

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
GCLK
INx
ITL
KEEPSTATE
MUX2

MUX4
NAND2B1
NAND2
NAND3B1
NOR2
NOR3
NOR4
NP_ANT
OR2
OR3
OR4
SDFRRS
SGCLK
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	0.84154
	B->X (RR)	0.01860	0.00100	0.04834	0.32940	0.06480	0.23072	2.50740	0.30000	0.82354

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	0.68559
	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	0.03033
	B	0.01860	0.00100	0.00954	0.32940	0.06480	0.01037	2.50740	0.30000	0.03009

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	0.02748
	B	0.01860	0.00100	0.00694	0.32940	0.06480	0.00877	2.50740	0.30000	0.02792

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	0.91460
	B->X (RR)	0.01860	0.00100	0.06684	0.32940	0.06480	0.26288	2.50740	0.30000	0.90616
	C->X (RR)	0.01860	0.00100	0.06970	0.32940	0.06480	0.25665	2.50740	0.30000	0.86827

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	0.67971
	B->X (FF)	0.01860	0.00100	0.04407	0.32940	0.06480	0.22083	2.50740	0.30000	0.71047
	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	0.02861
	B	0.01860	0.00100	0.01062	0.32940	0.06480	0.01141	2.50740	0.30000	0.02875
	C	0.01860	0.00100	0.01233	0.32940	0.06480	0.01289	2.50740	0.30000	0.03052

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	0.02601
	B	0.01860	0.00100	0.00715	0.32940	0.06480	0.00856	2.50740	0.30000	0.02625
	C	0.01860	0.00100	0.00729	0.32940	0.06480	0.00876	2.50740	0.30000	0.02725

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	0.90793

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	0.67107
	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	0.02768
	B	0.01860	0.00100	0.01234	0.32940	0.06480	0.01268	2.50740	0.30000	0.02825
	C	0.01860	0.00100	0.01332	0.32940	0.06480	0.01355	2.50740	0.30000	0.02935
	D	0.01860	0.00100	0.01342	0.32940	0.06480	0.01347	2.50740	0.30000	0.02990

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	0.00622	0.32940	0.06480	0.00762	2.50740	0.30000	0.02460
	B	0.01860	0.00100	0.00655	0.32940	0.06480	0.00780	2.50740	0.30000	0.02453
	C	0.01860	0.00100	0.00761	0.32940	0.06480	0.00895	2.50740	0.30000	0.02572
	D	0.01860	0.00100	0.00742	0.32940	0.06480	0.00881	2.50740	0.30000	0.02725

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	-0.00055	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	0.00115	0.32940	0.00117	2.50740	0.00117

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00056	0.32940	-0.00055	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	0.00115	0.32940	0.00117	2.50740	0.00117

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00070	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	0.00093	0.32940	0.00096	2.50740	0.00096

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	-0.00070	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	0.00093	0.32940	0.00096	2.50740	0.00096

Passive power(pJ) for C rising :

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

Passive power(pJ) for C falling :

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

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

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

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

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

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00157	0.32940	0.00159	2.50740	0.00157

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00036	0.32940	0.00028	2.50740	0.00024

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	0.00157	0.32940	0.00159	2.50740	0.00157

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	0.00036	0.32940	0.00028	2.50740	0.00024

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	0.76935

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	0.75497

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	0.00850	0.32940	0.06480	0.00978	2.50740	0.30000	0.02870
	A2	0.01860	0.00100	0.01069	0.32940	0.06480	0.01146	2.50740	0.30000	0.02979
	B1	0.01860	0.00100	0.00688	0.32940	0.06480	0.00877	2.50740	0.30000	0.03019

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	0.01014	0.32940	0.06480	0.01088	2.50740	0.30000	0.02991
	A2	0.01860	0.00100	0.00983	0.32940	0.06480	0.01080	2.50740	0.30000	0.02851
	B1	0.01860	0.00100	0.00686	0.32940	0.06480	0.00895	2.50740	0.30000	0.02953

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	0.00869	0.32940	0.06480	0.01051	2.50740	0.30000	0.03298
	B1	(!A1 * A2)	0.01860	0.00100	0.00688	0.32940	0.06480	0.00877	2.50740	0.30000	0.03019

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	0.00894	2.50740	0.30000	0.02906
	B1	(!A1 * A2)	0.01860	0.00100	0.00686	0.32940	0.06480	0.00895	2.50740	0.30000	0.02953

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00003	0.32940	-0.00002	2.50740	-0.00002

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00003	0.32940	0.00002	2.50740	0.00002

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	-0.00036	0.32940	-0.00035	2.50740	-0.00035
	(!A2 * B1)	0.01860	-0.00003	0.32940	-0.00002	2.50740	-0.00002

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	0.00036	0.32940	0.00035	2.50740	0.00035
	(!A2 * B1)	0.01860	0.00003	0.32940	0.00002	2.50740	0.00002

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00029	0.32940	-0.00030	2.50740	-0.00029

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00029	0.32940	0.00030	2.50740	0.00029

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	-0.00029	0.32940	-0.00030	2.50740	-0.00029
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00029	0.32940	0.00030	2.50740	0.00029
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00041	0.32940	0.00043	2.50740	0.00044

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	0.00041	0.32940	0.00043	2.50740	0.00044

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	-1.89757
	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	-0.21072	2.50740	1.21464	-1.89696
	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	-1.90852
	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	0.04427	0.32940	0.53732	0.05334	2.50740	2.41892	0.05903
	TE_B	0.01860	0.01992	0.00885	0.32940	0.53732	0.00651	2.50740	2.41892	0.00408
sg13g2_ebufn_4	A	0.01860	0.01058	0.02230	0.32940	0.26878	0.02629	2.50740	1.20958	0.02529
	TE_B	0.01860	0.01058	0.00457	0.32940	0.26878	0.00341	2.50740	1.20958	0.00124
sg13g2_ebufn_2	A	0.01860	0.00587	0.01176	0.32940	0.13447	0.01314	2.50740	0.60487	0.01237
	TE_B	0.01860	0.00587	0.00238	0.32940	0.13447	0.00187	2.50740	0.60487	0.00133

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	0.04441	0.32940	0.54726	0.04478	2.50740	2.42886	0.03974
	TE_B	0.01860	0.02986	0.00595	0.32940	0.54726	0.00367	2.50740	2.42886	0.00381
sg13g2_ebufn_4	A	0.01860	0.01564	0.02239	0.32940	0.27384	0.02275	2.50740	1.21464	0.02009
	TE_B	0.01860	0.01564	0.00317	0.32940	0.27384	0.00216	2.50740	1.21464	0.00599
sg13g2_ebufn_2	A	0.01860	0.00846	0.01111	0.32940	0.13706	0.01119	2.50740	0.60746	0.01161
	TE_B	0.01860	0.00846	0.00171	0.32940	0.13706	0.00142	2.50740	0.60746	0.00284

