

sg13g2_stdcell_fast_1p32V_m40C 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_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00257	0.00251	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	218.17100	284.77700	341.27600

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	0.04495	0.32940	0.06480	0.23304	2.50740	0.30000	0.84128
	B->X (RR)	0.01860	0.00100	0.04834	0.32940	0.06480	0.23072	2.50740	0.30000	0.82398

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	0.03806	0.32940	0.06480	0.20378	2.50740	0.30000	0.68550
	B->X (FF)	0.01860	0.00100	0.04146	0.32940	0.06480	0.21505	2.50740	0.30000	0.71858

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	0.00773	0.32940	0.06480	0.00926	2.50740	0.30000	0.03002
	B	0.01860	0.00100	0.00954	0.32940	0.06480	0.01037	2.50740	0.30000	0.02994

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	0.00674	0.32940	0.06480	0.00866	2.50740	0.30000	0.02729
	B	0.01860	0.00100	0.00694	0.32940	0.06480	0.00877	2.50740	0.30000	0.02790

AND3



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00258	0.00247	0.00249	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	220.74600	329.11100	472.26800

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	0.06000	0.32940	0.06480	0.26176	2.50740	0.30000	0.91212
	B->X (RR)	0.01860	0.00100	0.06684	0.32940	0.06480	0.26288	2.50740	0.30000	0.90632
	C->X (RR)	0.01860	0.00100	0.06970	0.32940	0.06480	0.25665	2.50740	0.30000	0.86839

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	0.04048	0.32940	0.06480	0.21002	2.50740	0.30000	0.67933
	B->X (FF)	0.01860	0.00100	0.04407	0.32940	0.06480	0.22083	2.50740	0.30000	0.71048
	C->X (FF)	0.01860	0.00100	0.04619	0.32940	0.06480	0.22962	2.50740	0.30000	0.74367

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	0.00887	0.32940	0.06480	0.01021	2.50740	0.30000	0.02794
	B	0.01860	0.00100	0.01062	0.32940	0.06480	0.01141	2.50740	0.30000	0.02864
	C	0.01860	0.00100	0.01233	0.32940	0.06480	0.01288	2.50740	0.30000	0.03035

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	0.00685	0.32940	0.06480	0.00852	2.50740	0.30000	0.02584
	B	0.01860	0.00100	0.00714	0.32940	0.06480	0.00856	2.50740	0.30000	0.02623
	C	0.01860	0.00100	0.00728	0.32940	0.06480	0.00876	2.50740	0.30000	0.02721

AND4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00219	0.00212	0.00251	0.00251	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	223.51400	362.26400	603.43600

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	0.07607	0.32940	0.06480	0.29026	2.50740	0.30000	0.98254
	B->X (RR)	0.01860	0.00100	0.08595	0.32940	0.06480	0.29286	2.50740	0.30000	0.97884
	C->X (RR)	0.01860	0.00100	0.09146	0.32940	0.06480	0.28979	2.50740	0.30000	0.94787
	D->X (RR)	0.01860	0.00100	0.09414	0.32940	0.06480	0.28501	2.50740	0.30000	0.90775

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	0.04248	0.32940	0.06480	0.21306	2.50740	0.30000	0.67155
	B->X (FF)	0.01860	0.00100	0.04607	0.32940	0.06480	0.22401	2.50740	0.30000	0.69954
	C->X (FF)	0.01860	0.00100	0.04849	0.32940	0.06480	0.23278	2.50740	0.30000	0.73022
	D->X (FF)	0.01860	0.00100	0.05010	0.32940	0.06480	0.23999	2.50740	0.30000	0.76198

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	0.01030	0.32940	0.06480	0.01138	2.50740	0.30000	0.02728
	B	0.01860	0.00100	0.01233	0.32940	0.06480	0.01268	2.50740	0.30000	0.02784
	C	0.01860	0.00100	0.01314	0.32940	0.06480	0.01334	2.50740	0.30000	0.02874
	D	0.01860	0.00100	0.01291	0.32940	0.06480	0.01295	2.50740	0.30000	0.02900

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	0.00596	0.32940	0.06480	0.00735	2.50740	0.30000	0.02441
	B	0.01860	0.00100	0.00629	0.32940	0.06480	0.00755	2.50740	0.30000	0.02425
	C	0.01860	0.00100	0.00750	0.32940	0.06480	0.00883	2.50740	0.30000	0.02558
	D	0.01860	0.00100	0.00732	0.32940	0.06480	0.00871	2.50740	0.30000	0.02711

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00056	0.32940	-0.00056	2.50740	-0.00055

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00142	0.32940	0.00144	2.50740	0.00144

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	-0.00056	0.32940	-0.00056	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_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00142	0.32940	0.00144	2.50740	0.00144

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00069	0.32940	-0.00070	2.50740	-0.00070

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00119	0.32940	0.00121	2.50740	0.00121

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	-0.00069	0.32940	-0.00070	2.50740	-0.00070

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	0.00119	0.32940	0.00121	2.50740	0.00121

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00018	0.32940	0.00021	2.50740	0.00020

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00010	0.32940	0.00011	2.50740	0.00011

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	0.00018	0.32940	0.00021	2.50740	0.00020

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	0.00010	0.32940	0.00011	2.50740	0.00011

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00207	0.32940	0.00210	2.50740	0.00208

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00045	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	0.00207	0.32940	0.00210	2.50740	0.00208

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	0.00045	0.32940	0.00038	2.50740	0.00035

A021



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00278	0.00288	0.00246	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	298.74600	357.45900	398.14000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.05514	0.32940	0.06480	0.25800	2.50740	0.30000	0.89793
	A2->X (RR)	0.01860	0.00100	0.05809	0.32940	0.06480	0.25178	2.50740	0.30000	0.87473
	B1->X (RR)	0.01860	0.00100	0.03594	0.32940	0.06480	0.22382	2.50740	0.30000	0.79946

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	0.05983	0.32940	0.06480	0.22578	2.50740	0.30000	0.71495
	A2->X (FF)	0.01860	0.00100	0.06576	0.32940	0.06480	0.23772	2.50740	0.30000	0.74522
	B1->X (FF)	0.01860	0.00100	0.05880	0.32940	0.06480	0.24071	2.50740	0.30000	0.78346

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	0.03594	0.32940	0.06480	0.22382	2.50740	0.30000	0.79946
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.03398	0.32940	0.06480	0.21343	2.50740	0.30000	0.76880

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	0.05880	0.32940	0.06480	0.24071	2.50740	0.30000	0.78346
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.05190	0.32940	0.06480	0.22583	2.50740	0.30000	0.75529

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	0.00852	0.32940	0.06480	0.00976	2.50740	0.30000	0.02829
	A2	0.01860	0.00100	0.01033	0.32940	0.06480	0.01110	2.50740	0.30000	0.02906
	B1	0.01860	0.00100	0.00630	0.32940	0.06480	0.00820	2.50740	0.30000	0.02929

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	0.00983	0.32940	0.06480	0.01058	2.50740	0.30000	0.02952
	A2	0.01860	0.00100	0.00986	0.32940	0.06480	0.01083	2.50740	0.30000	0.02850
	B1	0.01860	0.00100	0.00685	0.32940	0.06480	0.00895	2.50740	0.30000	0.02951

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	0.00811	0.32940	0.06480	0.00993	2.50740	0.30000	0.03203
	B1	(!A1 * A2)	0.01860	0.00100	0.00630	0.32940	0.06480	0.00820	2.50740	0.30000	0.02929

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	0.00703	0.32940	0.06480	0.00893	2.50740	0.30000	0.02896
	B1	(!A1 * A2)	0.01860	0.00100	0.00685	0.32940	0.06480	0.00895	2.50740	0.30000	0.02951

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00006	0.32940	-0.00001	2.50740	-0.00001

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00034	0.32940	0.00033	2.50740	0.00033

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	0.00011	0.32940	-0.00006	2.50740	-0.00012
	(!A2 * B1)	0.01860	-0.00006	0.32940	-0.00001	2.50740	-0.00001

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	0.00066	0.32940	0.00065	2.50740	0.00065
	(!A2 * B1)	0.01860	0.00034	0.32940	0.00033	2.50740	0.00033

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	0.00005	2.50740	0.00005

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00026	0.32940	0.00027	2.50740	0.00027

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	0.00019	0.32940	-0.00000	2.50740	-0.00006
	(!A1 * B1)	0.01860	0.00005	0.32940	0.00005	2.50740	0.00005

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	0.00059	0.32940	0.00060	2.50740	0.00059
	(!A1 * B1)	0.01860	0.00026	0.32940	0.00027	2.50740	0.00027

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00098	0.32940	0.00101	2.50740	0.00101

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00071	0.32940	0.00072	2.50740	0.00073

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	0.00098	0.32940	0.00101	2.50740	0.00101

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	0.00071	0.32940	0.00072	2.50740	0.00073

BTLx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00608	0.01711	2.40000
sg13g2_ebufn_4	0.00314	0.01036	1.20000
sg13g2_ebufn_2	0.00270	0.00631	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	374.47900	1634.29000	3019.60000
sg13g2_ebufn_4	266.13800	876.36000	1549.31000
sg13g2_ebufn_2	218.52700	523.63300	835.47100

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	0.01992	0.04623	0.32940	0.53732	0.38906	2.50740	2.41892	1.47597
	TE_B->Z (RR)	0.01860	0.01992	0.04851	0.32940	0.53732	0.13353	2.50740	2.41892	0.30857
	TE_B->Z (FR)	0.01860	0.01992	0.02559	0.32940	0.53732	0.36230	2.50740	2.41892	1.85731
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01058	0.04704	0.32940	0.26878	0.38783	2.50740	1.20958	1.46879
	TE_B->Z (RR)	0.01860	0.01058	0.03821	0.32940	0.26878	0.10109	2.50740	1.20958	0.22356
	TE_B->Z (FR)	0.01860	0.01058	0.02518	0.32940	0.26878	0.35946	2.50740	1.20958	1.84830
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00587	0.04100	0.32940	0.13447	0.35945	2.50740	0.60487	1.40771
	TE_B->Z (RR)	0.01860	0.00587	0.03322	0.32940	0.13447	0.08307	2.50740	0.60487	0.18898
	TE_B->Z (FR)	0.01860	0.00587	0.02528	0.32940	0.13447	0.35869	2.50740	0.60487	1.85119

