

sg13g2_stdcell_typ_1p50V_25C 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_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00252	0.00246	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	314.37000	392.89200	489.17900

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	0.04330	0.32940	0.06480	0.23373	2.50740	0.30000	0.85611
	B->X (RR)	0.01860	0.00100	0.04657	0.32940	0.06480	0.22992	2.50740	0.30000	0.82988

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	0.03873	0.32940	0.06480	0.20745	2.50740	0.30000	0.72898
	B->X (FF)	0.01860	0.00100	0.04256	0.32940	0.06480	0.21882	2.50740	0.30000	0.76721

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	0.00983	0.32940	0.06480	0.01307	2.50740	0.30000	0.04574
	B	0.01860	0.00100	0.01208	0.32940	0.06480	0.01435	2.50740	0.30000	0.04664

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	0.00859	0.32940	0.06480	0.01218	2.50740	0.30000	0.04549
	B	0.01860	0.00100	0.00893	0.32940	0.06480	0.01224	2.50740	0.30000	0.04555

AND3



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00252	0.00242	0.00245	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	317.50100	437.22200	686.65700

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	0.05666	0.32940	0.06480	0.25998	2.50740	0.30000	0.93077
	B->X (RR)	0.01860	0.00100	0.06305	0.32940	0.06480	0.25887	2.50740	0.30000	0.91640
	C->X (RR)	0.01860	0.00100	0.06588	0.32940	0.06480	0.25199	2.50740	0.30000	0.87484

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	0.04128	0.32940	0.06480	0.21266	2.50740	0.30000	0.71489
	B->X (FF)	0.01860	0.00100	0.04527	0.32940	0.06480	0.22377	2.50740	0.30000	0.74893
	C->X (FF)	0.01860	0.00100	0.04778	0.32940	0.06480	0.23326	2.50740	0.30000	0.78902

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	0.01137	0.32940	0.06480	0.01388	2.50740	0.30000	0.04467
	B	0.01860	0.00100	0.01357	0.32940	0.06480	0.01509	2.50740	0.30000	0.04553
	C	0.01860	0.00100	0.01572	0.32940	0.06480	0.01708	2.50740	0.30000	0.04806

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	0.00876	0.32940	0.06480	0.01189	2.50740	0.30000	0.04293
	B	0.01860	0.00100	0.00921	0.32940	0.06480	0.01201	2.50740	0.30000	0.04261
	C	0.01860	0.00100	0.00945	0.32940	0.06480	0.01242	2.50740	0.30000	0.04498

AND4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00213	0.00207	0.00245	0.00246	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	321.02100	465.11400	884.36000

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	0.07090	0.32940	0.06480	0.28676	2.50740	0.30000	1.00601
	B->X (RR)	0.01860	0.00100	0.07994	0.32940	0.06480	0.28786	2.50740	0.30000	0.99559
	C->X (RR)	0.01860	0.00100	0.08520	0.32940	0.06480	0.28278	2.50740	0.30000	0.96034
	D->X (RR)	0.01860	0.00100	0.08808	0.32940	0.06480	0.27674	2.50740	0.30000	0.91290

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	0.04348	0.32940	0.06480	0.21595	2.50740	0.30000	0.69892
	B->X (FF)	0.01860	0.00100	0.04743	0.32940	0.06480	0.22645	2.50740	0.30000	0.73164
	C->X (FF)	0.01860	0.00100	0.05023	0.32940	0.06480	0.23546	2.50740	0.30000	0.76643
	D->X (FF)	0.01860	0.00100	0.05217	0.32940	0.06480	0.24381	2.50740	0.30000	0.80492

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	0.01312	0.32940	0.06480	0.01525	2.50740	0.30000	0.04417
	B	0.01860	0.00100	0.01574	0.32940	0.06480	0.01700	2.50740	0.30000	0.04505
	C	0.01860	0.00100	0.01682	0.32940	0.06480	0.01755	2.50740	0.30000	0.04783
	D	0.01860	0.00100	0.01661	0.32940	0.06480	0.01708	2.50740	0.30000	0.04686

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	0.00772	0.32940	0.06480	0.01046	2.50740	0.30000	0.03990
	B	0.01860	0.00100	0.00819	0.32940	0.06480	0.01068	2.50740	0.30000	0.04014
	C	0.01860	0.00100	0.00976	0.32940	0.06480	0.01214	2.50740	0.30000	0.04287
	D	0.01860	0.00100	0.00974	0.32940	0.06480	0.01218	2.50740	0.30000	0.04424

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00058	0.32940	-0.00057	2.50740	-0.00057

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00176	0.32940	0.00178	2.50740	0.00178

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	-0.00058	0.32940	-0.00057	2.50740	-0.00057

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	0.00176	0.32940	0.00178	2.50740	0.00178

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00083	0.32940	-0.00083	2.50740	-0.00083

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00148	0.32940	0.00150	2.50740	0.00151

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	-0.00083	0.32940	-0.00083	2.50740	-0.00083

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	0.00148	0.32940	0.00150	2.50740	0.00151

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00023	0.32940	0.00024	2.50740	0.00024

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00011	0.32940	0.00012	2.50740	0.00012

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00023	0.32940	0.00024	2.50740	0.00024

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	0.00011	0.32940	0.00012	2.50740	0.00012

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00256	0.32940	0.00259	2.50740	0.00260

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00041	0.32940	0.00038	2.50740	0.00035

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	0.00256	0.32940	0.00259	2.50740	0.00260

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	0.00041	0.32940	0.00038	2.50740	0.00035

A021



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00270	0.00281	0.00240	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	405.34200	458.03200	521.30600

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	0.05318	0.32940	0.06480	0.25661	2.50740	0.30000	0.90963
	A2->X (RR)	0.01860	0.00100	0.05604	0.32940	0.06480	0.24908	2.50740	0.30000	0.87723
	B1->X (RR)	0.01860	0.00100	0.03612	0.32940	0.06480	0.22310	2.50740	0.30000	0.79119

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	0.06122	0.32940	0.06480	0.22730	2.50740	0.30000	0.75715
	A2->X (FF)	0.01860	0.00100	0.06774	0.32940	0.06480	0.23945	2.50740	0.30000	0.79285
	B1->X (FF)	0.01860	0.00100	0.06023	0.32940	0.06480	0.24845	2.50740	0.30000	0.85822

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	0.03612	0.32940	0.06480	0.22310	2.50740	0.30000	0.79119
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03409	0.32940	0.06480	0.21314	2.50740	0.30000	0.76104

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	0.06023	0.32940	0.06480	0.24845	2.50740	0.30000	0.85822
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.05275	0.32940	0.06480	0.23359	2.50740	0.30000	0.82800

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	0.01107	0.32940	0.06480	0.01355	2.50740	0.30000	0.04627
	A2	0.01860	0.00100	0.01334	0.32940	0.06480	0.01516	2.50740	0.30000	0.04676
	B1	0.01860	0.00100	0.00805	0.32940	0.06480	0.01132	2.50740	0.30000	0.04655

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	0.01259	0.32940	0.06480	0.01438	2.50740	0.30000	0.04836
	A2	0.01860	0.00100	0.01273	0.32940	0.06480	0.01434	2.50740	0.30000	0.04776
	B1	0.01860	0.00100	0.00871	0.32940	0.06480	0.01237	2.50740	0.30000	0.04596

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	0.01034	0.32940	0.06480	0.01347	2.50740	0.30000	0.04889
	B1	(!A1 * A2)	0.01860	0.00100	0.00805	0.32940	0.06480	0.01132	2.50740	0.30000	0.04655

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	0.00904	0.32940	0.06480	0.01225	2.50740	0.30000	0.04703
	B1	(!A1 * A2)	0.01860	0.00100	0.00871	0.32940	0.06480	0.01237	2.50740	0.30000	0.04596

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00009	0.32940	-0.00004	2.50740	-0.00004

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00040	0.32940	0.00039	2.50740	0.00039

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	0.00018	0.32940	-0.00006	2.50740	-0.00013
	(!A2 * B1)	0.01860	-0.00009	0.32940	-0.00004	2.50740	-0.00004

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00077	0.32940	0.00077	2.50740	0.00076
	(!A2 * B1)	0.01860	0.00040	0.32940	0.00039	2.50740	0.00039

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00005	0.32940	0.00003	2.50740	0.00004

Passive power(pJ) for A2 falling :

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

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	0.00027	0.32940	0.00002	2.50740	-0.00005
	(!A1 * B1)	0.01860	0.00005	0.32940	0.00003	2.50740	0.00004

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00069	0.32940	0.00069	2.50740	0.00068
	(!A1 * B1)	0.01860	0.00030	0.32940	0.00031	2.50740	0.00031

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00124	0.32940	0.00127	2.50740	0.00128

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00101	0.32940	0.00103	2.50740	0.00104

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	0.00124	0.32940	0.00127	2.50740	0.00128

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	0.00101	0.32940	0.00103	2.50740	0.00104

BTLx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00594	0.01664	2.40000
sg13g2_ebufn_4	0.00308	0.01009	1.20000
sg13g2_ebufn_2	0.00264	0.00615	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	590.42200	2069.18000	3795.96000
sg13g2_ebufn_4	416.07500	1118.50000	1944.92000
sg13g2_ebufn_2	331.86200	683.06500	1042.43000

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	0.02015	0.04625	0.32940	0.53755	0.39660	2.50740	2.41915	1.51658
	TE_B->Z (RR)	0.01860	0.02015	0.04966	0.32940	0.53755	0.12414	2.50740	2.41915	0.25739
	TE_B->Z (FR)	0.01860	0.02015	0.02570	0.32940	0.53755	0.37327	2.50740	2.41915	1.86729
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01070	0.04722	0.32940	0.26891	0.39565	2.50740	1.20970	1.50873
	TE_B->Z (RR)	0.01860	0.01070	0.03821	0.32940	0.26891	0.09158	2.50740	1.20970	0.17739
	TE_B->Z (FR)	0.01860	0.01070	0.02537	0.32940	0.26891	0.37074	2.50740	1.20970	1.85703
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00595	0.04113	0.32940	0.13455	0.37063	2.50740	0.60495	1.46255
	TE_B->Z (RR)	0.01860	0.00595	0.03282	0.32940	0.13455	0.07512	2.50740	0.60495	0.14255
	TE_B->Z (FR)	0.01860	0.00595	0.02576	0.32940	0.13455	0.37004	2.50740	0.60495	1.85917