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01011	0.32940	0.01439	2.50740	0.06794
sg13g2_ebufn_4	0.01860	0.00554	0.32940	0.00761	2.50740	0.03427
sg13g2_ebufn_2	0.01860	0.00319	0.32940	0.00532	2.50740	0.02910

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00861	0.32940	0.01351	2.50740	0.06638
sg13g2_ebufn_4	0.01860	0.00452	0.32940	0.00689	2.50740	0.03326
sg13g2_ebufn_2	0.01860	0.00293	0.32940	0.00526	2.50740	0.02865

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	-0.00445	0.32940	-0.00429	2.50740	0.01936
sg13g2_ebufn_4	0.01860	-0.00116	0.32940	-0.00016	2.50740	0.02563
sg13g2_ebufn_2	0.01860	-0.00013	0.32940	0.00137	2.50740	0.02467

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	0.06296	0.32940	0.06580	2.50740	0.09045
sg13g2_ebufn_4	0.01860	0.03232	0.32940	0.03504	2.50740	0.06098
sg13g2_ebufn_2	0.01860	0.01682	0.32940	0.01931	2.50740	0.04244

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	0.87097
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.03875	0.32940	0.51840	0.24391	2.50740	2.40000	0.86912
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.04824	0.32940	0.25920	0.27316	2.50740	1.20000	0.98427
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.03822	0.32940	0.12960	0.23860	2.50740	0.60000	0.85931
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.03400	0.32940	0.06480	0.21782	2.50740	0.30000	0.80836

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	0.75294
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.04295	0.32940	0.51840	0.23110	2.50740	2.40000	0.75259
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.04234	0.32940	0.25920	0.22598	2.50740	1.20000	0.69210
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.04120	0.32940	0.12960	0.22041	2.50740	0.60000	0.71984
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.03601	0.32940	0.06480	0.19822	2.50740	0.30000	0.67467

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	0.09470	0.32940	1.03680	0.10815	2.50740	4.80000	0.26824
sg13g2_buf_8	A	0.01860	0.00100	0.04588	0.32940	0.51840	0.05239	2.50740	2.40000	0.13100
sg13g2_buf_4	A	0.01860	0.00100	0.02246	0.32940	0.25920	0.02510	2.50740	1.20000	0.05721
sg13g2_buf_2	A	0.01860	0.00100	0.01183	0.32940	0.12960	0.01393	2.50740	0.60000	0.03696
sg13g2_buf_1	A	0.01860	0.00100	0.00673	0.32940	0.06480	0.00867	2.50740	0.30000	0.02860

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	0.10725	2.50740	4.80000	0.27946
sg13g2_buf_8	A	0.01860	0.00100	0.04409	0.32940	0.51840	0.05208	2.50740	2.40000	0.12941
sg13g2_buf_4	A	0.01860	0.00100	0.02210	0.32940	0.25920	0.02560	2.50740	1.20000	0.05734
sg13g2_buf_2	A	0.01860	0.00100	0.01146	0.32940	0.12960	0.01385	2.50740	0.60000	0.03762
sg13g2_buf_1	A	0.01860	0.00100	0.00679	0.32940	0.06480	0.00887	2.50740	0.30000	0.02774

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	0.04611	0.32940	0.12960	0.16044	2.50740	0.60000	0.60146
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03514	0.32940	0.06480	0.09333	2.50740	0.30000	0.32843

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	0.04607	0.32940	0.12960	0.16138	2.50740	0.60000	0.60801
	RESET_B	0.01860	0.00100	0.03591	0.32940	0.12960	0.14965	2.50740	0.60000	0.57839
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03447	0.32940	0.06480	0.09310	2.50740	0.30000	0.32732
	RESET_B	0.01860	0.00100	0.02430	0.32940	0.06480	0.08153	2.50740	0.30000	0.30104

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	0.04611	0.32940	0.12960	0.16194	2.50740	0.60000	0.60634
	RESET_B	0.01860	0.00100	0.03595	0.32940	0.12960	0.15040	2.50740	0.60000	0.58045
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03447	0.32940	0.06480	0.09346	2.50740	0.30000	0.33010
	RESET_B	0.01860	0.00100	0.02429	0.32940	0.06480	0.08187	2.50740	0.30000	0.30276

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	0.04614	0.32940	0.12960	0.15988	2.50740	0.60000	0.60459
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03513	0.32940	0.06480	0.09308	2.50740	0.30000	0.32828

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00150	0.32940	0.00247	2.50740	0.01335
sg13g2_dfrbp_1	0.01860	0.00160	0.32940	0.00256	2.50740	0.01338

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00149	0.32940	0.00254	2.50740	0.01346
sg13g2_dfrbp_1	0.01860	0.00162	0.32940	0.00265	2.50740	0.01353

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	0.00150	0.32940	0.00247	2.50740	0.01335
	(!CLK * RESET_B)	0.01860	0.01340	0.32940	0.01437	2.50740	0.02697
	(!CLK * !RESET_B)	0.01860	-0.00028	0.32940	-0.00029	2.50740	-0.00028
sg13g2_dfrbp_1	CLK	0.01860	0.00160	0.32940	0.00256	2.50740	0.01338
	(!CLK * RESET_B)	0.01860	0.01172	0.32940	0.01272	2.50740	0.02514
	(!CLK * !RESET_B)	0.01860	-0.00019	0.32940	-0.00019	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	0.00149	0.32940	0.00254	2.50740	0.01346
	(!CLK * RESET_B)	0.01860	0.01082	0.32940	0.01179	2.50740	0.02461
	(!CLK * !RESET_B)	0.01860	0.00047	0.32940	0.00048	2.50740	0.00048
sg13g2_dfrbp_1	CLK	0.01860	0.00162	0.32940	0.00265	2.50740	0.01353
	(!CLK * RESET_B)	0.01860	0.00992	0.32940	0.01092	2.50740	0.02362
	(!CLK * !RESET_B)	0.01860	0.00041	0.32940	0.00042	2.50740	0.00043

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	0.00390	0.32940	0.00430	2.50740	0.01450
sg13g2_dfrbp_1	0.01860	0.00436	0.32940	0.00471	2.50740	0.01490