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	0.02986	0.05846	0.32940	0.54726	0.34387	2.50740	2.42886	1.20358
	TE_B->Z (RF)	0.01860	0.02986	0.02319	0.32940	0.54726	-0.21100	2.50740	2.42886	-1.89759
	TE_B->Z (FF)	0.01860	0.02986	0.05950	0.32940	0.54726	0.35362	2.50740	2.42886	1.23092
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01564	0.05979	0.32940	0.27384	0.34538	2.50740	1.21464	1.20314
	TE_B->Z (RF)	0.01860	0.01564	0.01951	0.32940	0.27384	-0.21071	2.50740	1.21464	-1.89699
	TE_B->Z (FF)	0.01860	0.01564	0.04557	0.32940	0.27384	0.31124	2.50740	1.21464	1.12845
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00846	0.04590	0.32940	0.13706	0.30661	2.50740	0.60746	1.11434
	TE_B->Z (RF)	0.01860	0.00846	0.01302	0.32940	0.13706	-0.22212	2.50740	0.60746	-1.90853
	TE_B->Z (FF)	0.01860	0.00846	0.03897	0.32940	0.13706	0.28391	2.50740	0.60746	1.05870

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	0.01992	0.04400	0.32940	0.53732	0.05307	2.50740	2.41892	0.05750
	TE_B	0.01860	0.01992	0.00579	0.32940	0.53732	0.00345	2.50740	2.41892	0.00000
sg13g2_ebufn_4	A	0.01860	0.01058	0.02216	0.32940	0.26878	0.02615	2.50740	1.20958	0.02315
	TE_B	0.01860	0.01058	0.00287	0.32940	0.26878	0.00170	2.50740	1.20958	-0.00057
sg13g2_ebufn_2	A	0.01860	0.00587	0.01149	0.32940	0.13447	0.01286	2.50740	0.60487	0.01192
	TE_B	0.01860	0.00587	0.00140	0.32940	0.13447	0.00088	2.50740	0.60487	0.00019

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	0.02986	0.04394	0.32940	0.54726	0.04432	2.50740	2.42886	0.03652
	TE_B	0.01860	0.02986	0.00289	0.32940	0.54726	0.00061	2.50740	2.42886	0.00000
sg13g2_ebufn_4	A	0.01860	0.01564	0.02217	0.32940	0.27384	0.02253	2.50740	1.21464	0.01877
	TE_B	0.01860	0.01564	0.00146	0.32940	0.27384	0.00045	2.50740	1.21464	0.00291
sg13g2_ebufn_2	A	0.01860	0.00846	0.01087	0.32940	0.13706	0.01095	2.50740	0.60746	0.01083
	TE_B	0.01860	0.00846	0.00072	0.32940	0.13706	0.00043	2.50740	0.60746	0.00124

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01039	0.32940	0.01467	2.50740	0.06822
sg13g2_ebufn_4	0.01860	0.00569	0.32940	0.00776	2.50740	0.03441
sg13g2_ebufn_2	0.01860	0.00347	0.32940	0.00559	2.50740	0.02938

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00908	0.32940	0.01398	2.50740	0.06685
sg13g2_ebufn_4	0.01860	0.00474	0.32940	0.00711	2.50740	0.03348
sg13g2_ebufn_2	0.01860	0.00317	0.32940	0.00550	2.50740	0.02888

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	-0.00470	0.32940	-0.00461	2.50740	0.01905
sg13g2_ebufn_4	0.01860	-0.00102	0.32940	-0.00003	2.50740	0.02576
sg13g2_ebufn_2	0.01860	0.00012	0.32940	0.00161	2.50740	0.02492

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	0.06602	0.32940	0.06886	2.50740	0.09352
sg13g2_ebufn_4	0.01860	0.03403	0.32940	0.03675	2.50740	0.06269
sg13g2_ebufn_2	0.01860	0.01781	0.32940	0.02030	2.50740	0.04343

BU_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.01820	4.80000
sg13g2_buf_8	0.00909	2.40000
sg13g2_buf_4	0.00387	1.20000
sg13g2_buf_2	0.00268	0.60000
sg13g2_buf_1	0.00231	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	2211.69000	2605.76000	2999.83000
sg13g2_buf_8	1105.85000	1302.88000	1499.91000
sg13g2_buf_4	499.65700	620.30900	740.96100
sg13g2_buf_2	292.03200	338.82800	385.62500
sg13g2_buf_1	190.69300	203.41000	216.12600

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	0.03941	0.32940	1.03680	0.24523	2.50740	4.80000	0.87189
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.03875	0.32940	0.51840	0.24391	2.50740	2.40000	0.86975
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.04824	0.32940	0.25920	0.27316	2.50740	1.20000	0.98149
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.03822	0.32940	0.12960	0.23860	2.50740	0.60000	0.85805
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03400	0.32940	0.06480	0.21782	2.50740	0.30000	0.80835

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	0.04370	0.32940	1.03680	0.23206	2.50740	4.80000	0.75254
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04295	0.32940	0.51840	0.23110	2.50740	2.40000	0.75290
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04234	0.32940	0.25920	0.22598	2.50740	1.20000	0.69141
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04120	0.32940	0.12960	0.22041	2.50740	0.60000	0.72033
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03601	0.32940	0.06480	0.19822	2.50740	0.30000	0.67367

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	0.09471	0.32940	1.03680	0.10814	2.50740	4.80000	0.26437
sg13g2_buf_8	A	0.01860	0.00100	0.04588	0.32940	0.51840	0.05240	2.50740	2.40000	0.13606
sg13g2_buf_4	A	0.01860	0.00100	0.02246	0.32940	0.25920	0.02510	2.50740	1.20000	0.05407
sg13g2_buf_2	A	0.01860	0.00100	0.01183	0.32940	0.12960	0.01393	2.50740	0.60000	0.03615
sg13g2_buf_1	A	0.01860	0.00100	0.00673	0.32940	0.06480	0.00867	2.50740	0.30000	0.02822

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	0.08937	0.32940	1.03680	0.10723	2.50740	4.80000	0.27798
sg13g2_buf_8	A	0.01860	0.00100	0.04409	0.32940	0.51840	0.05208	2.50740	2.40000	0.13373
sg13g2_buf_4	A	0.01860	0.00100	0.02210	0.32940	0.25920	0.02560	2.50740	1.20000	0.05669
sg13g2_buf_2	A	0.01860	0.00100	0.01146	0.32940	0.12960	0.01385	2.50740	0.60000	0.03701
sg13g2_buf_1	A	0.01860	0.00100	0.00679	0.32940	0.06480	0.00887	2.50740	0.30000	0.02767

DECAP_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	1468.62000	1468.62000	1468.62000
sg13g2_decap_8	2937.23000	2937.23000	2937.23000

DFFRRx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00146	0.00530	0.00295	0.60000	0.60000
sg13g2_dfrbp_1	0.00152	0.00582	0.00276	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	1222.38000	1384.02000	1519.45000
sg13g2_dfrbp_1	942.05200	1098.92000	1247.92000

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	0.15658	0.32940	0.12960	0.34415	2.50740	0.60000	0.94749
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.12197	0.32940	0.06480	0.30966	2.50740	0.30000	0.88300

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	0.13888	0.32940	0.12960	0.31116	2.50740	0.60000	0.81353
	RESET_B->Q (FF)	0.01860	0.00100	0.18273	0.32940	0.12960	0.38775	2.50740	0.60000	0.99897
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.11821	0.32940	0.06480	0.28797	2.50740	0.30000	0.76889
	RESET_B->Q (FF)	0.01860	0.00100	0.15735	0.32940	0.06480	0.35897	2.50740	0.30000	0.95750

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	0.09168	0.32940	0.12960	0.30608	2.50740	0.60000	0.87324
	RESET_B->Q_N (FR)	0.01860	0.00100	0.13666	0.32940	0.12960	0.38161	2.50740	0.60000	1.05841
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.08947	0.32940	0.06480	0.29388	2.50740	0.30000	0.84150
	RESET_B->Q_N (FR)	0.01860	0.00100	0.12911	0.32940	0.06480	0.36356	2.50740	0.30000	1.02964

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	0.10205	0.32940	0.12960	0.31860	2.50740	0.60000	0.85725
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.09167	0.32940	0.06480	0.29117	2.50740	0.30000	0.80671

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	-0.13222	2.50740	2.50740	-0.17414
	setup	CLK (R)	0.01860	0.01860	0.08069	1.26300	1.26300	0.17539	2.50740	2.50740	0.21841
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.03179	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.19480
	setup	CLK (R)	0.01860	0.01860	0.07580	1.26300	1.26300	0.18619	2.50740	2.50740	0.23612

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	-0.01467	1.26300	1.26300	-0.09984	2.50740	2.50740	-0.15938
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.17539	2.50740	2.50740	0.23612
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01467	1.26300	1.26300	-0.09984	2.50740	2.50740	-0.15938
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.18079	2.50740	2.50740	0.25088

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	0.08558	1.26300	1.26300	0.21047	2.50740	2.50740	0.30991
	removal	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.30106
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.08069	1.26300	1.26300	0.22127	2.50740	2.50740	0.33648
	removal	CLK (R)	0.01860	0.01860	-0.06358	1.26300	1.26300	-0.20238	2.50740	2.50740	-0.31582

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	0.03319	0.32940	0.12960	0.14543	2.50740	0.60000	0.55725
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02249	0.32940	0.06480	0.07875	2.50740	0.30000	0.28702

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	0.03315	0.32940	0.12960	0.14637	2.50740	0.60000	0.56353
	RESET_B	0.01860	0.00100	0.03563	0.32940	0.12960	0.14937	2.50740	0.60000	0.57697
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02182	0.32940	0.06480	0.07851	2.50740	0.30000	0.28593
	RESET_B	0.01860	0.00100	0.02400	0.32940	0.06480	0.08124	2.50740	0.30000	0.30025

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	0.03319	0.32940	0.12960	0.14693	2.50740	0.60000	0.56179
	RESET_B	0.01860	0.00100	0.03567	0.32940	0.12960	0.15011	2.50740	0.60000	0.57927
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02182	0.32940	0.06480	0.07887	2.50740	0.30000	0.28859
	RESET_B	0.01860	0.00100	0.02399	0.32940	0.06480	0.08158	2.50740	0.30000	0.30207

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	0.03322	0.32940	0.12960	0.14487	2.50740	0.60000	0.56006
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02248	0.32940	0.06480	0.07849	2.50740	0.30000	0.28685

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00182	0.32940	0.00280	2.50740	0.01367
sg13g2_dfrbp_1	0.01860	0.00190	0.32940	0.00286	2.50740	0.01368

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00162	0.32940	0.00267	2.50740	0.01359
sg13g2_dfrbp_1	0.01860	0.00174	0.32940	0.00277	2.50740	0.01365

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	0.00182	0.32940	0.00280	2.50740	0.01367
	(!CLK * RESET_B)	0.01860	0.01368	0.32940	0.01465	2.50740	0.02725
	(!CLK * !RESET_B)	0.01860	-0.00028	0.32940	-0.00029	2.50740	-0.00028
sg13g2_dfrbp_1	CLK	0.01860	0.00190	0.32940	0.00286	2.50740	0.01368
	(!CLK * RESET_B)	0.01860	0.01200	0.32940	0.01300	2.50740	0.02542
	(!CLK * !RESET_B)	0.01860	-0.00019	0.32940	-0.00020	2.50740	-0.00019

