

sg13g2_stdcell_fast_1p65V_m40C Library

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

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

AND2



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00271	0.00266	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	881.89200	1184.66000	1427.31000

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	0.03259	0.32940	0.06480	0.17036	2.50740	0.30000	0.64333
	B->X (RR)	0.01860	0.00100	0.03430	0.32940	0.06480	0.16170	2.50740	0.30000	0.58708

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	0.02835	0.32940	0.06480	0.14745	2.50740	0.30000	0.51074
	B->X (FF)	0.01860	0.00100	0.03094	0.32940	0.06480	0.15849	2.50740	0.30000	0.56617

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	0.01224	0.32940	0.06480	0.02166	2.50740	0.30000	0.10529
	B	0.01860	0.00100	0.01508	0.32940	0.06480	0.02358	2.50740	0.30000	0.10975

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	0.01071	0.32940	0.06480	0.02067	2.50740	0.30000	0.10193
	B	0.01860	0.00100	0.01103	0.32940	0.06480	0.02099	2.50740	0.30000	0.10395

AND3



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00272	0.00262	0.00264	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	885.76100	1378.33000	2021.46000

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	0.04225	0.32940	0.06480	0.19490	2.50740	0.30000	0.73219
	B->X (RR)	0.01860	0.00100	0.04666	0.32940	0.06480	0.18956	2.50740	0.30000	0.69398
	C->X (RR)	0.01860	0.00100	0.04840	0.32940	0.06480	0.17794	2.50740	0.30000	0.63133

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	0.03003	0.32940	0.06480	0.14873	2.50740	0.30000	0.47227
	B->X (FF)	0.01860	0.00100	0.03274	0.32940	0.06480	0.15911	2.50740	0.30000	0.51906
	C->X (FF)	0.01860	0.00100	0.03431	0.32940	0.06480	0.16799	2.50740	0.30000	0.57478

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	0.01423	0.32940	0.06480	0.02237	2.50740	0.30000	0.09973
	B	0.01860	0.00100	0.01704	0.32940	0.06480	0.02387	2.50740	0.30000	0.10166
	C	0.01860	0.00100	0.01985	0.32940	0.06480	0.02597	2.50740	0.30000	0.10994

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	0.01095	0.32940	0.06480	0.01962	2.50740	0.30000	0.09345
	B	0.01860	0.00100	0.01143	0.32940	0.06480	0.01987	2.50740	0.30000	0.09548
	C	0.01860	0.00100	0.01166	0.32940	0.06480	0.02076	2.50740	0.30000	0.10149

AND4



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00228	0.00221	0.00265	0.00266	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	890.08200	1505.62000	2625.88000

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	0.05255	0.32940	0.06480	0.21733	2.50740	0.30000	0.81338
	B->X (RR)	0.01860	0.00100	0.05923	0.32940	0.06480	0.21438	2.50740	0.30000	0.78464
	C->X (RR)	0.01860	0.00100	0.06308	0.32940	0.06480	0.20620	2.50740	0.30000	0.73464
	D->X (RR)	0.01860	0.00100	0.06492	0.32940	0.06480	0.19531	2.50740	0.30000	0.66925

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	0.03138	0.32940	0.06480	0.14889	2.50740	0.30000	0.43741
	B->X (FF)	0.01860	0.00100	0.03412	0.32940	0.06480	0.15879	2.50740	0.30000	0.48003
	C->X (FF)	0.01860	0.00100	0.03590	0.32940	0.06480	0.16705	2.50740	0.30000	0.52641
	D->X (FF)	0.01860	0.00100	0.03707	0.32940	0.06480	0.17419	2.50740	0.30000	0.57909

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	0.01707	0.32940	0.06480	0.02341	2.50740	0.30000	0.09388
	B	0.01860	0.00100	0.02006	0.32940	0.06480	0.02560	2.50740	0.30000	0.09698
	C	0.01860	0.00100	0.02141	0.32940	0.06480	0.02609	2.50740	0.30000	0.10367
	D	0.01860	0.00100	0.02113	0.32940	0.06480	0.02558	2.50740	0.30000	0.10652

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	0.00953	0.32940	0.06480	0.01719	2.50740	0.30000	0.08553
	B	0.01860	0.00100	0.01010	0.32940	0.06480	0.01759	2.50740	0.30000	0.08745
	C	0.01860	0.00100	0.01204	0.32940	0.06480	0.01984	2.50740	0.30000	0.09398
	D	0.01860	0.00100	0.01136	0.32940	0.06480	0.01964	2.50740	0.30000	0.09968

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00118	0.32940	-0.00117	2.50740	-0.00116

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00227	0.32940	0.00229	2.50740	0.00229

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	-0.00118	0.32940	-0.00117	2.50740	-0.00116

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	0.00227	0.32940	0.00229	2.50740	0.00229

Passive power(pJ) for B rising :

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

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00190	0.32940	0.00193	2.50740	0.00193

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	-0.00113	0.32940	-0.00113	2.50740	-0.00113

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	0.00190	0.32940	0.00193	2.50740	0.00193

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00030	0.32940	0.00030	2.50740	0.00031

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00015	0.32940	0.00016	2.50740	0.00016

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00030	0.32940	0.00030	2.50740	0.00031

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	0.00015	0.32940	0.00016	2.50740	0.00016

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00335	0.32940	0.00332	2.50740	0.00333

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00109	0.32940	0.00092	2.50740	0.00085

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	0.00335	0.32940	0.00332	2.50740	0.00333

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	0.00109	0.32940	0.00092	2.50740	0.00085

A021



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00293	0.00304	0.00257	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	1094.59000	1428.42000	1866.60000

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	0.03996	0.32940	0.06480	0.18866	2.50740	0.30000	0.68760
	A2->X (RR)	0.01860	0.00100	0.04146	0.32940	0.06480	0.17706	2.50740	0.30000	0.62736
	B1->X (RR)	0.01860	0.00100	0.02713	0.32940	0.06480	0.15540	2.50740	0.30000	0.52199

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	0.04236	0.32940	0.06480	0.16058	2.50740	0.30000	0.53054
	A2->X (FF)	0.01860	0.00100	0.04695	0.32940	0.06480	0.17128	2.50740	0.30000	0.58537
	B1->X (FF)	0.01860	0.00100	0.04238	0.32940	0.06480	0.18402	2.50740	0.30000	0.66860

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	0.02713	0.32940	0.06480	0.15540	2.50740	0.30000	0.52199
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02571	0.32940	0.06480	0.14728	2.50740	0.30000	0.50030

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	0.04238	0.32940	0.06480	0.18402	2.50740	0.30000	0.66860
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.03723	0.32940	0.06480	0.17311	2.50740	0.30000	0.64751

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	0.01369	0.32940	0.06480	0.02227	2.50740	0.30000	0.10516
	A2	0.01860	0.00100	0.01663	0.32940	0.06480	0.02423	2.50740	0.30000	0.10943
	B1	0.01860	0.00100	0.00995	0.32940	0.06480	0.02027	2.50740	0.30000	0.10878

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	0.01579	0.32940	0.06480	0.02338	2.50740	0.30000	0.10571
	A2	0.01860	0.00100	0.01604	0.32940	0.06480	0.02367	2.50740	0.30000	0.10761
	B1	0.01860	0.00100	0.01118	0.32940	0.06480	0.02154	2.50740	0.30000	0.10456

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	0.01294	0.32940	0.06480	0.02305	2.50740	0.30000	0.11094
	B1	(!A1 * A2)	0.01860	0.00100	0.00995	0.32940	0.06480	0.02027	2.50740	0.30000	0.10878

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	0.01163	0.32940	0.06480	0.02135	2.50740	0.30000	0.10456
	B1	(!A1 * A2)	0.01860	0.00100	0.01118	0.32940	0.06480	0.02154	2.50740	0.30000	0.10456

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00008	0.32940	-0.00005	2.50740	-0.00003

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00052	0.32940	0.00050	2.50740	0.00050

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	0.00015	0.32940	-0.00011	2.50740	-0.00019
	(!A2 * B1)	0.01860	-0.00008	0.32940	-0.00005	2.50740	-0.00003

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	0.00101	0.32940	0.00098	2.50740	0.00098
	(!A2 * B1)	0.01860	0.00052	0.32940	0.00050	2.50740	0.00050

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00007	0.32940	0.00006	2.50740	0.00007

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00040	0.32940	0.00041	2.50740	0.00041

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	0.00026	0.32940	-0.00001	2.50740	-0.00010
	(!A1 * B1)	0.01860	0.00007	0.32940	0.00006	2.50740	0.00007

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	0.00091	0.32940	0.00089	2.50740	0.00089
	(!A1 * B1)	0.01860	0.00040	0.32940	0.00041	2.50740	0.00041

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00159	0.32940	0.00163	2.50740	0.00163

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00101	0.32940	0.00103	2.50740	0.00105

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	0.00159	0.32940	0.00163	2.50740	0.00163

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00101	0.32940	0.00103	2.50740	0.00105

BTLx



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00640	0.01804	2.40000
sg13g2_ebufn_4	0.00331	0.01094	1.20000
sg13g2_ebufn_2	0.00285	0.00667	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1242.25000	6703.48000	13150.90000
sg13g2_ebufn_4	985.89300	3586.28000	6679.75000
sg13g2_ebufn_2	819.86900	2120.06000	3500.29000

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	0.02061	0.03554	0.32940	0.53801	0.27793	2.50740	2.41961	1.05338
	TE_B->Z (RR)	0.01860	0.02061	0.03922	0.32940	0.53801	0.09900	2.50740	2.41961	0.21148
	TE_B->Z (FR)	0.01860	0.02061	0.01882	0.32940	0.53801	0.26103	2.50740	2.41961	1.26713
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01094	0.03603	0.32940	0.26914	0.27668	2.50740	1.20994	1.04451
	TE_B->Z (RR)	0.01860	0.01094	0.03023	0.32940	0.26914	0.07191	2.50740	1.20994	0.14243
	TE_B->Z (FR)	0.01860	0.01094	0.01816	0.32940	0.26914	0.25842	2.50740	1.20994	1.25768
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00605	0.03124	0.32940	0.13465	0.25563	2.50740	0.60505	1.01144
	TE_B->Z (RR)	0.01860	0.00605	0.02605	0.32940	0.13465	0.05820	2.50740	0.60505	0.11661
	TE_B->Z (FR)	0.01860	0.00605	0.01846	0.32940	0.13465	0.25815	2.50740	0.60505	1.26130

