000	0.02432

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	0.00637	0.32940	0.06480	0.00708	2.50740	0.30000	0.01896
	B	0.01860	0.00100	0.00671	0.32940	0.06480	0.00722	2.50740	0.30000	0.01868
	C	0.01860	0.00100	0.00797	0.32940	0.06480	0.00848	2.50740	0.30000	0.02046
	D	0.01860	0.00100	0.00821	0.32940	0.06480	0.00887	2.50740	0.30000	0.02152

Passive power(pJ) for A rising :

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

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00125	0.32940	0.00128	2.50740	0.00128

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	-0.00041	0.32940	-0.00041	2.50740	-0.00040

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	0.00125	0.32940	0.00128	2.50740	0.00128

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00071	0.32940	-0.00072	2.50740	-0.00072

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00110	0.32940	0.00112	2.50740	0.00113

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	-0.00071	0.32940	-0.00072	2.50740	-0.00072

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	0.00110	0.32940	0.00112	2.50740	0.00113

Passive power(pJ) for C rising :

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

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00003	0.32940	0.00002	2.50740	0.00003

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	0.00004	0.32940	0.00006	2.50740	0.00005

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	0.00003	0.32940	0.00002	2.50740	0.00003

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00164	0.32940	0.00167	2.50740	0.00165

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00006	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	0.00164	0.32940	0.00167	2.50740	0.00165

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	0.00006	0.32940	0.00001	2.50740	0.00001

A021



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a21o_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_1	0.00244	0.00254	0.00225	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	661.76800	1032.41000	1627.97000

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	0.07901	0.32940	0.06480	0.36648	2.50740	0.30000	1.29152
	A2->X (RR)	0.01860	0.00100	0.08371	0.32940	0.06480	0.36260	2.50740	0.30000	1.27470
	B1->X (RR)	0.01860	0.00100	0.05197	0.32940	0.06480	0.32527	2.50740	0.30000	1.18123

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	0.08932	0.32940	0.06480	0.34042	2.50740	0.30000	1.13213
	A2->X (FF)	0.01860	0.00100	0.09831	0.32940	0.06480	0.35568	2.50740	0.30000	1.16507
	B1->X (FF)	0.01860	0.00100	0.08747	0.32940	0.06480	0.35741	2.50740	0.30000	1.21105

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	0.05197	0.32940	0.06480	0.32527	2.50740	0.30000	1.18123
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.04871	0.32940	0.06480	0.31153	2.50740	0.30000	1.14400

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	0.08747	0.32940	0.06480	0.35741	2.50740	0.30000	1.21105
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.07693	0.32940	0.06480	0.33856	2.50740	0.30000	1.17471

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	0.00918	0.32940	0.06480	0.00973	2.50740	0.30000	0.02326
	A2	0.01860	0.00100	0.01087	0.32940	0.06480	0.01107	2.50740	0.30000	0.02346
	B1	0.01860	0.00100	0.00713	0.32940	0.06480	0.00793	2.50740	0.30000	0.02270

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	0.00994	0.32940	0.06480	0.01017	2.50740	0.30000	0.02293
	A2	0.01860	0.00100	0.01004	0.32940	0.06480	0.01029	2.50740	0.30000	0.02231
	B1	0.01860	0.00100	0.00685	0.32940	0.06480	0.00794	2.50740	0.30000	0.02218

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	0.00886	0.32940	0.06480	0.00985	2.50740	0.30000	0.02451
	B1	(!A1 * A2)	0.01860	0.00100	0.00713	0.32940	0.06480	0.00793	2.50740	0.30000	0.02270

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	0.00710	0.32940	0.06480	0.00802	2.50740	0.30000	0.02183
	B1	(!A1 * A2)	0.01860	0.00100	0.00685	0.32940	0.06480	0.00794	2.50740	0.30000	0.02218

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00023	0.32940	-0.00019	2.50740	-0.00019

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00031	0.32940	0.00030	2.50740	0.00030

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	0.00013	0.32940	-0.00006	2.50740	-0.00012
	(!A2 * B1)	0.01860	-0.00023	0.32940	-0.00019	2.50740	-0.00019

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	0.00032	0.32940	0.00031	2.50740	0.00031
	(!A2 * B1)	0.01860	0.00031	0.32940	0.00030	2.50740	0.00030

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00012	0.32940	-0.00013	2.50740	-0.00013

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00023	0.32940	0.00023	2.50740	0.00024

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	0.00021	0.32940	0.00001	2.50740	-0.00005
	(!A1 * B1)	0.01860	-0.00012	0.32940	-0.00013	2.50740	-0.00013

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	0.00026	0.32940	0.00025	2.50740	0.00025
	(!A1 * B1)	0.01860	0.00023	0.32940	0.00023	2.50740	0.00024

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00035	0.32940	0.00038	2.50740	0.00039

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00095	0.32940	0.00095	2.50740	0.00097

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	0.00035	0.32940	0.00038	2.50740	0.00039

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	0.00095	0.32940	0.00095	2.50740	0.00097

BTLx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_ebufn_8	45.36000
sg13g2_ebufn_4	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	0.00554	0.01498	2.40000
sg13g2_ebufn_4	0.00288	0.00912	1.20000
sg13g2_ebufn_2	0.00245	0.00558	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	2462.42000	3998.33000	7045.57000
sg13g2_ebufn_4	1611.87000	2240.96000	3625.89000
sg13g2_ebufn_2	1171.82000	1486.28000	1947.78000

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	0.01958	0.06534	0.32940	0.53698	0.57400	2.50740	2.41858	2.22069
	TE_B->Z (RR)	0.01860	0.01958	0.07063	0.32940	0.53698	0.16398	2.50740	2.41858	0.34997
	TE_B->Z (FR)	0.01860	0.01958	0.03490	0.32940	0.53698	0.52436	2.50740	2.41858	2.60019
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01045	0.06723	0.32940	0.26865	0.57380	2.50740	1.20945	2.21672
	TE_B->Z (RR)	0.01860	0.01045	0.05420	0.32940	0.26865	0.12457	2.50740	1.20945	0.25433
	TE_B->Z (FR)	0.01860	0.01045	0.03512	0.32940	0.26865	0.52192	2.50740	1.20945	2.59054
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00583	0.05806	0.32940	0.13443	0.54001	2.50740	0.60483	2.14378
	TE_B->Z (RR)	0.01860	0.00583	0.04655	0.32940	0.13443	0.10410	2.50740	0.60483	0.20586
	TE_B->Z (FR)	0.01860	0.00583	0.03553	0.32940	0.13443	0.52142	2.50740	0.60483	2.58935

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	0.02958	0.08499	0.32940	0.54698	0.48610	2.50740	2.42858	1.75969
	TE_B->Z (RF)	0.01860	0.02958	0.03982	0.32940	0.54698	-0.18771	2.50740	2.42858	-1.87429
	TE_B->Z (FF)	0.01860	0.02958	0.08510	0.32940	0.54698	0.48807	2.50740	2.42858	1.75090
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01555	0.08737	0.32940	0.27375	0.48870	2.50740	1.21455	1.76423
	TE_B->Z (RF)	0.01860	0.01555	0.03079	0.32940	0.27375	-0.18694	2.50740	1.21455	-1.87332
	TE_B->Z (FF)	0.01860	0.01555	0.06416	0.32940	0.27375	0.43695	2.50740	1.21455	1.62428
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00846	0.06589	0.32940	0.13706	0.44211	2.50740	0.60746	1.65775
	TE_B->Z (RF)	0.01860	0.00846	0.02140	0.32940	0.13706	-0.20424	2.50740	0.60746	-1.89044
	TE_B->Z (FF)	0.01860	0.00846	0.05474	0.32940	0.13706	0.40246	2.50740	0.60746	1.54255

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	0.01958	0.02540	0.32940	0.53698	0.03472	2.50740	2.41858	0.03267
	TE_B	0.01860	0.01958	0.01195	0.32940	0.53698	0.00974	2.50740	2.41858	0.00543
sg13g2_ebufn_4	A	0.01860	0.01045	0.01290	0.32940	0.26865	0.01718	2.50740	1.20945	0.01294
	TE_B	0.01860	0.01045	0.00590	0.32940	0.26865	0.00474	2.50740	1.20945	0.00142
sg13g2_ebufn_2	A	0.01860	0.00583	0.00674	0.32940	0.13443	0.00849	2.50740	0.60483	0.00702
	TE_B	0.01860	0.00583	0.00289	0.32940	0.13443	0.00244	2.50740	0.60483	0.00073

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	0.02958	0.04261	0.32940	0.54698	0.04218	2.50740	2.42858	0.02692
	TE_B	0.01860	0.02958	0.00897	0.32940	0.54698	0.00648	2.50740	2.42858	-0.00000
sg13g2_ebufn_4	A	0.01860	0.01555	0.02138	0.32940	0.27375	0.02107	2.50740	1.21455	0.01486
	TE_B	0.01860	0.01555	0.00444	0.32940	0.27375	0.00344	2.50740	1.21455	-0.00038
sg13g2_ebufn_2	A	0.01860	0.00846	0.01034	0.32940	0.13706	0.01032	2.50740	0.60746	0.00783
	TE_B	0.01860	0.00846	0.00218	0.32940	0.13706	0.00183	2.50740	0.60746	0.00140

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.02701	0.32940	0.02913	2.50740	0.06786
sg13g2_ebufn_4	0.01860	0.01392	0.32940	0.01495	2.50740	0.03416
sg13g2_ebufn_2	0.01860	0.00766	0.32940	0.00881	2.50740	0.02589

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01148	0.32940	0.01421	2.50740	0.05234
sg13g2_ebufn_4	0.01860	0.00607	0.32940	0.00739	2.50740	0.02632
sg13g2_ebufn_2	0.01860	0.00395	0.32940	0.00528	2.50740	0.02214

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	-0.00487	0.32940	-0.00566	2.50740	0.01121
sg13g2_ebufn_4	0.01860	-0.00103	0.32940	-0.00088	2.50740	0.01776
sg13g2_ebufn_2	0.01860	0.00025	0.32940	0.00089	2.50740	0.01773

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	0.05812	0.32940	0.05989	2.50740	0.07745
sg13g2_ebufn_4	0.01860	0.03016	0.32940	0.03189	2.50740	0.05083
sg13g2_ebufn_2	0.01860	0.01595	0.32940	0.01742	2.50740	0.03434

BU_x



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

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

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01660	4.80000
sg13g2_buf_8	0.00829	2.40000
sg13g2_buf_4	0.00352	1.20000
sg13g2_buf_2	0.00244	0.60000
sg13g2_buf_1	0.00210	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7855.68000	10631.10000	13406.50000
sg13g2_buf_8	3927.86000	5315.64000	6703.42000
sg13g2_buf_4	1952.91000	2605.01000	3257.12000
sg13g2_buf_2	1090.12000	1391.01000	1691.89000
sg13g2_buf_1	775.59600	837.73500	899.87400