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	0.01076	0.32940	0.01121	2.50740	0.02711
sg13g2_dfrbp_1	0.01860	0.00944	0.32940	0.00986	2.50740	0.02590

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	0.00390	0.32940	0.00430	2.50740	0.01450
	(CLK * !D * !Q * Q_N)	0.01860	0.00075	0.32940	0.00070	2.50740	0.00070
	(!CLK * D * !Q * Q_N)	0.01860	0.01593	0.32940	0.01642	2.50740	0.03189
	(!CLK * !D * !Q * Q_N)	0.01860	0.00083	0.32940	0.00077	2.50740	0.00077
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00436	0.32940	0.00471	2.50740	0.01490
	(CLK * !D * !Q * Q_N)	0.01860	0.00122	0.32940	0.00117	2.50740	0.00117
	(!CLK * D * !Q * Q_N)	0.01860	0.01466	0.32940	0.01521	2.50740	0.03067
	(!CLK * !D * !Q * Q_N)	0.01860	0.00130	0.32940	0.00125	2.50740	0.00125

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	0.04600	0.32940	0.04786	2.50740	0.07801
	(CLK * !D * !Q * Q_N)	0.01860	-0.00075	0.32940	-0.00070	2.50740	-0.00070
	(!CLK * D * !Q * Q_N)	0.01860	0.01076	0.32940	0.01121	2.50740	0.02711
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00083	0.32940	-0.00077	2.50740	-0.00077
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.03272	0.32940	0.03444	2.50740	0.06418
	(CLK * !D * !Q * Q_N)	0.01860	-0.00122	0.32940	-0.00117	2.50740	-0.00117
	(!CLK * D * !Q * Q_N)	0.01860	0.00944	0.32940	0.00986	2.50740	0.02590
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00130	0.32940	-0.00125	2.50740	-0.00125

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01224	0.32940	0.01433	2.50740	0.04267
sg13g2_dfrbp_1	0.01860	0.01199	0.32940	0.01393	2.50740	0.04031

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02353	0.32940	0.02576	2.50740	0.05468
sg13g2_dfrbp_1	0.01860	0.02121	0.32940	0.02333	2.50740	0.05076

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	0.01224	0.32940	0.01433	2.50740	0.04267
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01286	0.32940	0.01495	2.50740	0.04320
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01201	0.32940	0.01409	2.50740	0.04237
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01289	0.32940	0.01495	2.50740	0.04324
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01231	0.32940	0.01427	2.50740	0.04068
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01197	0.32940	0.01392	2.50740	0.04031
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01170	0.32940	0.01366	2.50740	0.04006
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01199	0.32940	0.01393	2.50740	0.04031

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	0.02353	0.32940	0.02576	2.50740	0.05468
	(D * RESET_B * !Q * Q_N)	0.01860	0.02371	0.32940	0.02594	2.50740	0.05487
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01220	0.32940	0.01441	2.50740	0.04235
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00666	0.32940	0.05854	2.50740	0.08638
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01217	0.32940	0.01441	2.50740	0.04237
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01220	0.32940	0.01440	2.50740	0.04234
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02121	0.32940	0.02333	2.50740	0.05076
	(D * RESET_B * !Q * Q_N)	0.01860	0.02128	0.32940	0.02344	2.50740	0.05082
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01157	0.32940	0.01371	2.50740	0.03998
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00594	0.32940	0.04629	2.50740	0.07243
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01155	0.32940	0.01371	2.50740	0.03997
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01157	0.32940	0.01371	2.50740	0.03997

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	0.01788	0.32940	0.06480	0.01819	2.50740	0.30000	0.01996
	GATE	0.01860	0.00100	0.01527	0.32940	0.06480	0.01557	2.50740	0.30000	0.01868

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	0.01845	0.32940	0.06480	0.01898	2.50740	0.30000	0.01995
	GATE	0.01860	0.00100	0.01654	0.32940	0.06480	0.01732	2.50740	0.30000	0.01817

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00402	0.32940	0.00565	2.50740	0.02523

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00414	0.32940	0.00584	2.50740	0.02518

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	0.00398	0.32940	0.00554	2.50740	0.02513
	(!GATE * !Q)	0.01860	0.00402	0.32940	0.00565	2.50740	0.02523

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	0.00403	0.32940	0.00581	2.50740	0.02518
	(!GATE * !Q)	0.01860	0.00414	0.32940	0.00584	2.50740	0.02518

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00894	0.32940	0.01084	2.50740	0.03522

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00592	0.32940	0.01956	2.50740	0.04401

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	0.00894	0.32940	0.01084	2.50740	0.03522

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	0.00592	0.32940	0.01956	2.50740	0.04401

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	0.00248	0.32940	0.06480	0.00224	2.50740	0.30000	0.00457
	GATE	0.01860	0.00100	0.01548	0.32940	0.06480	0.01570	2.50740	0.30000	0.01974

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	0.00573	0.32940	0.06480	-0.00224	2.50740	0.30000	-0.00457
	GATE	0.01860	0.00100	0.01510	0.32940	0.06480	0.01600	2.50740	0.30000	0.01733
	RESET_B	0.01860	0.00100	0.00838	0.32940	0.06480	0.01061	2.50740	0.30000	0.03413

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01945	0.32940	0.02156	2.50740	0.04140

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01500	0.32940	0.03028	2.50740	0.05028

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	0.00325	0.32940	0.00484	2.50740	0.02447
	!RESET_B	0.01860	0.01945	0.32940	0.02156	2.50740	0.04140

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	0.00343	0.32940	0.00523	2.50740	0.02459
	!RESET_B	0.01860	0.01500	0.32940	0.03028	2.50740	0.05028

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	-0.00016	0.32940	-0.00005	2.50740	-0.00001

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	0.00016	0.32940	0.00005	2.50740	0.00001

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	-0.00021	0.32940	-0.00010	2.50740	-0.00006
	(!D * !GATE * !Q)	0.01860	-0.00016	0.32940	-0.00005	2.50740	-0.00001

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	0.00021	0.32940	0.00010	2.50740	0.00006
	(!D * !GATE * !Q)	0.01860	0.00016	0.32940	0.00005	2.50740	0.00001

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00922	0.32940	0.01111	2.50740	0.03547

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00607	0.32940	0.01940	2.50740	0.04383

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	0.01226	0.32940	0.01406	2.50740	0.04028
	(!D * !RESET_B * !Q)	0.01860	0.00922	0.32940	0.01111	2.50740	0.03547