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	0.02954	0.05937	0.32940	0.54694	0.33486	2.50740	2.42854	1.19254
	TE_B->Z (RF)	0.01860	0.02954	0.02481	0.32940	0.54694	-0.20833	2.50740	2.42854	-1.89467
	TE_B->Z (FF)	0.01860	0.02954	0.05655	0.32940	0.54694	0.29930	2.50740	2.42854	1.01493
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01550	0.06071	0.32940	0.27370	0.33626	2.50740	1.21450	1.19233
	TE_B->Z (RF)	0.01860	0.01550	0.02018	0.32940	0.27370	-0.20739	2.50740	1.21450	-1.89380
	TE_B->Z (FF)	0.01860	0.01550	0.04289	0.32940	0.27370	0.25926	2.50740	1.21450	0.92169
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00841	0.04617	0.32940	0.13701	0.29842	2.50740	0.60741	1.11028
	TE_B->Z (RF)	0.01860	0.00841	0.01422	0.32940	0.13701	-0.21967	2.50740	0.60741	-1.90599
	TE_B->Z (FF)	0.01860	0.00841	0.03666	0.32940	0.13701	0.23295	2.50740	0.60741	0.85831

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	0.02015	0.05365	0.32940	0.53755	0.06394	2.50740	2.41915	0.07416
	TE_B	0.01860	0.02015	0.00766	0.32940	0.53755	0.00452	2.50740	2.41915	-0.00068
sg13g2_ebufn_4	A	0.01860	0.01070	0.02692	0.32940	0.26891	0.03133	2.50740	1.20970	0.02830
	TE_B	0.01860	0.01070	0.00367	0.32940	0.26891	0.00244	2.50740	1.20970	0.00000
sg13g2_ebufn_2	A	0.01860	0.00595	0.01377	0.32940	0.13455	0.01559	2.50740	0.60495	0.01474
	TE_B	0.01860	0.00595	0.00185	0.32940	0.13455	0.00116	2.50740	0.60495	0.00000

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	0.02954	0.05736	0.32940	0.54694	0.05579	2.50740	2.42854	0.05366
	TE_B	0.01860	0.02954	0.00148	0.32940	0.54694	-0.00172	2.50740	2.42854	0.00416
sg13g2_ebufn_4	A	0.01860	0.01550	0.02884	0.32940	0.27370	0.02816	2.50740	1.21450	0.02388
	TE_B	0.01860	0.01550	0.00068	0.32940	0.27370	-0.00030	2.50740	1.21450	0.00000
sg13g2_ebufn_2	A	0.01860	0.00841	0.01371	0.32940	0.13701	0.01359	2.50740	0.60741	0.01524
	TE_B	0.01860	0.00841	0.00036	0.32940	0.13701	-0.00009	2.50740	0.60741	0.00071

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01493	0.32940	0.02346	2.50740	0.11732
sg13g2_ebufn_4	0.01860	0.00819	0.32940	0.01235	2.50740	0.05916
sg13g2_ebufn_2	0.01860	0.00500	0.32940	0.00909	2.50740	0.05046

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01189	0.32940	0.02127	2.50740	0.11436
sg13g2_ebufn_4	0.01860	0.00627	0.32940	0.01086	2.50740	0.05726
sg13g2_ebufn_2	0.01860	0.00418	0.32940	0.00857	2.50740	0.04947

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	-0.00607	0.32940	-0.00470	2.50740	0.03840
sg13g2_ebufn_4	0.01860	-0.00135	0.32940	0.00146	2.50740	0.04724
sg13g2_ebufn_2	0.01860	0.00018	0.32940	0.00348	2.50740	0.04429

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	0.08254	0.32940	0.08752	2.50740	0.13143
sg13g2_ebufn_4	0.01860	0.04261	0.32940	0.04749	2.50740	0.09339
sg13g2_ebufn_2	0.01860	0.02230	0.32940	0.02690	2.50740	0.06746

BUx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.01780	4.80000
sg13g2_buf_8	0.00889	2.40000
sg13g2_buf_4	0.00377	1.20000
sg13g2_buf_2	0.00262	0.60000
sg13g2_buf_1	0.00226	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	2952.76000	3691.98000	4431.20000
sg13g2_buf_8	1476.39000	1845.99000	2215.60000
sg13g2_buf_4	678.31600	883.10300	1087.89000
sg13g2_buf_2	397.47500	481.44300	565.41000
sg13g2_buf_1	270.75000	290.44400	310.13800

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	0.03909	0.32940	1.03680	0.24335	2.50740	4.80000	0.87116
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.03850	0.32940	0.51840	0.24209	2.50740	2.40000	0.86956
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.04841	0.32940	0.25920	0.27086	2.50740	1.20000	0.98789
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.03814	0.32940	0.12960	0.23784	2.50740	0.60000	0.86323
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03411	0.32940	0.06480	0.21869	2.50740	0.30000	0.81970

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	0.04429	0.32940	1.03680	0.23419	2.50740	4.80000	0.79601
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04352	0.32940	0.51840	0.23335	2.50740	2.40000	0.79581
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04283	0.32940	0.25920	0.22670	2.50740	1.20000	0.72347
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04175	0.32940	0.12960	0.22283	2.50740	0.60000	0.76297
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03667	0.32940	0.06480	0.20150	2.50740	0.30000	0.72267

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	0.12033	0.32940	1.03680	0.14524	2.50740	4.80000	0.41395
sg13g2_buf_8	A	0.01860	0.00100	0.05829	0.32940	0.51840	0.07139	2.50740	2.40000	0.20373
sg13g2_buf_4	A	0.01860	0.00100	0.02887	0.32940	0.25920	0.03386	2.50740	1.20000	0.08763
sg13g2_buf_2	A	0.01860	0.00100	0.01500	0.32940	0.12960	0.01887	2.50740	0.60000	0.05738
sg13g2_buf_1	A	0.01860	0.00100	0.00856	0.32940	0.06480	0.01197	2.50740	0.30000	0.04490

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	0.11673	0.32940	1.03680	0.14669	2.50740	4.80000	0.42417
sg13g2_buf_8	A	0.01860	0.00100	0.05750	0.32940	0.51840	0.07234	2.50740	2.40000	0.21441
sg13g2_buf_4	A	0.01860	0.00100	0.02874	0.32940	0.25920	0.03453	2.50740	1.20000	0.09150
sg13g2_buf_2	A	0.01860	0.00100	0.01475	0.32940	0.12960	0.01910	2.50740	0.60000	0.06005
sg13g2_buf_1	A	0.01860	0.00100	0.00868	0.32940	0.06480	0.01240	2.50740	0.30000	0.04576

DECAP_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	1670.71000	1670.71000	1670.71000
sg13g2_decap_8	3341.40000	3341.40000	3341.40000

DFFRRx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00142	0.00519	0.00290	0.60000	0.60000
sg13g2_dfrbp_1	0.00149	0.00571	0.00272	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1666.35000	1911.40000	2129.32000
sg13g2_dfrbp_1	1278.45000	1513.75000	1738.43000

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	0.15600	0.32940	0.12960	0.34254	2.50740	0.60000	0.94248
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.12220	0.32940	0.06480	0.30899	2.50740	0.30000	0.87899

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	0.13438	0.32940	0.12960	0.30200	2.50740	0.60000	0.78213
	RESET_B->Q (FF)	0.01860	0.00100	0.18262	0.32940	0.12960	0.38930	2.50740	0.60000	1.03321
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.11518	0.32940	0.06480	0.27935	2.50740	0.30000	0.73696
	RESET_B->Q (FF)	0.01860	0.00100	0.15795	0.32940	0.06480	0.36093	2.50740	0.30000	0.99347

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	0.08963	0.32940	0.12960	0.30078	2.50740	0.60000	0.86948
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13868	0.32940	0.12960	0.38704	2.50740	0.60000	1.12036
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.08807	0.32940	0.06480	0.28939	2.50740	0.30000	0.83643
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13107	0.32940	0.06480	0.36988	2.50740	0.30000	1.09337

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	0.10100	0.32940	0.12960	0.31232	2.50740	0.60000	0.82601
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.09164	0.32940	0.06480	0.28541	2.50740	0.30000	0.77308

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	-0.02934	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.17119
	setup	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.17000	2.50740	2.50740	0.21251
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.03179	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.19480
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.18079	2.50740	2.50740	0.23908

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	-0.01956	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.22727
	setup	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.20777	2.50740	2.50740	0.30106
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.22432
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.21317	2.50740	2.50740	0.31582

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	0.07825	1.26300	1.26300	0.20777	2.50740	2.50740	0.31877
	removal	CLK (R)	0.01860	0.01860	-0.06358	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.30991
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.22127	2.50740	2.50740	0.34828
	removal	CLK (R)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.32762

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	0.04473	0.32940	0.12960	0.18753	2.50740	0.60000	0.72543
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02938	0.32940	0.06480	0.10158	2.50740	0.30000	0.36919

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	0.04299	0.32940	0.12960	0.18801	2.50740	0.60000	0.72024
	RESET_B	0.01860	0.00100	0.04622	0.32940	0.12960	0.19286	2.50740	0.60000	0.74734
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02797	0.32940	0.06480	0.10060	2.50740	0.30000	0.36837
	RESET_B	0.01860	0.00100	0.03079	0.32940	0.06480	0.10528	2.50740	0.30000	0.39534

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	0.04303	0.32940	0.12960	0.18873	2.50740	0.60000	0.71976
	RESET_B	0.01860	0.00100	0.04626	0.32940	0.12960	0.19381	2.50740	0.60000	0.74423
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02798	0.32940	0.06480	0.10143	2.50740	0.30000	0.36750
	RESET_B	0.01860	0.00100	0.03075	0.32940	0.06480	0.10581	2.50740	0.30000	0.39204

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	0.04477	0.32940	0.12960	0.18644	2.50740	0.60000	0.72698
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02937	0.32940	0.06480	0.10115	2.50740	0.30000	0.37175

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00238	0.32940	0.00417	2.50740	0.02238
sg13g2_dfrbp_1	0.01860	0.00248	0.32940	0.00422	2.50740	0.02239

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00210	0.32940	0.00400	2.50740	0.02239
sg13g2_dfrbp_1	0.01860	0.00225	0.32940	0.00413	2.50740	0.02246

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	0.00238	0.32940	0.00417	2.50740	0.02238
	(!CLK * RESET_B)	0.01860	0.01754	0.32940	0.01939	2.50740	0.04100
	(!CLK * !RESET_B)	0.01860	-0.00033	0.32940	-0.00034	2.50740	-0.00033
sg13g2_dfrbp_1	CLK	0.01860	0.00248	0.32940	0.00422	2.50740	0.02239
	(!CLK * RESET_B)	0.01860	0.01535	0.32940	0.01726	2.50740	0.03866
	(!CLK * !RESET_B)	0.01860	-0.00021	0.32940	-0.00022	2.50740	-0.00021