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	0.05596	0.32940	1.03680	0.34813	2.50740	4.80000	1.25268
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.05523	0.32940	0.51840	0.34647	2.50740	2.40000	1.24966
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.07090	0.32940	0.25920	0.38091	2.50740	1.20000	1.38095
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.05500	0.32940	0.12960	0.34125	2.50740	0.60000	1.24392
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.04891	0.32940	0.06480	0.31676	2.50740	0.30000	1.18838

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	0.06195	0.32940	1.03680	0.33847	2.50740	4.80000	1.16593
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.06110	0.32940	0.51840	0.33759	2.50740	2.40000	1.16650
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.05989	0.32940	0.25920	0.33216	2.50740	1.20000	1.10350
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.05876	0.32940	0.12960	0.32619	2.50740	0.60000	1.12637
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.05187	0.32940	0.06480	0.29887	2.50740	0.30000	1.07019

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	0.09423	0.32940	1.03680	0.10490	2.50740	4.80000	0.20851
sg13g2_buf_8	A	0.01860	0.00100	0.04566	0.32940	0.51840	0.05069	2.50740	2.40000	0.10078
sg13g2_buf_4	A	0.01860	0.00100	0.02240	0.32940	0.25920	0.02377	2.50740	1.20000	0.05276
sg13g2_buf_2	A	0.01860	0.00100	0.01186	0.32940	0.12960	0.01319	2.50740	0.60000	0.02909
sg13g2_buf_1	A	0.01860	0.00100	0.00691	0.32940	0.06480	0.00786	2.50740	0.30000	0.02089

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	0.09035	0.32940	1.03680	0.10006	2.50740	4.80000	0.20395
sg13g2_buf_8	A	0.01860	0.00100	0.04464	0.32940	0.51840	0.04940	2.50740	2.40000	0.10230
sg13g2_buf_4	A	0.01860	0.00100	0.02231	0.32940	0.25920	0.02441	2.50740	1.20000	0.04220
sg13g2_buf_2	A	0.01860	0.00100	0.01161	0.32940	0.12960	0.01325	2.50740	0.60000	0.02749
sg13g2_buf_1	A	0.01860	0.00100	0.00704	0.32940	0.06480	0.00819	2.50740	0.30000	0.02142

DECAP_x



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

Footprint

Cell Name	Area
sg13g2_decap_4	7.25760
sg13g2_decap_8	12.70080

Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_4	425.41100	425.41100	425.41100
sg13g2_decap_8	850.81400	850.81400	850.81400

DFFRRx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dfrbp_2	54.43200
sg13g2_dfrbp_1	47.17440

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00133	0.00480	0.00270	0.60000	0.60000
sg13g2_dfrbp_1	0.00139	0.00533	0.00253	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4377.30000	5083.70000	5903.84000
sg13g2_dfrbp_1	3291.09000	3958.98000	4709.15000

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	0.23079	0.32940	0.12960	0.49691	2.50740	0.60000	1.38407
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.18107	0.32940	0.06480	0.44971	2.50740	0.30000	1.30963

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	0.19969	0.32940	0.12960	0.44921	2.50740	0.60000	1.20990
	RESET_B->Q (FF)	0.01860	0.00100	0.27183	0.32940	0.12960	0.56093	2.50740	0.60000	1.50508
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.17178	0.32940	0.06480	0.41868	2.50740	0.30000	1.15779
	RESET_B->Q (FF)	0.01860	0.00100	0.23560	0.32940	0.06480	0.52057	2.50740	0.30000	1.44935

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	0.13272	0.32940	0.12960	0.43743	2.50740	0.60000	1.29002
	RESET_B->Q_N (FR)	0.01860	0.00100	0.20614	0.32940	0.12960	0.54736	2.50740	0.60000	1.58366
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.13120	0.32940	0.06480	0.42285	2.50740	0.30000	1.25525
	RESET_B->Q_N (FR)	0.01860	0.00100	0.19543	0.32940	0.06480	0.52371	2.50740	0.30000	1.54741

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	0.14828	0.32940	0.12960	0.46027	2.50740	0.60000	1.25612
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.13522	0.32940	0.06480	0.42211	2.50740	0.30000	1.19483

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	-0.04646	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.23317
	setup	CLK (R)	0.01860	0.01860	0.11737	1.26300	1.26300	0.24825	2.50740	2.50740	0.30696
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04890	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.11248	1.26300	1.26300	0.25365	2.50740	2.50740	0.32762

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	-0.02445	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.25088
	setup	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.26174	2.50740	2.50740	0.36599
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02445	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.25088
	setup	CLK (R)	0.01860	0.01860	0.10759	1.26300	1.26300	0.26444	2.50740	2.50740	0.38075

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	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	0.12470	1.26300	1.26300	0.27523	2.50740	2.50740	0.39551
	removal	CLK (R)	0.01860	0.01860	-0.10025	1.26300	1.26300	-0.25634	2.50740	2.50740	-0.37780
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.28333	2.50740	2.50740	0.42207
	removal	CLK (R)	0.01860	0.01860	-0.09292	1.26300	1.26300	-0.25904	2.50740	2.50740	-0.39255

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	0.03341	0.32940	0.12960	0.15005	2.50740	0.60000	0.58369
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02317	0.32940	0.06480	0.08166	2.50740	0.30000	0.29855

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	0.03290	0.32940	0.12960	0.15074	2.50740	0.60000	0.57918
	RESET_B	0.01860	0.00100	0.03551	0.32940	0.12960	0.15338	2.50740	0.60000	0.59247
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02211	0.32940	0.06480	0.08091	2.50740	0.30000	0.29448
	RESET_B	0.01860	0.00100	0.02408	0.32940	0.06480	0.08279	2.50740	0.30000	0.30588

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	0.03293	0.32940	0.12960	0.15140	2.50740	0.60000	0.58393
	RESET_B	0.01860	0.00100	0.03554	0.32940	0.12960	0.15406	2.50740	0.60000	0.59298
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02211	0.32940	0.06480	0.08124	2.50740	0.30000	0.29744
	RESET_B	0.01860	0.00100	0.02406	0.32940	0.06480	0.08332	2.50740	0.30000	0.30783

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	0.03344	0.32940	0.12960	0.14950	2.50740	0.60000	0.57701
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02316	0.32940	0.06480	0.08136	2.50740	0.30000	0.29624

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00201	0.32940	0.00251	2.50740	0.00988
sg13g2_dfrbp_1	0.01860	0.00209	0.32940	0.00256	2.50740	0.00991

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00181	0.32940	0.00229	2.50740	0.00972
sg13g2_dfrbp_1	0.01860	0.00194	0.32940	0.00242	2.50740	0.00982

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	0.00201	0.32940	0.00251	2.50740	0.00988
	(!CLK * RESET_B)	0.01860	0.01395	0.32940	0.01443	2.50740	0.02288
	(!CLK * !RESET_B)	0.01860	-0.00024	0.32940	-0.00026	2.50740	-0.00025
sg13g2_dfrbp_1	CLK	0.01860	0.00209	0.32940	0.00256	2.50740	0.00991
	(!CLK * RESET_B)	0.01860	0.01205	0.32940	0.01261	2.50740	0.02113
	(!CLK * !RESET_B)	0.01860	-0.00017	0.32940	-0.00018	2.50740	-0.00017

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	0.00181	0.32940	0.00229	2.50740	0.00972
	(!CLK * RESET_B)	0.01860	0.01141	0.32940	0.01183	2.50740	0.02072
	(!CLK * !RESET_B)	0.01860	0.00054	0.32940	0.00056	2.50740	0.00056
sg13g2_dfrbp_1	CLK	0.01860	0.00194	0.32940	0.00242	2.50740	0.00982
	(!CLK * RESET_B)	0.01860	0.01034	0.32940	0.01079	2.50740	0.01957
	(!CLK * !RESET_B)	0.01860	0.00048	0.32940	0.00050	2.50740	0.00050

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	0.00427	0.32940	0.00444	2.50740	0.01116
sg13g2_dfrbp_1	0.01860	0.00480	0.32940	0.00495	2.50740	0.01163

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	0.01158	0.32940	0.01160	2.50740	0.02212
sg13g2_dfrbp_1	0.01860	0.01006	0.32940	0.01000	2.50740	0.02064

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	0.00427	0.32940	0.00444	2.50740	0.01116
	(CLK * !D * !Q * Q_N)	0.01860	0.00134	0.32940	0.00129	2.50740	0.00129
	(!CLK * D * !Q * Q_N)	0.01860	0.01662	0.32940	0.01679	2.50740	0.02690
	(!CLK * !D * !Q * Q_N)	0.01860	0.00149	0.32940	0.00144	2.50740	0.00144
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00480	0.32940	0.00495	2.50740	0.01163
	(CLK * !D * !Q * Q_N)	0.01860	0.00185	0.32940	0.00180	2.50740	0.00181
	(!CLK * D * !Q * Q_N)	0.01860	0.01522	0.32940	0.01537	2.50740	0.02563
	(!CLK * !D * !Q * Q_N)	0.01860	0.00189	0.32940	0.00184	2.50740	0.00183

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	0.04663	0.32940	0.04713	2.50740	0.06801
	(CLK * !D * !Q * Q_N)	0.01860	-0.00051	0.32940	-0.00072	2.50740	-0.00080
	(!CLK * D * !Q * Q_N)	0.01860	0.01158	0.32940	0.01160	2.50740	0.02212
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00081	0.32940	-0.00093	2.50740	-0.00098
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03331	0.32940	0.03377	2.50740	0.05423
	(CLK * !D * !Q * Q_N)	0.01860	-0.00101	0.32940	-0.00122	2.50740	-0.00130
	(!CLK * D * !Q * Q_N)	0.01860	0.01006	0.32940	0.01000	2.50740	0.02064
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00112	0.32940	-0.00130	2.50740	-0.00136

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01314	0.32940	0.01430	2.50740	0.03499
sg13g2_dfrbp_1	0.01860	0.01255	0.32940	0.01359	2.50740	0.03287

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02453	0.32940	0.02562	2.50740	0.04682
sg13g2_dfrbp_1	0.01860	0.02183	0.32940	0.02290	2.50740	0.04290