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	0.01378	0.32940	0.01613	2.50740	0.04229
	(!D * RESET_B * !Q)	0.01860	0.00607	0.32940	0.01940	2.50740	0.04383
	(!D * !RESET_B * !Q)	0.01860	0.00610	0.32940	0.01944	2.50740	0.04385

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	0.00617	0.32940	0.06480	0.00634	2.50740	0.30000	0.00806
	GATE	0.01860	0.00100	0.01254	0.32940	0.06480	0.01292	2.50740	0.30000	0.01558

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	0.00763	0.32940	0.06480	0.00145	2.50740	0.30000	0.00236
	GATE	0.01860	0.00100	0.01238	0.32940	0.06480	0.01290	2.50740	0.30000	0.01453
	RESET_B	0.01860	0.00100	0.00883	0.32940	0.06480	0.01018	2.50740	0.30000	0.02303

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	0.00765	0.32940	0.06480	0.00143	2.50740	0.30000	0.00298
	GATE	0.01860	0.00100	0.01682	0.32940	0.06480	0.01843	2.50740	0.30000	0.03310
	RESET_B	0.01860	0.00100	0.00884	0.32940	0.06480	0.01021	2.50740	0.30000	0.02439

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	0.00617	0.32940	0.06480	0.00623	2.50740	0.30000	0.00754
	GATE	0.01860	0.00100	0.01254	0.32940	0.06480	0.01277	2.50740	0.30000	0.01512

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01909	0.32940	0.02121	2.50740	0.04110

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01487	0.32940	0.03001	2.50740	0.05002

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	0.00345	0.32940	0.00506	2.50740	0.02477
	!RESET_B	0.01860	0.01909	0.32940	0.02121	2.50740	0.04110

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	0.00342	0.32940	0.00525	2.50740	0.02466
	!RESET_B	0.01860	0.01487	0.32940	0.03001	2.50740	0.05002

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	-0.00027	0.32940	-0.00017	2.50740	-0.00013

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00027	0.32940	0.00017	2.50740	0.00013

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	-0.00032	0.32940	-0.00022	2.50740	-0.00018
	(!D * !GATE * !Q)	0.01860	-0.00027	0.32940	-0.00017	2.50740	-0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00032	0.32940	0.00022	2.50740	0.00018
	(!D * !GATE * !Q)	0.01860	0.00027	0.32940	0.00017	2.50740	0.00013

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00887	0.32940	0.01078	2.50740	0.03518

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00626	0.32940	0.01915	2.50740	0.04365

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	0.01194	0.32940	0.01378	2.50740	0.04000
	(!D * !RESET_B * !Q)	0.01860	0.00887	0.32940	0.01078	2.50740	0.03518

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	0.01418	0.32940	0.01652	2.50740	0.04269
	(!D * RESET_B * !Q)	0.01860	0.00626	0.32940	0.01915	2.50740	0.04365
	(!D * !RESET_B * !Q)	0.01860	0.00629	0.32940	0.01919	2.50740	0.04367

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	0.00838	0.32940	0.06480	0.00904	2.50740	0.30000	0.01086
	GATE_N	0.01860	0.00100	0.01945	0.32940	0.06480	0.00872	2.50740	0.30000	0.00860
	RESET_B	0.01860	0.00100	0.01226	0.32940	0.06480	0.01307	2.50740	0.30000	0.03567

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	0.01572	0.32940	0.06480	0.00028	2.50740	0.30000	0.00051
	GATE_N	0.01860	0.00100	0.01757	0.32940	0.06480	0.00706	2.50740	0.30000	0.00974
	RESET_B	0.01860	0.00100	0.00859	0.32940	0.06480	0.01080	2.50740	0.30000	0.03415

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01353	0.32940	0.01476	2.50740	0.03439

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00509	0.32940	0.02278	2.50740	0.04283

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	0.00316	0.32940	0.00476	2.50740	0.02445
	!RESET_B	0.01860	0.01353	0.32940	0.01476	2.50740	0.03439

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	0.00327	0.32940	0.00509	2.50740	0.02449
	!RESET_B	0.01860	0.00509	0.32940	0.02278	2.50740	0.04283

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	-0.00013	0.32940	-0.00003	2.50740	0.00000

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	0.00013	0.32940	0.00003	2.50740	0.00000

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	-0.00013	0.32940	-0.00003	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	-0.00013	0.32940	-0.00003	2.50740	0.00000

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	0.00013	0.32940	0.00003	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00013	0.32940	0.00003	2.50740	0.00000

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	0.00828	0.32940	0.01017	2.50740	0.03454

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	0.00604	0.32940	0.01934	2.50740	0.04387

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	0.01500	0.32940	0.01671	2.50740	0.04075
	(!D * !RESET_B * !Q)	0.01860	0.00828	0.32940	0.01017	2.50740	0.03454

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	0.01348	0.32940	0.01566	2.50740	0.03994
	(!D * RESET_B * !Q)	0.01860	0.00604	0.32940	0.01934	2.50740	0.04387
	(!D * !RESET_B * !Q)	0.01860	0.00607	0.32940	0.01937	2.50740	0.04390

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	0.01243	0.32940	0.06480	0.06896	2.50740	0.30000	0.27667
	GATE_N	0.01860	0.00100	0.02677	0.32940	0.06480	0.08331	2.50740	0.30000	0.28945

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	0.01628	0.32940	0.06480	0.05624	2.50740	0.30000	0.26258
	GATE_N	0.01860	0.00100	0.02448	0.32940	0.06480	0.08070	2.50740	0.30000	0.28990
	RESET_B	0.01860	0.00100	0.02826	0.32940	0.06480	0.08558	2.50740	0.30000	0.31374

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	0.01633	0.32940	0.06480	0.05634	2.50740	0.30000	0.26461
	GATE_N	0.01860	0.00100	0.03415	0.32940	0.06480	0.09301	2.50740	0.30000	0.32572
	RESET_B	0.01860	0.00100	0.02827	0.32940	0.06480	0.08580	2.50740	0.30000	0.31378

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	0.01243	0.32940	0.06480	0.06881	2.50740	0.30000	0.27707
	GATE_N	0.01860	0.00100	0.02677	0.32940	0.06480	0.08301	2.50740	0.30000	0.29065

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02031	0.32940	0.02184	2.50740	0.04172

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01479	0.32940	0.03303	2.50740	0.05304

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	0.00345	0.32940	0.00508	2.50740	0.02477
	!RESET_B	0.01860	0.02031	0.32940	0.02184	2.50740	0.04172