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	0.00210	0.32940	0.00400	2.50740	0.02239
	(!CLK * RESET_B)	0.01860	0.01429	0.32940	0.01631	2.50740	0.03850
	(!CLK * !RESET_B)	0.01860	0.00072	0.32940	0.00074	2.50740	0.00074
sg13g2_dfrbp_1	CLK	0.01860	0.00225	0.32940	0.00413	2.50740	0.02246
	(!CLK * RESET_B)	0.01860	0.01309	0.32940	0.01516	2.50740	0.03708
	(!CLK * !RESET_B)	0.01860	0.00064	0.32940	0.00066	2.50740	0.00066

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	0.00583	0.32940	0.00687	2.50740	0.02447
sg13g2_dfrbp_1	0.01860	0.00644	0.32940	0.00747	2.50740	0.02498

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	0.01417	0.32940	0.01574	2.50740	0.04385
sg13g2_dfrbp_1	0.01860	0.01242	0.32940	0.01397	2.50740	0.04209

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	0.00583	0.32940	0.00687	2.50740	0.02447
	(CLK * !D * !Q * Q_N)	0.01860	0.00196	0.32940	0.00191	2.50740	0.00191
	(!CLK * D * !Q * Q_N)	0.01860	0.02135	0.32940	0.02284	2.50740	0.05014
	(!CLK * !D * !Q * Q_N)	0.01860	0.00205	0.32940	0.00199	2.50740	0.00199
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00644	0.32940	0.00747	2.50740	0.02498
	(CLK * !D * !Q * Q_N)	0.01860	0.00256	0.32940	0.00250	2.50740	0.00250
	(!CLK * D * !Q * Q_N)	0.01860	0.01966	0.32940	0.02116	2.50740	0.04868
	(!CLK * !D * !Q * Q_N)	0.01860	0.00267	0.32940	0.00260	2.50740	0.00260

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	0.06008	0.32940	0.06444	2.50740	0.11585
	(CLK * !D * !Q * Q_N)	0.01860	-0.00081	0.32940	-0.00104	2.50740	-0.00112
	(!CLK * D * !Q * Q_N)	0.01860	0.01417	0.32940	0.01574	2.50740	0.04385
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00105	0.32940	-0.00119	2.50740	-0.00124
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.04239	0.32940	0.04661	2.50740	0.09707
	(CLK * !D * !Q * Q_N)	0.01860	-0.00140	0.32940	-0.00162	2.50740	-0.00171
	(!CLK * D * !Q * Q_N)	0.01860	0.01242	0.32940	0.01397	2.50740	0.04209
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00159	0.32940	-0.00176	2.50740	-0.00183

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01630	0.32940	0.02074	2.50740	0.07095
sg13g2_dfrbp_1	0.01860	0.01598	0.32940	0.02004	2.50740	0.06683

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03060	0.32940	0.03549	2.50740	0.08708
sg13g2_dfrbp_1	0.01860	0.02740	0.32940	0.03197	2.50740	0.08074

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	0.01630	0.32940	0.02074	2.50740	0.07095
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01711	0.32940	0.02156	2.50740	0.07168
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01599	0.32940	0.02043	2.50740	0.07058
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01716	0.32940	0.02149	2.50740	0.07169
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01638	0.32940	0.02045	2.50740	0.06732
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01594	0.32940	0.02001	2.50740	0.06682
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01559	0.32940	0.01967	2.50740	0.06653
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01598	0.32940	0.02004	2.50740	0.06683

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	0.03060	0.32940	0.03549	2.50740	0.08708
	(D * RESET_B * !Q * Q_N)	0.01860	0.03061	0.32940	0.03548	2.50740	0.08712
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01587	0.32940	0.02059	2.50740	0.07032
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00938	0.32940	0.07875	2.50740	0.12834
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01584	0.32940	0.02060	2.50740	0.07036
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01587	0.32940	0.02059	2.50740	0.07031
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02741	0.32940	0.03202	2.50740	0.08072
	(D * RESET_B * !Q * Q_N)	0.01860	0.02740	0.32940	0.03197	2.50740	0.08074
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01504	0.32940	0.01949	2.50740	0.06619
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00844	0.32940	0.06209	2.50740	0.10866
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01500	0.32940	0.01949	2.50740	0.06621
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01504	0.32940	0.01948	2.50740	0.06618

DLHQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00224	0.00232	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	928.97600	1021.47000	1136.46000

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	0.11588	0.32940	0.06480	0.29685	2.50740	0.30000	0.85868
	GATE->Q (RR)	0.01860	0.00100	0.09777	0.32940	0.06480	0.27885	2.50740	0.30000	0.79869

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	0.10213	0.32940	0.06480	0.26409	2.50740	0.30000	0.74518
	GATE->Q (RF)	0.01860	0.00100	0.10338	0.32940	0.06480	0.26102	2.50740	0.30000	0.67859

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.06113	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.10330
	setup	GATE (F)	0.01860	0.01860	0.06847	1.26300	1.26300	0.15651	2.50740	2.50740	0.18595

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	-0.02445	1.26300	1.26300	0.02159	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03179	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05608

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	0.02224	0.32940	0.06480	0.02257	2.50740	0.30000	0.02343
	GATE	0.01860	0.00100	0.01857	0.32940	0.06480	0.01898	2.50740	0.30000	0.02247

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	0.02321	0.32940	0.06480	0.02396	2.50740	0.30000	0.02619
	GATE	0.01860	0.00100	0.02014	0.32940	0.06480	0.02112	2.50740	0.30000	0.02213

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00559	0.32940	0.00879	2.50740	0.04292

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00547	0.32940	0.00879	2.50740	0.04262

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	0.00561	0.32940	0.00873	2.50740	0.04287
	(!GATE * !Q)	0.01860	0.00559	0.32940	0.00879	2.50740	0.04292

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	0.00533	0.32940	0.00881	2.50740	0.04260
	(!GATE * !Q)	0.01860	0.00547	0.32940	0.00879	2.50740	0.04262

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01222	0.32940	0.01613	2.50740	0.05886

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00827	0.32940	0.02665	2.50740	0.06980

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	0.01222	0.32940	0.01613	2.50740	0.05886

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	0.00827	0.32940	0.02665	2.50740	0.06980

DLHRQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00209	0.00286	0.00222	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1038.47000	1158.98000	1259.74000

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	0.12006	0.32940	0.06480	0.30364	2.50740	0.30000	0.86154
	GATE->Q (RR)	0.01860	0.00100	0.10645	0.32940	0.06480	0.29062	2.50740	0.30000	0.80669

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	0.10620	0.32940	0.06480	0.26877	2.50740	0.30000	0.75108
	GATE->Q (RF)	0.01860	0.00100	0.10771	0.32940	0.06480	0.26715	2.50740	0.30000	0.68677
	RESET_B->Q (FF)	0.01860	0.00100	0.04401	0.32940	0.06480	0.22479	2.50740	0.30000	0.77879

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	-0.05379	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.08855
	setup	GATE (F)	0.01860	0.01860	0.06602	1.26300	1.26300	0.13762	2.50740	2.50740	0.16234

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	-0.02690	1.26300	1.26300	0.01889	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03668	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05313

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	-0.00734	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.16824
	removal	GATE (F)	0.01860	0.01860	0.01712	1.26300	1.26300	0.12143	2.50740	2.50740	0.19185

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	0.00250	0.32940	0.06480	0.00199	2.50740	0.30000	0.00177
	GATE	0.01860	0.00100	0.01865	0.32940	0.06480	0.01900	2.50740	0.30000	0.02218

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	0.00648	0.32940	0.06480	-0.00199	2.50740	0.30000	-0.00177
	GATE	0.01860	0.00100	0.01825	0.32940	0.06480	0.01936	2.50740	0.30000	0.02047
	RESET_B	0.01860	0.00100	0.01034	0.32940	0.06480	0.01480	2.50740	0.30000	0.05427

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02524	0.32940	0.02922	2.50740	0.06418

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01983	0.32940	0.04020	2.50740	0.07547

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	0.00550	0.32940	0.00871	2.50740	0.04285
	!RESET_B	0.01860	0.02524	0.32940	0.02922	2.50740	0.06418

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	0.00510	0.32940	0.00857	2.50740	0.04236
	!RESET_B	0.01860	0.01983	0.32940	0.04020	2.50740	0.07547

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	0.00011	0.32940	0.00006	2.50740	0.00006

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	0.00061	0.32940	0.00049	2.50740	0.00044

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	0.00011	0.32940	0.00006	2.50740	0.00006
	(!D * !GATE * !Q)	0.01860	0.00011	0.32940	0.00006	2.50740	0.00006

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	0.00061	0.32940	0.00049	2.50740	0.00044
	(!D * !GATE * !Q)	0.01860	0.00061	0.32940	0.00049	2.50740	0.00044

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01272	0.32940	0.01660	2.50740	0.05923

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00850	0.32940	0.02659	2.50740	0.06971

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	0.01674	0.32940	0.02074	2.50740	0.06665
	(!D * !RESET_B * !Q)	0.01860	0.01272	0.32940	0.01660	2.50740	0.05923

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	0.01792	0.32940	0.02274	2.50740	0.06866
	(!D * RESET_B * !Q)	0.01860	0.00850	0.32940	0.02659	2.50740	0.06971
	(!D * !RESET_B * !Q)	0.01860	0.00855	0.32940	0.02664	2.50740	0.06976

DLHR



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00211	0.00301	0.00230	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	1322.77000	1454.41000	1537.31000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.12995	0.32940	0.06480	0.31801	2.50740	0.30000	0.87628
	GATE->Q (RR)	0.01860	0.00100	0.11689	0.32940	0.06480	0.30598	2.50740	0.30000	0.82397

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	0.11058	0.32940	0.06480	0.27499	2.50740	0.30000	0.75394
	GATE->Q (RF)	0.01860	0.00100	0.11204	0.32940	0.06480	0.27407	2.50740	0.30000	0.68923
	RESET_B->Q (FF)	0.01860	0.00100	0.04765	0.32940	0.06480	0.23742	2.50740	0.30000	0.79287

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	0.13548	0.32940	0.06480	0.31474	2.50740	0.30000	0.88388
	GATE->Q_N (RR)	0.01860	0.00100	0.13700	0.32940	0.06480	0.31378	2.50740	0.30000	0.81918
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07252	0.32940	0.06480	0.27085	2.50740	0.30000	0.86576

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	0.15747	0.32940	0.06480	0.31118	2.50740	0.30000	0.77846
	GATE->Q_N (RF)	0.01860	0.00100	0.14424	0.32940	0.06480	0.29917	2.50740	0.30000	0.72688

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	-0.05868	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.08855
	setup	GATE (F)	0.01860	0.01860	0.07091	1.26300	1.26300	0.14031	2.50740	2.50740	0.16234

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.02934	1.26300	1.26300	0.01889	2.50740	2.50740	0.06198
	setup	GATE (F)	0.01860	0.01860	0.03912	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.05313

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	-0.00245	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.11511
	removal	GATE (F)	0.01860	0.01860	0.01223	1.26300	1.26300	0.08905	2.50740	2.50740	0.13872