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	0.01314	0.32940	0.01430	2.50740	0.03499
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01351	0.32940	0.01473	2.50740	0.03527
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01275	0.32940	0.01393	2.50740	0.03456
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01337	0.32940	0.01459	2.50740	0.03512
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01318	0.32940	0.01420	2.50740	0.03353
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01255	0.32940	0.01359	2.50740	0.03287
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01237	0.32940	0.01345	2.50740	0.03270
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01240	0.32940	0.01343	2.50740	0.03270

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	0.02453	0.32940	0.02562	2.50740	0.04682
	(D * RESET_B * !Q * Q_N)	0.01860	0.02453	0.32940	0.02562	2.50740	0.04682
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01286	0.32940	0.01406	2.50740	0.03455
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00444	0.32940	0.05887	2.50740	0.07924
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01285	0.32940	0.01405	2.50740	0.03455
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01280	0.32940	0.01400	2.50740	0.03448
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02183	0.32940	0.02290	2.50740	0.04290
	(D * RESET_B * !Q * Q_N)	0.01860	0.02183	0.32940	0.02290	2.50740	0.04290
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01214	0.32940	0.01335	2.50740	0.03252
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00407	0.32940	0.04647	2.50740	0.06559
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01212	0.32940	0.01332	2.50740	0.03252
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01208	0.32940	0.01327	2.50740	0.03245

DLHQ



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dlhq_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	GATE	Q
sg13g2_dlhq_1	0.00208	0.00214	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2192.01000	2673.06000	3355.59000

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	0.17111	0.32940	0.06480	0.43479	2.50740	0.30000	1.27469
	GATE->Q (RR)	0.01860	0.00100	0.14475	0.32940	0.06480	0.40968	2.50740	0.30000	1.21430

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	0.15027	0.32940	0.06480	0.39326	2.50740	0.30000	1.13393
	GATE->Q (RF)	0.01860	0.00100	0.15342	0.32940	0.06480	0.39535	2.50740	0.30000	1.08918

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	-0.09292	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.20070
	setup	GATE (F)	0.01860	0.01860	0.10270	1.26300	1.26300	0.23476	2.50740	2.50740	0.29515

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	-0.03912	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.04890	1.26300	1.26300	0.00540	2.50740	2.50740	-0.03247

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	0.01769	0.32940	0.06480	0.01793	2.50740	0.30000	0.01790
	GATE	0.01860	0.00100	0.01412	0.32940	0.06480	0.01429	2.50740	0.30000	0.01498

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	0.01824	0.32940	0.06480	0.01864	2.50740	0.30000	0.01884
	GATE	0.01860	0.00100	0.01537	0.32940	0.06480	0.01599	2.50740	0.30000	0.01597

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00414	0.32940	0.00505	2.50740	0.01908

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00436	0.32940	0.00528	2.50740	0.01907

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	0.00457	0.32940	0.00539	2.50740	0.01938
	(!GATE * !Q)	0.01860	0.00414	0.32940	0.00505	2.50740	0.01908

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	0.00409	0.32940	0.00511	2.50740	0.01896
	(!GATE * !Q)	0.01860	0.00436	0.32940	0.00528	2.50740	0.01907

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01038	0.32940	0.01149	2.50740	0.02928

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00385	0.32940	0.01921	2.50740	0.03715

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	0.01038	0.32940	0.01149	2.50740	0.02928

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	0.00385	0.32940	0.01921	2.50740	0.03715

DLHRQ



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dlhrq_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE	Q
sg13g2_dlhrq_1	0.00194	0.00262	0.00205	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2461.77000	2905.86000	3378.47000

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_dlhrq_1	D->Q (RR)	0.01860	0.00100	0.17719	0.32940	0.06480	0.44489	2.50740	0.30000	1.28133
	GATE->Q (RR)	0.01860	0.00100	0.15769	0.32940	0.06480	0.42757	2.50740	0.30000	1.22894

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	0.15704	0.32940	0.06480	0.40056	2.50740	0.30000	1.14271
	GATE->Q (RF)	0.01860	0.00100	0.16068	0.32940	0.06480	0.40451	2.50740	0.30000	1.10179
	RESET_B->Q (FF)	0.01860	0.00100	0.06259	0.32940	0.06480	0.32716	2.50740	0.30000	1.14638

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	-0.07825	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.17709
	setup	GATE (F)	0.01860	0.01860	0.09781	1.26300	1.26300	0.21587	2.50740	2.50740	0.26269

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	-0.04157	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.05624	1.26300	1.26300	0.00810	2.50740	2.50740	-0.03247

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	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	-0.10794	2.50740	2.50740	-0.17119
	removal	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	0.13762	2.50740	2.50740	0.20366

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	0.00296	0.32940	0.06480	0.00160	2.50740	0.30000	0.00086
	GATE	0.01860	0.00100	0.01507	0.32940	0.06480	0.01526	2.50740	0.30000	0.01630

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	0.00762	0.32940	0.06480	-0.00160	2.50740	0.30000	-0.00086
	GATE	0.01860	0.00100	0.01480	0.32940	0.06480	0.01544	2.50740	0.30000	0.01519
	RESET_B	0.01860	0.00100	0.00828	0.32940	0.06480	0.00961	2.50740	0.30000	0.02570

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01875	0.32940	0.02127	2.50740	0.03565

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01321	0.32940	0.03004	2.50740	0.04420

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	0.00445	0.32940	0.00532	2.50740	0.01933
	!RESET_B	0.01860	0.01875	0.32940	0.02127	2.50740	0.03565

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	0.00399	0.32940	0.00501	2.50740	0.01884
	!RESET_B	0.01860	0.01321	0.32940	0.03004	2.50740	0.04420

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00000	0.32940	-0.00004	2.50740	-0.00004

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	0.00053	0.32940	0.00042	2.50740	0.00037

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00000	0.32940	-0.00004	2.50740	-0.00004
	(!D * !GATE * !Q)	0.01860	0.00000	0.32940	-0.00004	2.50740	-0.00004

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	0.00053	0.32940	0.00042	2.50740	0.00037
	(!D * !GATE * !Q)	0.01860	0.00053	0.32940	0.00042	2.50740	0.00037

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00992	0.32940	0.01098	2.50740	0.02873

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00398	0.32940	0.01915	2.50740	0.03709

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	0.01355	0.32940	0.01459	2.50740	0.03346
	(!D * !RESET_B * !Q)	0.01860	0.00992	0.32940	0.01098	2.50740	0.02873

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	0.01418	0.32940	0.01548	2.50740	0.03474
	(!D * RESET_B * !Q)	0.01860	0.00398	0.32940	0.01915	2.50740	0.03709
	(!D * !RESET_B * !Q)	0.01860	0.00405	0.32940	0.01922	2.50740	0.03716

DLHR



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dlhr_1	32.65920

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE	Q	Q_N
sg13g2_dlhr_1	0.00196	0.00277	0.00212	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3241.36000	3729.64000	4179.15000

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	0.19188	0.32940	0.06480	0.46567	2.50740	0.30000	1.30151
	GATE->Q (RR)	0.01860	0.00100	0.17333	0.32940	0.06480	0.45038	2.50740	0.30000	1.25399

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	0.16325	0.32940	0.06480	0.40974	2.50740	0.30000	1.14697
	GATE->Q (RF)	0.01860	0.00100	0.16687	0.32940	0.06480	0.41442	2.50740	0.30000	1.10719
	RESET_B->Q (FF)	0.01860	0.00100	0.06791	0.32940	0.06480	0.34375	2.50740	0.30000	1.17371

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	0.20070	0.32940	0.06480	0.45919	2.50740	0.30000	1.29096
	GATE->Q_N (RR)	0.01860	0.00100	0.20452	0.32940	0.06480	0.46386	2.50740	0.30000	1.25039
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10535	0.32940	0.06480	0.38753	2.50740	0.30000	1.26271

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	0.23271	0.32940	0.06480	0.46690	2.50740	0.30000	1.20845
	GATE->Q_N (RF)	0.01860	0.00100	0.21439	0.32940	0.06480	0.45139	2.50740	0.30000	1.16090

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	-0.08314	1.26300	1.26300	-0.16460	2.50740	2.50740	-0.18004
	setup	GATE (F)	0.01860	0.01860	0.10514	1.26300	1.26300	0.21587	2.50740	2.50740	0.26564

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	-0.04401	1.26300	1.26300	0.00270	2.50740	2.50740	0.04132
	setup	GATE (F)	0.01860	0.01860	0.06113	1.26300	1.26300	0.00810	2.50740	2.50740	-0.02952

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	0.00000	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.10921
	removal	GATE (F)	0.01860	0.01860	0.01956	1.26300	1.26300	0.09984	2.50740	2.50740	0.14463

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	0.00649	0.32940	0.06480	0.00604	2.50740	0.30000	0.00749
	GATE	0.01860	0.00100	0.01236	0.32940	0.06480	0.01266	2.50740	0.30000	0.01358

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	0.00863	0.32940	0.06480	0.00099	2.50740	0.30000	0.00006
	GATE	0.01860	0.00100	0.01219	0.32940	0.06480	0.01255	2.50740	0.30000	0.01229
	RESET_B	0.01860	0.00100	0.00874	0.32940	0.06480	0.00941	2.50740	0.30000	0.01803

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	0.00866	0.32940	0.06480	0.00119	2.50740	0.30000	0.00145
	GATE	0.01860	0.00100	0.01221	0.32940	0.06480	0.01276	2.50740	0.30000	0.01332
	RESET_B	0.01860	0.00100	0.00876	0.32940	0.06480	0.00959	2.50740	0.30000	0.01872

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	0.00649	0.32940	0.06480	0.00587	2.50740	0.30000	0.00569
	GATE	0.01860	0.00100	0.01235	0.32940	0.06480	0.01251	2.50740	0.30000	0.01272

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01826	0.32940	0.02079	2.50740	0.03515

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01285	0.32940	0.02952	2.50740	0.04380

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	0.00441	0.32940	0.00533	2.50740	0.01936
	!RESET_B	0.01860	0.01826	0.32940	0.02079	2.50740	0.03515

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	0.00370	0.32940	0.00476	2.50740	0.01864
	!RESET_B	0.01860	0.01285	0.32940	0.02952	2.50740	0.04380

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	-0.00014	0.32940	-0.00020	2.50740	-0.00020

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	0.00067	0.32940	0.00057	2.50740	0.00052

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	-0.00014	0.32940	-0.00020	2.50740	-0.00020
	(!D * !GATE * !Q)	0.01860	-0.00014	0.32940	-0.00020	2.50740	-0.00020

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	0.00067	0.32940	0.00057	2.50740	0.00052
	(!D * !GATE * !Q)	0.01860	0.00067	0.32940	0.00057	2.50740	0.00052

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00947	0.32940	0.01057	2.50740	0.02833

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00405	0.32940	0.01880	2.50740	0.03682