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	0.00318	0.32940	0.00500	2.50740	0.02442
	!RESET_B	0.01860	0.01479	0.32940	0.03303	2.50740	0.05304

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	-0.00025	0.32940	-0.00015	2.50740	-0.00011

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	0.00025	0.32940	0.00015	2.50740	0.00011

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	-0.00025	0.32940	-0.00015	2.50740	-0.00011
	(!D * GATE_N * !Q)	0.01860	-0.00025	0.32940	-0.00015	2.50740	-0.00011

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	0.00025	0.32940	0.00015	2.50740	0.00011
	(!D * GATE_N * !Q)	0.01860	0.00025	0.32940	0.00015	2.50740	0.00011

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	0.00349	0.32940	0.01904	2.50740	0.04337

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	0.00965	0.32940	0.01186	2.50740	0.03632

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	0.01524	0.32940	0.01697	2.50740	0.04091
	(!D * RESET_B * !Q)	0.01860	0.00349	0.32940	0.01904	2.50740	0.04337
	(!D * !RESET_B * !Q)	0.01860	0.00349	0.32940	0.01904	2.50740	0.04338

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	0.01390	0.32940	0.01609	2.50740	0.04026
	(!D * !RESET_B * !Q)	0.01860	0.00965	0.32940	0.01186	2.50740	0.03632

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	0.03012

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	0.02968

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	0.03294

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	0.01838	2.50740	0.30000	0.03183

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	0.03869

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	0.03914

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	0.01257	0.32940	0.26881	0.01502	2.50740	1.20961	0.04003
	TE_B	0.01860	0.01061	0.02668	0.32940	0.26881	0.01909	2.50740	1.20961	0.01579
sg13g2_einvn_2	A	0.01860	0.00588	0.00638	0.32940	0.13448	0.00743	2.50740	0.60488	0.01918
	TE_B	0.01860	0.00588	0.01317	0.32940	0.13448	0.00944	2.50740	0.60488	0.00805

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	0.01396	2.50740	1.21459	0.03420
sg13g2_einvn_2	A	0.01860	0.00846	0.00562	0.32940	0.13706	0.00695	2.50740	0.60746	0.01709

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	-0.01013	0.32940	-0.01198	2.50740	0.01387
sg13g2_einvn_2	0.01860	-0.00527	0.32940	-0.00564	2.50740	0.00870

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	0.01013	0.32940	0.01921	2.50740	0.04614
sg13g2_einvn_2	0.01860	0.00527	0.32940	0.00988	2.50740	0.02467

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

GCLK



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

Truth Table

INPUT		OUTPUT
GATE	CLK	GCLK
x	0	0
x	1	GCLK

Footprint

Cell Name	Area
sg13g2_lgcp_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	GATE	CLK	GCLK
sg13g2_lgcp_1	0.00241	0.00538	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	804.29400	828.59200	867.49900

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.05179	0.32940	0.06480	0.23359	2.50740	0.30000	0.82714

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.04155	0.32940	0.06480	0.21550	2.50740	0.30000	0.71996

Constraint Information

Constraints(ns) for GATE 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_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02621	1.26300	1.26300	-0.13762	2.50740	2.50740	-0.22663
	setup	CLK (R)	0.01860	0.01860	0.04182	1.26300	1.26300	0.18619	2.50740	2.50740	0.32600

Constraints(ns) for GATE 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_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01092	1.26300	1.26300	0.00540	2.50740	2.50740	0.02372
	setup	CLK (R)	0.01860	0.01860	0.03011	1.26300	1.26300	0.02698	2.50740	2.50740	0.02122

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_lgcp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.01177	0.32940	0.06480	0.01252	2.50740	0.30000	0.03382

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.00693	0.32940	0.06480	0.00912	2.50740	0.30000	0.02906

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.02049	0.32940	0.02344	2.50740	0.04311

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01159	0.32940	0.03462	2.50740	0.05431

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	0.02049	0.32940	0.02344	2.50740	0.04311

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	0.01159	0.32940	0.03462	2.50740	0.05431

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00717	0.32940	0.00905	2.50740	0.03343

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00903	0.32940	0.01112	2.50740	0.03564

INx



*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	0.04858	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	0.02709	0.32940	1.03680	0.04097	2.50740	4.80000	0.16262
sg13g2_inv_8	A	0.01860	0.00100	0.01297	0.32940	0.51840	0.01970	2.50740	2.40000	0.08761
sg13g2_inv_4	A	0.01860	0.00100	0.00651	0.32940	0.25920	0.00981	2.50740	1.20000	0.04340
sg13g2_inv_2	A	0.01860	0.00100	0.00331	0.32940	0.12960	0.00503	2.50740	0.60000	0.02099
sg13g2_inv_1	A	0.01860	0.00100	0.00188	0.32940	0.06480	0.00269	2.50740	0.30000	0.01095

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	0.02121	0.32940	1.03680	0.03306	2.50740	4.80000	0.14560
sg13g2_inv_8	A	0.01860	0.00100	0.01007	0.32940	0.51840	0.01579	2.50740	2.40000	0.07320
sg13g2_inv_4	A	0.01860	0.00100	0.00507	0.32940	0.25920	0.00791	2.50740	1.20000	0.03390
sg13g2_inv_2	A	0.01860	0.00100	0.00261	0.32940	0.12960	0.00412	2.50740	0.60000	0.01795
sg13g2_inv_1	A	0.01860	0.00100	0.00166	0.32940	0.06480	0.00238	2.50740	0.30000	0.00926

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	0.02439	0.32940	0.53748	0.03058	2.50740	2.41908	0.08521
	TE_B	0.01860	0.02008	0.05692	0.32940	0.53748	0.03973	2.50740	2.41908	0.03396

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	0.06749

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	-0.01462	0.32940	-0.02833	2.50740	-0.00455

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	0.01462	0.32940	0.03242	2.50740	0.05840

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	0.03631
	A1	0.01860	0.00100	0.01132	0.32940	0.06480	0.01703	2.50740	0.30000	0.03978
	S	0.01860	0.00100	0.01137	0.32940	0.06480	0.01265	2.50740	0.30000	0.03371

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	0.03873
	A1	0.01860	0.00100	0.01208	0.32940	0.06480	0.01392	2.50740	0.30000	0.03565
	S	0.01860	0.00100	0.01109	0.32940	0.06480	0.01228	2.50740	0.30000	0.03247

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	0.01176	0.32940	0.06480	0.01198	2.50740	0.30000	0.01346
	S	(!A0 * A1)	0.01860	0.00100	0.01137	0.32940	0.06480	0.01265	2.50740	0.30000	0.03371