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	0.00162	0.32940	0.00267	2.50740	0.01359
	(!CLK * RESET_B)	0.01860	0.01090	0.32940	0.01187	2.50740	0.02469
	(!CLK * !RESET_B)	0.01860	0.00058	0.32940	0.00060	2.50740	0.00060
sg13g2_dfrbp_1	CLK	0.01860	0.00174	0.32940	0.00277	2.50740	0.01365
	(!CLK * RESET_B)	0.01860	0.01002	0.32940	0.01101	2.50740	0.02372
	(!CLK * !RESET_B)	0.01860	0.00052	0.32940	0.00053	2.50740	0.00054

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	0.00471	0.32940	0.00511	2.50740	0.01530
sg13g2_dfrbp_1	0.01860	0.00517	0.32940	0.00551	2.50740	0.01570

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	0.01103	0.32940	0.01148	2.50740	0.02738
sg13g2_dfrbp_1	0.01860	0.00972	0.32940	0.01015	2.50740	0.02618

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	0.00471	0.32940	0.00511	2.50740	0.01530
	(CLK * !D * !Q * Q_N)	0.01860	0.00156	0.32940	0.00152	2.50740	0.00151
	(!CLK * D * !Q * Q_N)	0.01860	0.01675	0.32940	0.01724	2.50740	0.03271
	(!CLK * !D * !Q * Q_N)	0.01860	0.00163	0.32940	0.00157	2.50740	0.00157
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00517	0.32940	0.00551	2.50740	0.01570
	(CLK * !D * !Q * Q_N)	0.01860	0.00202	0.32940	0.00198	2.50740	0.00197
	(!CLK * D * !Q * Q_N)	0.01860	0.01548	0.32940	0.01602	2.50740	0.03149
	(!CLK * !D * !Q * Q_N)	0.01860	0.00210	0.32940	0.00205	2.50740	0.00205

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	0.04630	0.32940	0.04815	2.50740	0.07829
	(CLK * !D * !Q * Q_N)	0.01860	-0.00064	0.32940	-0.00083	2.50740	-0.00090
	(!CLK * D * !Q * Q_N)	0.01860	0.01103	0.32940	0.01148	2.50740	0.02738
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00081	0.32940	-0.00092	2.50740	-0.00097
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03303	0.32940	0.03475	2.50740	0.06447
	(CLK * !D * !Q * Q_N)	0.01860	-0.00109	0.32940	-0.00128	2.50740	-0.00135
	(!CLK * D * !Q * Q_N)	0.01860	0.00972	0.32940	0.01015	2.50740	0.02618
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00125	0.32940	-0.00138	2.50740	-0.00143

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01291	0.32940	0.01500	2.50740	0.04334
sg13g2_dfrbp_1	0.01860	0.01264	0.32940	0.01458	2.50740	0.04096

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02406	0.32940	0.02630	2.50740	0.05522
sg13g2_dfrbp_1	0.01860	0.02160	0.32940	0.02371	2.50740	0.05115

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	0.01291	0.32940	0.01500	2.50740	0.04334
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01350	0.32940	0.01558	2.50740	0.04384
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01265	0.32940	0.01473	2.50740	0.04302
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01354	0.32940	0.01559	2.50740	0.04389
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01297	0.32940	0.01493	2.50740	0.04134
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01262	0.32940	0.01456	2.50740	0.04096
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01233	0.32940	0.01429	2.50740	0.04068
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01264	0.32940	0.01458	2.50740	0.04096

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	0.02406	0.32940	0.02630	2.50740	0.05522
	(D * RESET_B * !Q * Q_N)	0.01860	0.02407	0.32940	0.02630	2.50740	0.05523
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01256	0.32940	0.01477	2.50740	0.04271
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00705	0.32940	0.05986	2.50740	0.08771
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01253	0.32940	0.01477	2.50740	0.04273
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01256	0.32940	0.01477	2.50740	0.04271
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02160	0.32940	0.02371	2.50740	0.05115
	(D * RESET_B * !Q * Q_N)	0.01860	0.02160	0.32940	0.02376	2.50740	0.05114
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01189	0.32940	0.01403	2.50740	0.04029
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00627	0.32940	0.04744	2.50740	0.07357
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01187	0.32940	0.01402	2.50740	0.04029
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01189	0.32940	0.01403	2.50740	0.04029

DLHQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00229	0.00233	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	679.02500	746.95700	843.24400

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	0.11387	0.32940	0.06480	0.29393	2.50740	0.30000	0.85183
	GATE->Q (RR)	0.01860	0.00100	0.09694	0.32940	0.06480	0.27891	2.50740	0.30000	0.80385

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	0.10329	0.32940	0.06480	0.26201	2.50740	0.30000	0.70385
	GATE->Q (RF)	0.01860	0.00100	0.10472	0.32940	0.06480	0.26826	2.50740	0.30000	0.71012

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	-0.05868	1.26300	1.26300	-0.15651	2.50740	2.50740	-0.19480
	setup	GATE (F)	0.01860	0.01860	0.06847	1.26300	1.26300	0.20777	2.50740	2.50740	0.27744

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	-0.02690	1.26300	1.26300	0.01349	2.50740	2.50740	0.04722
	setup	GATE (F)	0.01860	0.01860	0.03423	1.26300	1.26300	-0.00540	2.50740	2.50740	-0.03837

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	0.01745	0.32940	0.06480	0.01776	2.50740	0.30000	0.01913
	GATE	0.01860	0.00100	0.01460	0.32940	0.06480	0.01490	2.50740	0.30000	0.01763

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	0.01826	0.32940	0.06480	0.01879	2.50740	0.30000	0.01971
	GATE	0.01860	0.00100	0.01586	0.32940	0.06480	0.01665	2.50740	0.30000	0.01744

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00444	0.32940	0.00607	2.50740	0.02564

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00431	0.32940	0.00601	2.50740	0.02536

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	0.00436	0.32940	0.00591	2.50740	0.02551
	(!GATE * !Q)	0.01860	0.00444	0.32940	0.00607	2.50740	0.02564

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	0.00428	0.32940	0.00607	2.50740	0.02543
	(!GATE * !Q)	0.01860	0.00431	0.32940	0.00601	2.50740	0.02536

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00960	0.32940	0.01150	2.50740	0.03588

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00618	0.32940	0.01982	2.50740	0.04427

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	0.00960	0.32940	0.01150	2.50740	0.03588

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	0.00618	0.32940	0.01982	2.50740	0.04427

DLHRQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00213	0.00293	0.00224	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	775.44600	856.01800	913.96200

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	0.12002	0.32940	0.06480	0.30347	2.50740	0.30000	0.85701
	GATE->Q (RR)	0.01860	0.00100	0.10723	0.32940	0.06480	0.29276	2.50740	0.30000	0.81408

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	0.10756	0.32940	0.06480	0.26631	2.50740	0.30000	0.70932
	GATE->Q (RF)	0.01860	0.00100	0.10896	0.32940	0.06480	0.27418	2.50740	0.30000	0.71908
	RESET_B->Q (FF)	0.01860	0.00100	0.04297	0.32940	0.06480	0.22074	2.50740	0.30000	0.72973

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	-0.14301	2.50740	2.50740	-0.17709
	setup	GATE (F)	0.01860	0.01860	0.06602	1.26300	1.26300	0.18889	2.50740	2.50740	0.25383

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	-0.02934	1.26300	1.26300	0.01349	2.50740	2.50740	0.04722
	setup	GATE (F)	0.01860	0.01860	0.03912	1.26300	1.26300	-0.00540	2.50740	2.50740	-0.03837

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	-0.00489	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.09150
	removal	GATE (F)	0.01860	0.01860	0.01467	1.26300	1.26300	0.08365	2.50740	2.50740	0.11511

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	0.00176	0.32940	0.06480	0.00153	2.50740	0.30000	0.00345
	GATE	0.01860	0.00100	0.01470	0.32940	0.06480	0.01492	2.50740	0.30000	0.01850

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	0.00532	0.32940	0.06480	-0.00153	2.50740	0.30000	-0.00345
	GATE	0.01860	0.00100	0.01432	0.32940	0.06480	0.01522	2.50740	0.30000	0.01647
	RESET_B	0.01860	0.00100	0.00805	0.32940	0.06480	0.01027	2.50740	0.30000	0.03377

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02016	0.32940	0.02226	2.50740	0.04210

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01540	0.32940	0.03068	2.50740	0.05068

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	0.00429	0.32940	0.00587	2.50740	0.02551
	!RESET_B	0.01860	0.02016	0.32940	0.02226	2.50740	0.04210

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	0.00406	0.32940	0.00587	2.50740	0.02522
	!RESET_B	0.01860	0.01540	0.32940	0.03068	2.50740	0.05068

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	0.00009	0.32940	0.00004	2.50740	0.00004

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00049	0.32940	0.00038	2.50740	0.00034

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	0.00009	0.32940	0.00004	2.50740	0.00004
	(!D * !GATE * !Q)	0.01860	0.00009	0.32940	0.00004	2.50740	0.00004

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	(D * !GATE * !Q)	0.01860	0.00049	0.32940	0.00038	2.50740	0.00034
	(!D * !GATE * !Q)	0.01860	0.00049	0.32940	0.00038	2.50740	0.00034

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00999	0.32940	0.01187	2.50740	0.03624

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00638	0.32940	0.01971	2.50740	0.04414

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	0.01317	0.32940	0.01497	2.50740	0.04119
	(!D * !RESET_B * !Q)	0.01860	0.00999	0.32940	0.01187	2.50740	0.03624

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	0.01405	0.32940	0.01640	2.50740	0.04255
	(!D * RESET_B * !Q)	0.01860	0.00638	0.32940	0.01971	2.50740	0.04414
	(!D * !RESET_B * !Q)	0.01860	0.00639	0.32940	0.01973	2.50740	0.04415

DLHR



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00215	0.00309	0.00232	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	973.15400	1064.46000	1112.60000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.13020	0.32940	0.06480	0.31874	2.50740	0.30000	0.87182
	GATE->Q (RR)	0.01860	0.00100	0.11801	0.32940	0.06480	0.30952	2.50740	0.30000	0.83300

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	0.11205	0.32940	0.06480	0.27267	2.50740	0.30000	0.71100
	GATE->Q (RF)	0.01860	0.00100	0.11342	0.32940	0.06480	0.28069	2.50740	0.30000	0.72018
	RESET_B->Q (FF)	0.01860	0.00100	0.04659	0.32940	0.06480	0.23498	2.50740	0.30000	0.75128

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	0.13628	0.32940	0.06480	0.30607	2.50740	0.30000	0.81157
	GATE->Q_N (RR)	0.01860	0.00100	0.13777	0.32940	0.06480	0.31398	2.50740	0.30000	0.82108
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07069	0.32940	0.06480	0.26189	2.50740	0.30000	0.79510