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	0.00761	0.32940	0.06480	0.00768	2.50740	0.30000	0.00812
	GATE	0.01860	0.00100	0.01550	0.32940	0.06480	0.01595	2.50740	0.30000	0.01845

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	0.00931	0.32940	0.06480	0.00127	2.50740	0.30000	0.00224
	GATE	0.01860	0.00100	0.01526	0.32940	0.06480	0.01591	2.50740	0.30000	0.01644
	RESET_B	0.01860	0.00100	0.01105	0.32940	0.06480	0.01349	2.50740	0.30000	0.03680

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	0.00935	0.32940	0.06480	0.00158	2.50740	0.30000	0.00137
	GATE	0.01860	0.00100	0.01528	0.32940	0.06480	0.01616	2.50740	0.30000	0.01634
	RESET_B	0.01860	0.00100	0.01108	0.32940	0.06480	0.01361	2.50740	0.30000	0.03665

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	0.00762	0.32940	0.06480	0.00741	2.50740	0.30000	0.00865
	GATE	0.01860	0.00100	0.01550	0.32940	0.06480	0.01572	2.50740	0.30000	0.01881

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02471	0.32940	0.02871	2.50740	0.06370

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01962	0.32940	0.03971	2.50740	0.07506

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	0.00546	0.32940	0.00873	2.50740	0.04294
	!RESET_B	0.01860	0.02471	0.32940	0.02871	2.50740	0.06370

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	0.00479	0.32940	0.00830	2.50740	0.04219
	!RESET_B	0.01860	0.01962	0.32940	0.03971	2.50740	0.07506

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	-0.00008	0.32940	-0.00014	2.50740	-0.00014

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	0.00080	0.32940	0.00069	2.50740	0.00064

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	-0.00008	0.32940	-0.00014	2.50740	-0.00014
	(!D * !GATE * !Q)	0.01860	-0.00008	0.32940	-0.00014	2.50740	-0.00014

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	0.00080	0.32940	0.00069	2.50740	0.00064
	(!D * !GATE * !Q)	0.01860	0.00080	0.32940	0.00069	2.50740	0.00064

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01221	0.32940	0.01613	2.50740	0.05889

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00874	0.32940	0.02621	2.50740	0.06945

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	0.01626	0.32940	0.02023	2.50740	0.06620
	(!D * !RESET_B * !Q)	0.01860	0.01221	0.32940	0.01613	2.50740	0.05889

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	0.01841	0.32940	0.02315	2.50740	0.06914
	(!D * RESET_B * !Q)	0.01860	0.00874	0.32940	0.02621	2.50740	0.06945
	(!D * !RESET_B * !Q)	0.01860	0.00879	0.32940	0.02626	2.50740	0.06951

DLLRQ



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00207	0.00290	0.00220	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1029.35000	1158.05000	1266.87000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllrq_1	D->Q (RR)	0.01860	0.00100	0.11990	0.32940	0.06480	0.30320	2.50740	0.30000	0.86115
	GATE_N->Q (FR)	0.01860	0.00100	0.13199	0.32940	0.06480	0.32968	2.50740	0.30000	0.95998
	RESET_B->Q (RR)	0.01860	0.00100	0.05457	0.32940	0.06480	0.23816	2.50740	0.30000	0.85108

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	0.10573	0.32940	0.06480	0.26647	2.50740	0.30000	0.74473
	GATE_N->Q (FF)	0.01860	0.00100	0.10010	0.32940	0.06480	0.27885	2.50740	0.30000	0.83699
	RESET_B->Q (FF)	0.01860	0.00100	0.04444	0.32940	0.06480	0.22455	2.50740	0.30000	0.77779

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	-0.04646	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.09740
	setup	GATE_N (R)	0.01860	0.01860	0.05624	1.26300	1.26300	0.07555	2.50740	2.50740	0.10626

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	-0.05379	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.24793
	setup	GATE_N (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.22127	2.50740	2.50740	0.32467

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	-0.01956	1.26300	1.26300	-0.04048	2.50740	2.50740	-0.02656
	removal	GATE_N (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.05397	2.50740	2.50740	0.03837

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	0.01003	0.32940	0.06480	0.01081	2.50740	0.30000	0.01180
	GATE_N	0.01860	0.00100	0.02389	0.32940	0.06480	0.01063	2.50740	0.30000	0.01197
	RESET_B	0.01860	0.00100	0.01507	0.32940	0.06480	0.01722	2.50740	0.30000	0.05621

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	0.01933	0.32940	0.06480	-0.00018	2.50740	0.30000	0.00059
	GATE_N	0.01860	0.00100	0.02167	0.32940	0.06480	0.00871	2.50740	0.30000	0.01322
	RESET_B	0.01860	0.00100	0.01060	0.32940	0.06480	0.01500	2.50740	0.30000	0.05567

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01768	0.32940	0.02043	2.50740	0.05460

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00708	0.32940	0.03055	2.50740	0.06585

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	0.00546	0.32940	0.00872	2.50740	0.04291
	!RESET_B	0.01860	0.01768	0.32940	0.02043	2.50740	0.05460

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	0.00490	0.32940	0.00840	2.50740	0.04227
	!RESET_B	0.01860	0.00708	0.32940	0.03055	2.50740	0.06585

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	0.00011	0.32940	0.00006	2.50740	0.00006

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	0.00061	0.32940	0.00049	2.50740	0.00044

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	0.00012	0.32940	0.00006	2.50740	0.00006
	(!D * GATE_N * !Q)	0.01860	0.00011	0.32940	0.00006	2.50740	0.00006

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	0.00061	0.32940	0.00049	2.50740	0.00044
	(!D * GATE_N * !Q)	0.01860	0.00061	0.32940	0.00049	2.50740	0.00044

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	0.01139	0.32940	0.01531	2.50740	0.05801

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	0.00847	0.32940	0.02645	2.50740	0.06969

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	0.01986	0.32940	0.02364	2.50740	0.06586
	(!D * !RESET_B * !Q)	0.01860	0.01139	0.32940	0.01531	2.50740	0.05801

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	0.01781	0.32940	0.02214	2.50740	0.06487
	(!D * RESET_B * !Q)	0.01860	0.00847	0.32940	0.02645	2.50740	0.06969
	(!D * !RESET_B * !Q)	0.01860	0.00852	0.32940	0.02650	2.50740	0.06973

DLLR



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00212	0.00302	0.00227	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1313.38000	1477.50000	1560.97000

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	0.13140	0.32940	0.06480	0.31891	2.50740	0.30000	0.87754
	GATE_N->Q (FR)	0.01860	0.00100	0.14389	0.32940	0.06480	0.34725	2.50740	0.30000	0.97904

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	0.11170	0.32940	0.06480	0.27597	2.50740	0.30000	0.75518
	GATE_N->Q (FF)	0.01860	0.00100	0.10673	0.32940	0.06480	0.28995	2.50740	0.30000	0.85114
	RESET_B->Q (FF)	0.01860	0.00100	0.04751	0.32940	0.06480	0.24031	2.50740	0.30000	0.75967

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	0.13646	0.32940	0.06480	0.31557	2.50740	0.30000	0.88396
	GATE_N->Q_N (FR)	0.01860	0.00100	0.13160	0.32940	0.06480	0.32920	2.50740	0.30000	0.97908
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07293	0.32940	0.06480	0.27205	2.50740	0.30000	0.87208

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	0.15877	0.32940	0.06480	0.31243	2.50740	0.30000	0.77995
	GATE_N->Q_N (FF)	0.01860	0.00100	0.17111	0.32940	0.06480	0.34058	2.50740	0.30000	0.88264

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	-0.05379	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.10330
	setup	GATE_N (R)	0.01860	0.01860	0.06602	1.26300	1.26300	0.07825	2.50740	2.50740	0.11216

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	-0.05624	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.25383
	setup	GATE_N (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.22666	2.50740	2.50740	0.33352

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	-0.01223	1.26300	1.26300	-0.00810	2.50740	2.50740	0.02952
	removal	GATE_N (R)	0.01860	0.01860	0.02445	1.26300	1.26300	0.02159	2.50740	2.50740	-0.01476

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	0.01521	0.32940	0.06480	0.08784	2.50740	0.30000	0.35337
	GATE_N	0.01860	0.00100	0.03381	0.32940	0.06480	0.10656	2.50740	0.30000	0.37677

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	0.01999	0.32940	0.06480	0.07176	2.50740	0.30000	0.33964
	GATE_N	0.01860	0.00100	0.03087	0.32940	0.06480	0.10344	2.50740	0.30000	0.37220
	RESET_B	0.01860	0.00100	0.03545	0.32940	0.06480	0.11050	2.50740	0.30000	0.41338

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	0.02006	0.32940	0.06480	0.07243	2.50740	0.30000	0.33656
	GATE_N	0.01860	0.00100	0.03091	0.32940	0.06480	0.10378	2.50740	0.30000	0.37451
	RESET_B	0.01860	0.00100	0.03549	0.32940	0.06480	0.11100	2.50740	0.30000	0.41101

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	0.01522	0.32940	0.06480	0.08730	2.50740	0.30000	0.35572
	GATE_N	0.01860	0.00100	0.03382	0.32940	0.06480	0.10606	2.50740	0.30000	0.37187

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02646	0.32940	0.02972	2.50740	0.06466

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01946	0.32940	0.04344	2.50740	0.07870

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	0.00547	0.32940	0.00872	2.50740	0.04295
	!RESET_B	0.01860	0.02646	0.32940	0.02972	2.50740	0.06466

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	0.00479	0.32940	0.00829	2.50740	0.04219
	!RESET_B	0.01860	0.01946	0.32940	0.04344	2.50740	0.07870

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	-0.00008	0.32940	-0.00014	2.50740	-0.00014

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	0.00080	0.32940	0.00069	2.50740	0.00064

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	-0.00007	0.32940	-0.00014	2.50740	-0.00014
	(!D * GATE_N * !Q)	0.01860	-0.00008	0.32940	-0.00014	2.50740	-0.00014

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	0.00080	0.32940	0.00069	2.50740	0.00064
	(!D * GATE_N * !Q)	0.01860	0.00080	0.32940	0.00069	2.50740	0.00064

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	0.00525	0.32940	0.02662	2.50740	0.06916

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	0.01266	0.32940	0.01708	2.50740	0.06024

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	0.02014	0.32940	0.02388	2.50740	0.06607
	(!D * RESET_B * !Q)	0.01860	0.00525	0.32940	0.02662	2.50740	0.06916
	(!D * !RESET_B * !Q)	0.01860	0.00529	0.32940	0.02665	2.50740	0.06921

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	0.01836	0.32940	0.02274	2.50740	0.06538
	(!D * !RESET_B * !Q)	0.01860	0.01266	0.32940	0.01708	2.50740	0.06024