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	0.01120	0.32940	0.06480	0.01167	2.50740	0.30000	0.01256
	S	(!A0 * A1)	0.01860	0.00100	0.01109	0.32940	0.06480	0.01228	2.50740	0.30000	0.03247

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00504	0.32940	0.00645	2.50740	0.02593

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00483	0.32940	0.00653	2.50740	0.02581

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	0.97426
	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	0.01488	2.50740	0.30000	0.03157
	A1	0.01860	0.00100	0.01415	0.32940	0.06480	0.01446	2.50740	0.30000	0.03098
	A2	0.01860	0.00100	0.01490	0.32940	0.06480	0.01523	2.50740	0.30000	0.03237
	A3	0.01860	0.00100	0.01877	0.32940	0.06480	0.01898	2.50740	0.30000	0.03582
	S0	0.01860	0.00100	0.01049	0.32940	0.06480	0.01176	2.50740	0.30000	0.03028
	S1	0.01860	0.00100	0.01269	0.32940	0.06480	0.03779	2.50740	0.30000	0.05150

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	0.02012	0.32940	0.06480	0.02069	2.50740	0.30000	0.03857
	A1	0.01860	0.00100	0.01924	0.32940	0.06480	0.01977	2.50740	0.30000	0.03781
	A2	0.01860	0.00100	0.02111	0.32940	0.06480	0.02146	2.50740	0.30000	0.03938
	A3	0.01860	0.00100	0.01976	0.32940	0.06480	0.02006	2.50740	0.30000	0.03847
	S0	0.01860	0.00100	0.01997	0.32940	0.06480	0.02248	2.50740	0.30000	0.00538
	S1	0.01860	0.00100	0.01184	0.32940	0.06480	0.03595	2.50740	0.30000	0.05486

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	0.02150	0.32940	0.06480	0.01454	2.50740	0.30000	-0.00193
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.02144	0.32940	0.06480	0.01448	2.50740	0.30000	-0.00272
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01042	0.32940	0.06480	0.01186	2.50740	0.30000	0.03067
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01049	0.32940	0.06480	0.01176	2.50740	0.30000	0.03028
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01110	0.32940	0.06480	0.04297	2.50740	0.30000	0.05723
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01269	0.32940	0.06480	0.03779	2.50740	0.30000	0.05150
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01156	0.32940	0.06480	0.03474	2.50740	0.30000	0.05362
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01289	0.32940	0.06480	0.03033	2.50740	0.30000	0.04838

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	0.01997	0.32940	0.06480	0.02248	2.50740	0.30000	0.00538
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01967	0.32940	0.06480	0.02326	2.50740	0.30000	0.00616
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01172	0.32940	0.06480	0.00904	2.50740	0.30000	0.02913
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01172	0.32940	0.06480	0.00902	2.50740	0.30000	0.02847
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01556	0.32940	0.06480	0.03269	2.50740	0.30000	0.04656
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01336	0.32940	0.06480	0.04426	2.50740	0.30000	0.05830
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01307	0.32940	0.06480	0.02583	2.50740	0.30000	0.04311
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01184	0.32940	0.06480	0.03595	2.50740	0.30000	0.05486

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00806	0.32940	0.01194	2.50740	0.05548

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00696	0.32940	0.01551	2.50740	0.05846

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	0.00739	0.32940	0.01114	2.50740	0.05464
	(A0 * A1 * !S1)	0.01860	0.00806	0.32940	0.01156	2.50740	0.05471
	(!A2 * !A3 * S1)	0.01860	0.00806	0.32940	0.01194	2.50740	0.05548
	(!A0 * !A1 * !S1)	0.01860	0.00909	0.32940	0.01272	2.50740	0.05587

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	0.00738	0.32940	0.01604	2.50740	0.05915
	(A0 * A1 * !S1)	0.01860	0.00800	0.32940	0.01806	2.50740	0.06086
	(!A2 * !A3 * S1)	0.01860	0.00696	0.32940	0.01551	2.50740	0.05846
	(!A0 * !A1 * !S1)	0.01860	0.00759	0.32940	0.01163	2.50740	0.05422

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00422	0.32940	0.00644	2.50740	0.03023

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00497	0.32940	0.00752	2.50740	0.03100

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	0.00422	0.32940	0.00644	2.50740	0.03023
	(A0 * A2 * !S0)	0.01860	0.00421	0.32940	0.00642	2.50740	0.03021
	(!A1 * !A3 * S0)	0.01860	0.00466	0.32940	0.00705	2.50740	0.03085
	(!A0 * !A2 * !S0)	0.01860	0.00464	0.32940	0.00704	2.50740	0.03082

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	0.00499	0.32940	0.00754	2.50740	0.03102
	(A0 * A2 * !S0)	0.01860	0.00497	0.32940	0.00752	2.50740	0.03100
	(!A1 * !A3 * S0)	0.01860	0.00478	0.32940	0.00720	2.50740	0.03062
	(!A0 * !A2 * !S0)	0.01860	0.00477	0.32940	0.00719	2.50740	0.03060

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	0.81328
	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	1.05656
	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	0.00260	0.32940	0.06480	0.00284	2.50740	0.30000	0.00490
	B	0.01860	0.00100	0.00230	0.32940	0.06480	0.00278	2.50740	0.30000	0.00988

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	0.00537	0.32940	0.06480	0.00549	2.50740	0.30000	0.00558
	B	0.01860	0.00100	0.00504	0.32940	0.06480	0.00533	2.50740	0.30000	0.01073

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	0.00463	0.32940	0.00641	2.50740	0.02624

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	0.00229	0.32940	0.00410	2.50740	0.02353

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	0.00463	0.32940	0.00641	2.50740	0.02624

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	0.00229	0.32940	0.00410	2.50740	0.02353

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	0.00254	2.50740	0.30000	0.01014

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	0.00897
	B	0.01860	0.00100	0.00478	0.32940	0.06480	0.00494	2.50740	0.30000	0.01081

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	0.80906
	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	0.00270	0.32940	0.06480	0.00296	2.50740	0.30000	0.00403
	B	0.01860	0.00100	0.00265	0.32940	0.06480	0.00299	2.50740	0.30000	0.00894
	C	0.01860	0.00100	0.00296	0.32940	0.06480	0.00305	2.50740	0.30000	0.00975

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	0.00791	0.32940	0.06480	0.00794	2.50740	0.30000	0.00735
	B	0.01860	0.00100	0.00639	0.32940	0.06480	0.00640	2.50740	0.30000	0.01058
	C	0.01860	0.00100	0.00863	0.32940	0.06480	0.00858	2.50740	0.30000	0.01332