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	0.01310	0.32940	0.01414	2.50740	0.03306
	(!D * !RESET_B * !Q)	0.01860	0.00947	0.32940	0.01057	2.50740	0.02833

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	0.01453	0.32940	0.01585	2.50740	0.03512
	(!D * RESET_B * !Q)	0.01860	0.00405	0.32940	0.01880	2.50740	0.03682
	(!D * !RESET_B * !Q)	0.01860	0.00411	0.32940	0.01887	2.50740	0.03688

DLLRQ



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dllrq_1	29.03040

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE_N	Q
sg13g2_dllrq_1	0.00192	0.00264	0.00205	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2319.78000	2868.89000	3378.60000

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	0.17695	0.32940	0.06480	0.44378	2.50740	0.30000	1.27969
	GATE_N->Q (FR)	0.01860	0.00100	0.19534	0.32940	0.06480	0.47615	2.50740	0.30000	1.36861
	RESET_B->Q (RR)	0.01860	0.00100	0.07852	0.32940	0.06480	0.34558	2.50740	0.30000	1.23160

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	0.15641	0.32940	0.06480	0.39786	2.50740	0.30000	1.13517
	GATE_N->Q (FF)	0.01860	0.00100	0.14755	0.32940	0.06480	0.40831	2.50740	0.30000	1.23234
	RESET_B->Q (FF)	0.01860	0.00100	0.06338	0.32940	0.06480	0.32721	2.50740	0.30000	1.14311

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	-0.07091	1.26300	1.26300	-0.08905	2.50740	2.50740	-0.12101
	setup	GATE_N (R)	0.01860	0.01860	0.08069	1.26300	1.26300	0.09984	2.50740	2.50740	0.13282

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.08069	1.26300	1.26300	-0.22666	2.50740	2.50740	-0.30401
	setup	GATE_N (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.27523	2.50740	2.50740	0.39255

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	-0.02690	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.06493
	removal	GATE_N (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.08905	2.50740	2.50740	0.08264

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	0.00771	0.32940	0.06480	0.00821	2.50740	0.30000	0.00868
	GATE_N	0.01860	0.00100	0.02173	0.32940	0.06480	0.00829	2.50740	0.30000	0.00858
	RESET_B	0.01860	0.00100	0.01143	0.32940	0.06480	0.01207	2.50740	0.30000	0.02721

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	0.01773	0.32940	0.06480	-0.00012	2.50740	0.30000	-0.00064
	GATE_N	0.01860	0.00100	0.02011	0.32940	0.06480	0.00669	2.50740	0.30000	0.00817
	RESET_B	0.01860	0.00100	0.00852	0.32940	0.06480	0.00987	2.50740	0.30000	0.02561

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01397	0.32940	0.01458	2.50740	0.02855

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00318	0.32940	0.02230	2.50740	0.03660

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	0.00441	0.32940	0.00534	2.50740	0.01935
	!RESET_B	0.01860	0.01397	0.32940	0.01458	2.50740	0.02855

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	0.00379	0.32940	0.00484	2.50740	0.01871
	!RESET_B	0.01860	0.00318	0.32940	0.02230	2.50740	0.03660

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	-0.00004	2.50740	-0.00004

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	0.00053	0.32940	0.00042	2.50740	0.00037

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	-0.00004	2.50740	-0.00004
	(!D * GATE_N * !Q)	0.01860	0.00001	0.32940	-0.00004	2.50740	-0.00004

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	0.00053	0.32940	0.00042	2.50740	0.00037
	(!D * GATE_N * !Q)	0.01860	0.00053	0.32940	0.00042	2.50740	0.00037

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	0.00869	0.32940	0.00980	2.50740	0.02754

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	0.00396	0.32940	0.01894	2.50740	0.03688

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	0.01575	0.32940	0.01679	2.50740	0.03423
	(!D * !RESET_B * !Q)	0.01860	0.00869	0.32940	0.00980	2.50740	0.02754

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	0.01428	0.32940	0.01545	2.50740	0.03325
	(!D * RESET_B * !Q)	0.01860	0.00396	0.32940	0.01894	2.50740	0.03688
	(!D * !RESET_B * !Q)	0.01860	0.00403	0.32940	0.01901	2.50740	0.03695

DLLR



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_dllr_1	34.47360

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE_N	Q	Q_N
sg13g2_dllr_1	0.00197	0.00277	0.00212	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3098.94000	3804.90000	4197.66000

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	0.19430	0.32940	0.06480	0.46796	2.50740	0.30000	1.30469
	GATE_N->Q (FR)	0.01860	0.00100	0.21304	0.32940	0.06480	0.50176	2.50740	0.30000	1.39549

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	0.16524	0.32940	0.06480	0.41158	2.50740	0.30000	1.14897
	GATE_N->Q (FF)	0.01860	0.00100	0.15727	0.32940	0.06480	0.42407	2.50740	0.30000	1.25190
	RESET_B->Q (FF)	0.01860	0.00100	0.06786	0.32940	0.06480	0.34834	2.50740	0.30000	1.15557

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	0.20259	0.32940	0.06480	0.46076	2.50740	0.30000	1.29179
	GATE_N->Q_N (FR)	0.01860	0.00100	0.19476	0.32940	0.06480	0.47390	2.50740	0.30000	1.39351
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10606	0.32940	0.06480	0.38925	2.50740	0.30000	1.27103

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	0.23494	0.32940	0.06480	0.46923	2.50740	0.30000	1.21109
	GATE_N->Q_N (FF)	0.01860	0.00100	0.25395	0.32940	0.06480	0.50287	2.50740	0.30000	1.30344

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	-0.08069	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.12692
	setup	GATE_N (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.10794	2.50740	2.50740	0.13872

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	-0.08314	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.30696
	setup	GATE_N (R)	0.01860	0.01860	0.09781	1.26300	1.26300	0.28333	2.50740	2.50740	0.40141

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	-0.01467	1.26300	1.26300	-0.03238	2.50740	2.50740	-0.00295
	removal	GATE_N (R)	0.01860	0.01860	0.03912	1.26300	1.26300	0.05397	2.50740	2.50740	0.02361

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	0.01255	0.32940	0.06480	0.07067	2.50740	0.30000	0.28614
	GATE_N	0.01860	0.00100	0.02695	0.32940	0.06480	0.08583	2.50740	0.30000	0.30267

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	0.01761	0.32940	0.06480	0.05890	2.50740	0.30000	0.27172
	GATE_N	0.01860	0.00100	0.02471	0.32940	0.06480	0.08318	2.50740	0.30000	0.29886
	RESET_B	0.01860	0.00100	0.02809	0.32940	0.06480	0.08697	2.50740	0.30000	0.31510

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	0.01766	0.32940	0.06480	0.05928	2.50740	0.30000	0.27502
	GATE_N	0.01860	0.00100	0.02473	0.32940	0.06480	0.08368	2.50740	0.30000	0.30113
	RESET_B	0.01860	0.00100	0.02811	0.32940	0.06480	0.08724	2.50740	0.30000	0.31665

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	0.01255	0.32940	0.06480	0.07032	2.50740	0.30000	0.28403
	GATE_N	0.01860	0.00100	0.02694	0.32940	0.06480	0.08546	2.50740	0.30000	0.29949

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02012	0.32940	0.02172	2.50740	0.03614

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01350	0.32940	0.03169	2.50740	0.04598

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	0.00442	0.32940	0.00533	2.50740	0.01937
	!RESET_B	0.01860	0.02012	0.32940	0.02172	2.50740	0.03614

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	0.00370	0.32940	0.00475	2.50740	0.01864
	!RESET_B	0.01860	0.01350	0.32940	0.03169	2.50740	0.04598

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	-0.00014	0.32940	-0.00019	2.50740	-0.00019

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	0.00068	0.32940	0.00057	2.50740	0.00053

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	-0.00014	0.32940	-0.00019	2.50740	-0.00019
	(!D * GATE_N * !Q)	0.01860	-0.00014	0.32940	-0.00019	2.50740	-0.00019

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	0.00068	0.32940	0.00057	2.50740	0.00053
	(!D * GATE_N * !Q)	0.01860	0.00068	0.32940	0.00057	2.50740	0.00053

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	0.00296	0.32940	0.01930	2.50740	0.03701

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	0.00984	0.32940	0.01108	2.50740	0.02900

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	0.01595	0.32940	0.01690	2.50740	0.03439
	(!D * RESET_B * !Q)	0.01860	0.00289	0.32940	0.01925	2.50740	0.03695
	(!D * !RESET_B * !Q)	0.01860	0.00296	0.32940	0.01930	2.50740	0.03701

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	0.01478	0.32940	0.01597	2.50740	0.03371
	(!D * !RESET_B * !Q)	0.01860	0.00984	0.32940	0.01108	2.50740	0.02900

DLY1



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00128	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	1250.82000	1439.19000	1627.55000

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	0.11314	0.32940	0.06480	0.37613	2.50740	0.30000	1.15118

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	0.12980	0.32940	0.06480	0.39594	2.50740	0.30000	1.25223

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	0.01514	0.32940	0.06480	0.01578	2.50740	0.30000	0.02481

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	0.01439	0.32940	0.06480	0.01516	2.50740	0.30000	0.02460

DLY2



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00129	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	1270.94000	1459.31000	1647.68000

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	0.16864	0.32940	0.06480	0.44321	2.50740	0.30000	1.26233

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	0.18944	0.32940	0.06480	0.47624	2.50740	0.30000	1.37260

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	0.01801	0.32940	0.06480	0.01836	2.50740	0.30000	0.02607

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	0.01742	0.32940	0.06480	0.01795	2.50740	0.30000	0.02598

DLY4



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd3_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd3_1	0.00126	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	2554.51000	2742.91000	2931.30000

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	0.37634	0.32940	0.06480	0.68669	2.50740	0.30000	1.59345

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	0.39394	0.32940	0.06480	0.71945	2.50740	0.30000	1.70654

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	0.02623	0.32940	0.06480	0.02619	2.50740	0.30000	0.03246

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	0.02598	0.32940	0.06480	0.02581	2.50740	0.30000	0.03248

EINVIN_x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_einvn_4	23.58720
sg13g2_einvn_2	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_4	0.00753	0.00856	1.20000
sg13g2_einvn_2	0.00378	0.00448	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1199.74000	2309.86000	3419.99000
sg13g2_einvn_2	594.23400	1149.30000	1704.37000