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	0.15890	0.32940	0.06480	0.31674	2.50740	0.30000	0.80239
	GATE->Q_N (RF)	0.01860	0.00100	0.14653	0.32940	0.06480	0.30763	2.50740	0.30000	0.76322

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	-0.05624	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.18004
	setup	GATE (F)	0.01860	0.01860	0.07091	1.26300	1.26300	0.19158	2.50740	2.50740	0.25383

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	0.01349	2.50740	2.50740	0.04722
	setup	GATE (F)	0.01860	0.01860	0.04157	1.26300	1.26300	-0.00270	2.50740	2.50740	-0.03837

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	-0.02698	2.50740	2.50740	-0.03837
	removal	GATE (F)	0.01860	0.01860	0.01223	1.26300	1.26300	0.05127	2.50740	2.50740	0.06198

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	0.00581	0.32940	0.06480	0.00599	2.50740	0.30000	0.00747
	GATE	0.01860	0.00100	0.01216	0.32940	0.06480	0.01254	2.50740	0.30000	0.01498

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D	0.01860	0.00100	0.00743	0.32940	0.06480	0.00125	2.50740	0.30000	0.00197
	GATE	0.01860	0.00100	0.01199	0.32940	0.06480	0.01252	2.50740	0.30000	0.01395
	RESET_B	0.01860	0.00100	0.00864	0.32940	0.06480	0.00999	2.50740	0.30000	0.02276

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	0.00745	0.32940	0.06480	0.00123	2.50740	0.30000	0.00252
	GATE	0.01860	0.00100	0.01200	0.32940	0.06480	0.01266	2.50740	0.30000	0.01487
	RESET_B	0.01860	0.00100	0.00866	0.32940	0.06480	0.01002	2.50740	0.30000	0.02407

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	0.00581	0.32940	0.06480	0.00587	2.50740	0.30000	0.00696
	GATE	0.01860	0.00100	0.01216	0.32940	0.06480	0.01238	2.50740	0.30000	0.01453

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01978	0.32940	0.02191	2.50740	0.04179

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01527	0.32940	0.03040	2.50740	0.05041

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	0.00426	0.32940	0.00587	2.50740	0.02559
	!RESET_B	0.01860	0.01978	0.32940	0.02191	2.50740	0.04179

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	0.00383	0.32940	0.00567	2.50740	0.02507
	!RESET_B	0.01860	0.01527	0.32940	0.03040	2.50740	0.05041

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	-0.00006	0.32940	-0.00012	2.50740	-0.00012

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	0.00064	0.32940	0.00054	2.50740	0.00050

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	-0.00006	0.32940	-0.00012	2.50740	-0.00012
	(!D * !GATE * !Q)	0.01860	-0.00006	0.32940	-0.00012	2.50740	-0.00012

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	0.00064	0.32940	0.00054	2.50740	0.00050
	(!D * !GATE * !Q)	0.01860	0.00064	0.32940	0.00054	2.50740	0.00050

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00963	0.32940	0.01153	2.50740	0.03593

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00657	0.32940	0.01946	2.50740	0.04396

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	0.01284	0.32940	0.01468	2.50740	0.04090
	(!D * !RESET_B * !Q)	0.01860	0.00963	0.32940	0.01153	2.50740	0.03593

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	0.01444	0.32940	0.01679	2.50740	0.04296
	(!D * RESET_B * !Q)	0.01860	0.00657	0.32940	0.01946	2.50740	0.04396
	(!D * !RESET_B * !Q)	0.01860	0.00659	0.32940	0.01948	2.50740	0.04397

DLLRQ



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00212	0.00297	0.00224	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	775.37100	857.91900	913.96400

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	0.11984	0.32940	0.06480	0.30285	2.50740	0.30000	0.85659
	GATE_N->Q (FR)	0.01860	0.00100	0.13090	0.32940	0.06480	0.31985	2.50740	0.30000	0.87671
	RESET_B->Q (RR)	0.01860	0.00100	0.05736	0.32940	0.06480	0.24226	2.50740	0.30000	0.85024

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	0.10709	0.32940	0.06480	0.26415	2.50740	0.30000	0.70203
	GATE_N->Q (FF)	0.01860	0.00100	0.10013	0.32940	0.06480	0.27554	2.50740	0.30000	0.78719
	RESET_B->Q (FF)	0.01860	0.00100	0.04334	0.32940	0.06480	0.22002	2.50740	0.30000	0.72825

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	-0.04401	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.05624	1.26300	1.26300	0.07286	2.50740	2.50740	0.10035

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	-0.15111	2.50740	2.50740	-0.19185
	setup	GATE_N (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.20508	2.50740	2.50740	0.28040

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	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	-0.01712	1.26300	1.26300	-0.04587	2.50740	2.50740	-0.03837
	removal	GATE_N (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.05936	2.50740	2.50740	0.05018

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	0.00787	0.32940	0.06480	0.00854	2.50740	0.30000	0.00987
	GATE_N	0.01860	0.00100	0.01914	0.32940	0.06480	0.00842	2.50740	0.30000	0.00791
	RESET_B	0.01860	0.00100	0.01203	0.32940	0.06480	0.01299	2.50740	0.30000	0.03550

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	0.01545	0.32940	0.06480	0.00001	2.50740	0.30000	0.00019
	GATE_N	0.01860	0.00100	0.01726	0.32940	0.06480	0.00675	2.50740	0.30000	0.00936
	RESET_B	0.01860	0.00100	0.00823	0.32940	0.06480	0.01045	2.50740	0.30000	0.03378

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01403	0.32940	0.01526	2.50740	0.03489

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00534	0.32940	0.02304	2.50740	0.04309

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	0.00427	0.32940	0.00587	2.50740	0.02556
	!RESET_B	0.01860	0.01403	0.32940	0.01526	2.50740	0.03489

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	0.00393	0.32940	0.00575	2.50740	0.02514
	!RESET_B	0.01860	0.00534	0.32940	0.02304	2.50740	0.04309

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	0.00009	0.32940	0.00004	2.50740	0.00004

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00048	0.32940	0.00038	2.50740	0.00034

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	0.00009	0.32940	0.00004	2.50740	0.00004
	(!D * GATE_N * !Q)	0.01860	0.00009	0.32940	0.00004	2.50740	0.00004

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00049	0.32940	0.00038	2.50740	0.00034
	(!D * GATE_N * !Q)	0.01860	0.00048	0.32940	0.00038	2.50740	0.00034

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	0.00898	0.32940	0.01087	2.50740	0.03524

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	0.00633	0.32940	0.01963	2.50740	0.04416

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	0.01570	0.32940	0.01741	2.50740	0.04146
	(!D * !RESET_B * !Q)	0.01860	0.00898	0.32940	0.01087	2.50740	0.03524

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	0.01403	0.32940	0.01621	2.50740	0.04049
	(!D * RESET_B * !Q)	0.01860	0.00633	0.32940	0.01963	2.50740	0.04416
	(!D * !RESET_B * !Q)	0.01860	0.00634	0.32940	0.01964	2.50740	0.04418

DLLR



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00216	0.00310	0.00232	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	973.77000	1084.04000	1124.01000

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	0.13151	0.32940	0.06480	0.31996	2.50740	0.30000	0.87294
	GATE_N->Q (FR)	0.01860	0.00100	0.14299	0.32940	0.06480	0.33866	2.50740	0.30000	0.89716

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	0.11316	0.32940	0.06480	0.27367	2.50740	0.30000	0.71252
	GATE_N->Q (FF)	0.01860	0.00100	0.10683	0.32940	0.06480	0.28651	2.50740	0.30000	0.80132
	RESET_B->Q (FF)	0.01860	0.00100	0.04644	0.32940	0.06480	0.23878	2.50740	0.30000	0.72500

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	0.13731	0.32940	0.06480	0.30684	2.50740	0.30000	0.81147
	GATE_N->Q_N (FR)	0.01860	0.00100	0.13106	0.32940	0.06480	0.31981	2.50740	0.30000	0.90008
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07106	0.32940	0.06480	0.26347	2.50740	0.30000	0.80205

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	0.16002	0.32940	0.06480	0.31813	2.50740	0.30000	0.80386
	GATE_N->Q_N (FF)	0.01860	0.00100	0.17134	0.32940	0.06480	0.33662	2.50740	0.30000	0.82823

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	-0.05135	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.09445
	setup	GATE_N (R)	0.01860	0.01860	0.06358	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_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.05624	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.19775
	setup	GATE_N (R)	0.01860	0.01860	0.06602	1.26300	1.26300	0.20777	2.50740	2.50740	0.28630

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	-0.00734	1.26300	1.26300	-0.01349	2.50740	2.50740	0.01476
	removal	GATE_N (R)	0.01860	0.01860	0.02445	1.26300	1.26300	0.02968	2.50740	2.50740	-0.00295

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	0.01172	0.32940	0.06480	0.06825	2.50740	0.30000	0.27551
	GATE_N	0.01860	0.00100	0.02646	0.32940	0.06480	0.08300	2.50740	0.30000	0.28870

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	0.01598	0.32940	0.06480	0.05593	2.50740	0.30000	0.26194
	GATE_N	0.01860	0.00100	0.02417	0.32940	0.06480	0.08040	2.50740	0.30000	0.28906
	RESET_B	0.01860	0.00100	0.02787	0.32940	0.06480	0.08519	2.50740	0.30000	0.31294

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	0.01603	0.32940	0.06480	0.05603	2.50740	0.30000	0.26377
	GATE_N	0.01860	0.00100	0.02419	0.32940	0.06480	0.08084	2.50740	0.30000	0.28852
	RESET_B	0.01860	0.00100	0.02788	0.32940	0.06480	0.08541	2.50740	0.30000	0.31284

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	0.01172	0.32940	0.06480	0.06810	2.50740	0.30000	0.27584
	GATE_N	0.01860	0.00100	0.02646	0.32940	0.06480	0.08270	2.50740	0.30000	0.28977

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02101	0.32940	0.02254	2.50740	0.04242

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01508	0.32940	0.03332	2.50740	0.05333

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	0.00427	0.32940	0.00590	2.50740	0.02559
	!RESET_B	0.01860	0.02101	0.32940	0.02254	2.50740	0.04242

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	0.00383	0.32940	0.00565	2.50740	0.02507
	!RESET_B	0.01860	0.01508	0.32940	0.03332	2.50740	0.05333

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	-0.00006	0.32940	-0.00012	2.50740	-0.00012

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	0.00064	0.32940	0.00054	2.50740	0.00050

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

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	0.00064	0.32940	0.00054	2.50740	0.00050
	(!D * GATE_N * !Q)	0.01860	0.00064	0.32940	0.00054	2.50740	0.00050