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	0.02967	0.04301	0.32940	0.54707	0.24763	2.50740	2.42867	0.89585
	TE_B->Z (RF)	0.01860	0.02967	0.01757	0.32940	0.54707	-0.22207	2.50740	2.42867	-1.90858
	TE_B->Z (FF)	0.01860	0.02967	0.03884	0.32940	0.54707	0.19868	2.50740	2.42867	0.64787
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01554	0.04384	0.32940	0.27374	0.24833	2.50740	1.21454	0.89614
	TE_B->Z (RF)	0.01860	0.01554	0.01462	0.32940	0.27374	-0.22147	2.50740	1.21454	-1.90782
	TE_B->Z (FF)	0.01860	0.01554	0.03006	0.32940	0.27374	0.16882	2.50740	1.21454	0.58065
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00841	0.03388	0.32940	0.13701	0.22037	2.50740	0.60741	0.83194
	TE_B->Z (RF)	0.01860	0.00841	0.00708	0.32940	0.13701	-0.23049	2.50740	0.60741	-1.91701
	TE_B->Z (FF)	0.01860	0.00841	0.02596	0.32940	0.13701	0.14858	2.50740	0.60741	0.53136

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	0.02061	0.07450	0.32940	0.53801	0.08509	2.50740	2.41961	0.10396
	TE_B	0.01860	0.02061	0.00911	0.32940	0.53801	0.00497	2.50740	2.41961	0.01023
sg13g2_ebufn_4	A	0.01860	0.01094	0.03766	0.32940	0.26914	0.04198	2.50740	1.20994	0.04528
	TE_B	0.01860	0.01094	0.00443	0.32940	0.26914	0.00242	2.50740	1.20994	-0.00158
sg13g2_ebufn_2	A	0.01860	0.00605	0.01902	0.32940	0.13465	0.02018	2.50740	0.60505	0.02337
	TE_B	0.01860	0.00605	0.00228	0.32940	0.13465	0.00136	2.50740	0.60505	0.00087

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	0.02967	0.07477	0.32940	0.54707	0.07074	2.50740	2.42867	0.05898
	TE_B	0.01860	0.02967	-0.00060	0.32940	0.54707	-0.00383	2.50740	2.42867	0.00656
sg13g2_ebufn_4	A	0.01860	0.01554	0.03771	0.32940	0.27374	0.03566	2.50740	1.21454	0.03052
	TE_B	0.01860	0.01554	-0.00037	0.32940	0.27374	-0.00098	2.50740	1.21454	0.00158
sg13g2_ebufn_2	A	0.01860	0.00841	0.01750	0.32940	0.13701	0.01739	2.50740	0.60741	0.01719
	TE_B	0.01860	0.00841	-0.00014	0.32940	0.13701	-0.00035	2.50740	0.60741	-0.00079

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01598	0.32940	0.04241	2.50740	0.27605
sg13g2_ebufn_4	0.01860	0.00869	0.32940	0.02177	2.50740	0.13844
sg13g2_ebufn_2	0.01860	0.00545	0.32940	0.01764	2.50740	0.12068

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01400	0.32940	0.04128	2.50740	0.27176
sg13g2_ebufn_4	0.01860	0.00730	0.32940	0.02081	2.50740	0.13601
sg13g2_ebufn_2	0.01860	0.00501	0.32940	0.01747	2.50740	0.11882

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	-0.00640	0.32940	0.00217	2.50740	0.11401
sg13g2_ebufn_4	0.01860	-0.00105	0.32940	0.00996	2.50740	0.12535
sg13g2_ebufn_2	0.01860	0.00055	0.32940	0.01163	2.50740	0.11397

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	0.10495	0.32940	0.11845	2.50740	0.22926
sg13g2_ebufn_4	0.01860	0.05414	0.32940	0.06807	2.50740	0.18190
sg13g2_ebufn_2	0.01860	0.02830	0.32940	0.04099	2.50740	0.14155

BU_x



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.01917	4.80000
sg13g2_buf_8	0.00957	2.40000
sg13g2_buf_4	0.00407	1.20000
sg13g2_buf_2	0.00283	0.60000
sg13g2_buf_1	0.00244	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7714.52000	10319.40000	12924.20000
sg13g2_buf_8	3857.27000	5159.69000	6462.11000
sg13g2_buf_4	1614.28000	2412.17000	3210.06000
sg13g2_buf_2	1028.62000	1336.10000	1643.58000
sg13g2_buf_1	711.84600	797.51900	883.19200

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	0.02985	0.32940	1.03680	0.17542	2.50740	4.80000	0.62573
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.02930	0.32940	0.51840	0.17419	2.50740	2.40000	0.62380
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.03633	0.32940	0.25920	0.19999	2.50740	1.20000	0.74725
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.02880	0.32940	0.12960	0.16984	2.50740	0.60000	0.61746
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.02562	0.32940	0.06480	0.15398	2.50740	0.30000	0.58131

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	0.03254	0.32940	1.03680	0.17097	2.50740	4.80000	0.58652
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.03191	0.32940	0.51840	0.17022	2.50740	2.40000	0.58652
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.03140	0.32940	0.25920	0.16101	2.50740	1.20000	0.49342
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.03053	0.32940	0.12960	0.16104	2.50740	0.60000	0.55626
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.02689	0.32940	0.06480	0.14521	2.50740	0.30000	0.53037

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	0.15571	0.32940	1.03680	0.23172	2.50740	4.80000	0.93895
sg13g2_buf_8	A	0.01860	0.00100	0.07540	0.32940	0.51840	0.11548	2.50740	2.40000	0.46973
sg13g2_buf_4	A	0.01860	0.00100	0.03809	0.32940	0.25920	0.05325	2.50740	1.20000	0.19869
sg13g2_buf_2	A	0.01860	0.00100	0.01910	0.32940	0.12960	0.03007	2.50740	0.60000	0.13061
sg13g2_buf_1	A	0.01860	0.00100	0.01062	0.32940	0.06480	0.02122	2.50740	0.30000	0.10621

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	0.15188	0.32940	1.03680	0.23150	2.50740	4.80000	0.92210
sg13g2_buf_8	A	0.01860	0.00100	0.07468	0.32940	0.51840	0.11528	2.50740	2.40000	0.45765
sg13g2_buf_4	A	0.01860	0.00100	0.03723	0.32940	0.25920	0.05265	2.50740	1.20000	0.19483
sg13g2_buf_2	A	0.01860	0.00100	0.01884	0.32940	0.12960	0.02983	2.50740	0.60000	0.12922
sg13g2_buf_1	A	0.01860	0.00100	0.01076	0.32940	0.06480	0.02118	2.50740	0.30000	0.10434

DECAP_x



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	5984.42000	5984.42000	5984.42000
sg13g2_decap_8	11968.80000	11968.80000	11968.80000

DFFRRx



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00152	0.00553	0.00312	0.60000	0.60000
sg13g2_dfrbp_1	0.00159	0.00606	0.00293	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4783.37000	5625.49000	6222.82000
sg13g2_dfrbp_1	3675.32000	4489.22000	5112.29000

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	0.10923	0.32940	0.12960	0.24055	2.50740	0.60000	0.65077
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.08591	0.32940	0.06480	0.21598	2.50740	0.30000	0.59121

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	0.09802	0.32940	0.12960	0.21810	2.50740	0.60000	0.55582
	RESET_B->Q (FF)	0.01860	0.00100	0.12934	0.32940	0.12960	0.28212	2.50740	0.60000	0.76097
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.08338	0.32940	0.06480	0.20029	2.50740	0.30000	0.51205
	RESET_B->Q (FF)	0.01860	0.00100	0.11118	0.32940	0.06480	0.26203	2.50740	0.30000	0.73264

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	0.06584	0.32940	0.12960	0.21488	2.50740	0.60000	0.59684
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09776	0.32940	0.12960	0.27816	2.50740	0.60000	0.80214
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.06388	0.32940	0.06480	0.20473	2.50740	0.30000	0.56143
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09191	0.32940	0.06480	0.26530	2.50740	0.30000	0.78210

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	0.07185	0.32940	0.12960	0.22306	2.50740	0.60000	0.59078
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.06513	0.32940	0.06480	0.20374	2.50740	0.30000	0.54169

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	-0.02445	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.14758
	setup	CLK (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.13492	2.50740	2.50740	0.18004
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02690	1.26300	1.26300	-0.11603	2.50740	2.50740	-0.16824
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.14841	2.50740	2.50740	0.20956

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	-0.01223	1.26300	1.26300	-0.10794	2.50740	2.50740	-0.17709
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.15651	2.50740	2.50740	0.22727
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01467	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.16234
	setup	CLK (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.16460	2.50740	2.50740	0.24793

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	0.05624	1.26300	1.26300	0.18619	2.50740	2.50740	0.30401
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.29515
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.20238	2.50740	2.50740	0.33943
	removal	CLK (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.18889	2.50740	2.50740	-0.31877

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	0.06040	0.32940	0.12960	0.23045	2.50740	0.60000	0.87816
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03783	0.32940	0.06480	0.12541	2.50740	0.30000	0.45630

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	0.05747	0.32940	0.12960	0.23181	2.50740	0.60000	0.87810
	RESET_B	0.01860	0.00100	0.06152	0.32940	0.12960	0.24111	2.50740	0.60000	0.93458
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03617	0.32940	0.06480	0.12396	2.50740	0.30000	0.45172
	RESET_B	0.01860	0.00100	0.03965	0.32940	0.06480	0.13455	2.50740	0.30000	0.50563

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	0.05754	0.32940	0.12960	0.23169	2.50740	0.60000	0.87678
	RESET_B	0.01860	0.00100	0.06148	0.32940	0.12960	0.24260	2.50740	0.60000	0.93690
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03619	0.32940	0.06480	0.12436	2.50740	0.30000	0.45290
	RESET_B	0.01860	0.00100	0.03960	0.32940	0.06480	0.13538	2.50740	0.30000	0.50826

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	0.06044	0.32940	0.12960	0.23112	2.50740	0.60000	0.88287
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.03785	0.32940	0.06480	0.12472	2.50740	0.30000	0.45722

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00282	0.32940	0.00833	2.50740	0.05455
sg13g2_dfrbp_1	0.01860	0.00294	0.32940	0.00838	2.50740	0.05457

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00254	0.32940	0.00818	2.50740	0.05465
sg13g2_dfrbp_1	0.01860	0.00272	0.32940	0.00832	2.50740	0.05474

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	0.00282	0.32940	0.00833	2.50740	0.05455
	(!CLK * RESET_B)	0.01860	0.02198	0.32940	0.02823	2.50740	0.08489
	(!CLK * !RESET_B)	0.01860	-0.00046	0.32940	-0.00046	2.50740	-0.00046
sg13g2_dfrbp_1	CLK	0.01860	0.00294	0.32940	0.00838	2.50740	0.05457
	(!CLK * RESET_B)	0.01860	0.01939	0.32940	0.02575	2.50740	0.08189
	(!CLK * !RESET_B)	0.01860	-0.00032	0.32940	-0.00032	2.50740	-0.00032