DLY1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00139	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	435.62900	473.15700	510.68500

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	0.07577	0.32940	0.06480	0.25198	2.50740	0.30000	0.73437

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	0.08763	0.32940	0.06480	0.27109	2.50740	0.30000	0.86473

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	0.01899	0.32940	0.06480	0.02138	2.50740	0.30000	0.04470

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	0.01804	0.32940	0.06480	0.02082	2.50740	0.30000	0.04367

DLY2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00139	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	515.77600	553.33200	590.88800

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	0.11415	0.32940	0.06480	0.30186	2.50740	0.30000	0.81996

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	0.12844	0.32940	0.06480	0.32935	2.50740	0.30000	0.94878

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	0.02283	0.32940	0.06480	0.02458	2.50740	0.30000	0.04615

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	0.02207	0.32940	0.06480	0.02407	2.50740	0.30000	0.04660

DLY4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00135	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1214.87000	1252.41000	1289.95000

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	0.25068	0.32940	0.06480	0.46463	2.50740	0.30000	1.05479

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	0.25902	0.32940	0.06480	0.49325	2.50740	0.30000	1.17978

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	0.03389	0.32940	0.06480	0.03443	2.50740	0.30000	0.05432

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	0.03353	0.32940	0.06480	0.03401	2.50740	0.30000	0.05405

EINVIN_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00765	0.00919	1.20000
sg13g2_einvn_2	0.00383	0.00481	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1259.67000	1555.34000	1851.00000
sg13g2_einvn_2	633.83500	781.67600	929.51700

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	0.01071	0.01911	0.32940	0.26891	0.39491	2.50740	1.20971	2.14484
	TE_B->Z (RR)	0.01860	0.01071	0.03679	0.32940	0.26891	0.09057	2.50740	1.20971	0.17465
	TE_B->Z (FR)	0.01860	0.01071	0.02349	0.32940	0.26891	0.36713	2.50740	1.20971	1.84963
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00598	0.02015	0.32940	0.13458	0.39470	2.50740	0.60498	2.13984
	TE_B->Z (RR)	0.01860	0.00598	0.03566	0.32940	0.13458	0.08593	2.50740	0.60498	0.17017
	TE_B->Z (FR)	0.01860	0.00598	0.02449	0.32940	0.13458	0.36712	2.50740	0.60498	1.85006

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	0.01545	0.01668	0.32940	0.27365	0.32036	2.50740	1.21445	1.76394
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00841	0.01775	0.32940	0.13701	0.32031	2.50740	0.60741	1.76362

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	0.01071	0.01562	0.32940	0.26891	0.02042	2.50740	1.20971	0.06512
	TE_B	0.01860	0.01071	0.03118	0.32940	0.26891	0.02179	2.50740	1.20971	0.01497
sg13g2_einvn_2	A	0.01860	0.00598	0.00782	0.32940	0.13458	0.01007	2.50740	0.60498	0.03131
	TE_B	0.01860	0.00598	0.01540	0.32940	0.13458	0.01078	2.50740	0.60498	0.00656

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	0.01545	0.01450	0.32940	0.27365	0.01965	2.50740	1.21445	0.05708
sg13g2_einvn_2	A	0.01860	0.00841	0.00750	0.32940	0.13701	0.00995	2.50740	0.60741	0.02895

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	-0.00008	0.32940	-0.00006	2.50740	-0.00005
sg13g2_einvn_2	0.01860	-0.00015	0.32940	-0.00014	2.50740	-0.00013

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00008	0.32940	0.00006	2.50740	0.00005
sg13g2_einvn_2	0.01860	0.00015	0.32940	0.00014	2.50740	0.00013

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	-0.00241	0.32940	0.00057	2.50740	0.04650
sg13g2_einvn_2	0.01860	-0.00096	0.32940	0.00075	2.50740	0.02561

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	0.01503	0.32940	0.02812	2.50740	0.07533
sg13g2_einvn_2	0.01860	0.00776	0.32940	0.01442	2.50740	0.03979

FILLx



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_4	7.25760
sg13g2_fill_2	3.62880
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_4	0.00000	0.00000	0.00000
sg13g2_fill_2	0.00000	0.00000	0.00000
sg13g2_fill_8	0.00000	0.00000	0.00000

IN_x



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.04728	4.80000
sg13g2_inv_8	0.02304	2.40000
sg13g2_inv_4	0.01153	1.20000
sg13g2_inv_2	0.00576	0.60000
sg13g2_inv_1	0.00289	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	1502.34000	2685.07000	3867.81000
sg13g2_inv_8	751.17500	1342.54000	1933.90000
sg13g2_inv_4	375.58700	671.26900	966.95100
sg13g2_inv_2	187.79400	335.63500	483.47600
sg13g2_inv_1	93.89740	167.81700	241.73700

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	0.01226	0.32940	1.03680	0.27411	2.50740	4.80000	1.53308
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01213	0.32940	0.51840	0.27364	2.50740	2.40000	1.53373
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01243	0.32940	0.25920	0.27337	2.50740	1.20000	1.53246
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01337	0.32940	0.12960	0.27288	2.50740	0.60000	1.52864
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01564	0.32940	0.06480	0.27333	2.50740	0.30000	1.52855

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	0.01155	0.32940	1.03680	0.24668	2.50740	4.80000	1.38311
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01143	0.32940	0.51840	0.24688	2.50740	2.40000	1.38461
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01171	0.32940	0.25920	0.24663	2.50740	1.20000	1.38409
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01251	0.32940	0.12960	0.24534	2.50740	0.60000	1.37843
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01447	0.32940	0.06480	0.24556	2.50740	0.30000	1.37871

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	0.03479	0.32940	1.03680	0.06296	2.50740	4.80000	0.32254
sg13g2_inv_8	A	0.01860	0.00100	0.01658	0.32940	0.51840	0.03043	2.50740	2.40000	0.16355
sg13g2_inv_4	A	0.01860	0.00100	0.00832	0.32940	0.25920	0.01522	2.50740	1.20000	0.07888
sg13g2_inv_2	A	0.01860	0.00100	0.00417	0.32940	0.12960	0.00761	2.50740	0.60000	0.03949
sg13g2_inv_1	A	0.01860	0.00100	0.00240	0.32940	0.06480	0.00405	2.50740	0.30000	0.02028

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	0.02888	0.32940	1.03680	0.05434	2.50740	4.80000	0.27602
sg13g2_inv_8	A	0.01860	0.00100	0.01366	0.32940	0.51840	0.02650	2.50740	2.40000	0.13162
sg13g2_inv_4	A	0.01860	0.00100	0.00692	0.32940	0.25920	0.01314	2.50740	1.20000	0.06638
sg13g2_inv_2	A	0.01860	0.00100	0.00353	0.32940	0.12960	0.00675	2.50740	0.60000	0.03481
sg13g2_inv_1	A	0.01860	0.00100	0.00224	0.32940	0.06480	0.00372	2.50740	0.30000	0.01798

ITL



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.01523	0.01559	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2425.44000	3016.80000	3608.16000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (FR)	0.01860	0.02036	0.01868	0.32940	0.53776	0.39642	2.50740	2.41936	2.14806
	TE_B->Z (RR)	0.01860	0.02036	0.04783	0.32940	0.53776	0.12289	2.50740	2.41936	0.25601
	TE_B->Z (FR)	0.01860	0.02036	0.02448	0.32940	0.53776	0.36966	2.50740	2.41936	1.85557

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	0.02980	0.01669	0.32940	0.54720	0.32184	2.50740	2.42880	1.77046

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A	0.01860	0.02036	0.03043	0.32940	0.53776	0.04160	2.50740	2.41936	0.13249
	TE_B	0.01860	0.02036	0.06750	0.32940	0.53776	0.04547	2.50740	2.41936	0.03602

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	0.02980	0.02801	0.32940	0.54720	0.03883	2.50740	2.42880	0.10891

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	-0.00015	0.32940	-0.00011	2.50740	-0.00009

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00015	0.32940	0.00011	2.50740	0.00009

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	-0.00764	0.32940	-0.00606	2.50740	0.03723

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	0.02232	0.32940	0.04629	2.50740	0.09199

KEEPSTATE



*sg13g2_stdcell_typ_1p50V_25C Cell Library:
Process sg13g2_stdcell_typ_1p50V_25C,
Voltage 1.50, Temp 25.00*

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	76.35460	435.86100	795.36700

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_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00199	0.00199	0.00525	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	622.29900	726.31200	861.45500

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	0.04825	0.32940	0.06480	0.24441	2.50740	0.30000	0.83582
	A1->X (RR)	0.01860	0.00100	0.03640	0.32940	0.06480	0.24696	2.50740	0.30000	0.84378
	S->X (-R)	0.01860	0.00100	0.07790	0.32940	0.06480	0.26489	2.50740	0.30000	0.83675

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	0.04224	0.32940	0.06480	0.26119	2.50740	0.30000	0.89192
	A1->X (FF)	0.01860	0.00100	0.06406	0.32940	0.06480	0.26513	2.50740	0.30000	0.90115
	S->X (-F)	0.01860	0.00100	0.07264	0.32940	0.06480	0.25007	2.50740	0.30000	0.84212

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	0.05359	0.32940	0.06480	0.24276	2.50740	0.30000	0.83513
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.07790	0.32940	0.06480	0.26489	2.50740	0.30000	0.83675

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	0.07264	0.32940	0.06480	0.25007	2.50740	0.30000	0.84212
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.09304	0.32940	0.06480	0.26139	2.50740	0.30000	0.73955

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	0.01538	0.32940	0.06480	0.01839	2.50740	0.30000	0.05303
	A1	0.01860	0.00100	0.01446	0.32940	0.06480	0.02272	2.50740	0.30000	0.05762
	S	0.01860	0.00100	0.01460	0.32940	0.06480	0.01733	2.50740	0.30000	0.05198

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	0.01488	0.32940	0.06480	0.02381	2.50740	0.30000	0.05966
	A1	0.01860	0.00100	0.01555	0.32940	0.06480	0.01876	2.50740	0.30000	0.05491
	S	0.01860	0.00100	0.01402	0.32940	0.06480	0.01652	2.50740	0.30000	0.05263

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	0.01469	0.32940	0.06480	0.01482	2.50740	0.30000	0.01651
	S	(!A0 * A1)	0.01860	0.00100	0.01460	0.32940	0.06480	0.01733	2.50740	0.30000	0.05198

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	0.01462	0.32940	0.06480	0.01494	2.50740	0.30000	0.01698
	S	(!A0 * A1)	0.01860	0.00100	0.01402	0.32940	0.06480	0.01652	2.50740	0.30000	0.05263

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00635	0.32940	0.00926	2.50740	0.04326

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00640	0.32940	0.00968	2.50740	0.04336