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	0.01041	0.02483	0.32940	0.26861	0.53312	2.50740	1.20941	2.80262
	TE_B->Z (RR)	0.01860	0.01041	0.05212	0.32940	0.26861	0.12289	2.50740	1.20941	0.25216
	TE_B->Z (FR)	0.01860	0.01041	0.03167	0.32940	0.26861	0.51705	2.50740	1.20941	2.58008
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00583	0.02638	0.32940	0.13443	0.53290	2.50740	0.60483	2.80034
	TE_B->Z (RR)	0.01860	0.00583	0.05099	0.32940	0.13443	0.11966	2.50740	0.60483	0.25392
	TE_B->Z (FR)	0.01860	0.00583	0.03330	0.32940	0.13443	0.51728	2.50740	0.60483	2.57969

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	0.01549	0.02274	0.32940	0.27369	0.43138	2.50740	1.21449	2.34581
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00845	0.02406	0.32940	0.13705	0.43148	2.50740	0.60745	2.34565

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	0.01041	0.00777	0.32940	0.26861	0.00849	2.50740	1.20941	0.01881
	TE_B	0.01860	0.01041	0.02617	0.32940	0.26861	0.01694	2.50740	1.20941	0.01101
sg13g2_einvn_2	A	0.01860	0.00583	0.00396	0.32940	0.13443	0.00428	2.50740	0.60483	0.00925
	TE_B	0.01860	0.00583	0.01301	0.32940	0.13443	0.00836	2.50740	0.60483	0.00536

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	0.01549	0.01457	0.32940	0.27369	0.01673	2.50740	1.21449	0.02521
sg13g2_einvn_2	A	0.01860	0.00845	0.00732	0.32940	0.13705	0.00828	2.50740	0.60745	0.01259

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	-0.00312	0.32940	-0.00314	2.50740	-0.00317
sg13g2_einvn_2	0.01860	-0.00147	0.32940	-0.00148	2.50740	-0.00149

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00437	0.32940	0.00423	2.50740	0.00422
sg13g2_einvn_2	0.01860	0.00217	0.32940	0.00209	2.50740	0.00209

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	-0.00182	0.32940	-0.00114	2.50740	0.01771
sg13g2_einvn_2	0.01860	-0.00070	0.32940	-0.00035	2.50740	0.00951

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	0.00983	0.32940	0.01965	2.50740	0.03941
sg13g2_einvn_2	0.01860	0.00504	0.32940	0.00998	2.50740	0.02020

FILLx



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

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_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_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

Truth Table

INPUT	OUTPUT
A	Y
0	1
1	0

Footprint

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

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04455	4.80000
sg13g2_inv_8	0.02168	2.40000
sg13g2_inv_4	0.01085	1.20000
sg13g2_inv_2	0.00542	0.60000
sg13g2_inv_1	0.00272	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3291.04000	7731.67000	12172.30000
sg13g2_inv_8	1645.53000	3865.84000	6086.14000
sg13g2_inv_4	822.76100	1932.92000	3043.07000
sg13g2_inv_2	411.38100	966.46100	1521.54000
sg13g2_inv_1	205.87300	483.32500	760.77700

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	0.01662	0.32940	1.03680	0.35176	2.50740	4.80000	2.00414
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01648	0.32940	0.51840	0.35125	2.50740	2.40000	2.00258
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01691	0.32940	0.25920	0.35112	2.50740	1.20000	2.00206
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01808	0.32940	0.12960	0.35046	2.50740	0.60000	1.99934
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02069	0.32940	0.06480	0.35119	2.50740	0.30000	1.99977

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	0.01595	0.32940	1.03680	0.32593	2.50740	4.80000	1.86274
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01585	0.32940	0.51840	0.32629	2.50740	2.40000	1.86255
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01624	0.32940	0.25920	0.32610	2.50740	1.20000	1.86207
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01725	0.32940	0.12960	0.32455	2.50740	0.60000	1.85469
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01977	0.32940	0.06480	0.32521	2.50740	0.30000	1.85545

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	0.02729	0.32940	1.03680	0.03425	2.50740	4.80000	0.10092
sg13g2_inv_8	A	0.01860	0.00100	0.01304	0.32940	0.51840	0.01637	2.50740	2.40000	0.04867
sg13g2_inv_4	A	0.01860	0.00100	0.00655	0.32940	0.25920	0.00831	2.50740	1.20000	0.02453
sg13g2_inv_2	A	0.01860	0.00100	0.00335	0.32940	0.12960	0.00407	2.50740	0.60000	0.01257
sg13g2_inv_1	A	0.01860	0.00100	0.00200	0.32940	0.06480	0.00228	2.50740	0.30000	0.00649

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	0.02354	0.32940	1.03680	0.03153	2.50740	4.80000	0.09913
sg13g2_inv_8	A	0.01860	0.00100	0.01124	0.32940	0.51840	0.01574	2.50740	2.40000	0.04661
sg13g2_inv_4	A	0.01860	0.00100	0.00569	0.32940	0.25920	0.00775	2.50740	1.20000	0.02335
sg13g2_inv_2	A	0.01860	0.00100	0.00293	0.32940	0.12960	0.00378	2.50740	0.60000	0.01153
sg13g2_inv_1	A	0.01860	0.00100	0.00193	0.32940	0.06480	0.00226	2.50740	0.30000	0.00615

ITL



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_einvn_8	39.84120

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01498	0.01459	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2193.62000	4413.89000	6634.15000

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	0.01976	0.02416	0.32940	0.53716	0.53530	2.50740	2.41876	2.80912
	TE_B->Z (RR)	0.01860	0.01976	0.06830	0.32940	0.53716	0.16252	2.50740	2.41876	0.34787
	TE_B->Z (FR)	0.01860	0.01976	0.03237	0.32940	0.53716	0.51980	2.50740	2.41876	2.58816

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	0.02987	0.02294	0.32940	0.54727	0.43271	2.50740	2.42887	2.35217

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	0.01976	0.01504	0.32940	0.53716	0.01765	2.50740	2.41876	0.04060
	TE_B	0.01860	0.01976	0.05444	0.32940	0.53716	0.03535	2.50740	2.41876	0.02920

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	0.02987	0.02869	0.32940	0.54727	0.03352	2.50740	2.42887	0.04987

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	-0.00647	0.32940	-0.00652	2.50740	-0.00659

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00887	0.32940	0.00861	2.50740	0.00861

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	-0.00608	0.32940	-0.00588	2.50740	0.01138

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	0.01535	0.32940	0.03382	2.50740	0.05257

KEEPSTATE



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

Truth Table

INPUT	OUTPUT
SH	SH
x	-

Footprint

Cell Name	Area
sg13g2_sighold	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	SH	SH
sg13g2_sighold	0.00000	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	290.15900	312.05800	333.95700

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_1p35V_125C Cell Library: Process
sg13g2_stdcell_slow_1p35V_125C, Voltage 1.35, Temp 125.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_mux2_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_1	0.00185	0.00186	0.00481	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	1203.82000	1680.13000	2354.83000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.07667	0.32940	0.06480	0.35573	2.50740	0.30000	1.22822
	A1->X (RR)	0.01860	0.00100	0.05053	0.32940	0.06480	0.35697	2.50740	0.30000	1.24263
	S->X (-R)	0.01860	0.00100	0.08000	0.32940	0.06480	0.35466	2.50740	0.30000	1.23356

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	0.05469	0.32940	0.06480	0.37490	2.50740	0.30000	1.26303
	A1->X (FF)	0.01860	0.00100	0.09481	0.32940	0.06480	0.38030	2.50740	0.30000	1.27527
	S->X (-F)	0.01860	0.00100	0.10630	0.32940	0.06480	0.36724	2.50740	0.30000	1.21397

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	0.08000	0.32940	0.06480	0.35466	2.50740	0.30000	1.23356
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.11558	0.32940	0.06480	0.38557	2.50740	0.30000	1.22172

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	0.10630	0.32940	0.06480	0.36724	2.50740	0.30000	1.21397
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.13784	0.32940	0.06480	0.39268	2.50740	0.30000	1.14737

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	0.01101	0.32940	0.06480	0.01148	2.50740	0.30000	0.02587
	A1	0.01860	0.00100	0.01065	0.32940	0.06480	0.01635	2.50740	0.30000	0.03126
	S	0.01860	0.00100	0.01204	0.32940	0.06480	0.01284	2.50740	0.30000	0.02629

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	0.01046	0.32940	0.06480	0.01702	2.50740	0.30000	0.03275
	A1	0.01860	0.00100	0.01228	0.32940	0.06480	0.01323	2.50740	0.30000	0.02820
	S	0.01860	0.00100	0.01112	0.32940	0.06480	0.01195	2.50740	0.30000	0.02653

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	0.01189	0.32940	0.06480	0.01213	2.50740	0.30000	0.01177
	S	(!A0 * A1)	0.01860	0.00100	0.01204	0.32940	0.06480	0.01284	2.50740	0.30000	0.02629

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	0.01209	0.32940	0.06480	0.01222	2.50740	0.30000	0.01207
	S	(!A0 * A1)	0.01860	0.00100	0.01112	0.32940	0.06480	0.01195	2.50740	0.30000	0.02653

Passive power(pJ) for S rising :

Cell Name	Power(pJ)						
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max	
sg13g2_mux2_1	0.01860	0.00468	0.32940	0.00551	2.50740	0.01943	

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00498	0.32940	0.00580	2.50740	0.01956

MUX4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_mux4_1	38.10240

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)
	A0	A1	A2	A3	S0	S1	X
sg13g2_mux4_1	0.00259	0.00259	0.00259	0.00260	0.00747	0.00462	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	1583.44000	3711.48000	5416.70000

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_mux4_1	A0->X (RR)	0.01860	0.00100	0.13770	0.32940	0.06480	0.43478	2.50740	0.30000	1.41278
	A1->X (RR)	0.01860	0.00100	0.13115	0.32940	0.06480	0.43292	2.50740	0.30000	1.40708
	A2->X (RR)	0.01860	0.00100	0.14053	0.32940	0.06480	0.44404	2.50740	0.30000	1.43261
	A3->X (RR)	0.01860	0.00100	0.13725	0.32940	0.06480	0.44227	2.50740	0.30000	1.43013
	S0->X (-R)	0.01860	0.00100	0.11405	0.32940	0.06480	0.43022	2.50740	0.30000	1.40678
	S1->X (-R)	0.01860	0.00100	-0.00291	0.32940	0.06480	0.34104	2.50740	0.30000	1.22594

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	0.15615	0.32940	0.06480	0.44389	2.50740	0.30000	1.30422
	A1->X (FF)	0.01860	0.00100	0.15716	0.32940	0.06480	0.44360	2.50740	0.30000	1.30864
	A2->X (FF)	0.01860	0.00100	0.16674	0.32940	0.06480	0.45775	2.50740	0.30000	1.33414
	A3->X (FF)	0.01860	0.00100	0.16811	0.32940	0.06480	0.45732	2.50740	0.30000	1.33305
	S0->X (-F)	0.01860	0.00100	0.14021	0.32940	0.06480	0.44855	2.50740	0.30000	1.35624
	S1->X (-F)	0.01860	0.00100	0.03539	0.32940	0.06480	0.35458	2.50740	0.30000	1.19662