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	0.00416	0.32940	0.01971	2.50740	0.04405

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	0.00995	0.32940	0.01216	2.50740	0.03662

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.01595	0.32940	0.01767	2.50740	0.04162
	(!D * RESET_B * !Q)	0.01860	0.00416	0.32940	0.01971	2.50740	0.04405
	(!D * !RESET_B * !Q)	0.01860	0.00417	0.32940	0.01972	2.50740	0.04405

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	0.01444	0.32940	0.01664	2.50740	0.04080
	(!D * !RESET_B * !Q)	0.01860	0.00995	0.32940	0.01216	2.50740	0.03662

DLY1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00141	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	308.75600	324.85500	340.95400

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	0.07457	0.32940	0.06480	0.25031	2.50740	0.30000	0.73309

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	0.08593	0.32940	0.06480	0.26639	2.50740	0.30000	0.81458

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	0.01499	0.32940	0.06480	0.01619	2.50740	0.30000	0.02973

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	0.01419	0.32940	0.06480	0.01568	2.50740	0.30000	0.02955

DLY2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00142	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	402.36000	418.48100	434.60100

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	0.11082	0.32940	0.06480	0.29887	2.50740	0.30000	0.81768

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	0.12384	0.32940	0.06480	0.32303	2.50740	0.30000	0.89978

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	0.01796	0.32940	0.06480	0.01901	2.50740	0.30000	0.03256

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	0.01730	0.32940	0.06480	0.01837	2.50740	0.30000	0.03168

DLY4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00138	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	939.23500	955.34200	971.44900

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	0.23419	0.32940	0.06480	0.44780	2.50740	0.30000	1.04574

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	0.23754	0.32940	0.06480	0.47198	2.50740	0.30000	1.12009

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	0.02644	0.32940	0.06480	0.02670	2.50740	0.30000	0.03822

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	0.02605	0.32940	0.06480	0.02644	2.50740	0.30000	0.03892

EINVIN_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00778	0.00945	1.20000
sg13g2_einvn_2	0.00389	0.00495	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	1155.03000	1312.65000	1470.26000
sg13g2_einvn_2	581.54000	660.35200	739.16400

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	0.01061	0.01871	0.32940	0.26881	0.37719	2.50740	1.20961	2.07730
	TE_B->Z (RR)	0.01860	0.01061	0.03687	0.32940	0.26881	0.10014	2.50740	1.20961	0.22280
	TE_B->Z (FR)	0.01860	0.01061	0.02301	0.32940	0.26881	0.35524	2.50740	1.20961	1.83831
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00588	0.01969	0.32940	0.13448	0.37672	2.50740	0.60488	2.07343
	TE_B->Z (RR)	0.01860	0.00588	0.03563	0.32940	0.13448	0.09444	2.50740	0.60488	0.21076
	TE_B->Z (FR)	0.01860	0.00588	0.02384	0.32940	0.13448	0.35525	2.50740	0.60488	1.83810

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	0.01559	0.01761	0.32940	0.27379	0.33618	2.50740	1.21459	1.88946
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00846	0.01863	0.32940	0.13706	0.33600	2.50740	0.60746	1.88843

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	0.01061	0.01258	0.32940	0.26881	0.01502	2.50740	1.20961	0.03906
	TE_B	0.01860	0.01061	0.02497	0.32940	0.26881	0.01738	2.50740	1.20961	0.01448
sg13g2_einvn_2	A	0.01860	0.00588	0.00638	0.32940	0.13448	0.00743	2.50740	0.60488	0.01871
	TE_B	0.01860	0.00588	0.01231	0.32940	0.13448	0.00858	2.50740	0.60488	0.00705

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	0.01559	0.01103	0.32940	0.27379	0.01395	2.50740	1.21459	0.03380
sg13g2_einvn_2	A	0.01860	0.00846	0.00563	0.32940	0.13706	0.00695	2.50740	0.60746	0.01692

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_einvn_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_einvn_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_4	0.01860	-0.00165	0.32940	-0.00071	2.50740	0.02515
sg13g2_einvn_2	0.01860	-0.00065	0.32940	-0.00003	2.50740	0.01431

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	0.01184	0.32940	0.02092	2.50740	0.04785
sg13g2_einvn_2	0.01860	0.00613	0.32940	0.01074	2.50740	0.02553

FILLx



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

Pin Capacitance Information Leakage Information

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

IN_x



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.04857	4.80000
sg13g2_inv_8	0.02369	2.40000
sg13g2_inv_4	0.01186	1.20000
sg13g2_inv_2	0.00592	0.60000
sg13g2_inv_1	0.00297	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	1264.60000	1895.10000	2525.60000
sg13g2_inv_8	632.30100	947.55000	1262.80000
sg13g2_inv_4	316.15000	473.77500	631.39900
sg13g2_inv_2	158.07600	236.88800	315.70000
sg13g2_inv_1	79.03790	118.44300	157.84900

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	0.01234	0.32940	1.03680	0.26872	2.50740	4.80000	1.52169
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01220	0.32940	0.51840	0.26824	2.50740	2.40000	1.52254
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01248	0.32940	0.25920	0.26792	2.50740	1.20000	1.52161
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01340	0.32940	0.12960	0.26764	2.50740	0.60000	1.51836
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01541	0.32940	0.06480	0.26796	2.50740	0.30000	1.51861

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	0.01231	0.32940	1.03680	0.25541	2.50740	4.80000	1.47401
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01222	0.32940	0.51840	0.25554	2.50740	2.40000	1.47616
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01245	0.32940	0.25920	0.25533	2.50740	1.20000	1.47563
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01321	0.32940	0.12960	0.25404	2.50740	0.60000	1.46844
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01500	0.32940	0.06480	0.25464	2.50740	0.30000	1.46854

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	0.02710	0.32940	1.03680	0.04097	2.50740	4.80000	0.16255
sg13g2_inv_8	A	0.01860	0.00100	0.01298	0.32940	0.51840	0.01970	2.50740	2.40000	0.08784
sg13g2_inv_4	A	0.01860	0.00100	0.00651	0.32940	0.25920	0.00981	2.50740	1.20000	0.04337
sg13g2_inv_2	A	0.01860	0.00100	0.00331	0.32940	0.12960	0.00503	2.50740	0.60000	0.02101
sg13g2_inv_1	A	0.01860	0.00100	0.00188	0.32940	0.06480	0.00269	2.50740	0.30000	0.01096

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	0.02122	0.32940	1.03680	0.03306	2.50740	4.80000	0.14679
sg13g2_inv_8	A	0.01860	0.00100	0.01007	0.32940	0.51840	0.01579	2.50740	2.40000	0.07388
sg13g2_inv_4	A	0.01860	0.00100	0.00508	0.32940	0.25920	0.00792	2.50740	1.20000	0.03423
sg13g2_inv_2	A	0.01860	0.00100	0.00261	0.32940	0.12960	0.00412	2.50740	0.60000	0.01809
sg13g2_inv_1	A	0.01860	0.00100	0.00166	0.32940	0.06480	0.00238	2.50740	0.30000	0.00936

ITL



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.01550	0.01603	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	2231.03000	2546.28000	2861.52000

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	0.02008	0.01827	0.32940	0.53748	0.37869	2.50740	2.41908	2.08561
	TE_B->Z (RR)	0.01860	0.02008	0.04680	0.32940	0.53748	0.13213	2.50740	2.41908	0.30739
	TE_B->Z (FR)	0.01860	0.02008	0.02415	0.32940	0.53748	0.35821	2.50740	2.41908	1.84548

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	0.03009	0.01766	0.32940	0.54749	0.33808	2.50740	2.42909	1.89998

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	0.02008	0.02440	0.32940	0.53748	0.03059	2.50740	2.41908	0.08332
	TE_B	0.01860	0.02008	0.05386	0.32940	0.53748	0.03667	2.50740	2.41908	0.03165

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	0.03009	0.02123	0.32940	0.54749	0.02786	2.50740	2.42909	0.06696

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_einvn_8	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	-0.00543	0.32940	-0.00562	2.50740	0.01818

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	0.01768	0.32940	0.03549	2.50740	0.06146

KEEPSTATE



*sg13g2_stdcell_fast_1p32V_m40C Cell Library:
Process sg13g2_stdcell_fast_1p32V_m40C,
Voltage 1.32, Temp -40.00*

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	46.58800	363.86100	681.13400

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_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00203	0.00201	0.00537	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	481.22000	559.06800	661.66200

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	0.04965	0.32940	0.06480	0.24635	2.50740	0.30000	0.84546
	A1->X (RR)	0.01860	0.00100	0.03729	0.32940	0.06480	0.24962	2.50740	0.30000	0.85420
	S->X (-R)	0.01860	0.00100	0.05546	0.32940	0.06480	0.24513	2.50740	0.30000	0.83878

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	0.04220	0.32940	0.06480	0.25375	2.50740	0.30000	0.82038
	A1->X (FF)	0.01860	0.00100	0.06268	0.32940	0.06480	0.25764	2.50740	0.30000	0.83219
	S->X (-F)	0.01860	0.00100	0.07041	0.32940	0.06480	0.24646	2.50740	0.30000	0.78784

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	0.05546	0.32940	0.06480	0.24513	2.50740	0.30000	0.83878
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.07844	0.32940	0.06480	0.25697	2.50740	0.30000	0.76565

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	0.07041	0.32940	0.06480	0.24646	2.50740	0.30000	0.78784
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.09070	0.32940	0.06480	0.26300	2.50740	0.30000	0.76009

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	0.01208	0.32940	0.06480	0.01356	2.50740	0.30000	0.03592
	A1	0.01860	0.00100	0.01132	0.32940	0.06480	0.01703	2.50740	0.30000	0.03939
	S	0.01860	0.00100	0.01138	0.32940	0.06480	0.01267	2.50740	0.30000	0.03342

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	0.01124	0.32940	0.06480	0.01765	2.50740	0.30000	0.03860
	A1	0.01860	0.00100	0.01208	0.32940	0.06480	0.01392	2.50740	0.30000	0.03553
	S	0.01860	0.00100	0.01081	0.32940	0.06480	0.01204	2.50740	0.30000	0.03219

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	0.01148	0.32940	0.06480	0.01174	2.50740	0.30000	0.01281
	S	(!A0 * A1)	0.01860	0.00100	0.01138	0.32940	0.06480	0.01267	2.50740	0.30000	0.03342

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	0.01121	0.32940	0.06480	0.01168	2.50740	0.30000	0.01264
	S	(!A0 * A1)	0.01860	0.00100	0.01081	0.32940	0.06480	0.01204	2.50740	0.30000	0.03219

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00502	0.32940	0.00643	2.50740	0.02591

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00511	0.32940	0.00677	2.50740	0.02604