MUX4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00280	0.00280	0.00280	0.00281	0.00804	0.00492	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	863.95600	1307.21000	1573.89000

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	0.08822	0.32940	0.06480	0.29951	2.50740	0.30000	0.96991
	A1->X (RR)	0.01860	0.00100	0.08627	0.32940	0.06480	0.29839	2.50740	0.30000	0.96780
	A2->X (RR)	0.01860	0.00100	0.09278	0.32940	0.06480	0.30543	2.50740	0.30000	0.98351
	A3->X (RR)	0.01860	0.00100	0.08934	0.32940	0.06480	0.30417	2.50740	0.30000	0.98168
	S0->X (-R)	0.01860	0.00100	0.07430	0.32940	0.06480	0.30039	2.50740	0.30000	0.97217
	S1->X (-R)	0.01860	0.00100	-0.00738	0.32940	0.06480	0.24189	2.50740	0.30000	0.84410

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	0.10461	0.32940	0.06480	0.30100	2.50740	0.30000	0.89222
	A1->X (FF)	0.01860	0.00100	0.10558	0.32940	0.06480	0.30100	2.50740	0.30000	0.89427
	A2->X (FF)	0.01860	0.00100	0.11156	0.32940	0.06480	0.31010	2.50740	0.30000	0.90994
	A3->X (FF)	0.01860	0.00100	0.11207	0.32940	0.06480	0.30961	2.50740	0.30000	0.90965
	S0->X (-F)	0.01860	0.00100	0.09301	0.32940	0.06480	0.30986	2.50740	0.30000	0.94234
	S1->X (-F)	0.01860	0.00100	0.02885	0.32940	0.06480	0.24467	2.50740	0.30000	0.84226

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	0.07430	0.32940	0.06480	0.30039	2.50740	0.30000	0.97217
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.07057	0.32940	0.06480	0.29069	2.50740	0.30000	0.94972
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.11195	0.32940	0.06480	0.31954	2.50740	0.30000	0.92970
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.10898	0.32940	0.06480	0.31452	2.50740	0.30000	0.92203
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00919	0.32940	0.06480	0.24088	2.50740	0.30000	0.84377
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00738	0.32940	0.06480	0.24189	2.50740	0.30000	0.84410
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00915	0.32940	0.06480	0.25443	2.50740	0.30000	0.83369
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00747	0.32940	0.06480	0.25461	2.50740	0.30000	0.83386

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	0.09301	0.32940	0.06480	0.30986	2.50740	0.30000	0.94234
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.08481	0.32940	0.06480	0.29689	2.50740	0.30000	0.91735
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.12292	0.32940	0.06480	0.31668	2.50740	0.30000	0.83935
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11662	0.32940	0.06480	0.30835	2.50740	0.30000	0.82879
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.02885	0.32940	0.06480	0.24467	2.50740	0.30000	0.84226
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.01017	0.32940	0.06480	0.24226	2.50740	0.30000	0.84146
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00294	0.32940	0.06480	0.24921	2.50740	0.30000	0.74723
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.01016	0.32940	0.06480	0.24779	2.50740	0.30000	0.74703

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	0.01894	0.32940	0.06480	0.02011	2.50740	0.30000	0.05102
	A1	0.01860	0.00100	0.02361	0.32940	0.06480	0.02467	2.50740	0.30000	0.05530
	A2	0.01860	0.00100	0.02631	0.32940	0.06480	0.02734	2.50740	0.30000	0.05951
	A3	0.01860	0.00100	0.02401	0.32940	0.06480	0.02487	2.50740	0.30000	0.05571
	S0	0.01860	0.00100	0.01172	0.32940	0.06480	0.01502	2.50740	0.30000	0.04841
	S1	0.01860	0.00100	0.01624	0.32940	0.06480	0.04993	2.50740	0.30000	0.07115

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	0.02641	0.32940	0.06480	0.02717	2.50740	0.30000	0.05949
	A1	0.01860	0.00100	0.02495	0.32940	0.06480	0.02565	2.50740	0.30000	0.05815
	A2	0.01860	0.00100	0.02095	0.32940	0.06480	0.02144	2.50740	0.30000	0.05386
	A3	0.01860	0.00100	0.02094	0.32940	0.06480	0.02143	2.50740	0.30000	0.05410
	S0	0.01860	0.00100	0.02420	0.32940	0.06480	0.02614	2.50740	0.30000	-0.00206
	S1	0.01860	0.00100	0.01543	0.32940	0.06480	0.04663	2.50740	0.30000	0.07756

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	0.02641	0.32940	0.06480	0.01669	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02633	0.32940	0.06480	0.01670	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01164	0.32940	0.06480	0.01516	2.50740	0.30000	0.04816
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01172	0.32940	0.06480	0.01502	2.50740	0.30000	0.04841
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01394	0.32940	0.06480	0.05518	2.50740	0.30000	0.07673
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01624	0.32940	0.06480	0.04993	2.50740	0.30000	0.07115
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01362	0.32940	0.06480	0.04433	2.50740	0.30000	0.07263
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01572	0.32940	0.06480	0.04005	2.50740	0.30000	0.06733

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	0.02420	0.32940	0.06480	0.02614	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02374	0.32940	0.06480	0.02708	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01457	0.32940	0.06480	0.01136	2.50740	0.30000	0.04398
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01448	0.32940	0.06480	0.01151	2.50740	0.30000	0.04427
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.02133	0.32940	0.06480	0.03878	2.50740	0.30000	0.06052
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01646	0.32940	0.06480	0.05564	2.50740	0.30000	0.07872
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01758	0.32940	0.06480	0.03148	2.50740	0.30000	0.06041
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01543	0.32940	0.06480	0.04663	2.50740	0.30000	0.07756

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01259	0.32940	0.01937	2.50740	0.09335

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01010	0.32940	0.02350	2.50740	0.09738

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	0.01166	0.32940	0.01882	2.50740	0.09325
	(A0 * A1 * !S1)	0.01860	0.01259	0.32940	0.01937	2.50740	0.09335
	(!A2 * !A3 * S1)	0.01860	0.01181	0.32940	0.01912	2.50740	0.09359
	(!A0 * !A1 * !S1)	0.01860	0.01323	0.32940	0.02016	2.50740	0.09419

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	0.01037	0.32940	0.02405	2.50740	0.09796
	(A0 * A1 * !S1)	0.01860	0.01125	0.32940	0.02669	2.50740	0.10020
	(!A2 * !A3 * S1)	0.01860	0.01010	0.32940	0.02350	2.50740	0.09738
	(!A0 * !A1 * !S1)	0.01860	0.01095	0.32940	0.01854	2.50740	0.09189

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00656	0.32940	0.01082	2.50740	0.05223

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00647	0.32940	0.01120	2.50740	0.05227

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	0.00656	0.32940	0.01082	2.50740	0.05223
	(A0 * A2 * !S0)	0.01860	0.00655	0.32940	0.01080	2.50740	0.05222
	(!A1 * !A3 * S0)	0.01860	0.00650	0.32940	0.01097	2.50740	0.05243
	(!A0 * !A2 * !S0)	0.01860	0.00649	0.32940	0.01096	2.50740	0.05242

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	0.00647	0.32940	0.01120	2.50740	0.05227
	(A0 * A2 * !S0)	0.01860	0.00647	0.32940	0.01118	2.50740	0.05226
	(!A1 * !A3 * S0)	0.01860	0.00666	0.32940	0.01122	2.50740	0.05220
	(!A0 * !A2 * !S0)	0.01860	0.00665	0.32940	0.01122	2.50740	0.05219

NAND2B1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

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	0.00234	0.00313	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	161.32500	357.09600	551.88100

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	0.03581	0.32940	0.06480	0.22066	2.50740	0.30000	0.82500
	B->Y (FR)	0.01860	0.00100	0.01963	0.32940	0.06480	0.27785	2.50740	0.30000	1.53259

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	0.04317	0.32940	0.06480	0.27734	2.50740	0.30000	1.05767
	B->Y (RF)	0.01860	0.00100	0.02577	0.32940	0.06480	0.30053	2.50740	0.30000	1.58868

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	0.00276	0.32940	0.06480	0.00286	2.50740	0.30000	0.00238
	B	0.01860	0.00100	0.00296	0.32940	0.06480	0.00410	2.50740	0.30000	0.01928

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	0.00647	0.32940	0.06480	0.00665	2.50740	0.30000	0.00599
	B	0.01860	0.00100	0.00641	0.32940	0.06480	0.00694	2.50740	0.30000	0.01810

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	0.00643	0.32940	0.00986	2.50740	0.04430

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	0.00323	0.32940	0.00672	2.50740	0.04066

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	0.00643	0.32940	0.00986	2.50740	0.04430

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	0.00323	0.32940	0.00672	2.50740	0.04066

NAND2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00285	0.00297	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	92.91990	269.72600	483.47500

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	0.01726	0.32940	0.06480	0.27444	2.50740	0.30000	1.52321
	B->Y (FR)	0.01860	0.00100	0.01988	0.32940	0.06480	0.27724	2.50740	0.30000	1.53006

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	0.02085	0.32940	0.06480	0.31839	2.50740	0.30000	1.75453
	B->Y (RF)	0.01860	0.00100	0.02362	0.32940	0.06480	0.29878	2.50740	0.30000	1.59275

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	0.00264	0.32940	0.06480	0.00409	2.50740	0.30000	0.01730
	B	0.01860	0.00100	0.00278	0.32940	0.06480	0.00393	2.50740	0.30000	0.01852

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	0.00332	0.32940	0.06480	0.00433	2.50740	0.30000	0.01639
	B	0.01860	0.00100	0.00609	0.32940	0.06480	0.00674	2.50740	0.30000	0.01894

NAND3B1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

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	0.00225	0.00298	0.00301	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	164.47300	390.94500	793.61500

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	0.03757	0.32940	0.06480	0.22048	2.50740	0.30000	0.82167
	B->Y (FR)	0.01860	0.00100	0.02164	0.32940	0.06480	0.27965	2.50740	0.30000	1.52867
	C->Y (FR)	0.01860	0.00100	0.02345	0.32940	0.06480	0.28205	2.50740	0.30000	1.53248

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	0.05134	0.32940	0.06480	0.35687	2.50740	0.30000	1.40171
	B->Y (RF)	0.01860	0.00100	0.03762	0.32940	0.06480	0.38410	2.50740	0.30000	1.98125
	C->Y (RF)	0.01860	0.00100	0.04143	0.32940	0.06480	0.36721	2.50740	0.30000	1.79451

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	0.00297	0.32940	0.06480	0.00295	2.50740	0.30000	0.00185
	B	0.01860	0.00100	0.00345	0.32940	0.06480	0.00432	2.50740	0.30000	0.01689
	C	0.01860	0.00100	0.00387	0.32940	0.06480	0.00445	2.50740	0.30000	0.01771