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	0.11405	0.32940	0.06480	0.43022	2.50740	0.30000	1.40678
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.10710	0.32940	0.06480	0.41589	2.50740	0.30000	1.37518
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.16923	0.32940	0.06480	0.46485	2.50740	0.30000	1.35267
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.16373	0.32940	0.06480	0.45662	2.50740	0.30000	1.33962
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00632	0.32940	0.06480	0.33474	2.50740	0.30000	1.22541
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00291	0.32940	0.06480	0.34104	2.50740	0.30000	1.22594
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00639	0.32940	0.06480	0.36308	2.50740	0.30000	1.20670
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00377	0.32940	0.06480	0.36571	2.50740	0.30000	1.20661

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	0.14021	0.32940	0.06480	0.44855	2.50740	0.30000	1.35624
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.12689	0.32940	0.06480	0.42842	2.50740	0.30000	1.31935
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.18492	0.32940	0.06480	0.47350	2.50740	0.30000	1.27790
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.17492	0.32940	0.06480	0.46016	2.50740	0.30000	1.25911
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.03539	0.32940	0.06480	0.35458	2.50740	0.30000	1.19662
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00738	0.32940	0.06480	0.34440	2.50740	0.30000	1.19521
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.00116	0.32940	0.06480	0.37015	2.50740	0.30000	1.13221
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00742	0.32940	0.06480	0.36482	2.50740	0.30000	1.13147

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	0.02138	0.32940	0.06480	0.02144	2.50740	0.30000	0.03301
	A1	0.01860	0.00100	0.01454	0.32940	0.06480	0.01455	2.50740	0.30000	0.02640
	A2	0.01860	0.00100	0.01553	0.32940	0.06480	0.01551	2.50740	0.30000	0.02661
	A3	0.01860	0.00100	0.01945	0.32940	0.06480	0.01945	2.50740	0.30000	0.03108
	S0	0.01860	0.00100	0.01059	0.32940	0.06480	0.01143	2.50740	0.30000	0.02607
	S1	0.01860	0.00100	0.01182	0.32940	0.06480	0.03274	2.50740	0.30000	0.04739

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	0.02110	0.32940	0.06480	0.02108	2.50740	0.30000	0.03206
	A1	0.01860	0.00100	0.01999	0.32940	0.06480	0.01994	2.50740	0.30000	0.03128
	A2	0.01860	0.00100	0.02224	0.32940	0.06480	0.02216	2.50740	0.30000	0.03287
	A3	0.01860	0.00100	0.01647	0.32940	0.06480	0.01634	2.50740	0.30000	0.02844
	S0	0.01860	0.00100	0.01816	0.32940	0.06480	0.02298	2.50740	0.30000	0.01098
	S1	0.01860	0.00100	0.01311	0.32940	0.06480	0.03403	2.50740	0.30000	0.04991

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	0.02234	0.32940	0.06480	0.01513	2.50740	0.30000	0.00207
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02228	0.32940	0.06480	0.01520	2.50740	0.30000	0.00225
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01050	0.32940	0.06480	0.01164	2.50740	0.30000	0.02507
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01059	0.32940	0.06480	0.01143	2.50740	0.30000	0.02607
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01226	0.32940	0.06480	0.04232	2.50740	0.30000	0.05318
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01410	0.32940	0.06480	0.03872	2.50740	0.30000	0.04853
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01182	0.32940	0.06480	0.03274	2.50740	0.30000	0.04739
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01331	0.32940	0.06480	0.03010	2.50740	0.30000	0.04335

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	0.01816	0.32940	0.06480	0.02298	2.50740	0.30000	0.01098
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01761	0.32940	0.06480	0.02396	2.50740	0.30000	0.01141
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01275	0.32940	0.06480	0.00801	2.50740	0.30000	0.02043
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01269	0.32940	0.06480	0.00788	2.50740	0.30000	0.02201
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01584	0.32940	0.06480	0.03157	2.50740	0.30000	0.04063
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01411	0.32940	0.06480	0.04267	2.50740	0.30000	0.05341
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01442	0.32940	0.06480	0.02508	2.50740	0.30000	0.03872
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01311	0.32940	0.06480	0.03403	2.50740	0.30000	0.04991

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00946	0.32940	0.01164	2.50740	0.04314

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00706	0.32940	0.01508	2.50740	0.04641

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	0.00908	0.32940	0.01119	2.50740	0.04268
	(A0 * A1 * !S1)	0.01860	0.00970	0.32940	0.01159	2.50740	0.04265
	(!A2 * !A3 * S1)	0.01860	0.00946	0.32940	0.01164	2.50740	0.04314
	(!A0 * !A1 * !S1)	0.01860	0.01068	0.32940	0.01267	2.50740	0.04374

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	0.00706	0.32940	0.01508	2.50740	0.04641
	(A0 * A1 * !S1)	0.01860	0.00776	0.32940	0.01756	2.50740	0.04850
	(!A2 * !A3 * S1)	0.01860	0.00719	0.32940	0.01509	2.50740	0.04632
	(!A0 * !A1 * !S1)	0.01860	0.00933	0.32940	0.01155	2.50740	0.04230

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00450	0.32940	0.00580	2.50740	0.02311

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00436	0.32940	0.00600	2.50740	0.02310

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	0.00443	0.32940	0.00574	2.50740	0.02304
	(A0 * A2 * !S0)	0.01860	0.00450	0.32940	0.00580	2.50740	0.02311
	(!A1 * !A3 * S0)	0.01860	0.00473	0.32940	0.00622	2.50740	0.02349
	(!A0 * !A2 * !S0)	0.01860	0.00479	0.32940	0.00628	2.50740	0.02354

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	0.00431	0.32940	0.00593	2.50740	0.02304
	(A0 * A2 * !S0)	0.01860	0.00436	0.32940	0.00600	2.50740	0.02310
	(!A1 * !A3 * S0)	0.01860	0.00480	0.32940	0.00625	2.50740	0.02335
	(!A0 * !A2 * !S0)	0.01860	0.00485	0.32940	0.00630	2.50740	0.02341

NAND2B1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_1	0.00218	0.00293	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	330.12500	860.13100	1660.52000

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	0.05139	0.32940	0.06480	0.31899	2.50740	0.30000	1.19218
	B->Y (FR)	0.01860	0.00100	0.02567	0.32940	0.06480	0.35744	2.50740	0.30000	2.00775

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	0.06171	0.32940	0.06480	0.41592	2.50740	0.30000	1.58989
	B->Y (RF)	0.01860	0.00100	0.03744	0.32940	0.06480	0.42398	2.50740	0.30000	2.20242

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	0.00239	0.32940	0.06480	0.00240	2.50740	0.30000	0.00120
	B	0.01860	0.00100	0.00250	0.32940	0.06480	0.00251	2.50740	0.30000	0.00616

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	0.00518	0.32940	0.06480	0.00528	2.50740	0.30000	0.00488
	B	0.01860	0.00100	0.00520	0.32940	0.06480	0.00521	2.50740	0.30000	0.00687

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	0.00502	0.32940	0.00603	2.50740	0.02022

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	0.00268	0.32940	0.00370	2.50740	0.01758

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	0.00502	0.32940	0.00603	2.50740	0.02022

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	0.00268	0.32940	0.00370	2.50740	0.01758

NAND2



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_1	0.00268	0.00278	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	191.13100	647.87200	1521.53000

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	0.02259	0.32940	0.06480	0.35303	2.50740	0.30000	2.00014
	B->Y (FR)	0.01860	0.00100	0.02611	0.32940	0.06480	0.35656	2.50740	0.30000	2.00534

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	0.02907	0.32940	0.06480	0.43095	2.50740	0.30000	2.33431
	B->Y (RF)	0.01860	0.00100	0.03380	0.32940	0.06480	0.42048	2.50740	0.30000	2.20200

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	0.00221	0.32940	0.06480	0.00245	2.50740	0.30000	0.00605
	B	0.01860	0.00100	0.00237	0.32940	0.06480	0.00234	2.50740	0.30000	0.00600

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	0.00284	0.32940	0.06480	0.00304	2.50740	0.30000	0.00576
	B	0.01860	0.00100	0.00495	0.32940	0.06480	0.00493	2.50740	0.30000	0.00700

NAND3B1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand3b_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A_N	B	C	Y
sg13g2_nand3b_1	0.00209	0.00278	0.00281	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	221.57000	766.53900	2421.29000

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	0.05418	0.32940	0.06480	0.31973	2.50740	0.30000	1.18858
	B->Y (FR)	0.01860	0.00100	0.02899	0.32940	0.06480	0.36075	2.50740	0.30000	2.00899
	C->Y (FR)	0.01860	0.00100	0.03169	0.32940	0.06480	0.36443	2.50740	0.30000	2.01315

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	0.07472	0.32940	0.06480	0.53976	2.50740	0.30000	2.12694
	B->Y (RF)	0.01860	0.00100	0.05598	0.32940	0.06480	0.55061	2.50740	0.30000	2.72660
	C->Y (RF)	0.01860	0.00100	0.06190	0.32940	0.06480	0.54168	2.50740	0.30000	2.57671

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	0.00243	0.32940	0.06480	0.00236	2.50740	0.30000	0.00132
	B	0.01860	0.00100	0.00293	0.32940	0.06480	0.00293	2.50740	0.30000	0.00599
	C	0.01860	0.00100	0.00336	0.32940	0.06480	0.00321	2.50740	0.30000	0.00621

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	0.00691	0.32940	0.06480	0.00694	2.50740	0.30000	0.00587
	B	0.01860	0.00100	0.00673	0.32940	0.06480	0.00661	2.50740	0.30000	0.00832
	C	0.01860	0.00100	0.00886	0.32940	0.06480	0.00875	2.50740	0.30000	0.01050

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	0.00509	0.32940	0.00611	2.50740	0.02029

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	0.00255	0.32940	0.00358	2.50740	0.01748

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	0.00509	0.32940	0.00611	2.50740	0.02029

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	0.00255	0.32940	0.00358	2.50740	0.01748

NOR2



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_1	0.00280	0.00268	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	407.92500	645.11200	982.68100

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	0.04174	0.32940	0.06480	0.52042	2.50740	0.30000	2.60100
	B->Y (FR)	0.01860	0.00100	0.03517	0.32940	0.06480	0.53738	2.50740	0.30000	2.79824