MUX4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00286	0.00285	0.00286	0.00287	0.00825	0.00505	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	762.60600	984.28200	1144.83000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux4_1	A0->X (RR)	0.01860	0.00100	0.09216	0.32940	0.06480	0.30494	2.50740	0.30000	0.97647
	A1->X (RR)	0.01860	0.00100	0.08991	0.32940	0.06480	0.30437	2.50740	0.30000	0.97428
	A2->X (RR)	0.01860	0.00100	0.09515	0.32940	0.06480	0.31132	2.50740	0.30000	0.99165
	A3->X (RR)	0.01860	0.00100	0.09337	0.32940	0.06480	0.31031	2.50740	0.30000	0.99025
	S0->X (-R)	0.01860	0.00100	0.07854	0.32940	0.06480	0.30453	2.50740	0.30000	0.98148
	S1->X (-R)	0.01860	0.00100	-0.00970	0.32940	0.06480	0.24363	2.50740	0.30000	0.85154

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	0.10229	0.32940	0.06480	0.29832	2.50740	0.30000	0.85139
	A1->X (FF)	0.01860	0.00100	0.10330	0.32940	0.06480	0.29843	2.50740	0.30000	0.85333
	A2->X (FF)	0.01860	0.00100	0.10837	0.32940	0.06480	0.30702	2.50740	0.30000	0.87083
	A3->X (FF)	0.01860	0.00100	0.10889	0.32940	0.06480	0.30680	2.50740	0.30000	0.86998
	S0->X (-F)	0.01860	0.00100	0.09170	0.32940	0.06480	0.30263	2.50740	0.30000	0.88171
	S1->X (-F)	0.01860	0.00100	-0.00230	0.32940	0.06480	0.23745	2.50740	0.30000	0.76542

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	0.07854	0.32940	0.06480	0.30453	2.50740	0.30000	0.98148
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.07469	0.32940	0.06480	0.29481	2.50740	0.30000	0.96008
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.11406	0.32940	0.06480	0.31460	2.50740	0.30000	0.86459
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11114	0.32940	0.06480	0.30971	2.50740	0.30000	0.85718
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00970	0.32940	0.06480	0.24363	2.50740	0.30000	0.85154
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00737	0.32940	0.06480	0.24413	2.50740	0.30000	0.85128
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00969	0.32940	0.06480	0.24743	2.50740	0.30000	0.75654
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00760	0.32940	0.06480	0.24762	2.50740	0.30000	0.75646

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	0.09170	0.32940	0.06480	0.30263	2.50740	0.30000	0.88171
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.08418	0.32940	0.06480	0.28987	2.50740	0.30000	0.85690
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.12116	0.32940	0.06480	0.31918	2.50740	0.30000	0.86332
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.11534	0.32940	0.06480	0.31142	2.50740	0.30000	0.85257
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00230	0.32940	0.06480	0.23745	2.50740	0.30000	0.76542
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.01039	0.32940	0.06480	0.23578	2.50740	0.30000	0.76507
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00495	0.32940	0.06480	0.25117	2.50740	0.30000	0.75791
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.01040	0.32940	0.06480	0.25048	2.50740	0.30000	0.75783

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	0.01463	0.32940	0.06480	0.01487	2.50740	0.30000	0.03113
	A1	0.01860	0.00100	0.01414	0.32940	0.06480	0.01446	2.50740	0.30000	0.03072
	A2	0.01860	0.00100	0.01489	0.32940	0.06480	0.01523	2.50740	0.30000	0.03197
	A3	0.01860	0.00100	0.01876	0.32940	0.06480	0.01897	2.50740	0.30000	0.03544
	S0	0.01860	0.00100	0.00890	0.32940	0.06480	0.01054	2.50740	0.30000	0.02904
	S1	0.01860	0.00100	0.01224	0.32940	0.06480	0.03748	2.50740	0.30000	0.05083

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	0.02011	0.32940	0.06480	0.02068	2.50740	0.30000	0.03851
	A1	0.01860	0.00100	0.01923	0.32940	0.06480	0.01976	2.50740	0.30000	0.03774
	A2	0.01860	0.00100	0.02110	0.32940	0.06480	0.02145	2.50740	0.30000	0.03932
	A3	0.01860	0.00100	0.01975	0.32940	0.06480	0.02005	2.50740	0.30000	0.03841
	S0	0.01860	0.00100	0.01837	0.32940	0.06480	0.02126	2.50740	0.30000	0.00453
	S1	0.01860	0.00100	0.01139	0.32940	0.06480	0.03563	2.50740	0.30000	0.05451

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	0.02053	0.32940	0.06480	0.01358	2.50740	0.30000	-0.00310
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02048	0.32940	0.06480	0.01351	2.50740	0.30000	-0.00387
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00882	0.32940	0.06480	0.01064	2.50740	0.30000	0.02943
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00890	0.32940	0.06480	0.01054	2.50740	0.30000	0.02904
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01066	0.32940	0.06480	0.04265	2.50740	0.30000	0.05654
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01224	0.32940	0.06480	0.03748	2.50740	0.30000	0.05083
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01061	0.32940	0.06480	0.03361	2.50740	0.30000	0.05210
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01194	0.32940	0.06480	0.02921	2.50740	0.30000	0.04687

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	0.01837	0.32940	0.06480	0.02126	2.50740	0.30000	0.00453
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01807	0.32940	0.06480	0.02204	2.50740	0.30000	0.00531
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01078	0.32940	0.06480	0.00809	2.50740	0.30000	0.02805
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01077	0.32940	0.06480	0.00808	2.50740	0.30000	0.02742
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01461	0.32940	0.06480	0.03157	2.50740	0.30000	0.04536
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01240	0.32940	0.06480	0.04313	2.50740	0.30000	0.05709
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01262	0.32940	0.06480	0.02552	2.50740	0.30000	0.04278
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01139	0.32940	0.06480	0.03563	2.50740	0.30000	0.05451

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00965	0.32940	0.01315	2.50740	0.05629

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00790	0.32940	0.01645	2.50740	0.05940

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	0.00897	0.32940	0.01271	2.50740	0.05622
	(A0 * A1 * !S1)	0.01860	0.00965	0.32940	0.01315	2.50740	0.05629
	(!A2 * !A3 * S1)	0.01860	0.00910	0.32940	0.01297	2.50740	0.05652
	(!A0 * !A1 * !S1)	0.01860	0.01013	0.32940	0.01376	2.50740	0.05690

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	0.00807	0.32940	0.01673	2.50740	0.05984
	(A0 * A1 * !S1)	0.01860	0.00868	0.32940	0.01874	2.50740	0.06154
	(!A2 * !A3 * S1)	0.01860	0.00790	0.32940	0.01645	2.50740	0.05940
	(!A0 * !A1 * !S1)	0.01860	0.00854	0.32940	0.01258	2.50740	0.05517

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00516	0.32940	0.00756	2.50740	0.03134

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00541	0.32940	0.00783	2.50740	0.03123

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	0.00523	0.32940	0.00745	2.50740	0.03123
	(A0 * A2 * !S0)	0.01860	0.00522	0.32940	0.00744	2.50740	0.03123
	(!A1 * !A3 * S0)	0.01860	0.00517	0.32940	0.00757	2.50740	0.03136
	(!A0 * !A2 * !S0)	0.01860	0.00516	0.32940	0.00756	2.50740	0.03134

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	0.00526	0.32940	0.00782	2.50740	0.03129
	(A0 * A2 * !S0)	0.01860	0.00526	0.32940	0.00781	2.50740	0.03128
	(!A1 * !A3 * S0)	0.01860	0.00542	0.32940	0.00784	2.50740	0.03125
	(!A0 * !A2 * !S0)	0.01860	0.00541	0.32940	0.00783	2.50740	0.03123

NAND2B1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00239	0.00320	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	138.12400	269.62400	373.98000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2b_1	A_N->Y (RR)	0.01860	0.00100	0.03567	0.32940	0.06480	0.21947	2.50740	0.30000	0.81346
	B->Y (FR)	0.01860	0.00100	0.01913	0.32940	0.06480	0.27249	2.50740	0.30000	1.52434

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	0.04316	0.32940	0.06480	0.28405	2.50740	0.30000	1.05655
	B->Y (RF)	0.01860	0.00100	0.02716	0.32940	0.06480	0.31947	2.50740	0.30000	1.71662

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	0.00218	0.32940	0.06480	0.00241	2.50740	0.30000	0.00424
	B	0.01860	0.00100	0.00230	0.32940	0.06480	0.00277	2.50740	0.30000	0.00991

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	0.00511	0.32940	0.06480	0.00524	2.50740	0.30000	0.00499
	B	0.01860	0.00100	0.00504	0.32940	0.06480	0.00533	2.50740	0.30000	0.01063

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	0.00506	0.32940	0.00683	2.50740	0.02666

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	0.00254	0.32940	0.00436	2.50740	0.02379

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	0.00506	0.32940	0.00683	2.50740	0.02666

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	0.00254	0.32940	0.00436	2.50740	0.02379

NAND2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00294	0.00305	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	79.83490	198.91600	315.69900

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	0.01693	0.32940	0.06480	0.26839	2.50740	0.30000	1.51667
	B->Y (FR)	0.01860	0.00100	0.01932	0.32940	0.06480	0.27148	2.50740	0.30000	1.52177

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	0.02185	0.32940	0.06480	0.33359	2.50740	0.30000	1.87710
	B->Y (RF)	0.01860	0.00100	0.02483	0.32940	0.06480	0.31638	2.50740	0.30000	1.71579

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	0.00207	0.32940	0.06480	0.00261	2.50740	0.30000	0.00933
	B	0.01860	0.00100	0.00217	0.32940	0.06480	0.00253	2.50740	0.30000	0.01015

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	0.00254	0.32940	0.06480	0.00291	2.50740	0.30000	0.00893
	B	0.01860	0.00100	0.00478	0.32940	0.06480	0.00494	2.50740	0.30000	0.01072

NAND3B1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00230	0.00305	0.00308	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	140.75300	315.57500	531.82700

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	0.03727	0.32940	0.06480	0.21927	2.50740	0.30000	0.80924
	B->Y (FR)	0.01860	0.00100	0.02087	0.32940	0.06480	0.27398	2.50740	0.30000	1.52333
	C->Y (FR)	0.01860	0.00100	0.02233	0.32940	0.06480	0.27625	2.50740	0.30000	1.52520

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	0.05213	0.32940	0.06480	0.37452	2.50740	0.30000	1.44874
	B->Y (RF)	0.01860	0.00100	0.04014	0.32940	0.06480	0.41022	2.50740	0.30000	2.12702
	C->Y (RF)	0.01860	0.00100	0.04390	0.32940	0.06480	0.39526	2.50740	0.30000	1.95999

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	0.00233	0.32940	0.06480	0.00259	2.50740	0.30000	0.00272
	B	0.01860	0.00100	0.00265	0.32940	0.06480	0.00299	2.50740	0.30000	0.00895
	C	0.01860	0.00100	0.00295	0.32940	0.06480	0.00305	2.50740	0.30000	0.00977