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	0.00254	0.32940	0.00818	2.50740	0.05465
	(!CLK * RESET_B)	0.01860	0.01802	0.32940	0.02462	2.50740	0.08148
	(!CLK * !RESET_B)	0.01860	0.00093	0.32940	0.00095	2.50740	0.00095
sg13g2_dfrbp_1	CLK	0.01860	0.00272	0.32940	0.00832	2.50740	0.05474
	(!CLK * RESET_B)	0.01860	0.01662	0.32940	0.02319	2.50740	0.07948
	(!CLK * !RESET_B)	0.01860	0.00083	0.32940	0.00086	2.50740	0.00086

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	0.00711	0.32940	0.01181	2.50740	0.05874
sg13g2_dfrbp_1	0.01860	0.00783	0.32940	0.01244	2.50740	0.05934

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	0.01728	0.32940	0.02449	2.50740	0.09968
sg13g2_dfrbp_1	0.01860	0.01527	0.32940	0.02246	2.50740	0.09724

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	0.00711	0.32940	0.01181	2.50740	0.05874
	(CLK * !D * !Q * Q_N)	0.01860	0.00244	0.32940	0.00238	2.50740	0.00238
	(!CLK * D * !Q * Q_N)	0.01860	0.02656	0.32940	0.03355	2.50740	0.10879
	(!CLK * !D * !Q * Q_N)	0.01860	0.00253	0.32940	0.00246	2.50740	0.00247
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00783	0.32940	0.01244	2.50740	0.05934
	(CLK * !D * !Q * Q_N)	0.01860	0.00316	0.32940	0.00310	2.50740	0.00310
	(!CLK * D * !Q * Q_N)	0.01860	0.02463	0.32940	0.03176	2.50740	0.10662
	(!CLK * !D * !Q * Q_N)	0.01860	0.00327	0.32940	0.00321	2.50740	0.00320

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	0.07860	0.32940	0.09464	2.50740	0.22258
	(CLK * !D * !Q * Q_N)	0.01860	-0.00115	0.32940	-0.00141	2.50740	-0.00150
	(!CLK * D * !Q * Q_N)	0.01860	0.01728	0.32940	0.02449	2.50740	0.09968
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00139	0.32940	-0.00154	2.50740	-0.00160
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.05416	0.32940	0.07000	2.50740	0.19556
	(CLK * !D * !Q * Q_N)	0.01860	-0.00186	0.32940	-0.00212	2.50740	-0.00221
	(!CLK * D * !Q * Q_N)	0.01860	0.01527	0.32940	0.02246	2.50740	0.09724
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00207	0.32940	-0.00225	2.50740	-0.00232

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.02030	0.32940	0.03445	2.50740	0.16046
sg13g2_dfrbp_1	0.01860	0.01982	0.32940	0.03295	2.50740	0.15047

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03816	0.32940	0.05317	2.50740	0.18183
sg13g2_dfrbp_1	0.01860	0.03433	0.32940	0.04841	2.50740	0.17003

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	0.02030	0.32940	0.03445	2.50740	0.16046
	(D * !RESET_B * !Q * Q_N)	0.01860	0.02122	0.32940	0.03527	2.50740	0.16113
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01987	0.32940	0.03400	2.50740	0.15988
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.02127	0.32940	0.03534	2.50740	0.16113
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.02035	0.32940	0.03355	2.50740	0.15112
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01979	0.32940	0.03293	2.50740	0.15045
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01933	0.32940	0.03251	2.50740	0.15006
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01982	0.32940	0.03295	2.50740	0.15047

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	0.03816	0.32940	0.05319	2.50740	0.18193
	(D * RESET_B * !Q * Q_N)	0.01860	0.03816	0.32940	0.05317	2.50740	0.18183
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01970	0.32940	0.03404	2.50740	0.15789
	(!D * RESET_B * Q * !Q_N)	0.01860	0.02062	0.32940	0.11075	2.50740	0.23444
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01965	0.32940	0.03405	2.50740	0.15790
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01970	0.32940	0.03404	2.50740	0.15789
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03435	0.32940	0.04844	2.50740	0.17016
	(D * RESET_B * !Q * Q_N)	0.01860	0.03433	0.32940	0.04841	2.50740	0.17003
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01867	0.32940	0.03214	2.50740	0.14881
	(!D * RESET_B * Q * !Q_N)	0.01860	0.01825	0.32940	0.08676	2.50740	0.20333
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01863	0.32940	0.03219	2.50740	0.14886
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01868	0.32940	0.03214	2.50740	0.14880

DLHQ



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00243	0.00252	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2628.79000	3037.34000	3638.71000

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	0.08149	0.32940	0.06480	0.20633	2.50740	0.30000	0.58615
	GATE->Q (RR)	0.01860	0.00100	0.06932	0.32940	0.06480	0.19285	2.50740	0.30000	0.51721

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	0.07376	0.32940	0.06480	0.18891	2.50740	0.30000	0.52502
	GATE->Q (RF)	0.01860	0.00100	0.07501	0.32940	0.06480	0.18571	2.50740	0.30000	0.45839

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	-0.04401	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.05313
	setup	GATE (F)	0.01860	0.01860	0.04890	1.26300	1.26300	0.11063	2.50740	2.50740	0.12987

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	-0.01712	1.26300	1.26300	0.03238	2.50740	2.50740	0.07674
	setup	GATE (F)	0.01860	0.01860	0.02201	1.26300	1.26300	-0.02698	2.50740	2.50740	-0.07084

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	0.02808	0.32940	0.06480	0.02894	2.50740	0.30000	0.03519
	GATE	0.01860	0.00100	0.02348	0.32940	0.06480	0.02481	2.50740	0.30000	0.03365

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	0.02921	0.32940	0.06480	0.03018	2.50740	0.30000	0.03646
	GATE	0.01860	0.00100	0.02536	0.32940	0.06480	0.02677	2.50740	0.30000	0.02711

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00697	0.32940	0.01689	2.50740	0.10307

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00682	0.32940	0.01691	2.50740	0.10183

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	0.00683	0.32940	0.01668	2.50740	0.10292
	(!GATE * !Q)	0.01860	0.00697	0.32940	0.01689	2.50740	0.10307

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	0.00676	0.32940	0.01695	2.50740	0.10190
	(!GATE * !Q)	0.01860	0.00682	0.32940	0.01691	2.50740	0.10183

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01511	0.32940	0.02760	2.50740	0.13426

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01686	0.32940	0.04089	2.50740	0.14805

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	0.01511	0.32940	0.02760	2.50740	0.13426

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	0.01686	0.32940	0.04089	2.50740	0.14805

DLHRQ



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00226	0.00307	0.00241	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2977.31000	3583.86000	4046.30000

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	0.08570	0.32940	0.06480	0.21221	2.50740	0.30000	0.58789
	GATE->Q (RR)	0.01860	0.00100	0.07653	0.32940	0.06480	0.20237	2.50740	0.30000	0.52401

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	0.07658	0.32940	0.06480	0.19210	2.50740	0.30000	0.53041
	GATE->Q (RF)	0.01860	0.00100	0.07788	0.32940	0.06480	0.18981	2.50740	0.30000	0.46329
	RESET_B->Q (FF)	0.01860	0.00100	0.03191	0.32940	0.06480	0.16308	2.50740	0.30000	0.57255

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	-0.03912	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.04132
	setup	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.09714	2.50740	2.50740	0.11511

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	-0.01956	1.26300	1.26300	0.02968	2.50740	2.50740	0.07674
	setup	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	-0.02429	2.50740	2.50740	-0.07084

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00734	1.26300	1.26300	-0.09174	2.50740	2.50740	-0.15348
	removal	GATE (F)	0.01860	0.01860	0.01223	1.26300	1.26300	0.10524	2.50740	2.50740	0.17709

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	0.00317	0.32940	0.06480	0.00295	2.50740	0.30000	0.00565
	GATE	0.01860	0.00100	0.02359	0.32940	0.06480	0.02464	2.50740	0.30000	0.03673

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	0.00311	0.32940	0.06480	-0.00295	2.50740	0.30000	-0.00565
	GATE	0.01860	0.00100	0.02311	0.32940	0.06480	0.02484	2.50740	0.30000	0.02490
	RESET_B	0.01860	0.00100	0.01297	0.32940	0.06480	0.02495	2.50740	0.30000	0.12364

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.03182	0.32940	0.04226	2.50740	0.13228

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.03000	0.32940	0.05593	2.50740	0.14586

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	0.00674	0.32940	0.01670	2.50740	0.10286
	!RESET_B	0.01860	0.03182	0.32940	0.04226	2.50740	0.13228

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	0.00642	0.32940	0.01658	2.50740	0.10149
	!RESET_B	0.01860	0.03000	0.32940	0.05593	2.50740	0.14586

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	0.00013	0.32940	0.00008	2.50740	0.00008

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	0.00068	0.32940	0.00053	2.50740	0.00048

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	0.00013	0.32940	0.00008	2.50740	0.00008
	(!D * !GATE * !Q)	0.01860	0.00013	0.32940	0.00008	2.50740	0.00008

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	0.00068	0.32940	0.00053	2.50740	0.00048
	(!D * !GATE * !Q)	0.01860	0.00068	0.32940	0.00053	2.50740	0.00048

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01568	0.32940	0.02810	2.50740	0.13457

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01734	0.32940	0.04065	2.50740	0.14770

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	0.02062	0.32940	0.03380	2.50740	0.14863
	(!D * !RESET_B * !Q)	0.01860	0.01568	0.32940	0.02810	2.50740	0.13457

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	0.02235	0.32940	0.03652	2.50740	0.15022
	(!D * RESET_B * !Q)	0.01860	0.01734	0.32940	0.04065	2.50740	0.14770
	(!D * !RESET_B * !Q)	0.01860	0.01735	0.32940	0.04068	2.50740	0.14772

DLHR



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00229	0.00324	0.00250	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3709.30000	4395.05000	4779.23000

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	0.09302	0.32940	0.06480	0.22330	2.50740	0.30000	0.59865
	GATE->Q (RR)	0.01860	0.00100	0.08427	0.32940	0.06480	0.21417	2.50740	0.30000	0.53629

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	0.07975	0.32940	0.06480	0.19649	2.50740	0.30000	0.53221
	GATE->Q (RF)	0.01860	0.00100	0.08098	0.32940	0.06480	0.19414	2.50740	0.30000	0.46301
	RESET_B->Q (FF)	0.01860	0.00100	0.03440	0.32940	0.06480	0.17154	2.50740	0.30000	0.57385

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	0.09698	0.32940	0.06480	0.21985	2.50740	0.30000	0.60164
	GATE->Q_N (RR)	0.01860	0.00100	0.09825	0.32940	0.06480	0.21770	2.50740	0.30000	0.53272
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05159	0.32940	0.06480	0.18910	2.50740	0.30000	0.58419