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	0.02465	0.32940	0.06480	0.33015	2.50740	0.30000	1.85917
	B->Y (RF)	0.01860	0.00100	0.02153	0.32940	0.06480	0.32633	2.50740	0.30000	1.85508

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	0.00544	0.32940	0.06480	0.00534	2.50740	0.30000	0.00771
	B	0.01860	0.00100	0.00277	0.32940	0.06480	0.00295	2.50740	0.30000	0.00543

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	0.00246	0.32940	0.06480	0.00229	2.50740	0.30000	0.00559
	B	0.01860	0.00100	0.00223	0.32940	0.06480	0.00238	2.50740	0.30000	0.00559

NOR3



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_1	0.00278	0.00273	0.00264	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	381.28600	743.99100	1273.85000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.07523	0.32940	0.06480	0.72567	2.50740	0.30000	3.30904
	B->Y (FR)	0.01860	0.00100	0.07036	0.32940	0.06480	0.73853	2.50740	0.30000	3.50973
	C->Y (FR)	0.01860	0.00100	0.05421	0.32940	0.06480	0.73770	2.50740	0.30000	3.62977

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	0.02791	0.32940	0.06480	0.33716	2.50740	0.30000	1.87005
	B->Y (RF)	0.01860	0.00100	0.02755	0.32940	0.06480	0.33385	2.50740	0.30000	1.86740
	C->Y (RF)	0.01860	0.00100	0.02384	0.32940	0.06480	0.32970	2.50740	0.30000	1.86017

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	0.00908	0.32940	0.06480	0.00891	2.50740	0.30000	0.01049
	B	0.01860	0.00100	0.00684	0.32940	0.06480	0.00667	2.50740	0.30000	0.00846
	C	0.01860	0.00100	0.00420	0.32940	0.06480	0.00431	2.50740	0.30000	0.00647

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	0.00322	0.32940	0.06480	0.00300	2.50740	0.30000	0.00593
	B	0.01860	0.00100	0.00290	0.32940	0.06480	0.00274	2.50740	0.30000	0.00547
	C	0.01860	0.00100	0.00240	0.32940	0.06480	0.00263	2.50740	0.30000	0.00526

NOR4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor4_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_1	0.00276	0.00270	0.00234	0.00241	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	389.18300	724.66100	1561.86000

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	0.11611	0.32940	0.06480	0.95262	2.50740	0.30000	4.12588
	B->Y (FR)	0.01860	0.00100	0.11170	0.32940	0.06480	0.95758	2.50740	0.30000	4.27098
	C->Y (FR)	0.01860	0.00100	0.09776	0.32940	0.06480	0.95564	2.50740	0.30000	4.41248
	D->Y (FR)	0.01860	0.00100	0.06994	0.32940	0.06480	0.94004	2.50740	0.30000	4.48754

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	0.02912	0.32940	0.06480	0.34228	2.50740	0.30000	1.87362
	B->Y (RF)	0.01860	0.00100	0.03012	0.32940	0.06480	0.33955	2.50740	0.30000	1.87536
	C->Y (RF)	0.01860	0.00100	0.02908	0.32940	0.06480	0.33569	2.50740	0.30000	1.86855
	D->Y (RF)	0.01860	0.00100	0.02500	0.32940	0.06480	0.33152	2.50740	0.30000	1.85706

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	0.01171	0.32940	0.06480	0.01150	2.50740	0.30000	0.01285
	B	0.01860	0.00100	0.00956	0.32940	0.06480	0.00934	2.50740	0.30000	0.01063
	C	0.01860	0.00100	0.00782	0.32940	0.06480	0.00760	2.50740	0.30000	0.00874
	D	0.01860	0.00100	0.00443	0.32940	0.06480	0.00447	2.50740	0.30000	0.00623

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	0.00403	0.32940	0.06480	0.00396	2.50740	0.30000	0.00592
	B	0.01860	0.00100	0.00378	0.32940	0.06480	0.00365	2.50740	0.30000	0.00618
	C	0.01860	0.00100	0.00243	0.32940	0.06480	0.00233	2.50740	0.30000	0.00477
	D	0.01860	0.00100	0.00027	0.32940	0.06480	0.00063	2.50740	0.30000	0.00250

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00006	0.32940	-0.00014	2.50740	-0.00019

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00032	0.32940	0.00033	2.50740	0.00034

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	0.00006	0.32940	-0.00014	2.50740	-0.00019

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	0.00032	0.32940	0.00033	2.50740	0.00034

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00008	0.32940	-0.00013	2.50740	-0.00018

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00027	0.32940	0.00028	2.50740	0.00029

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	0.00008	0.32940	-0.00013	2.50740	-0.00018

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	0.00027	0.32940	0.00028	2.50740	0.00029

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00078	0.32940	0.00079	2.50740	0.00080

Passive power(pJ) for C falling :

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

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	0.00078	0.32940	0.00079	2.50740	0.00080

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	-0.00022	0.32940	-0.00022	2.50740	-0.00022

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00223	0.32940	0.00224	2.50740	0.00224

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00053	0.32940	0.00055	2.50740	0.00057

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	0.00223	0.32940	0.00224	2.50740	0.00224

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	0.00053	0.32940	0.00055	2.50740	0.00057

NP_ANT



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

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00111

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.54763	5.54763	5.54763

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	-0.00043	0.32940	-0.00044	2.50740	-0.00045

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00044	0.32940	0.00045	2.50740	0.00045

OR2



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or2_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_1	0.00212	0.00208	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	509.17300	819.34300	1038.51000

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	0.05582	0.32940	0.06480	0.33366	2.50740	0.30000	1.20905
	B->X (RR)	0.01860	0.00100	0.05128	0.32940	0.06480	0.31935	2.50740	0.30000	1.16210

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	0.08941	0.32940	0.06480	0.34220	2.50740	0.30000	1.15664
	B->X (FF)	0.01860	0.00100	0.08319	0.32940	0.06480	0.35040	2.50740	0.30000	1.19769

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	0.00723	0.32940	0.06480	0.00798	2.50740	0.30000	0.01948
	B	0.01860	0.00100	0.00721	0.32940	0.06480	0.00789	2.50740	0.30000	0.01982

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	0.00947	0.32940	0.06480	0.00989	2.50740	0.30000	0.02115
	B	0.01860	0.00100	0.00752	0.32940	0.06480	0.00838	2.50740	0.30000	0.02034

OR3



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_1	0.00233	0.00229	0.00222	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	530.86200	880.61900	1337.96000

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	0.06524	0.32940	0.06480	0.35861	2.50740	0.30000	1.28519
	B->X (RR)	0.01860	0.00100	0.06194	0.32940	0.06480	0.34731	2.50740	0.30000	1.23699
	C->X (RR)	0.01860	0.00100	0.05589	0.32940	0.06480	0.33139	2.50740	0.30000	1.18234

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	0.12856	0.32940	0.06480	0.38489	2.50740	0.30000	1.17974
	B->X (FF)	0.01860	0.00100	0.12312	0.32940	0.06480	0.39115	2.50740	0.30000	1.23794
	C->X (FF)	0.01860	0.00100	0.10833	0.32940	0.06480	0.38817	2.50740	0.30000	1.25208

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	0.00798	0.32940	0.06480	0.00844	2.50740	0.30000	0.02082
	B	0.01860	0.00100	0.00757	0.32940	0.06480	0.00815	2.50740	0.30000	0.01984
	C	0.01860	0.00100	0.00732	0.32940	0.06480	0.00793	2.50740	0.30000	0.01870

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	0.01337	0.32940	0.06480	0.01333	2.50740	0.30000	0.02466
	B	0.01860	0.00100	0.01137	0.32940	0.06480	0.01155	2.50740	0.30000	0.02368
	C	0.01860	0.00100	0.00909	0.32940	0.06480	0.00972	2.50740	0.30000	0.02271

OR4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_1	0.00232	0.00226	0.00194	0.00201	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	532.49900	866.55400	1594.51000

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	0.06811	0.32940	0.06480	0.37050	2.50740	0.30000	1.31063
	B->X (RR)	0.01860	0.00100	0.06723	0.32940	0.06480	0.36192	2.50740	0.30000	1.26602
	C->X (RR)	0.01860	0.00100	0.06332	0.32940	0.06480	0.34952	2.50740	0.30000	1.22219
	D->X (RR)	0.01860	0.00100	0.05689	0.32940	0.06480	0.33466	2.50740	0.30000	1.17389

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	0.17765	0.32940	0.06480	0.44719	2.50740	0.30000	1.23859
	B->X (FF)	0.01860	0.00100	0.17255	0.32940	0.06480	0.44836	2.50740	0.30000	1.30077
	C->X (FF)	0.01860	0.00100	0.15851	0.32940	0.06480	0.44313	2.50740	0.30000	1.34485
	D->X (FF)	0.01860	0.00100	0.13352	0.32940	0.06480	0.43102	2.50740	0.30000	1.34404

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	0.00879	0.32940	0.06480	0.00926	2.50740	0.30000	0.02153
	B	0.01860	0.00100	0.00839	0.32940	0.06480	0.00880	2.50740	0.30000	0.01910
	C	0.01860	0.00100	0.00720	0.32940	0.06480	0.00755	2.50740	0.30000	0.01808
	D	0.01860	0.00100	0.00550	0.32940	0.06480	0.00614	2.50740	0.30000	0.01635

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	0.01476	0.32940	0.06480	0.01430	2.50740	0.30000	0.02363
	B	0.01860	0.00100	0.01374	0.32940	0.06480	0.01331	2.50740	0.30000	0.02274
	C	0.01860	0.00100	0.01199	0.32940	0.06480	0.01163	2.50740	0.30000	0.02229
	D	0.01860	0.00100	0.00860	0.32940	0.06480	0.00880	2.50740	0.30000	0.01905

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00011	0.32940	-0.00028	2.50740	-0.00033

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00113	0.32940	0.00116	2.50740	0.00117

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	-0.00011	0.32940	-0.00028	2.50740	-0.00033

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	0.00113	0.32940	0.00116	2.50740	0.00117

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00009	0.32940	-0.00021	2.50740	-0.00021

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00019	0.32940	0.00021	2.50740	0.00021

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	-0.00009	0.32940	-0.00021	2.50740	-0.00021

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	0.00019	0.32940	0.00021	2.50740	0.00021

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00053	0.32940	0.00055	2.50740	0.00055

Passive power(pJ) for C falling :

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

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	0.00053	0.32940	0.00055	2.50740	0.00055

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	-0.00006	0.32940	-0.00006	2.50740	-0.00006

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00186	0.32940	0.00188	2.50740	0.00188