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	0.00651	0.32940	0.06480	0.00655	2.50740	0.30000	0.00558
	B	0.01860	0.00100	0.00639	0.32940	0.06480	0.00640	2.50740	0.30000	0.01035
	C	0.01860	0.00100	0.00863	0.32940	0.06480	0.00858	2.50740	0.30000	0.01311

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	0.00497	0.32940	0.00676	2.50740	0.02660

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	0.00257	0.32940	0.00439	2.50740	0.02382

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	0.00497	0.32940	0.00676	2.50740	0.02660

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	0.00257	0.32940	0.00439	2.50740	0.02382

NOR2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00307	0.00293	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	153.46400	198.33500	256.16900

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	0.02865	0.32940	0.06480	0.35814	2.50740	0.30000	1.86303
	B->Y (FR)	0.01860	0.00100	0.02431	0.32940	0.06480	0.37770	2.50740	0.30000	2.07490

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	0.01868	0.32940	0.06480	0.25902	2.50740	0.30000	1.47212
	B->Y (RF)	0.01860	0.00100	0.01639	0.32940	0.06480	0.25553	2.50740	0.30000	1.46723

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	0.00544	0.32940	0.06480	0.00564	2.50740	0.30000	0.01073
	B	0.01860	0.00100	0.00263	0.32940	0.06480	0.00313	2.50740	0.30000	0.00977

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	0.00210	0.32940	0.06480	0.00242	2.50740	0.30000	0.00823
	B	0.01860	0.00100	0.00193	0.32940	0.06480	0.00243	2.50740	0.30000	0.00841

NOR3



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00306	0.00300	0.00289	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	155.62800	258.00300	375.68400

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	0.04933	0.32940	0.06480	0.47118	2.50740	0.30000	2.24790
	B->Y (FR)	0.01860	0.00100	0.04593	0.32940	0.06480	0.48843	2.50740	0.30000	2.43515
	C->Y (FR)	0.01860	0.00100	0.03529	0.32940	0.06480	0.49416	2.50740	0.30000	2.56110

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	0.02062	0.32940	0.06480	0.26358	2.50740	0.30000	1.47601
	B->Y (RF)	0.01860	0.00100	0.02033	0.32940	0.06480	0.26153	2.50740	0.30000	1.47732
	C->Y (RF)	0.01860	0.00100	0.01802	0.32940	0.06480	0.25816	2.50740	0.30000	1.47268

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	0.00911	0.32940	0.06480	0.00905	2.50740	0.30000	0.01388
	B	0.01860	0.00100	0.00669	0.32940	0.06480	0.00667	2.50740	0.30000	0.01071
	C	0.01860	0.00100	0.00389	0.32940	0.06480	0.00426	2.50740	0.30000	0.00893

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	0.00272	0.32940	0.06480	0.00281	2.50740	0.30000	0.00782
	B	0.01860	0.00100	0.00251	0.32940	0.06480	0.00275	2.50740	0.30000	0.00777
	C	0.01860	0.00100	0.00214	0.32940	0.06480	0.00275	2.50740	0.30000	0.00823

NOR4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00307	0.00298	0.00255	0.00260	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	158.08100	330.20800	496.99000

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	0.07504	0.32940	0.06480	0.60489	2.50740	0.30000	2.68889
	B->Y (FR)	0.01860	0.00100	0.07193	0.32940	0.06480	0.61361	2.50740	0.30000	2.82940
	C->Y (FR)	0.01860	0.00100	0.06287	0.32940	0.06480	0.62009	2.50740	0.30000	2.97895
	D->Y (FR)	0.01860	0.00100	0.04511	0.32940	0.06480	0.61423	2.50740	0.30000	3.05866

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	0.02143	0.32940	0.06480	0.26696	2.50740	0.30000	1.48164
	B->Y (RF)	0.01860	0.00100	0.02192	0.32940	0.06480	0.26565	2.50740	0.30000	1.48099
	C->Y (RF)	0.01860	0.00100	0.02134	0.32940	0.06480	0.26294	2.50740	0.30000	1.47910
	D->Y (RF)	0.01860	0.00100	0.01885	0.32940	0.06480	0.25917	2.50740	0.30000	1.47194

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	0.01063	0.32940	0.06480	0.01048	2.50740	0.30000	0.01420
	B	0.01860	0.00100	0.00955	0.32940	0.06480	0.00941	2.50740	0.30000	0.01274
	C	0.01860	0.00100	0.00789	0.32940	0.06480	0.00781	2.50740	0.30000	0.01114
	D	0.01860	0.00100	0.00564	0.32940	0.06480	0.00595	2.50740	0.30000	0.01002

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	0.00335	0.32940	0.06480	0.00342	2.50740	0.30000	0.00780
	B	0.01860	0.00100	0.00335	0.32940	0.06480	0.00351	2.50740	0.30000	0.00750
	C	0.01860	0.00100	0.00161	0.32940	0.06480	0.00185	2.50740	0.30000	0.00640
	D	0.01860	0.00100	0.00076	0.32940	0.06480	0.00130	2.50740	0.30000	0.00618

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00006	0.32940	-0.00012	2.50740	-0.00016

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00160	0.32940	0.00163	2.50740	0.00163

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00006	0.32940	-0.00012	2.50740	-0.00016

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	0.00160	0.32940	0.00163	2.50740	0.00163

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00008	0.32940	-0.00024	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	0.00030	0.32940	0.00032	2.50740	0.00032

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00008	0.32940	-0.00024	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	0.00030	0.32940	0.00032	2.50740	0.00032

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00121	0.32940	0.00122	2.50740	0.00123

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00044	0.32940	-0.00044	2.50740	-0.00043

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	0.00121	0.32940	0.00122	2.50740	0.00123

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	-0.00044	0.32940	-0.00044	2.50740	-0.00043

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00151	0.32940	0.00152	2.50740	0.00152

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00098	0.32940	-0.00100	2.50740	-0.00100

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	0.00151	0.32940	0.00152	2.50740	0.00152

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	-0.00098	0.32940	-0.00100	2.50740	-0.00100

NP_ANT



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00106

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	5.22717	5.22717	5.22717

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	-0.00037	0.32940	-0.00037	2.50740	-0.00038

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00037	0.32940	0.00038	2.50740	0.00038

OR2



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00234	0.00228	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	187.52400	238.23900	274.40800

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	0.03827	0.32940	0.06480	0.22954	2.50740	0.30000	0.81782
	B->X (RR)	0.01860	0.00100	0.03543	0.32940	0.06480	0.21866	2.50740	0.30000	0.77927

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	0.06005	0.32940	0.06480	0.22804	2.50740	0.30000	0.74503
	B->X (FF)	0.01860	0.00100	0.05585	0.32940	0.06480	0.23510	2.50740	0.30000	0.77927

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	0.00699	0.32940	0.06480	0.00820	2.50740	0.30000	0.02626
	B	0.01860	0.00100	0.00704	0.32940	0.06480	0.00862	2.50740	0.30000	0.02659

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	0.00935	0.32940	0.06480	0.01026	2.50740	0.30000	0.02648
	B	0.01860	0.00100	0.00727	0.32940	0.06480	0.00893	2.50740	0.30000	0.02691

OR3



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00258	0.00253	0.00245	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	191.90600	284.52600	364.63500

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	0.04367	0.32940	0.06480	0.24967	2.50740	0.30000	0.88075
	B->X (RR)	0.01860	0.00100	0.04179	0.32940	0.06480	0.23933	2.50740	0.30000	0.83664
	C->X (RR)	0.01860	0.00100	0.03804	0.32940	0.06480	0.22716	2.50740	0.30000	0.79670

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	0.08488	0.32940	0.06480	0.25393	2.50740	0.30000	0.75449
	B->X (FF)	0.01860	0.00100	0.08116	0.32940	0.06480	0.26139	2.50740	0.30000	0.80767
	C->X (FF)	0.01860	0.00100	0.07122	0.32940	0.06480	0.25984	2.50740	0.30000	0.81941

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	0.00755	0.32940	0.06480	0.00867	2.50740	0.30000	0.02767
	B	0.01860	0.00100	0.00731	0.32940	0.06480	0.00835	2.50740	0.30000	0.02605
	C	0.01860	0.00100	0.00715	0.32940	0.06480	0.00844	2.50740	0.30000	0.02628

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	0.01324	0.32940	0.06480	0.01359	2.50740	0.30000	0.03010
	B	0.01860	0.00100	0.01108	0.32940	0.06480	0.01186	2.50740	0.30000	0.02866
	C	0.01860	0.00100	0.00865	0.32940	0.06480	0.01015	2.50740	0.30000	0.02800

OR4



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00261	0.00258	0.00211	0.00219	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	194.36000	322.71900	433.56400

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	0.04558	0.32940	0.06480	0.25990	2.50740	0.30000	0.89796
	B->X (RR)	0.01860	0.00100	0.04504	0.32940	0.06480	0.25220	2.50740	0.30000	0.86019
	C->X (RR)	0.01860	0.00100	0.04280	0.32940	0.06480	0.24187	2.50740	0.30000	0.82010
	D->X (RR)	0.01860	0.00100	0.03887	0.32940	0.06480	0.22958	2.50740	0.30000	0.78157

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	0.11734	0.32940	0.06480	0.29433	2.50740	0.30000	0.80421
	B->X (FF)	0.01860	0.00100	0.11369	0.32940	0.06480	0.29807	2.50740	0.30000	0.85885
	C->X (FF)	0.01860	0.00100	0.10457	0.32940	0.06480	0.29778	2.50740	0.30000	0.89157
	D->X (FF)	0.01860	0.00100	0.08820	0.32940	0.06480	0.29112	2.50740	0.30000	0.89446

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	0.00842	0.32940	0.06480	0.00934	2.50740	0.30000	0.02637
	B	0.01860	0.00100	0.00832	0.32940	0.06480	0.00919	2.50740	0.30000	0.02515
	C	0.01860	0.00100	0.00656	0.32940	0.06480	0.00735	2.50740	0.30000	0.02336
	D	0.01860	0.00100	0.00603	0.32940	0.06480	0.00716	2.50740	0.30000	0.02340

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	0.01281	0.32940	0.06480	0.01271	2.50740	0.30000	0.02834
	B	0.01860	0.00100	0.01305	0.32940	0.06480	0.01304	2.50740	0.30000	0.02838
	C	0.01860	0.00100	0.01186	0.32940	0.06480	0.01207	2.50740	0.30000	0.02695
	D	0.01860	0.00100	0.00898	0.32940	0.06480	0.01001	2.50740	0.30000	0.02575

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00033	0.32940	-0.00034	2.50740	-0.00036

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00316	0.32940	0.00319	2.50740	0.00317