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	0.11258	0.32940	0.06480	0.22197	2.50740	0.30000	0.55082
	GATE->Q_N (RF)	0.01860	0.00100	0.10369	0.32940	0.06480	0.21276	2.50740	0.30000	0.48841

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	-0.04157	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.04132
	setup	GATE (F)	0.01860	0.01860	0.05135	1.26300	1.26300	0.09444	2.50740	2.50740	0.10921

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	-0.01956	1.26300	1.26300	0.02968	2.50740	2.50740	0.07674
	setup	GATE (F)	0.01860	0.01860	0.02690	1.26300	1.26300	-0.02429	2.50740	2.50740	-0.07084

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	-0.06206	2.50740	2.50740	-0.10626
	removal	GATE (F)	0.01860	0.01860	0.00978	1.26300	1.26300	0.07555	2.50740	2.50740	0.12692

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	0.00979	0.32940	0.06480	0.01003	2.50740	0.30000	0.01144
	GATE	0.01860	0.00100	0.01978	0.32940	0.06480	0.02059	2.50740	0.30000	0.02800

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	0.00924	0.32940	0.06480	0.00234	2.50740	0.30000	0.00324
	GATE	0.01860	0.00100	0.01939	0.32940	0.06480	0.02024	2.50740	0.30000	0.02188
	RESET_B	0.01860	0.00100	0.01394	0.32940	0.06480	0.02079	2.50740	0.30000	0.07875

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	0.00930	0.32940	0.06480	0.00233	2.50740	0.30000	0.00431
	GATE	0.01860	0.00100	0.01941	0.32940	0.06480	0.02069	2.50740	0.30000	0.02229
	RESET_B	0.01860	0.00100	0.01398	0.32940	0.06480	0.02116	2.50740	0.30000	0.07904

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	0.00980	0.32940	0.06480	0.00977	2.50740	0.30000	0.01230
	GATE	0.01860	0.00100	0.01979	0.32940	0.06480	0.02039	2.50740	0.30000	0.02618

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.03121	0.32940	0.04172	2.50740	0.13180

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02990	0.32940	0.05553	2.50740	0.14552

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	0.00670	0.32940	0.01676	2.50740	0.10307
	!RESET_B	0.01860	0.03121	0.32940	0.04172	2.50740	0.13180

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	0.00607	0.32940	0.01633	2.50740	0.10140
	!RESET_B	0.01860	0.02990	0.32940	0.05553	2.50740	0.14552

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	-0.00012	0.32940	-0.00019	2.50740	-0.00019

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00092	0.32940	0.00079	2.50740	0.00074

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	-0.00012	0.32940	-0.00019	2.50740	-0.00019
	(!D * !GATE * !Q)	0.01860	-0.00012	0.32940	-0.00019	2.50740	-0.00019

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00092	0.32940	0.00079	2.50740	0.00074
	(!D * !GATE * !Q)	0.01860	0.00092	0.32940	0.00079	2.50740	0.00074

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01514	0.32940	0.02754	2.50740	0.13424

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01777	0.32940	0.04033	2.50740	0.14755

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	0.02011	0.32940	0.03331	2.50740	0.14847
	(!D * !RESET_B * !Q)	0.01860	0.01514	0.32940	0.02754	2.50740	0.13424

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	0.02298	0.32940	0.03715	2.50740	0.15095
	(!D * RESET_B * !Q)	0.01860	0.01777	0.32940	0.04033	2.50740	0.14755
	(!D * !RESET_B * !Q)	0.01860	0.01779	0.32940	0.04036	2.50740	0.14757

DLLRQ



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00225	0.00311	0.00238	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2977.02000	3585.17000	4046.29000

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	0.08553	0.32940	0.06480	0.21204	2.50740	0.30000	0.58833
	GATE_N->Q (FR)	0.01860	0.00100	0.09306	0.32940	0.06480	0.23341	2.50740	0.30000	0.68219
	RESET_B->Q (RR)	0.01860	0.00100	0.03947	0.32940	0.06480	0.16940	2.50740	0.30000	0.60604

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	0.07616	0.32940	0.06480	0.19031	2.50740	0.30000	0.52455
	GATE_N->Q (FF)	0.01860	0.00100	0.07148	0.32940	0.06480	0.20266	2.50740	0.30000	0.61721
	RESET_B->Q (FF)	0.01860	0.00100	0.03217	0.32940	0.06480	0.16277	2.50740	0.30000	0.57310

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	-0.02934	1.26300	1.26300	-0.05667	2.50740	2.50740	-0.08855
	setup	GATE_N (R)	0.01860	0.01860	0.03912	1.26300	1.26300	0.06206	2.50740	2.50740	0.09445

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	-0.03912	1.26300	1.26300	-0.14031	2.50740	2.50740	-0.20366
	setup	GATE_N (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.18349	2.50740	2.50740	0.27449

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	-0.01467	1.26300	1.26300	-0.01619	2.50740	2.50740	0.00590
	removal	GATE_N (R)	0.01860	0.01860	0.02201	1.26300	1.26300	0.02698	2.50740	2.50740	0.00590

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	0.01309	0.32940	0.06480	0.01403	2.50740	0.30000	0.01972
	GATE_N	0.01860	0.00100	0.02339	0.32940	0.06480	0.01345	2.50740	0.30000	0.01210
	RESET_B	0.01860	0.00100	0.01877	0.32940	0.06480	0.02803	2.50740	0.30000	0.12856

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	0.01857	0.32940	0.06480	0.00022	2.50740	0.30000	0.00167
	GATE_N	0.01860	0.00100	0.02052	0.32940	0.06480	0.01170	2.50740	0.30000	0.01991
	RESET_B	0.01860	0.00100	0.01324	0.32940	0.06480	0.02527	2.50740	0.30000	0.12625

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.02185	0.32940	0.03133	2.50740	0.11752

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01465	0.32940	0.04420	2.50740	0.13424

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	0.00671	0.32940	0.01673	2.50740	0.10304
	!RESET_B	0.01860	0.02185	0.32940	0.03133	2.50740	0.11752

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	0.00621	0.32940	0.01643	2.50740	0.10154
	!RESET_B	0.01860	0.01465	0.32940	0.04420	2.50740	0.13424

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	0.00008	2.50740	0.00007

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	0.00068	0.32940	0.00053	2.50740	0.00048

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	0.00008	2.50740	0.00008
	(!D * GATE_N * !Q)	0.01860	0.00013	0.32940	0.00008	2.50740	0.00007

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	0.00068	0.32940	0.00053	2.50740	0.00048
	(!D * GATE_N * !Q)	0.01860	0.00068	0.32940	0.00053	2.50740	0.00048

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	0.01408	0.32940	0.02653	2.50740	0.13315

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	0.01722	0.32940	0.04062	2.50740	0.14793

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	0.02458	0.32940	0.03675	2.50740	0.14255
	(!D * !RESET_B * !Q)	0.01860	0.01408	0.32940	0.02653	2.50740	0.13315

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	0.02202	0.32940	0.03506	2.50740	0.14074
	(!D * RESET_B * !Q)	0.01860	0.01722	0.32940	0.04062	2.50740	0.14793
	(!D * !RESET_B * !Q)	0.01860	0.01724	0.32940	0.04064	2.50740	0.14796

DLLR



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00229	0.00324	0.00246	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3709.86000	4416.94000	4779.23000

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	0.09393	0.32940	0.06480	0.22406	2.50740	0.30000	0.59934
	GATE_N->Q (FR)	0.01860	0.00100	0.10178	0.32940	0.06480	0.24664	2.50740	0.30000	0.69784

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	0.08054	0.32940	0.06480	0.19717	2.50740	0.30000	0.53286
	GATE_N->Q (FF)	0.01860	0.00100	0.07622	0.32940	0.06480	0.21063	2.50740	0.30000	0.62875
	RESET_B->Q (FF)	0.01860	0.00100	0.03430	0.32940	0.06480	0.17300	2.50740	0.30000	0.52431

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	0.09763	0.32940	0.06480	0.22024	2.50740	0.30000	0.60131
	GATE_N->Q_N (FR)	0.01860	0.00100	0.09337	0.32940	0.06480	0.23408	2.50740	0.30000	0.69663
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05172	0.32940	0.06480	0.19084	2.50740	0.30000	0.58636

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	0.11331	0.32940	0.06480	0.22267	2.50740	0.30000	0.55171
	GATE_N->Q_N (FF)	0.01860	0.00100	0.12106	0.32940	0.06480	0.24534	2.50740	0.30000	0.65056

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	-0.03423	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.06476	2.50740	2.50740	0.09740

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	-0.04157	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.21251
	setup	GATE_N (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.18889	2.50740	2.50740	0.29220

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	-0.00978	1.26300	1.26300	0.01619	2.50740	2.50740	0.06198
	removal	GATE_N (R)	0.01860	0.01860	0.01712	1.26300	1.26300	-0.00540	2.50740	2.50740	-0.05018

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	0.02029	0.32940	0.06480	0.10783	2.50740	0.30000	0.43209
	GATE_N	0.01860	0.00100	0.04295	0.32940	0.06480	0.13034	2.50740	0.30000	0.45143

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	0.02139	0.32940	0.06480	0.08836	2.50740	0.30000	0.41068
	GATE_N	0.01860	0.00100	0.03908	0.32940	0.06480	0.12742	2.50740	0.30000	0.45904
	RESET_B	0.01860	0.00100	0.04444	0.32940	0.06480	0.14348	2.50740	0.30000	0.54888

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	0.02149	0.32940	0.06480	0.08841	2.50740	0.30000	0.40962
	GATE_N	0.01860	0.00100	0.03914	0.32940	0.06480	0.12850	2.50740	0.30000	0.45710
	RESET_B	0.01860	0.00100	0.04448	0.32940	0.06480	0.14460	2.50740	0.30000	0.54330

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	0.02031	0.32940	0.06480	0.10730	2.50740	0.30000	0.43182
	GATE_N	0.01860	0.00100	0.04298	0.32940	0.06480	0.13004	2.50740	0.30000	0.45310

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.03256	0.32940	0.04284	2.50740	0.13287

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02850	0.32940	0.06014	2.50740	0.15017

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	0.00672	0.32940	0.01674	2.50740	0.10310
	!RESET_B	0.01860	0.03256	0.32940	0.04284	2.50740	0.13287

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	0.00606	0.32940	0.01630	2.50740	0.10141
	!RESET_B	0.01860	0.02850	0.32940	0.06014	2.50740	0.15017

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	-0.00011	0.32940	-0.00018	2.50740	-0.00018

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	0.00092	0.32940	0.00079	2.50740	0.00073