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	0.00460	0.32940	0.00639	2.50740	0.02623

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	0.00118	0.32940	0.00299	2.50740	0.02243

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	0.00460	0.32940	0.00639	2.50740	0.02623

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	0.00118	0.32940	0.00299	2.50740	0.02243

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	0.01099
	B	0.01860	0.00100	0.00262	0.32940	0.06480	0.00313	2.50740	0.30000	0.00994

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	0.00818
	B	0.01860	0.00100	0.00193	0.32940	0.06480	0.00243	2.50740	0.30000	0.00833

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	0.01425
	B	0.01860	0.00100	0.00669	0.32940	0.06480	0.00667	2.50740	0.30000	0.01107
	C	0.01860	0.00100	0.00389	0.32940	0.06480	0.00426	2.50740	0.30000	0.00927

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	0.00282	2.50740	0.30000	0.00778
	B	0.01860	0.00100	0.00251	0.32940	0.06480	0.00275	2.50740	0.30000	0.00774
	C	0.01860	0.00100	0.00214	0.32940	0.06480	0.00275	2.50740	0.30000	0.00816

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	0.01102	0.32940	0.06480	0.01087	2.50740	0.30000	0.01501
	B	0.01860	0.00100	0.00985	0.32940	0.06480	0.00973	2.50740	0.30000	0.01348
	C	0.01860	0.00100	0.00786	0.32940	0.06480	0.00778	2.50740	0.30000	0.01153
	D	0.01860	0.00100	0.00551	0.32940	0.06480	0.00581	2.50740	0.30000	0.01029

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	0.00377	0.32940	0.06480	0.00386	2.50740	0.30000	0.00820
	B	0.01860	0.00100	0.00328	0.32940	0.06480	0.00328	2.50740	0.30000	0.00719
	C	0.01860	0.00100	0.00225	0.32940	0.06480	0.00249	2.50740	0.30000	0.00698
	D	0.01860	0.00100	0.00141	0.32940	0.06480	0.00196	2.50740	0.30000	0.00675

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00035	0.32940	-0.00055	2.50740	-0.00060

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00121	0.32940	0.00124	2.50740	0.00123

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	-0.00035	0.32940	-0.00055	2.50740	-0.00060

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	0.00121	0.32940	0.00124	2.50740	0.00123

Passive power(pJ) for B rising :

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

Passive power(pJ) for B falling :

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

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00057	0.32940	0.00059	2.50740	0.00059

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00041	0.32940	-0.00041	2.50740	-0.00040

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00057	0.32940	0.00059	2.50740	0.00059

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	-0.00041	0.32940	-0.00041	2.50740	-0.00040

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00085	0.32940	0.00087	2.50740	0.00086

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00085	0.32940	-0.00087	2.50740	-0.00086

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	0.00085	0.32940	0.00087	2.50740	0.00086

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	-0.00085	0.32940	-0.00087	2.50740	-0.00086

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	-0.00034	0.32940	-0.00035	2.50740	-0.00035

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00034	0.32940	0.00035	2.50740	0.00035

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	0.77836

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	0.74500
	B->X (FF)	0.01860	0.00100	0.05585	0.32940	0.06480	0.23510	2.50740	0.30000	0.78012

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	0.00821	2.50740	0.30000	0.02649
	B	0.01860	0.00100	0.00703	0.32940	0.06480	0.00862	2.50740	0.30000	0.02660

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	0.01027	2.50740	0.30000	0.02685
	B	0.01860	0.00100	0.00727	0.32940	0.06480	0.00893	2.50740	0.30000	0.02615

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	0.79679

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	0.80776
	C->X (FF)	0.01860	0.00100	0.07122	0.32940	0.06480	0.25984	2.50740	0.30000	0.81970

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	0.00756	0.32940	0.06480	0.00868	2.50740	0.30000	0.02797
	B	0.01860	0.00100	0.00732	0.32940	0.06480	0.00835	2.50740	0.30000	0.02628
	C	0.01860	0.00100	0.00715	0.32940	0.06480	0.00844	2.50740	0.30000	0.02632

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	0.03017
	B	0.01860	0.00100	0.01108	0.32940	0.06480	0.01186	2.50740	0.30000	0.02860
	C	0.01860	0.00100	0.00865	0.32940	0.06480	0.01015	2.50740	0.30000	0.02809

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	0.82014
	D->X (RR)	0.01860	0.00100	0.03887	0.32940	0.06480	0.22958	2.50740	0.30000	0.78202

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	0.85882
	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	0.00872	0.32940	0.06480	0.00965	2.50740	0.30000	0.02700
	B	0.01860	0.00100	0.00829	0.32940	0.06480	0.00919	2.50740	0.30000	0.02542
	C	0.01860	0.00100	0.00700	0.32940	0.06480	0.00779	2.50740	0.30000	0.02448
	D	0.01860	0.00100	0.00650	0.32940	0.06480	0.00763	2.50740	0.30000	0.02424

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	0.01316	0.32940	0.06480	0.01306	2.50740	0.30000	0.02882
	B	0.01860	0.00100	0.01340	0.32940	0.06480	0.01339	2.50740	0.30000	0.02935
	C	0.01860	0.00100	0.01188	0.32940	0.06480	0.01210	2.50740	0.30000	0.02712
	D	0.01860	0.00100	0.00939	0.32940	0.06480	0.01042	2.50740	0.30000	0.02632

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00062	0.32940	-0.00064	2.50740	-0.00066

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00281	0.32940	0.00284	2.50740	0.00282

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	-0.00062	0.32940	-0.00064	2.50740	-0.00066

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	0.00281	0.32940	0.00284	2.50740	0.00282

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00042	0.32940	-0.00045	2.50740	-0.00044

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00042	0.32940	0.00045	2.50740	0.00044

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	-0.00042	0.32940	-0.00045	2.50740	-0.00044

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	0.00042	0.32940	0.00045	2.50740	0.00044

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00049	0.32940	0.00050	2.50740	0.00051

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00021	0.32940	-0.00022	2.50740	-0.00021

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	0.00049	0.32940	0.00050	2.50740	0.00051

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	-0.00021	0.32940	-0.00022	2.50740	-0.00021

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00073	0.32940	0.00075	2.50740	0.00075

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00015	0.32940	-0.00015	2.50740	-0.00013

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	0.00073	0.32940	0.00075	2.50740	0.00075

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	-0.00015	0.32940	-0.00015	2.50740	-0.00013