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	-0.00033	0.32940	-0.00034	2.50740	-0.00036

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	0.00316	0.32940	0.00319	2.50740	0.00317

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00045	0.32940	-0.00045	2.50740	-0.00045

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00077	0.32940	0.00080	2.50740	0.00079

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	-0.00045	0.32940	-0.00045	2.50740	-0.00045

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	0.00077	0.32940	0.00080	2.50740	0.00079

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00092	0.32940	0.00094	2.50740	0.00094

Passive power(pJ) for C falling :

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

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	0.00092	0.32940	0.00094	2.50740	0.00094

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	-0.00019	0.32940	-0.00019	2.50740	-0.00019

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00120	0.32940	0.00121	2.50740	0.00121

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00026	0.32940	0.00026	2.50740	0.00028

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	0.00120	0.32940	0.00121	2.50740	0.00121

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	0.00026	0.32940	0.00026	2.50740	0.00028

SDFRRS



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00180	0.00201	0.00347	0.00171	0.00523	0.00315	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	1508.44000	1693.57000	1790.09000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.18709	0.32940	0.06480	0.37303	2.50740	0.30000	0.93883
	SET_B->Q (FR)	0.01860	0.00100	0.07838	0.32940	0.06480	0.28009	2.50740	0.30000	0.85349

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	0.15849	0.32940	0.06480	0.33008	2.50740	0.30000	0.84600
	RESET_B->Q (FF)	0.01860	0.00100	0.13345	0.32940	0.06480	0.31583	2.50740	0.30000	0.82990

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	0.18709	0.32940	0.06480	0.37303	2.50740	0.30000	0.93883

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	0.15849	0.32940	0.06480	0.33008	2.50740	0.30000	0.84600

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	0.12980	0.32940	0.06480	0.33346	2.50740	0.30000	0.91965
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10390	0.32940	0.06480	0.32451	2.50740	0.30000	0.91316

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	0.15567	0.32940	0.06480	0.35102	2.50740	0.30000	0.85354
	SET_B->Q_N (FF)	0.01860	0.00100	0.05260	0.32940	0.06480	0.25776	2.50740	0.30000	0.78248

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	0.12980	0.32940	0.06480	0.33346	2.50740	0.30000	0.91965

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	0.15567	0.32940	0.06480	0.35102	2.50740	0.30000	0.85354

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	-0.05868	1.26300	1.26300	-0.19158	2.50740	2.50740	-0.25973
	setup	CLK (R)	0.01860	0.01860	0.08558	1.26300	1.26300	0.21047	2.50740	2.50740	0.28040

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	-0.06113	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.14463
	setup	CLK (R)	0.01860	0.01860	0.11003	1.26300	1.26300	0.19428	2.50740	2.50740	0.26269

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	-0.07580	1.26300	1.26300	-0.22666	2.50740	2.50740	-0.30991
	setup	CLK (R)	0.01860	0.01860	0.10514	1.26300	1.26300	0.24015	2.50740	2.50740	0.32467

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	-0.08069	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.16234
	setup	CLK (R)	0.01860	0.01860	0.13204	1.26300	1.26300	0.20508	2.50740	2.50740	0.27154

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	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.23746	2.50740	2.50740	0.32762

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	-0.06113	1.26300	1.26300	-0.08365	2.50740	2.50740	-0.08855
	setup	CLK (R)	0.01860	0.01860	0.11248	1.26300	1.26300	0.15920	2.50740	2.50740	0.20661

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	0.09714	2.50740	2.50740	0.12101
	removal	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.07286	2.50740	2.50740	-0.08855

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	0.02445	1.26300	1.26300	0.24285	2.50740	2.50740	0.56079
	removal	CLK (R)	0.01860	0.01860	0.01956	1.26300	1.26300	0.05936	2.50740	2.50740	0.05903
	hold	RESET_B (R)	0.01860	0.01860	-0.05135	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.22727
	setup	RESET_B (R)	0.01860	0.01860	0.06602	1.26300	1.26300	0.19158	2.50740	2.50740	0.28925

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	0.01220	0.32940	0.06480	0.01268	2.50740	0.30000	0.01309
	SET_B	0.01860	0.00100	0.03630	0.32940	0.06480	0.09479	2.50740	0.30000	0.33729

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	0.01221	0.32940	0.06480	0.01246	2.50740	0.30000	0.01441
	RESET_B	0.01860	0.00100	0.04191	0.32940	0.06480	0.09863	2.50740	0.30000	0.32313

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	0.01220	0.32940	0.06480	0.01268	2.50740	0.30000	0.01309

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	0.01221	0.32940	0.06480	0.01246	2.50740	0.30000	0.01441

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	0.01221	0.32940	0.06480	0.01256	2.50740	0.30000	0.01353
	RESET_B	0.01860	0.00100	0.04192	0.32940	0.06480	0.09890	2.50740	0.30000	0.32127

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	0.01220	0.32940	0.06480	0.01251	2.50740	0.30000	0.01364
	SET_B	0.01860	0.00100	0.03628	0.32940	0.06480	0.09455	2.50740	0.30000	0.33560

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	0.01221	0.32940	0.06480	0.01256	2.50740	0.30000	0.01353

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	0.01220	0.32940	0.06480	0.01251	2.50740	0.30000	0.01364

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00698	0.32940	0.00749	2.50740	0.01875

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00545	0.32940	0.00613	2.50740	0.01724

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	0.01262	0.32940	0.01326	2.50740	0.02577
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00698	0.32940	0.00749	2.50740	0.01875

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	0.01373	0.32940	0.01441	2.50740	0.02695
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00545	0.32940	0.00613	2.50740	0.01724

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00899	0.32940	0.00927	2.50740	0.01936

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01000	0.32940	0.01035	2.50740	0.02061

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	0.01456	0.32940	0.01494	2.50740	0.02623
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00899	0.32940	0.00927	2.50740	0.01936

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	0.01943	0.32940	0.01940	2.50740	0.03104
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.01000	0.32940	0.01035	2.50740	0.02061

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01668	0.32940	0.01799	2.50740	0.03326

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01718	0.32940	0.01859	2.50740	0.03338

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	0.01668	0.32940	0.01799	2.50740	0.03326
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02231	0.32940	0.02273	2.50740	0.03795
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01492	0.32940	0.01708	2.50740	0.04489
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00885	0.32940	0.01100	2.50740	0.03732

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	0.01718	0.32940	0.01859	2.50740	0.03338
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02031	0.32940	0.02922	2.50740	0.04407
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00469	0.32940	0.03233	2.50740	0.05906
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00924	0.32940	0.01117	2.50740	0.03660

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01362	0.32940	0.01582	2.50740	0.04426

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01687	0.32940	0.01958	2.50740	0.04826

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	0.01296	0.32940	0.01509	2.50740	0.04361
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01844	0.32940	0.02062	2.50740	0.04889
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01305	0.32940	0.01518	2.50740	0.04371
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01296	0.32940	0.01509	2.50740	0.04361
	(!RESET_B * !Q * Q_N)	0.01860	0.01362	0.32940	0.01582	2.50740	0.04426
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01304	0.32940	0.01518	2.50740	0.04371

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	0.01156	0.32940	0.01385	2.50740	0.04201
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02146	0.32940	0.02379	2.50740	0.05272
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01687	0.32940	0.01958	2.50740	0.04826
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02366	0.32940	0.02633	2.50740	0.05503
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01186	0.32940	0.01425	2.50740	0.04227
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01157	0.32940	0.01385	2.50740	0.04201
	(!RESET_B * !Q * Q_N)	0.01860	0.01185	0.32940	0.01424	2.50740	0.04228
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01186	0.32940	0.01424	2.50740	0.04227

TIE0



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	246.49400	246.49400	246.49400

TIE1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	230.87300	230.87300	230.87300

XNOR2_1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp
-40.00*

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	0.00579	0.00492	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	260.31500	440.18500	585.59700

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	0.05034	0.32940	0.06480	0.23244	2.50740	0.30000	0.82727
	A->Y (FR)	0.01860	0.00100	0.03637	0.32940	0.06480	0.36711	2.50740	0.30000	1.87255
	B->Y (RR)	0.01860	0.00100	0.04620	0.32940	0.06480	0.23374	2.50740	0.30000	0.84240
	B->Y (FR)	0.01860	0.00100	0.03169	0.32940	0.06480	0.38690	2.50740	0.30000	2.08171

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	0.04874	0.32940	0.06480	0.30219	2.50740	0.30000	1.10030
	A->Y (RF)	0.01860	0.00100	0.03433	0.32940	0.06480	0.32943	2.50740	0.30000	1.73120
	B->Y (FF)	0.01860	0.00100	0.04926	0.32940	0.06480	0.29290	2.50740	0.30000	1.07807
	B->Y (RF)	0.01860	0.00100	0.02868	0.32940	0.06480	0.32255	2.50740	0.30000	1.71913

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	0.00942	0.32940	0.06480	0.01035	2.50740	0.30000	0.03148
	B	0.01860	0.00100	0.00917	0.32940	0.06480	0.01045	2.50740	0.30000	0.03074

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	0.00854	0.32940	0.06480	0.01036	2.50740	0.30000	0.02919
	B	0.01860	0.00100	0.00924	0.32940	0.06480	0.00961	2.50740	0.30000	0.02980

XOR2_1



*sg13g2_stdcell_fast_1p32V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p32V_m40C, Voltage 1.32, Temp -40.00*

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	0.00591	0.00504	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	333.27100	407.80400	475.69000

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	0.04861	0.32940	0.06480	0.35819	2.50740	0.30000	1.39611
	A->X (FR)	0.01860	0.00100	0.04018	0.32940	0.06480	0.37217	2.50740	0.30000	1.88312
	B->X (RR)	0.01860	0.00100	0.05029	0.32940	0.06480	0.34705	2.50740	0.30000	1.35429
	B->X (FR)	0.01860	0.00100	0.03424	0.32940	0.06480	0.36564	2.50740	0.30000	1.87032

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	0.05748	0.32940	0.06480	0.21915	2.50740	0.30000	0.70456
	A->X (RF)	0.01860	0.00100	0.03211	0.32940	0.06480	0.32601	2.50740	0.30000	1.72294
	B->X (FF)	0.01860	0.00100	0.05282	0.32940	0.06480	0.22340	2.50740	0.30000	0.73075
	B->X (RF)	0.01860	0.00100	0.02820	0.32940	0.06480	0.34170	2.50740	0.30000	1.88490

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	0.00804	0.32940	0.06480	0.00945	2.50740	0.30000	0.02808
	B	0.01860	0.00100	0.00854	0.32940	0.06480	0.00878	2.50740	0.30000	0.02794

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	0.01065	0.32940	0.06480	0.01173	2.50740	0.30000	0.03031
	B	0.01860	0.00100	0.00973	0.32940	0.06480	0.01142	2.50740	0.30000	0.03151