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	-0.00011	0.32940	-0.00018	2.50740	-0.00018
	(!D * GATE_N * !Q)	0.01860	-0.00011	0.32940	-0.00018	2.50740	-0.00018

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	0.00092	0.32940	0.00079	2.50740	0.00074
	(!D * GATE_N * !Q)	0.01860	0.00092	0.32940	0.00079	2.50740	0.00073

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	0.01092	0.32940	0.04052	2.50740	0.14709

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	0.01571	0.32940	0.02887	2.50740	0.13606

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	0.02498	0.32940	0.03710	2.50740	0.14303
	(!D * RESET_B * !Q)	0.01860	0.01092	0.32940	0.04052	2.50740	0.14709
	(!D * !RESET_B * !Q)	0.01860	0.01094	0.32940	0.04054	2.50740	0.14710

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	0.02265	0.32940	0.03563	2.50740	0.14128
	(!D * !RESET_B * !Q)	0.01860	0.01571	0.32940	0.02887	2.50740	0.13606

DLY1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00150	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	1089.99000	1219.20000	1348.41000

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	0.05417	0.32940	0.06480	0.17021	2.50740	0.30000	0.45297

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	0.06188	0.32940	0.06480	0.19819	2.50740	0.30000	0.65645

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	0.02362	0.32940	0.06480	0.03080	2.50740	0.30000	0.09083

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	0.02248	0.32940	0.06480	0.03001	2.50740	0.30000	0.09101

DLY2



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00151	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	1542.41000	1671.65000	1800.89000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	0.08309	0.32940	0.06480	0.20993	2.50740	0.30000	0.52339

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	0.09189	0.32940	0.06480	0.24223	2.50740	0.30000	0.71501

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	0.02880	0.32940	0.06480	0.03496	2.50740	0.30000	0.09173

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	0.02799	0.32940	0.06480	0.03426	2.50740	0.30000	0.09196

DLY4



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00146	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	3719.04000	3848.27000	3977.51000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	0.18321	0.32940	0.06480	0.33089	2.50740	0.30000	0.70428

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	0.18517	0.32940	0.06480	0.36280	2.50740	0.30000	0.88445

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	0.04394	0.32940	0.06480	0.04706	2.50740	0.30000	0.10035

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	0.04367	0.32940	0.06480	0.04665	2.50740	0.30000	0.10055

EINVIN_x



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00792	0.00987	1.20000
sg13g2_einvn_2	0.00397	0.00517	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	4387.33000	5429.25000	6471.17000
sg13g2_einvn_2	2203.90000	2724.87000	3245.84000

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	0.01097	0.01388	0.32940	0.26917	0.29512	2.50740	1.20997	1.60002
	TE_B->Z (RR)	0.01860	0.01097	0.02908	0.32940	0.26917	0.07101	2.50740	1.20997	0.14272
	TE_B->Z (FR)	0.01860	0.01097	0.01708	0.32940	0.26917	0.25539	2.50740	1.20997	1.24911
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00606	0.01495	0.32940	0.13466	0.29465	2.50740	0.60506	1.59620
	TE_B->Z (RR)	0.01860	0.00606	0.02792	0.32940	0.13466	0.06639	2.50740	0.60506	0.13124
	TE_B->Z (FR)	0.01860	0.00606	0.01771	0.32940	0.13466	0.25543	2.50740	0.60506	1.25046

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01549	0.01289	0.32940	0.27369	0.25763	2.50740	1.21449	1.40176
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00841	0.01380	0.32940	0.13701	0.25747	2.50740	0.60741	1.40439

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	0.01097	0.02066	0.32940	0.26917	0.03689	2.50740	1.20997	0.19107
	TE_B	0.01860	0.01097	0.03614	0.32940	0.26917	0.02727	2.50740	1.20997	0.02189
sg13g2_einvn_2	A	0.01860	0.00606	0.01050	0.32940	0.13466	0.01829	2.50740	0.60506	0.09391
	TE_B	0.01860	0.00606	0.01770	0.32940	0.13466	0.01340	2.50740	0.60506	0.01060

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_4	A	0.01860	0.01549	0.01828	0.32940	0.27369	0.03315	2.50740	1.21449	0.16493
sg13g2_einvn_2	A	0.01860	0.00841	0.00927	0.32940	0.13701	0.01672	2.50740	0.60741	0.08450

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	-0.00275	0.32940	0.00811	2.50740	0.12379
sg13g2_einvn_2	0.01860	-0.00108	0.32940	0.00524	2.50740	0.07007

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	0.02241	0.32940	0.04362	2.50740	0.15971
sg13g2_einvn_2	0.01860	0.01165	0.32940	0.02282	2.50740	0.08766

FILLx



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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

INx



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.05034	4.80000
sg13g2_inv_8	0.02457	2.40000
sg13g2_inv_4	0.01230	1.20000
sg13g2_inv_2	0.00614	0.60000
sg13g2_inv_1	0.00308	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3337.24000	7505.02000	11672.80000
sg13g2_inv_8	1668.63000	3752.51000	5836.38000
sg13g2_inv_4	834.31200	1876.25000	2918.19000
sg13g2_inv_2	417.15600	938.12800	1459.10000
sg13g2_inv_1	208.57800	469.06200	729.54700

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	0.00892	0.32940	1.03680	0.20630	2.50740	4.80000	1.13583
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.00881	0.32940	0.51840	0.20572	2.50740	2.40000	1.13405
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.00899	0.32940	0.25920	0.20544	2.50740	1.20000	1.13310
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.00975	0.32940	0.12960	0.20503	2.50740	0.60000	1.13240
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01138	0.32940	0.06480	0.20507	2.50740	0.30000	1.13037

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	0.00871	0.32940	1.03680	0.19155	2.50740	4.80000	1.06186
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.00862	0.32940	0.51840	0.19165	2.50740	2.40000	1.06509
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.00877	0.32940	0.25920	0.19140	2.50740	1.20000	1.06257
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.00944	0.32940	0.12960	0.18996	2.50740	0.60000	1.05436
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01092	0.32940	0.06480	0.19013	2.50740	0.30000	1.05450

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	0.04799	0.32940	1.03680	0.14506	2.50740	4.80000	1.03285
sg13g2_inv_8	A	0.01860	0.00100	0.02306	0.32940	0.51840	0.06948	2.50740	2.40000	0.51398
sg13g2_inv_4	A	0.01860	0.00100	0.01148	0.32940	0.25920	0.03521	2.50740	1.20000	0.25869
sg13g2_inv_2	A	0.01860	0.00100	0.00574	0.32940	0.12960	0.01756	2.50740	0.60000	0.13147
sg13g2_inv_1	A	0.01860	0.00100	0.00313	0.32940	0.06480	0.00898	2.50740	0.30000	0.06553

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	0.03791	0.32940	1.03680	0.12551	2.50740	4.80000	0.97131
sg13g2_inv_8	A	0.01860	0.00100	0.01811	0.32940	0.51840	0.06152	2.50740	2.40000	0.46935
sg13g2_inv_4	A	0.01860	0.00100	0.00905	0.32940	0.25920	0.03075	2.50740	1.20000	0.23822
sg13g2_inv_2	A	0.01860	0.00100	0.00457	0.32940	0.12960	0.01534	2.50740	0.60000	0.11936
sg13g2_inv_1	A	0.01860	0.00100	0.00276	0.32940	0.06480	0.00799	2.50740	0.30000	0.06030

ITL



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.01579	0.01667	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	8566.04000	10649.90000	12733.80000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_einvn_8	A->Z (FR)	0.01860	0.02090	0.01347	0.32940	0.53830	0.29667	2.50740	2.41990	1.60509
	TE_B->Z (RR)	0.01860	0.02090	0.03823	0.32940	0.53830	0.09796	2.50740	2.41990	0.21112
	TE_B->Z (FR)	0.01860	0.02090	0.01822	0.32940	0.53830	0.25777	2.50740	2.41990	1.25299

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	0.02989	0.01282	0.32940	0.54729	0.25911	2.50740	2.42889	1.41418

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	0.02090	0.03985	0.32940	0.53830	0.07481	2.50740	2.41990	0.38695
	TE_B	0.01860	0.02090	0.08170	0.32940	0.53830	0.05675	2.50740	2.41990	0.04366

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	0.02989	0.03517	0.32940	0.54729	0.06486	2.50740	2.42889	0.33264

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	-0.00881	0.32940	-0.00098	2.50740	0.11109

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	0.03202	0.32940	0.06654	2.50740	0.18065

KEEPSTATE



*sg13g2_stdcell_fast_1p65V_m40C Cell Library:
Process sg13g2_stdcell_fast_1p65V_m40C,
Voltage 1.65, 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	116.26700	1502.82000	2889.37000

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_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00213	0.00214	0.00569	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	1907.10000	2302.08000	2933.22000

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	0.03607	0.32940	0.06480	0.17619	2.50740	0.30000	0.58671
	A1->X (RR)	0.01860	0.00100	0.02933	0.32940	0.06480	0.17784	2.50740	0.30000	0.59004
	S->X (-R)	0.01860	0.00100	0.03960	0.32940	0.06480	0.16995	2.50740	0.30000	0.57905

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	0.03336	0.32940	0.06480	0.19231	2.50740	0.30000	0.67237
	A1->X (FF)	0.01860	0.00100	0.04475	0.32940	0.06480	0.19466	2.50740	0.30000	0.68259
	S->X (-F)	0.01860	0.00100	0.05006	0.32940	0.06480	0.18103	2.50740	0.30000	0.63615

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	0.03960	0.32940	0.06480	0.16995	2.50740	0.30000	0.57905
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.05634	0.32940	0.06480	0.18502	2.50740	0.30000	0.56802

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	0.05006	0.32940	0.06480	0.18103	2.50740	0.30000	0.63615
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.06499	0.32940	0.06480	0.18469	2.50740	0.30000	0.52284

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	0.01931	0.32940	0.06480	0.02826	2.50740	0.30000	0.11370
	A1	0.01860	0.00100	0.02003	0.32940	0.06480	0.03386	2.50740	0.30000	0.11904
	S	0.01860	0.00100	0.01832	0.32940	0.06480	0.02697	2.50740	0.30000	0.11802

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	0.02096	0.32940	0.06480	0.03619	2.50740	0.30000	0.11772
	A1	0.01860	0.00100	0.01970	0.32940	0.06480	0.02900	2.50740	0.30000	0.11383
	S	0.01860	0.00100	0.01775	0.32940	0.06480	0.02667	2.50740	0.30000	0.11653

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	0.01833	0.32940	0.06480	0.01862	2.50740	0.30000	0.02368
	S	(!A0 * A1)	0.01860	0.00100	0.01832	0.32940	0.06480	0.02697	2.50740	0.30000	0.11802