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00105	0.32940	0.00106	2.50740	0.00108

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	0.00186	0.32940	0.00188	2.50740	0.00188

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	0.00105	0.32940	0.00106	2.50740	0.00108

SDFRRS



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

Truth Table

INPUT						OUTPUT	
D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
0	0	x	1	1	R	0	1
0	1	0	1	1	R	0	1
x	1	1	1	1	R	1	0
1	x	0	1	1	R	1	0
1	0	1	1	1	R	0	1
x	x	x	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	0.00164	0.00182	0.00317	0.00155	0.00476	0.00288	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	4196.74000	5867.66000	7346.26000

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	0.27950	0.32940	0.06480	0.54628	2.50740	0.30000	1.39653
	SET_B->Q (FR)	0.01860	0.00100	0.11758	0.32940	0.06480	0.41005	2.50740	0.30000	1.33260

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	0.23224	0.32940	0.06480	0.47920	2.50740	0.30000	1.25435
	RESET_B->Q (FF)	0.01860	0.00100	0.19389	0.32940	0.06480	0.46105	2.50740	0.30000	1.28523

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	0.27950	0.32940	0.06480	0.54628	2.50740	0.30000	1.39653

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	0.23224	0.32940	0.06480	0.47920	2.50740	0.30000	1.25435

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	0.19082	0.32940	0.06480	0.47960	2.50740	0.30000	1.35239
	RESET_B->Q_N (FR)	0.01860	0.00100	0.15155	0.32940	0.06480	0.46810	2.50740	0.30000	1.39293

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	0.23118	0.32940	0.06480	0.51412	2.50740	0.30000	1.27397
	SET_B->Q_N (FF)	0.01860	0.00100	0.07758	0.32940	0.06480	0.37227	2.50740	0.30000	1.22421

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	0.19082	0.32940	0.06480	0.47960	2.50740	0.30000	1.35239

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	0.23118	0.32940	0.06480	0.51412	2.50740	0.30000	1.27397

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	-0.08803	1.26300	1.26300	-0.25365	2.50740	2.50740	-0.34533
	setup	CLK (R)	0.01860	0.01860	0.12715	1.26300	1.26300	0.27793	2.50740	2.50740	0.37189

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	-0.09536	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.26269
	setup	CLK (R)	0.01860	0.01860	0.16138	1.26300	1.26300	0.26984	2.50740	2.50740	0.36009

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	-0.11492	1.26300	1.26300	-0.30761	2.50740	2.50740	-0.41617
	setup	CLK (R)	0.01860	0.01860	0.15649	1.26300	1.26300	0.32650	2.50740	2.50740	0.43683

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	-0.12715	1.26300	1.26300	-0.21047	2.50740	2.50740	-0.27449
	setup	CLK (R)	0.01860	0.01860	0.19562	1.26300	1.26300	0.28333	2.50740	2.50740	0.36894

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	-0.09781	1.26300	1.26300	-0.29412	2.50740	2.50740	-0.40436
	setup	CLK (R)	0.01860	0.01860	0.13693	1.26300	1.26300	0.31571	2.50740	2.50740	0.42797

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	-0.09781	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.18890
	setup	CLK (R)	0.01860	0.01860	0.16383	1.26300	1.26300	0.22396	2.50740	2.50740	0.28925

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	0.07580	1.26300	1.26300	0.13762	2.50740	2.50740	0.17119
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.12987

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	0.03423	1.26300	1.26300	0.21047	2.50740	2.50740	0.55784
	removal	CLK (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.07555	2.50740	2.50740	0.07084
	hold	RESET_B (R)	0.01860	0.01860	-0.07336	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.25973
	setup	RESET_B (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.22666	2.50740	2.50740	0.32762

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	0.01237	0.32940	0.06480	0.01272	2.50740	0.30000	0.01506
	SET_B	0.01860	0.00100	0.03681	0.32940	0.06480	0.09614	2.50740	0.30000	0.33785

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	0.01233	0.32940	0.06480	0.01248	2.50740	0.30000	0.01309
	RESET_B	0.01860	0.00100	0.04194	0.32940	0.06480	0.10057	2.50740	0.30000	0.32529

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	0.01237	0.32940	0.06480	0.01272	2.50740	0.30000	0.01506

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	0.01233	0.32940	0.06480	0.01248	2.50740	0.30000	0.01309

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	0.01234	0.32940	0.06480	0.01264	2.50740	0.30000	0.01450
	RESET_B	0.01860	0.00100	0.04194	0.32940	0.06480	0.10089	2.50740	0.30000	0.32884

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	0.01237	0.32940	0.06480	0.01261	2.50740	0.30000	0.01285
	SET_B	0.01860	0.00100	0.03677	0.32940	0.06480	0.09584	2.50740	0.30000	0.33643

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	0.01234	0.32940	0.06480	0.01264	2.50740	0.30000	0.01450

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	0.01237	0.32940	0.06480	0.01261	2.50740	0.30000	0.01285

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00697	0.32940	0.00721	2.50740	0.01469

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00580	0.32940	0.00601	2.50740	0.01341

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	0.01272	0.32940	0.01292	2.50740	0.02151
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00697	0.32940	0.00721	2.50740	0.01469

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	0.01367	0.32940	0.01383	2.50740	0.02240
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00580	0.32940	0.00601	2.50740	0.01341

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00907	0.32940	0.00916	2.50740	0.01570

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00991	0.32940	0.00992	2.50740	0.01660

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	0.01482	0.32940	0.01485	2.50740	0.02228
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00907	0.32940	0.00916	2.50740	0.01570

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	0.01831	0.32940	0.01792	2.50740	0.02574
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00991	0.32940	0.00992	2.50740	0.01660

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01505	0.32940	0.01613	2.50740	0.03536

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01725	0.32940	0.01792	2.50740	0.02809

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	0.01723	0.32940	0.01781	2.50740	0.02845
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02248	0.32940	0.02217	2.50740	0.03268
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01505	0.32940	0.01613	2.50740	0.03536
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00927	0.32940	0.01033	2.50740	0.02851

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	0.01725	0.32940	0.01792	2.50740	0.02809
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01923	0.32940	0.02844	2.50740	0.03868
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00414	0.32940	0.02958	2.50740	0.05002
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00951	0.32940	0.01046	2.50740	0.02777

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01369	0.32940	0.01487	2.50740	0.03572

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01659	0.32940	0.01802	2.50740	0.03921

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	0.01358	0.32940	0.01481	2.50740	0.03551
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01815	0.32940	0.01936	2.50740	0.03998
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01345	0.32940	0.01459	2.50740	0.03547
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01358	0.32940	0.01482	2.50740	0.03551
	(!RESET_B * !Q * Q_N)	0.01860	0.01369	0.32940	0.01487	2.50740	0.03572
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01342	0.32940	0.01458	2.50740	0.03546

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	0.01129	0.32940	0.01254	2.50740	0.03321
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02154	0.32940	0.02271	2.50740	0.04394
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01659	0.32940	0.01802	2.50740	0.03921
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02412	0.32940	0.02547	2.50740	0.04679
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01186	0.32940	0.01319	2.50740	0.03371
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01129	0.32940	0.01255	2.50740	0.03321
	(!RESET_B * !Q * Q_N)	0.01860	0.01184	0.32940	0.01318	2.50740	0.03370
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01182	0.32940	0.01316	2.50740	0.03368

TIE0



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

Footprint

Cell Name	Area
sg13g2_tielo	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_LO
sg13g2_tielo	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tielo	57.43060	57.43060	57.43060

TIE1



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

Footprint

Cell Name	Area
sg13g2_tiehi	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_HI
sg13g2_tiehi	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tiehi	55.09780	55.09780	55.09780

XNOR2_1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xnor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_xnor2_1	0.00511	0.00450	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	436.45000	1366.71000	1931.98000

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	0.07104	0.32940	0.06480	0.33829	2.50740	0.30000	1.21257
	A->Y (FR)	0.01860	0.00100	0.05425	0.32940	0.06480	0.53543	2.50740	0.30000	2.61345
	B->Y (RR)	0.01860	0.00100	0.06565	0.32940	0.06480	0.33599	2.50740	0.30000	1.21796
	B->Y (FR)	0.01860	0.00100	0.04778	0.32940	0.06480	0.55158	2.50740	0.30000	2.81190

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	0.06991	0.32940	0.06480	0.43811	2.50740	0.30000	1.65012
	A->Y (RF)	0.01860	0.00100	0.04654	0.32940	0.06480	0.43680	2.50740	0.30000	2.22156
	B->Y (FF)	0.01860	0.00100	0.07075	0.32940	0.06480	0.42553	2.50740	0.30000	1.61942
	B->Y (RF)	0.01860	0.00100	0.03933	0.32940	0.06480	0.42800	2.50740	0.30000	2.20703

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	0.00936	0.32940	0.06480	0.00996	2.50740	0.30000	0.02203
	B	0.01860	0.00100	0.00929	0.32940	0.06480	0.00984	2.50740	0.30000	0.02310

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	0.00846	0.32940	0.06480	0.00955	2.50740	0.30000	0.02260
	B	0.01860	0.00100	0.00958	0.32940	0.06480	0.00906	2.50740	0.30000	0.02265

XOR2_1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xor2_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00537	0.00460	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	1079.39000	1356.14000	1948.49000

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	0.07229	0.32940	0.06480	0.54351	2.50740	0.30000	2.13940
	A->X (FR)	0.01860	0.00100	0.05980	0.32940	0.06480	0.54368	2.50740	0.30000	2.62410
	B->X (RR)	0.01860	0.00100	0.07568	0.32940	0.06480	0.52885	2.50740	0.30000	2.09418
	B->X (FR)	0.01860	0.00100	0.05123	0.32940	0.06480	0.53409	2.50740	0.30000	2.61154

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	0.08593	0.32940	0.06480	0.33163	2.50740	0.30000	1.11221
	A->X (RF)	0.01860	0.00100	0.04467	0.32940	0.06480	0.43382	2.50740	0.30000	2.21230
	B->X (FF)	0.01860	0.00100	0.07909	0.32940	0.06480	0.33669	2.50740	0.30000	1.14324
	B->X (RF)	0.01860	0.00100	0.03891	0.32940	0.06480	0.44304	2.50740	0.30000	2.34668

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	0.00833	0.32940	0.06480	0.00919	2.50740	0.30000	0.02150
	B	0.01860	0.00100	0.00897	0.32940	0.06480	0.00837	2.50740	0.30000	0.02160

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	0.01078	0.32940	0.06480	0.01121	2.50740	0.30000	0.02326
	B	0.01860	0.00100	0.00998	0.32940	0.06480	0.01074	2.50740	0.30000	0.02356