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	0.00827	0.32940	0.06480	0.00835	2.50740	0.30000	0.00700
	B	0.01860	0.00100	0.00817	0.32940	0.06480	0.00859	2.50740	0.30000	0.01872
	C	0.01860	0.00100	0.01099	0.32940	0.06480	0.01130	2.50740	0.30000	0.02079

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	0.00633	0.32940	0.00976	2.50740	0.04422

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	0.00329	0.32940	0.00676	2.50740	0.04073

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	0.00633	0.32940	0.00976	2.50740	0.04422

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	0.00329	0.32940	0.00676	2.50740	0.04073

NOR2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00300	0.00284	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	187.79400	254.43800	308.45400

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	0.02967	0.32940	0.06480	0.37082	2.50740	0.30000	1.90063
	B->Y (FR)	0.01860	0.00100	0.02526	0.32940	0.06480	0.39643	2.50740	0.30000	2.14358

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	0.01830	0.32940	0.06480	0.25018	2.50740	0.30000	1.38159
	B->Y (RF)	0.01860	0.00100	0.01605	0.32940	0.06480	0.24674	2.50740	0.30000	1.37442

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	0.00683	0.32940	0.06480	0.00740	2.50740	0.30000	0.01953
	B	0.01860	0.00100	0.00331	0.32940	0.06480	0.00449	2.50740	0.30000	0.01683

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	0.00280	0.32940	0.06480	0.00382	2.50740	0.30000	0.01605
	B	0.01860	0.00100	0.00264	0.32940	0.06480	0.00383	2.50740	0.30000	0.01541

NOR3



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00299	0.00292	0.00281	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	222.86100	315.30700	439.09300

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	0.05199	0.32940	0.06480	0.49554	2.50740	0.30000	2.32512
	B->Y (FR)	0.01860	0.00100	0.04847	0.32940	0.06480	0.51606	2.50740	0.30000	2.53517
	C->Y (FR)	0.01860	0.00100	0.03708	0.32940	0.06480	0.52546	2.50740	0.30000	2.69448

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	0.02034	0.32940	0.06480	0.25500	2.50740	0.30000	1.38524
	B->Y (RF)	0.01860	0.00100	0.02012	0.32940	0.06480	0.25242	2.50740	0.30000	1.38257
	C->Y (RF)	0.01860	0.00100	0.01782	0.32940	0.06480	0.24917	2.50740	0.30000	1.37624

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	0.01152	0.32940	0.06480	0.01164	2.50740	0.30000	0.02220
	B	0.01860	0.00100	0.00846	0.32940	0.06480	0.00873	2.50740	0.30000	0.01779
	C	0.01860	0.00100	0.00496	0.32940	0.06480	0.00583	2.50740	0.30000	0.01608

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	0.00366	0.32940	0.06480	0.00424	2.50740	0.30000	0.01488
	B	0.01860	0.00100	0.00338	0.32940	0.06480	0.00399	2.50740	0.30000	0.01382
	C	0.01860	0.00100	0.00291	0.32940	0.06480	0.00402	2.50740	0.30000	0.01334

NOR4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00297	0.00289	0.00248	0.00253	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	225.53700	385.88800	574.94700

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	0.07966	0.32940	0.06480	0.64088	2.50740	0.30000	2.82396
	B->Y (FR)	0.01860	0.00100	0.07638	0.32940	0.06480	0.65192	2.50740	0.30000	2.98141
	C->Y (FR)	0.01860	0.00100	0.06643	0.32940	0.06480	0.66066	2.50740	0.30000	3.14485
	D->Y (FR)	0.01860	0.00100	0.04709	0.32940	0.06480	0.65775	2.50740	0.30000	3.25257

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	0.02109	0.32940	0.06480	0.25860	2.50740	0.30000	1.39039
	B->Y (RF)	0.01860	0.00100	0.02175	0.32940	0.06480	0.25672	2.50740	0.30000	1.38790
	C->Y (RF)	0.01860	0.00100	0.02115	0.32940	0.06480	0.25389	2.50740	0.30000	1.38127
	D->Y (RF)	0.01860	0.00100	0.01867	0.32940	0.06480	0.24982	2.50740	0.30000	1.37481

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	0.01429	0.32940	0.06480	0.01421	2.50740	0.30000	0.02349
	B	0.01860	0.00100	0.01210	0.32940	0.06480	0.01204	2.50740	0.30000	0.02042
	C	0.01860	0.00100	0.00981	0.32940	0.06480	0.00992	2.50740	0.30000	0.01766
	D	0.01860	0.00100	0.00649	0.32940	0.06480	0.00723	2.50740	0.30000	0.01620

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	0.00455	0.32940	0.06480	0.00508	2.50740	0.30000	0.01481
	B	0.01860	0.00100	0.00444	0.32940	0.06480	0.00496	2.50740	0.30000	0.01395
	C	0.01860	0.00100	0.00226	0.32940	0.06480	0.00287	2.50740	0.30000	0.01124
	D	0.01860	0.00100	0.00118	0.32940	0.06480	0.00218	2.50740	0.30000	0.01022

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00007	0.32940	-0.00018	2.50740	-0.00024

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00118	0.32940	0.00119	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_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00007	0.32940	-0.00018	2.50740	-0.00024

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	0.00118	0.32940	0.00119	2.50740	0.00117

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00000	0.32940	-0.00023	2.50740	-0.00027

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00035	0.32940	0.00037	2.50740	0.00038

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	-0.00000	0.32940	-0.00023	2.50740	-0.00027

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	0.00035	0.32940	0.00037	2.50740	0.00038

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00152	0.32940	0.00154	2.50740	0.00154

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00040	0.32940	-0.00040	2.50740	-0.00040

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	0.00152	0.32940	0.00154	2.50740	0.00154

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	-0.00040	0.32940	-0.00040	2.50740	-0.00040

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00187	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_nor4_1	0.01860	-0.00059	0.32940	-0.00060	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	0.00187	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_nor4_1	(A * !C) + (!A * B * !C)	0.01860	-0.00059	0.32940	-0.00060	2.50740	-0.00057

NP_ANT



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00108

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	6.74997	6.74997	6.74997

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	-0.00049	0.32940	-0.00050	2.50740	-0.00051

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00050	0.32940	0.00051	2.50740	0.00051

OR2



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00229	0.00224	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	255.62000	314.06200	378.54500

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	0.03855	0.32940	0.06480	0.22988	2.50740	0.30000	0.82325
	B->X (RR)	0.01860	0.00100	0.03567	0.32940	0.06480	0.21814	2.50740	0.30000	0.77059

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	0.06122	0.32940	0.06480	0.23094	2.50740	0.30000	0.79378
	B->X (FF)	0.01860	0.00100	0.05688	0.32940	0.06480	0.24244	2.50740	0.30000	0.84827

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	0.00893	0.32940	0.06480	0.01155	2.50740	0.30000	0.04124
	B	0.01860	0.00100	0.00897	0.32940	0.06480	0.01152	2.50740	0.30000	0.04137

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	0.01202	0.32940	0.06480	0.01401	2.50740	0.30000	0.04352
	B	0.01860	0.00100	0.00940	0.32940	0.06480	0.01216	2.50740	0.30000	0.04139

OR3



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00253	0.00248	0.00240	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	266.46700	354.76500	474.06100

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	0.04417	0.32940	0.06480	0.24856	2.50740	0.30000	0.88175
	B->X (RR)	0.01860	0.00100	0.04232	0.32940	0.06480	0.23948	2.50740	0.30000	0.82830
	C->X (RR)	0.01860	0.00100	0.03844	0.32940	0.06480	0.22661	2.50740	0.30000	0.78144

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	0.08729	0.32940	0.06480	0.25607	2.50740	0.30000	0.80396
	B->X (FF)	0.01860	0.00100	0.08337	0.32940	0.06480	0.26610	2.50740	0.30000	0.87399
	C->X (FF)	0.01860	0.00100	0.07271	0.32940	0.06480	0.26946	2.50740	0.30000	0.90087

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	0.00976	0.32940	0.06480	0.01196	2.50740	0.30000	0.04275
	B	0.01860	0.00100	0.00939	0.32940	0.06480	0.01176	2.50740	0.30000	0.04011
	C	0.01860	0.00100	0.00915	0.32940	0.06480	0.01162	2.50740	0.30000	0.04087

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	0.01715	0.32940	0.06480	0.01810	2.50740	0.30000	0.04799
	B	0.01860	0.00100	0.01443	0.32940	0.06480	0.01563	2.50740	0.30000	0.04476
	C	0.01860	0.00100	0.01138	0.32940	0.06480	0.01384	2.50740	0.30000	0.04306

OR4



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00255	0.00251	0.00206	0.00214	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	269.20100	388.87100	551.50200

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	0.04593	0.32940	0.06480	0.25747	2.50740	0.30000	0.89027
	B->X (RR)	0.01860	0.00100	0.04559	0.32940	0.06480	0.25015	2.50740	0.30000	0.84532
	C->X (RR)	0.01860	0.00100	0.04332	0.32940	0.06480	0.24087	2.50740	0.30000	0.79926
	D->X (RR)	0.01860	0.00100	0.03920	0.32940	0.06480	0.22786	2.50740	0.30000	0.75612

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	0.12096	0.32940	0.06480	0.29584	2.50740	0.30000	0.85666
	B->X (FF)	0.01860	0.00100	0.11718	0.32940	0.06480	0.30199	2.50740	0.30000	0.92635
	C->X (FF)	0.01860	0.00100	0.10722	0.32940	0.06480	0.30508	2.50740	0.30000	0.97018
	D->X (FF)	0.01860	0.00100	0.08947	0.32940	0.06480	0.30207	2.50740	0.30000	0.98519

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	0.01107	0.32940	0.06480	0.01272	2.50740	0.30000	0.04190
	B	0.01860	0.00100	0.01076	0.32940	0.06480	0.01251	2.50740	0.30000	0.03915
	C	0.01860	0.00100	0.00847	0.32940	0.06480	0.01034	2.50740	0.30000	0.03585
	D	0.01860	0.00100	0.00774	0.32940	0.06480	0.00989	2.50740	0.30000	0.03631

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	0.01697	0.32940	0.06480	0.01660	2.50740	0.30000	0.04560
	B	0.01860	0.00100	0.01718	0.32940	0.06480	0.01694	2.50740	0.30000	0.04458
	C	0.01860	0.00100	0.01556	0.32940	0.06480	0.01589	2.50740	0.30000	0.04183
	D	0.01860	0.00100	0.01174	0.32940	0.06480	0.01319	2.50740	0.30000	0.03895

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00053	0.32940	-0.00054	2.50740	-0.00055

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00382	0.32940	0.00388	2.50740	0.00385

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	-0.00053	0.32940	-0.00054	2.50740	-0.00055

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	0.00382	0.32940	0.00388	2.50740	0.00385