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	0.01825	0.32940	0.06480	0.01868	2.50740	0.30000	0.02358
	S	(!A0 * A1)	0.01860	0.00100	0.01775	0.32940	0.06480	0.02667	2.50740	0.30000	0.11653

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00784	0.32940	0.01745	2.50740	0.10340

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00799	0.32940	0.01795	2.50740	0.10273

MUX4



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00303	0.00303	0.00303	0.00303	0.00862	0.00525	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	2333.77000	3933.03000	5424.77000

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	0.06398	0.32940	0.06480	0.21359	2.50740	0.30000	0.69270
	A1->X (RR)	0.01860	0.00100	0.06267	0.32940	0.06480	0.21276	2.50740	0.30000	0.69071
	A2->X (RR)	0.01860	0.00100	0.06589	0.32940	0.06480	0.21839	2.50740	0.30000	0.70013
	A3->X (RR)	0.01860	0.00100	0.06491	0.32940	0.06480	0.21779	2.50740	0.30000	0.69985
	S0->X (-R)	0.01860	0.00100	0.05428	0.32940	0.06480	0.22007	2.50740	0.30000	0.70396
	S1->X (-R)	0.01860	0.00100	-0.00957	0.32940	0.06480	0.17602	2.50740	0.30000	0.61459

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	0.07105	0.32940	0.06480	0.21223	2.50740	0.30000	0.65038
	A1->X (FF)	0.01860	0.00100	0.07148	0.32940	0.06480	0.21297	2.50740	0.30000	0.65180
	A2->X (FF)	0.01860	0.00100	0.07472	0.32940	0.06480	0.21829	2.50740	0.30000	0.66188
	A3->X (FF)	0.01860	0.00100	0.07547	0.32940	0.06480	0.21820	2.50740	0.30000	0.66111
	S0->X (-F)	0.01860	0.00100	0.06294	0.32940	0.06480	0.22343	2.50740	0.30000	0.69425
	S1->X (-F)	0.01860	0.00100	-0.00682	0.32940	0.06480	0.17749	2.50740	0.30000	0.62673

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	0.05428	0.32940	0.06480	0.22007	2.50740	0.30000	0.70396
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.05181	0.32940	0.06480	0.21273	2.50740	0.30000	0.68982
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.08025	0.32940	0.06480	0.22631	2.50740	0.30000	0.64024
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.07839	0.32940	0.06480	0.22304	2.50740	0.30000	0.63517
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.01101	0.32940	0.06480	0.17597	2.50740	0.30000	0.61378
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00957	0.32940	0.06480	0.17602	2.50740	0.30000	0.61459
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.01101	0.32940	0.06480	0.18022	2.50740	0.30000	0.57859
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00958	0.32940	0.06480	0.18024	2.50740	0.30000	0.57870

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	0.06294	0.32940	0.06480	0.22343	2.50740	0.30000	0.69425
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.05793	0.32940	0.06480	0.21461	2.50740	0.30000	0.67559
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.08469	0.32940	0.06480	0.22474	2.50740	0.30000	0.60354
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.08067	0.32940	0.06480	0.21939	2.50740	0.30000	0.59597
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00682	0.32940	0.06480	0.17749	2.50740	0.30000	0.62673
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.01151	0.32940	0.06480	0.17665	2.50740	0.30000	0.62514
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00766	0.32940	0.06480	0.17813	2.50740	0.30000	0.54390
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.01150	0.32940	0.06480	0.17788	2.50740	0.30000	0.54398

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	0.02392	0.32940	0.06480	0.02949	2.50740	0.30000	0.11425
	A1	0.01860	0.00100	0.02314	0.32940	0.06480	0.02870	2.50740	0.30000	0.11219
	A2	0.01860	0.00100	0.02437	0.32940	0.06480	0.02983	2.50740	0.30000	0.11331
	A3	0.01860	0.00100	0.03031	0.32940	0.06480	0.03576	2.50740	0.30000	0.11881
	S0	0.01860	0.00100	0.01519	0.32940	0.06480	0.02379	2.50740	0.30000	0.10291
	S1	0.01860	0.00100	0.02074	0.32940	0.06480	0.06287	2.50740	0.30000	0.11571

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	0.02459	0.32940	0.06480	0.02990	2.50740	0.30000	0.11267
	A1	0.01860	0.00100	0.03164	0.32940	0.06480	0.03711	2.50740	0.30000	0.12093
	A2	0.01860	0.00100	0.03486	0.32940	0.06480	0.04013	2.50740	0.30000	0.12429
	A3	0.01860	0.00100	0.02659	0.32940	0.06480	0.03182	2.50740	0.30000	0.11453
	S0	0.01860	0.00100	0.03253	0.32940	0.06480	0.02933	2.50740	0.30000	-0.03754
	S1	0.01860	0.00100	0.01940	0.32940	0.06480	0.06447	2.50740	0.30000	0.13115

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	0.03171	0.32940	0.06480	0.01559	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03157	0.32940	0.06480	0.01572	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01521	0.32940	0.06480	0.02455	2.50740	0.30000	0.10392
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01519	0.32940	0.06480	0.02379	2.50740	0.30000	0.10291
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01748	0.32940	0.06480	0.07193	2.50740	0.30000	0.12567
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02074	0.32940	0.06480	0.06287	2.50740	0.30000	0.11571
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01763	0.32940	0.06480	0.06048	2.50740	0.30000	0.12655
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.02074	0.32940	0.06480	0.05249	2.50740	0.30000	0.11812

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	0.03273	0.32940	0.06480	0.02842	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03253	0.32940	0.06480	0.02933	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01738	0.32940	0.06480	0.02017	2.50740	0.30000	0.09955
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01724	0.32940	0.06480	0.02025	2.50740	0.30000	0.09627
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.02900	0.32940	0.06480	0.05319	2.50740	0.30000	0.10784
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02066	0.32940	0.06480	0.07314	2.50740	0.30000	0.12810
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.02264	0.32940	0.06480	0.04629	2.50740	0.30000	0.11183
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01940	0.32940	0.06480	0.06447	2.50740	0.30000	0.13115

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01500	0.32940	0.03577	2.50740	0.21738

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01403	0.32940	0.04135	2.50740	0.22081

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	0.01403	0.32940	0.03537	2.50740	0.21737
	(A0 * A1 * !S1)	0.01860	0.01500	0.32940	0.03577	2.50740	0.21738
	(!A2 * !A3 * S1)	0.01860	0.01427	0.32940	0.03584	2.50740	0.21775
	(!A0 * !A1 * !S1)	0.01860	0.01578	0.32940	0.03677	2.50740	0.21826

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	0.01426	0.32940	0.04189	2.50740	0.22148
	(A0 * A1 * !S1)	0.01860	0.01534	0.32940	0.04475	2.50740	0.22394
	(!A2 * !A3 * S1)	0.01860	0.01403	0.32940	0.04135	2.50740	0.22081
	(!A0 * !A1 * !S1)	0.01860	0.01351	0.32940	0.03511	2.50740	0.21407

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00831	0.32940	0.02067	2.50740	0.12391

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00836	0.32940	0.02125	2.50740	0.12281

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	0.00831	0.32940	0.02067	2.50740	0.12391
	(A0 * A2 * !S0)	0.01860	0.00829	0.32940	0.02065	2.50740	0.12389
	(!A1 * !A3 * S0)	0.01860	0.00821	0.32940	0.02088	2.50740	0.12402
	(!A0 * !A2 * !S0)	0.01860	0.00819	0.32940	0.02086	2.50740	0.12399

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	0.00836	0.32940	0.02126	2.50740	0.12284
	(A0 * A2 * !S0)	0.01860	0.00836	0.32940	0.02125	2.50740	0.12281
	(!A1 * !A3 * S0)	0.01860	0.00860	0.32940	0.02122	2.50740	0.12273
	(!A0 * !A2 * !S0)	0.01860	0.00859	0.32940	0.02121	2.50740	0.12271

NAND2B1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00253	0.00334	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	357.06600	1055.54000	1612.75000

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	0.02685	0.32940	0.06480	0.15561	2.50740	0.30000	0.58825
	B->Y (FR)	0.01860	0.00100	0.01480	0.32940	0.06480	0.20897	2.50740	0.30000	1.12647

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	0.03190	0.32940	0.06480	0.20297	2.50740	0.30000	0.79322
	B->Y (RF)	0.01860	0.00100	0.01936	0.32940	0.06480	0.22919	2.50740	0.30000	1.21101

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	0.00340	0.32940	0.06480	0.00377	2.50740	0.30000	0.00423
	B	0.01860	0.00100	0.00366	0.32940	0.06480	0.00868	2.50740	0.30000	0.05946

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	0.00799	0.32940	0.06480	0.00824	2.50740	0.30000	0.00974
	B	0.01860	0.00100	0.00780	0.32940	0.06480	0.01140	2.50740	0.30000	0.05626

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	0.00804	0.32940	0.01830	2.50740	0.10502

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	0.00399	0.32940	0.01419	2.50740	0.09955

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	0.00804	0.32940	0.01830	2.50740	0.10502

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	0.00399	0.32940	0.01419	2.50740	0.09955

NAND2



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00304	0.00318	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	203.41400	841.74700	1459.09000

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	0.01271	0.32940	0.06480	0.20502	2.50740	0.30000	1.11473
	B->Y (FR)	0.01860	0.00100	0.01497	0.32940	0.06480	0.20800	2.50740	0.30000	1.12360

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	0.01652	0.32940	0.06480	0.25608	2.50740	0.30000	1.40374
	B->Y (RF)	0.01860	0.00100	0.01795	0.32940	0.06480	0.22803	2.50740	0.30000	1.20987

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	0.00342	0.32940	0.06480	0.00813	2.50740	0.30000	0.05485
	B	0.01860	0.00100	0.00341	0.32940	0.06480	0.00832	2.50740	0.30000	0.05887

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	0.00396	0.32940	0.06480	0.00821	2.50740	0.30000	0.05057
	B	0.01860	0.00100	0.00740	0.32940	0.06480	0.01123	2.50740	0.30000	0.05680

NAND3B1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00244	0.00318	0.00323	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	361.01500	1221.45000	2342.28000

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	0.02801	0.32940	0.06480	0.15540	2.50740	0.30000	0.58579
	B->Y (FR)	0.01860	0.00100	0.01640	0.32940	0.06480	0.20956	2.50740	0.30000	1.11480
	C->Y (FR)	0.01860	0.00100	0.01771	0.32940	0.06480	0.21207	2.50740	0.30000	1.12222

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	0.03788	0.32940	0.06480	0.26337	2.50740	0.30000	1.05538
	B->Y (RF)	0.01860	0.00100	0.02833	0.32940	0.06480	0.29904	2.50740	0.30000	1.55382
	C->Y (RF)	0.01860	0.00100	0.03079	0.32940	0.06480	0.27613	2.50740	0.30000	1.36079