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	0.01902	0.32940	0.06480	0.02059	2.50740	0.30000	0.03546
	SET_B	0.01860	0.00100	0.03633	0.32940	0.06480	0.09481	2.50740	0.30000	0.33776

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	0.01902	0.32940	0.06480	0.02038	2.50740	0.30000	0.03682
	RESET_B	0.01860	0.00100	0.04192	0.32940	0.06480	0.09865	2.50740	0.30000	0.32363

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	0.01902	0.32940	0.06480	0.02059	2.50740	0.30000	0.03546

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	0.01902	0.32940	0.06480	0.02038	2.50740	0.30000	0.03682

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	0.01903	0.32940	0.06480	0.02048	2.50740	0.30000	0.03589
	RESET_B	0.01860	0.00100	0.04193	0.32940	0.06480	0.09892	2.50740	0.30000	0.32183

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	0.01902	0.32940	0.06480	0.02043	2.50740	0.30000	0.03611
	SET_B	0.01860	0.00100	0.03630	0.32940	0.06480	0.09457	2.50740	0.30000	0.33606

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	0.01903	0.32940	0.06480	0.02048	2.50740	0.30000	0.03589

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	0.01902	0.32940	0.06480	0.02043	2.50740	0.30000	0.03611

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00595	0.32940	0.00646	2.50740	0.01771

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00521	0.32940	0.00590	2.50740	0.01701

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	0.01245	0.32940	0.01308	2.50740	0.02560
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00595	0.32940	0.00646	2.50740	0.01771

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	0.01352	0.32940	0.01421	2.50740	0.02675
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00521	0.32940	0.00590	2.50740	0.01701

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00757	0.32940	0.00784	2.50740	0.01794

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00778	0.32940	0.00813	2.50740	0.01838

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	0.01440	0.32940	0.01478	2.50740	0.02606
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00757	0.32940	0.00784	2.50740	0.01794

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	0.01921	0.32940	0.01918	2.50740	0.03082
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00778	0.32940	0.00813	2.50740	0.01838

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01549	0.32940	0.01679	2.50740	0.03207

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01681	0.32940	0.01822	2.50740	0.03299

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	0.01549	0.32940	0.01679	2.50740	0.03207
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01968	0.32940	0.02010	2.50740	0.03532
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01436	0.32940	0.01652	2.50740	0.04433
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00724	0.32940	0.00939	2.50740	0.03571

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	0.01681	0.32940	0.01822	2.50740	0.03299
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01920	0.32940	0.02811	2.50740	0.04294
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00402	0.32940	0.03171	2.50740	0.05844
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00723	0.32940	0.00915	2.50740	0.03459

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01279	0.32940	0.01500	2.50740	0.04344

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01447	0.32940	0.01718	2.50740	0.04586

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	0.01230	0.32940	0.01443	2.50740	0.04295
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01712	0.32940	0.01930	2.50740	0.04756
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01237	0.32940	0.01451	2.50740	0.04303
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01228	0.32940	0.01441	2.50740	0.04293
	(!RESET_B * !Q * Q_N)	0.01860	0.01279	0.32940	0.01500	2.50740	0.04344
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01236	0.32940	0.01451	2.50740	0.04303

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	0.01121	0.32940	0.01350	2.50740	0.04166
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02110	0.32940	0.02342	2.50740	0.05235
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01447	0.32940	0.01718	2.50740	0.04586
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02327	0.32940	0.02594	2.50740	0.05464
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01150	0.32940	0.01388	2.50740	0.04191
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01121	0.32940	0.01350	2.50740	0.04166
	(!RESET_B * !Q * Q_N)	0.01860	0.01104	0.32940	0.01343	2.50740	0.04147
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01149	0.32940	0.01388	2.50740	0.04190

SGCLK



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

Truth Table

INPUT			OUTPUT
GATE	SCE	CLK	GCLK
x	x	0	0
x	x	1	GCLK

Footprint

Cell Name	Area
sg13g2_slgcp_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	GATE	SCE	CLK	GCLK
sg13g2_slgcp_1	0.00188	0.00235	0.00516	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	818.65100	878.30300	941.90900

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.05156	0.32940	0.06480	0.23357	2.50740	0.30000	0.82770

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.04171	0.32940	0.06480	0.21570	2.50740	0.30000	0.72085

Constraint Information

Constraints(ns) for GATE 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_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02575	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.18295
	setup	CLK (R)	0.01860	0.01860	0.04275	1.26300	1.26300	0.20238	2.50740	2.50740	0.31146

Constraints(ns) for GATE 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_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.03800	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.18670
	setup	CLK (R)	0.01860	0.01860	0.06590	1.26300	1.26300	0.18889	2.50740	2.50740	0.30187

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_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02976	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.23046
	setup	CLK (R)	0.01860	0.01860	0.00200	1.26300	1.26300	0.00200	2.50740	2.50740	0.00200

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_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.04454	1.26300	1.26300	-0.09984	2.50740	2.50740	-0.14176
	setup	CLK (R)	0.01860	0.01860	0.07246	1.26300	1.26300	0.16460	2.50740	2.50740	0.23197

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_slgcp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.01177	0.32940	0.06480	0.01252	2.50740	0.30000	0.03284

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.00708	0.32940	0.06480	0.00922	2.50740	0.30000	0.02869

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02054	0.32940	0.02318	2.50740	0.04207

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01310	0.32940	0.03673	2.50740	0.05581

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	0.02054	0.32940	0.02318	2.50740	0.04207

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	0.01310	0.32940	0.03673	2.50740	0.05581

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01144	0.32940	0.01271	2.50740	0.03160

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01431	0.32940	0.03567	2.50740	0.05349

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00736	0.32940	0.00925	2.50740	0.03374

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00829	0.32940	0.01045	2.50740	0.03498

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	0.82697
	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	0.84259
	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	1.07814
	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	0.03163
	B	0.01860	0.00100	0.00917	0.32940	0.06480	0.01045	2.50740	0.30000	0.03154

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	0.00855	0.32940	0.06480	0.01037	2.50740	0.30000	0.02951
	B	0.01860	0.00100	0.00925	0.32940	0.06480	0.00962	2.50740	0.30000	0.03012

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	0.73057
	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	0.00946	2.50740	0.30000	0.02852
	B	0.01860	0.00100	0.00854	0.32940	0.06480	0.00879	2.50740	0.30000	0.02845

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	0.03037
	B	0.01860	0.00100	0.00973	0.32940	0.06480	0.01142	2.50740	0.30000	0.03105