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00056	0.32940	-0.00057	2.50740	-0.00057

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00092	0.32940	0.00096	2.50740	0.00095

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	-0.00056	0.32940	-0.00057	2.50740	-0.00057

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	0.00092	0.32940	0.00096	2.50740	0.00095

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00115	0.32940	0.00117	2.50740	0.00118

Passive power(pJ) for C falling :

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

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	0.00115	0.32940	0.00117	2.50740	0.00118

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	-0.00016	0.32940	-0.00016	2.50740	-0.00016

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00149	0.32940	0.00151	2.50740	0.00150

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00058	0.32940	0.00059	2.50740	0.00063

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	0.00149	0.32940	0.00151	2.50740	0.00150

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	0.00058	0.32940	0.00059	2.50740	0.00063

SDFRRS



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00175	0.00196	0.00339	0.00166	0.00508	0.00308	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1921.44000	2292.71000	2444.94000

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	0.18716	0.32940	0.06480	0.37289	2.50740	0.30000	0.94110
	SET_B->Q (FR)	0.01860	0.00100	0.08060	0.32940	0.06480	0.28924	2.50740	0.30000	0.92171

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	0.15616	0.32940	0.06480	0.32238	2.50740	0.30000	0.81678
	RESET_B->Q (FF)	0.01860	0.00100	0.13159	0.32940	0.06480	0.31517	2.50740	0.30000	0.85867

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	0.18716	0.32940	0.06480	0.37289	2.50740	0.30000	0.94110

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	0.15616	0.32940	0.06480	0.32238	2.50740	0.30000	0.81678

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	0.12866	0.32940	0.06480	0.33013	2.50740	0.30000	0.91785
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10340	0.32940	0.06480	0.32771	2.50740	0.30000	0.96811

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	0.15531	0.32940	0.06480	0.34594	2.50740	0.30000	0.82745
	SET_B->Q_N (FF)	0.01860	0.00100	0.05405	0.32940	0.06480	0.25968	2.50740	0.30000	0.81700

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	0.12866	0.32940	0.06480	0.33013	2.50740	0.30000	0.91785

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	0.15531	0.32940	0.06480	0.34594	2.50740	0.30000	0.82745

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	-0.05624	1.26300	1.26300	-0.18349	2.50740	2.50740	-0.25088
	setup	CLK (R)	0.01860	0.01860	0.08314	1.26300	1.26300	0.19968	2.50740	2.50740	0.27154

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.22432
	setup	CLK (R)	0.01860	0.01860	0.11003	1.26300	1.26300	0.23206	2.50740	2.50740	0.33648

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	-0.07336	1.26300	1.26300	-0.21317	2.50740	2.50740	-0.29811
	setup	CLK (R)	0.01860	0.01860	0.10025	1.26300	1.26300	0.22936	2.50740	2.50740	0.31582

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	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	-0.16190	2.50740	2.50740	-0.21841
	setup	CLK (R)	0.01860	0.01860	0.13448	1.26300	1.26300	0.22936	2.50740	2.50740	0.32762

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	-0.05868	1.26300	1.26300	-0.20508	2.50740	2.50740	-0.29220
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.23476	2.50740	2.50740	0.33057

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.11063	2.50740	2.50740	-0.14167
	setup	CLK (R)	0.01860	0.01860	0.11248	1.26300	1.26300	0.18349	2.50740	2.50740	0.25973

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	0.05379	1.26300	1.26300	0.09444	2.50740	2.50740	0.12101
	removal	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.08559

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	0.02201	1.26300	1.26300	0.23476	2.50740	2.50740	0.56374
	removal	CLK (R)	0.01860	0.01860	0.01956	1.26300	1.26300	0.04857	2.50740	2.50740	0.04132
	hold	RESET_B (R)	0.01860	0.01860	-0.04890	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.20956
	setup	RESET_B (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.18079	2.50740	2.50740	0.28040

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	0.01585	0.32940	0.06480	0.01613	2.50740	0.30000	0.01724
	SET_B	0.01860	0.00100	0.04639	0.32940	0.06480	0.12437	2.50740	0.30000	0.45204

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	0.01566	0.32940	0.06480	0.01592	2.50740	0.30000	0.01790
	RESET_B	0.01860	0.00100	0.05340	0.32940	0.06480	0.12733	2.50740	0.30000	0.42159

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	0.01585	0.32940	0.06480	0.01613	2.50740	0.30000	0.01724

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	0.01566	0.32940	0.06480	0.01592	2.50740	0.30000	0.01790

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	0.01566	0.32940	0.06480	0.01607	2.50740	0.30000	0.01778
	RESET_B	0.01860	0.00100	0.05340	0.32940	0.06480	0.12786	2.50740	0.30000	0.42628

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	0.01585	0.32940	0.06480	0.01589	2.50740	0.30000	0.01773
	SET_B	0.01860	0.00100	0.04634	0.32940	0.06480	0.12378	2.50740	0.30000	0.45588

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	0.01566	0.32940	0.06480	0.01607	2.50740	0.30000	0.01778

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	0.01585	0.32940	0.06480	0.01589	2.50740	0.30000	0.01773

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00892	0.32940	0.01010	2.50740	0.02902

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00697	0.32940	0.00831	2.50740	0.02709

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	0.01609	0.32940	0.01755	2.50740	0.03876
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00892	0.32940	0.01010	2.50740	0.02902

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	0.01758	0.32940	0.01908	2.50740	0.04049
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00697	0.32940	0.00831	2.50740	0.02709

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01153	0.32940	0.01227	2.50740	0.03052

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01274	0.32940	0.01367	2.50740	0.03224

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	0.01866	0.32940	0.01958	2.50740	0.03992
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.01153	0.32940	0.01227	2.50740	0.03052

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	0.02459	0.32940	0.02511	2.50740	0.04613
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.01274	0.32940	0.01367	2.50740	0.03224

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02156	0.32940	0.02413	2.50740	0.05045

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02176	0.32940	0.02448	2.50740	0.05012

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	0.02156	0.32940	0.02413	2.50740	0.05045
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02851	0.32940	0.02995	2.50740	0.05610
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01912	0.32940	0.02350	2.50740	0.07120
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.01147	0.32940	0.01546	2.50740	0.06085

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	0.02176	0.32940	0.02448	2.50740	0.05012
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02567	0.32940	0.03823	2.50740	0.06388
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00597	0.32940	0.04283	2.50740	0.08932
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.01175	0.32940	0.01553	2.50740	0.05986

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01717	0.32940	0.02175	2.50740	0.07211

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02153	0.32940	0.02674	2.50740	0.07775

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	0.01644	0.32940	0.02085	2.50740	0.07122
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02331	0.32940	0.02780	2.50740	0.07800
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01652	0.32940	0.02102	2.50740	0.07149
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01644	0.32940	0.02085	2.50740	0.07122
	(!RESET_B * !Q * Q_N)	0.01860	0.01717	0.32940	0.02175	2.50740	0.07211
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01651	0.32940	0.02102	2.50740	0.07149

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	0.01465	0.32940	0.01945	2.50740	0.06943
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02715	0.32940	0.03212	2.50740	0.08371
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02153	0.32940	0.02674	2.50740	0.07775
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.03022	0.32940	0.03537	2.50740	0.08637
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01501	0.32940	0.01993	2.50740	0.06983
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01465	0.32940	0.01945	2.50740	0.06943
	(!RESET_B * !Q * Q_N)	0.01860	0.01499	0.32940	0.01991	2.50740	0.06982
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01501	0.32940	0.01992	2.50740	0.06983

TIE0



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	266.16600	266.16600	266.16600

TIE1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	238.37800	238.37800	238.37800

XNOR2_1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp
25.00*

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	0.00563	0.00479	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	276.70500	577.45300	766.90400

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	0.04836	0.32940	0.06480	0.23155	2.50740	0.30000	0.83258
	A->Y (FR)	0.01860	0.00100	0.03815	0.32940	0.06480	0.38079	2.50740	0.30000	1.90654
	B->Y (RR)	0.01860	0.00100	0.04467	0.32940	0.06480	0.23436	2.50740	0.30000	0.85708
	B->Y (FR)	0.01860	0.00100	0.03358	0.32940	0.06480	0.40550	2.50740	0.30000	2.14996

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	0.04917	0.32940	0.06480	0.29446	2.50740	0.30000	1.09991
	A->Y (RF)	0.01860	0.00100	0.03240	0.32940	0.06480	0.31009	2.50740	0.30000	1.60107
	B->Y (FF)	0.01860	0.00100	0.04920	0.32940	0.06480	0.28531	2.50740	0.30000	1.07099
	B->Y (RF)	0.01860	0.00100	0.02707	0.32940	0.06480	0.30362	2.50740	0.30000	1.59158

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	0.01187	0.32940	0.06480	0.01429	2.50740	0.30000	0.04724
	B	0.01860	0.00100	0.01164	0.32940	0.06480	0.01445	2.50740	0.30000	0.04794

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	0.01080	0.32940	0.06480	0.01412	2.50740	0.30000	0.04794
	B	0.01860	0.00100	0.01174	0.32940	0.06480	0.01339	2.50740	0.30000	0.04712

XOR2_1



*sg13g2_stdcell_typ_1p50V_25C Cell Library: Process
sg13g2_stdcell_typ_1p50V_25C, Voltage 1.50, Temp 25.00*

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	0.00579	0.00491	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	427.71900	522.97100	652.81300

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	0.04950	0.32940	0.06480	0.36928	2.50740	0.30000	1.44426
	A->X (FR)	0.01860	0.00100	0.04213	0.32940	0.06480	0.38491	2.50740	0.30000	1.91596
	B->X (RR)	0.01860	0.00100	0.05182	0.32940	0.06480	0.35850	2.50740	0.30000	1.39248
	B->X (FR)	0.01860	0.00100	0.03562	0.32940	0.06480	0.37860	2.50740	0.30000	1.90245

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	0.05869	0.32940	0.06480	0.22220	2.50740	0.30000	0.75120
	A->X (RF)	0.01860	0.00100	0.03064	0.32940	0.06480	0.30800	2.50740	0.30000	1.59664
	B->X (FF)	0.01860	0.00100	0.05379	0.32940	0.06480	0.23055	2.50740	0.30000	0.79703
	B->X (RF)	0.01860	0.00100	0.02689	0.32940	0.06480	0.32613	2.50740	0.30000	1.75946

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	0.01025	0.32940	0.06480	0.01306	2.50740	0.30000	0.04577
	B	0.01860	0.00100	0.01099	0.32940	0.06480	0.01234	2.50740	0.30000	0.04435

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	0.01361	0.32940	0.06480	0.01592	2.50740	0.30000	0.04865
	B	0.01860	0.00100	0.01246	0.32940	0.06480	0.01541	2.50740	0.30000	0.04818