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	0.00365	0.32940	0.06480	0.00404	2.50740	0.30000	0.00486
	B	0.01860	0.00100	0.00422	0.32940	0.06480	0.00838	2.50740	0.30000	0.05112
	C	0.01860	0.00100	0.00459	0.32940	0.06480	0.00872	2.50740	0.30000	0.05442

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	0.01007	0.32940	0.06480	0.01004	2.50740	0.30000	0.01030
	B	0.01860	0.00100	0.00980	0.32940	0.06480	0.01249	2.50740	0.30000	0.04866
	C	0.01860	0.00100	0.01340	0.32940	0.06480	0.01611	2.50740	0.30000	0.05917

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	0.00791	0.32940	0.01819	2.50740	0.10487

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	0.00404	0.32940	0.01423	2.50740	0.09956

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	0.00791	0.32940	0.01819	2.50740	0.10487

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	0.00404	0.32940	0.01423	2.50740	0.09956

NOR2



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00321	0.00304	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	417.15700	843.97800	1338.85000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02101	0.32940	0.06480	0.26420	2.50740	0.30000	1.36900
	B->Y (FR)	0.01860	0.00100	0.01877	0.32940	0.06480	0.29623	2.50740	0.30000	1.60773

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	0.01435	0.32940	0.06480	0.19328	2.50740	0.30000	1.04780
	B->Y (RF)	0.01860	0.00100	0.01223	0.32940	0.06480	0.19022	2.50740	0.30000	1.03808

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	0.00842	0.32940	0.06480	0.01242	2.50740	0.30000	0.06132
	B	0.01860	0.00100	0.00410	0.32940	0.06480	0.00869	2.50740	0.30000	0.05355

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	0.00328	0.32940	0.06480	0.00749	2.50740	0.30000	0.05219
	B	0.01860	0.00100	0.00321	0.32940	0.06480	0.00742	2.50740	0.30000	0.04856

NOR3



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00321	0.00313	0.00300	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	625.73500	1142.51000	1989.34000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.03543	0.32940	0.06480	0.33705	2.50740	0.30000	1.62263
	B->Y (FR)	0.01860	0.00100	0.03323	0.32940	0.06480	0.36220	2.50740	0.30000	1.83744
	C->Y (FR)	0.01860	0.00100	0.02599	0.32940	0.06480	0.37933	2.50740	0.30000	2.01776

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	0.01628	0.32940	0.06480	0.19692	2.50740	0.30000	1.04692
	B->Y (RF)	0.01860	0.00100	0.01592	0.32940	0.06480	0.19506	2.50740	0.30000	1.04257
	C->Y (RF)	0.01860	0.00100	0.01375	0.32940	0.06480	0.19180	2.50740	0.30000	1.03391

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	0.01426	0.32940	0.06480	0.01686	2.50740	0.30000	0.06051
	B	0.01860	0.00100	0.01030	0.32940	0.06480	0.01310	2.50740	0.30000	0.04994
	C	0.01860	0.00100	0.00591	0.32940	0.06480	0.00969	2.50740	0.30000	0.04704

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	0.00421	0.32940	0.06480	0.00777	2.50740	0.30000	0.04823
	B	0.01860	0.00100	0.00397	0.32940	0.06480	0.00742	2.50740	0.30000	0.04465
	C	0.01860	0.00100	0.00356	0.32940	0.06480	0.00718	2.50740	0.30000	0.04143

NOR4



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00322	0.00310	0.00263	0.00267	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	715.11300	1525.04000	2642.37000

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	0.05362	0.32940	0.06480	0.42368	2.50740	0.30000	1.93297
	B->Y (FR)	0.01860	0.00100	0.05153	0.32940	0.06480	0.43994	2.50740	0.30000	2.08945
	C->Y (FR)	0.01860	0.00100	0.04484	0.32940	0.06480	0.45633	2.50740	0.30000	2.27116
	D->Y (FR)	0.01860	0.00100	0.03239	0.32940	0.06480	0.46362	2.50740	0.30000	2.40211

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	0.01707	0.32940	0.06480	0.19989	2.50740	0.30000	1.04738
	B->Y (RF)	0.01860	0.00100	0.01749	0.32940	0.06480	0.19862	2.50740	0.30000	1.04582
	C->Y (RF)	0.01860	0.00100	0.01686	0.32940	0.06480	0.19569	2.50740	0.30000	1.03696
	D->Y (RF)	0.01860	0.00100	0.01456	0.32940	0.06480	0.19224	2.50740	0.30000	1.02896

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	0.01632	0.32940	0.06480	0.01786	2.50740	0.30000	0.05805
	B	0.01860	0.00100	0.01490	0.32940	0.06480	0.01654	2.50740	0.30000	0.05142
	C	0.01860	0.00100	0.01219	0.32940	0.06480	0.01433	2.50740	0.30000	0.04635
	D	0.01860	0.00100	0.00892	0.32940	0.06480	0.01221	2.50740	0.30000	0.04510

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	0.00512	0.32940	0.06480	0.00815	2.50740	0.30000	0.04597
	B	0.01860	0.00100	0.00531	0.32940	0.06480	0.00841	2.50740	0.30000	0.04332
	C	0.01860	0.00100	0.00256	0.32940	0.06480	0.00559	2.50740	0.30000	0.03759
	D	0.01860	0.00100	0.00138	0.32940	0.06480	0.00473	2.50740	0.30000	0.03549

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00016	0.32940	-0.00011	2.50740	-0.00016

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00296	0.32940	0.00294	2.50740	0.00299

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	0.00016	0.32940	-0.00011	2.50740	-0.00016

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00296	0.32940	0.00294	2.50740	0.00299

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00016	0.32940	-0.00038	2.50740	-0.00042

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00047	0.32940	0.00050	2.50740	0.00050

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	-0.00016	0.32940	-0.00038	2.50740	-0.00042

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	0.00047	0.32940	0.00050	2.50740	0.00050

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00195	0.32940	0.00198	2.50740	0.00198

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00073	0.32940	-0.00073	2.50740	-0.00073

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	0.00195	0.32940	0.00198	2.50740	0.00198

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	-0.00073	0.32940	-0.00073	2.50740	-0.00073

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00242	0.32940	0.00244	2.50740	0.00243

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00184	0.32940	-0.00186	2.50740	-0.00187

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	0.00242	0.32940	0.00244	2.50740	0.00243

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	-0.00184	0.32940	-0.00186	2.50740	-0.00187

NP_ANT



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00104

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	8.16746	8.16746	8.16746

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	-0.00055	0.32940	-0.00056	2.50740	-0.00057

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00056	0.32940	0.00057	2.50740	0.00057

OR2



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00248	0.00243	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	696.05300	922.82600	1113.94000

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	0.02890	0.32940	0.06480	0.16093	2.50740	0.30000	0.57132
	B->X (RR)	0.01860	0.00100	0.02676	0.32940	0.06480	0.15062	2.50740	0.30000	0.50381

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	0.04225	0.32940	0.06480	0.16689	2.50740	0.30000	0.59380
	B->X (FF)	0.01860	0.00100	0.03991	0.32940	0.06480	0.17971	2.50740	0.30000	0.66778

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	0.01106	0.32940	0.06480	0.01980	2.50740	0.30000	0.09814
	B	0.01860	0.00100	0.01116	0.32940	0.06480	0.01951	2.50740	0.30000	0.09502

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	0.01512	0.32940	0.06480	0.02267	2.50740	0.30000	0.09661
	B	0.01860	0.00100	0.01182	0.32940	0.06480	0.02032	2.50740	0.30000	0.09286

OR3



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00273	0.00269	0.00261	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	703.25700	1119.61000	1554.28000

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	0.03282	0.32940	0.06480	0.17612	2.50740	0.30000	0.62131
	B->X (RR)	0.01860	0.00100	0.03147	0.32940	0.06480	0.16655	2.50740	0.30000	0.55451
	C->X (RR)	0.01860	0.00100	0.02871	0.32940	0.06480	0.15512	2.50740	0.30000	0.49915

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	0.05931	0.32940	0.06480	0.17923	2.50740	0.30000	0.59614
	B->X (FF)	0.01860	0.00100	0.05683	0.32940	0.06480	0.19335	2.50740	0.30000	0.67489
	C->X (FF)	0.01860	0.00100	0.04986	0.32940	0.06480	0.19836	2.50740	0.30000	0.71709

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	0.01201	0.32940	0.06480	0.02000	2.50740	0.30000	0.10190
	B	0.01860	0.00100	0.01166	0.32940	0.06480	0.01914	2.50740	0.30000	0.09521
	C	0.01860	0.00100	0.01143	0.32940	0.06480	0.01957	2.50740	0.30000	0.09156

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	0.02181	0.32940	0.06480	0.02708	2.50740	0.30000	0.10571
	B	0.01860	0.00100	0.01828	0.32940	0.06480	0.02440	2.50740	0.30000	0.09710
	C	0.01860	0.00100	0.01439	0.32940	0.06480	0.02155	2.50740	0.30000	0.09274

OR4



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00276	0.00273	0.00221	0.00229	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	706.98800	1314.75000	1993.46000

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	0.03418	0.32940	0.06480	0.18200	2.50740	0.30000	0.61785
	B->X (RR)	0.01860	0.00100	0.03392	0.32940	0.06480	0.17498	2.50740	0.30000	0.56015
	C->X (RR)	0.01860	0.00100	0.03230	0.32940	0.06480	0.16576	2.50740	0.30000	0.50640
	D->X (RR)	0.01860	0.00100	0.02931	0.32940	0.06480	0.15453	2.50740	0.30000	0.45951

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	0.08189	0.32940	0.06480	0.20294	2.50740	0.30000	0.64729
	B->X (FF)	0.01860	0.00100	0.07949	0.32940	0.06480	0.21396	2.50740	0.30000	0.72302
	C->X (FF)	0.01860	0.00100	0.07272	0.32940	0.06480	0.22265	2.50740	0.30000	0.77585
	D->X (FF)	0.01860	0.00100	0.06092	0.32940	0.06480	0.22373	2.50740	0.30000	0.80058

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	0.01332	0.32940	0.06480	0.02033	2.50740	0.30000	0.09869
	B	0.01860	0.00100	0.01331	0.32940	0.06480	0.01989	2.50740	0.30000	0.09067
	C	0.01860	0.00100	0.01052	0.32940	0.06480	0.01686	2.50740	0.30000	0.08205
	D	0.01860	0.00100	0.00967	0.32940	0.06480	0.01644	2.50740	0.30000	0.08083

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	0.02187	0.32940	0.06480	0.02422	2.50740	0.30000	0.10102
	B	0.01860	0.00100	0.02217	0.32940	0.06480	0.02544	2.50740	0.30000	0.09501
	C	0.01860	0.00100	0.02021	0.32940	0.06480	0.02445	2.50740	0.30000	0.08858
	D	0.01860	0.00100	0.01571	0.32940	0.06480	0.02109	2.50740	0.30000	0.08422

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00041	0.32940	-0.00044	2.50740	-0.00047

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00497	0.32940	0.00496	2.50740	0.00497

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	-0.00041	0.32940	-0.00044	2.50740	-0.00047

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	0.00497	0.32940	0.00496	2.50740	0.00497

Passive power(pJ) for B rising :

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

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00118	0.32940	0.00121	2.50740	0.00122

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	-0.00071	0.32940	-0.00071	2.50740	-0.00071

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	0.00118	0.32940	0.00121	2.50740	0.00122

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00148	0.32940	0.00151	2.50740	0.00152

Passive power(pJ) for C falling :

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

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	0.00148	0.32940	0.00151	2.50740	0.00152

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	-0.00034	0.32940	-0.00034	2.50740	-0.00034

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00193	0.32940	0.00194	2.50740	0.00194

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00024	0.32940	0.00025	2.50740	0.00029

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	0.00193	0.32940	0.00194	2.50740	0.00194

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	0.00024	0.32940	0.00025	2.50740	0.00029

SDFRRS



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00187	0.00211	0.00363	0.00179	0.00547	0.00332	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	5790.43000	6734.89000	7421.59000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.13236	0.32940	0.06480	0.26160	2.50740	0.30000	0.64534
	SET_B->Q (FR)	0.01860	0.00100	0.05680	0.32940	0.06480	0.20384	2.50740	0.30000	0.63293

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	0.11233	0.32940	0.06480	0.23315	2.50740	0.30000	0.58503
	RESET_B->Q (FF)	0.01860	0.00100	0.09497	0.32940	0.06480	0.22849	2.50740	0.30000	0.61698

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	0.13236	0.32940	0.06480	0.26160	2.50740	0.30000	0.64534

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	0.11233	0.32940	0.06480	0.23315	2.50740	0.30000	0.58503

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	0.09284	0.32940	0.06480	0.23583	2.50740	0.30000	0.63650
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07484	0.32940	0.06480	0.23474	2.50740	0.30000	0.67533

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	0.11088	0.32940	0.06480	0.24687	2.50740	0.30000	0.58757
	SET_B->Q_N (FF)	0.01860	0.00100	0.03862	0.32940	0.06480	0.18813	2.50740	0.30000	0.57675

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	0.09284	0.32940	0.06480	0.23583	2.50740	0.30000	0.63650

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	0.11088	0.32940	0.06480	0.24687	2.50740	0.30000	0.58757

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	-0.04157	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.20070
	setup	CLK (R)	0.01860	0.01860	0.05868	1.26300	1.26300	0.15920	2.50740	2.50740	0.21841

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	-0.04401	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.17414
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.18619	2.50740	2.50740	0.28925

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	-0.05379	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.22727
	setup	CLK (R)	0.01860	0.01860	0.07091	1.26300	1.26300	0.17269	2.50740	2.50740	0.23908

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	-0.05868	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.16234
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.17809	2.50740	2.50740	0.27449

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	-0.04401	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.26269
	setup	CLK (R)	0.01860	0.01860	0.06358	1.26300	1.26300	0.19698	2.50740	2.50740	0.29515

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	-0.04401	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.07674
	setup	CLK (R)	0.01860	0.01860	0.07336	1.26300	1.26300	0.13492	2.50740	2.50740	0.19185

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	0.03668	1.26300	1.26300	0.06746	2.50740	2.50740	0.08855
	removal	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.04317	2.50740	2.50740	-0.04722

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	0.01467	1.26300	1.26300	0.24825	2.50740	2.50740	0.55784
	removal	CLK (R)	0.01860	0.01860	0.01467	1.26300	1.26300	0.02968	2.50740	2.50740	0.02066
	hold	RESET_B (R)	0.01860	0.01860	-0.03423	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.19185
	setup	RESET_B (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.16460	2.50740	2.50740	0.28630

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	0.02049	0.32940	0.06480	0.02056	2.50740	0.30000	0.02045
	SET_B	0.01860	0.00100	0.05800	0.32940	0.06480	0.16442	2.50740	0.30000	0.63815

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	0.01966	0.32940	0.06480	0.01994	2.50740	0.30000	0.02501
	RESET_B	0.01860	0.00100	0.06747	0.32940	0.06480	0.16202	2.50740	0.30000	0.56183

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	0.02049	0.32940	0.06480	0.02056	2.50740	0.30000	0.02045

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	0.01966	0.32940	0.06480	0.01994	2.50740	0.30000	0.02501

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	0.01965	0.32940	0.06480	0.02049	2.50740	0.30000	0.02425
	RESET_B	0.01860	0.00100	0.06744	0.32940	0.06480	0.16313	2.50740	0.30000	0.55919

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	0.02047	0.32940	0.06480	0.02047	2.50740	0.30000	0.02121
	SET_B	0.01860	0.00100	0.05794	0.32940	0.06480	0.16425	2.50740	0.30000	0.64040

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	0.01965	0.32940	0.06480	0.02049	2.50740	0.30000	0.02425

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	0.02047	0.32940	0.06480	0.02047	2.50740	0.30000	0.02121

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01099	0.32940	0.01529	2.50740	0.06386

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00847	0.32940	0.01306	2.50740	0.06102

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	0.02011	0.32940	0.02532	2.50740	0.08001
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.01099	0.32940	0.01529	2.50740	0.06386

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	0.02195	0.32940	0.02732	2.50740	0.08152
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00847	0.32940	0.01306	2.50740	0.06102

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01412	0.32940	0.01796	2.50740	0.06916

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01566	0.32940	0.01971	2.50740	0.07112

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	0.02322	0.32940	0.02785	2.50740	0.08455
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.01412	0.32940	0.01796	2.50740	0.06916

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	0.03093	0.32940	0.03517	2.50740	0.09213
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.01566	0.32940	0.01971	2.50740	0.07112

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.03486	0.32940	0.04182	2.50740	0.11001

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.03308	0.32940	0.05225	2.50740	0.11883

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	0.02668	0.32940	0.03491	2.50740	0.10346
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.03486	0.32940	0.04182	2.50740	0.11001
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02375	0.32940	0.03759	2.50740	0.16085
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.01390	0.32940	0.02672	2.50740	0.14341

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	0.02742	0.32940	0.03538	2.50740	0.10217
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.03308	0.32940	0.05225	2.50740	0.11883
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00857	0.32940	0.06193	2.50740	0.18188
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.01458	0.32940	0.02699	2.50740	0.14184

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02134	0.32940	0.03571	2.50740	0.16229

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02644	0.32940	0.04187	2.50740	0.16776

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	0.02033	0.32940	0.03460	2.50740	0.16095
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02894	0.32940	0.04322	2.50740	0.16891
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02045	0.32940	0.03480	2.50740	0.16139
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.02033	0.32940	0.03460	2.50740	0.16096
	(!RESET_B * !Q * Q_N)	0.01860	0.02134	0.32940	0.03571	2.50740	0.16229
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.02043	0.32940	0.03481	2.50740	0.16139

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	0.01851	0.32940	0.03318	2.50740	0.15736
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03354	0.32940	0.04875	2.50740	0.17736
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02644	0.32940	0.04187	2.50740	0.16776
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.03767	0.32940	0.05308	2.50740	0.17913
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01874	0.32940	0.03337	2.50740	0.15740
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01851	0.32940	0.03318	2.50740	0.15736
	(!RESET_B * !Q * Q_N)	0.01860	0.01872	0.32940	0.03337	2.50740	0.15739
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01873	0.32940	0.03337	2.50740	0.15740

TIE0



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	1134.24000	1134.24000	1134.24000

TIE1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	977.87400	977.87400	977.87400

XNOR2_1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00609	0.00510	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	683.60100	1834.56000	2725.56000

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	0.03577	0.32940	0.06480	0.16306	2.50740	0.30000	0.59044
	A->Y (FR)	0.01860	0.00100	0.02676	0.32940	0.06480	0.27028	2.50740	0.30000	1.36389
	B->Y (RR)	0.01860	0.00100	0.03349	0.32940	0.06480	0.17085	2.50740	0.30000	0.64336
	B->Y (FR)	0.01860	0.00100	0.02405	0.32940	0.06480	0.30216	2.50740	0.30000	1.60494

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	0.03619	0.32940	0.06480	0.21652	2.50740	0.30000	0.81854
	A->Y (RF)	0.01860	0.00100	0.02470	0.32940	0.06480	0.23627	2.50740	0.30000	1.21378
	B->Y (FF)	0.01860	0.00100	0.03616	0.32940	0.06480	0.20792	2.50740	0.30000	0.77092
	B->Y (RF)	0.01860	0.00100	0.02041	0.32940	0.06480	0.23061	2.50740	0.30000	1.19723

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	0.01484	0.32940	0.06480	0.02381	2.50740	0.30000	0.11064
	B	0.01860	0.00100	0.01451	0.32940	0.06480	0.02350	2.50740	0.30000	0.10762

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	0.01336	0.32940	0.06480	0.02370	2.50740	0.30000	0.10961
	B	0.01860	0.00100	0.01438	0.32940	0.06480	0.02243	2.50740	0.30000	0.10648

XOR2_1



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, 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	0.00624	0.00524	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	1083.34000	1605.44000	2318.28000

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	0.03635	0.32940	0.06480	0.25271	2.50740	0.30000	0.98247
	A->X (FR)	0.01860	0.00100	0.02966	0.32940	0.06480	0.27420	2.50740	0.30000	1.37359
	B->X (RR)	0.01860	0.00100	0.03712	0.32940	0.06480	0.24237	2.50740	0.30000	0.91390
	B->X (FR)	0.01860	0.00100	0.02488	0.32940	0.06480	0.26857	2.50740	0.30000	1.35980

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	0.04053	0.32940	0.06480	0.15856	2.50740	0.30000	0.55133
	A->X (RF)	0.01860	0.00100	0.02347	0.32940	0.06480	0.23447	2.50740	0.30000	1.20457
	B->X (FF)	0.01860	0.00100	0.03781	0.32940	0.06480	0.16945	2.50740	0.30000	0.61354
	B->X (RF)	0.01860	0.00100	0.02122	0.32940	0.06480	0.26209	2.50740	0.30000	1.40025

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	0.01257	0.32940	0.06480	0.02195	2.50740	0.30000	0.10783
	B	0.01860	0.00100	0.01329	0.32940	0.06480	0.02066	2.50740	0.30000	0.10267

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	0.01696	0.32940	0.06480	0.02538	2.50740	0.30000	0.11054
	B	0.01860	0.00100	0.01562	0.32940	0.06480	0.02519	2.50740	0.30000	0.10573