

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
GCLK
INx
ITL
KEEPSTATE
MUX2

MUX4
NAND2B1
NAND2
NAND3B1
NOR2
NOR3
NOR4
NP_ANT
OR2
OR3
OR4
SDFRRS
SGCLK
TIE0
TIE1
XNOR2_1
XOR2_1

AND2



*sg13g2_stdcell_fast_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	0.64331
	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	0.51082
	B->X (FF)	0.01860	0.00100	0.03094	0.32940	0.06480	0.15849	2.50740	0.30000	0.56577

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	0.10547
	B	0.01860	0.00100	0.01508	0.32940	0.06480	0.02358	2.50740	0.30000	0.10990

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	0.02068	2.50740	0.30000	0.10194
	B	0.01860	0.00100	0.01103	0.32940	0.06480	0.02099	2.50740	0.30000	0.10344

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	0.73114
	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	0.47231
	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	0.57477

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	0.09955
	B	0.01860	0.00100	0.01704	0.32940	0.06480	0.02387	2.50740	0.30000	0.10188
	C	0.01860	0.00100	0.01985	0.32940	0.06480	0.02597	2.50740	0.30000	0.11013

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	0.09336
	B	0.01860	0.00100	0.01143	0.32940	0.06480	0.01987	2.50740	0.30000	0.09546
	C	0.01860	0.00100	0.01166	0.32940	0.06480	0.02076	2.50740	0.30000	0.10131

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	0.43739
	B->X (FF)	0.01860	0.00100	0.03412	0.32940	0.06480	0.15879	2.50740	0.30000	0.47996
	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	0.57907

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	0.01708	0.32940	0.06480	0.02342	2.50740	0.30000	0.09423
	B	0.01860	0.00100	0.02007	0.32940	0.06480	0.02561	2.50740	0.30000	0.09730
	C	0.01860	0.00100	0.02171	0.32940	0.06480	0.02640	2.50740	0.30000	0.10426
	D	0.01860	0.00100	0.02385	0.32940	0.06480	0.02831	2.50740	0.30000	0.10948

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	0.01026	0.32940	0.06480	0.01791	2.50740	0.30000	0.08625
	B	0.01860	0.00100	0.01079	0.32940	0.06480	0.01829	2.50740	0.30000	0.08810
	C	0.01860	0.00100	0.01220	0.32940	0.06480	0.02000	2.50740	0.30000	0.09413
	D	0.01860	0.00100	0.01176	0.32940	0.06480	0.02005	2.50740	0.30000	0.10001

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	0.00155	0.32940	0.00157	2.50740	0.00157

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	0.00155	0.32940	0.00157	2.50740	0.00157

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	-0.00114	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	0.00121	0.32940	0.00124	2.50740	0.00125

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	-0.00114	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	0.00121	0.32940	0.00124	2.50740	0.00125

Passive power(pJ) for C rising :

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

Passive power(pJ) for C falling :

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

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

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

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

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

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00063	0.32940	0.00060	2.50740	0.00061

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00070	0.32940	0.00052	2.50740	0.00044

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	0.00063	0.32940	0.00060	2.50740	0.00061

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	0.00070	0.32940	0.00052	2.50740	0.00044

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	0.68756
	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	0.52265

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	0.66694

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	0.52265
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02571	0.32940	0.06480	0.14728	2.50740	0.30000	0.50046

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	0.66694
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.03723	0.32940	0.06480	0.17311	2.50740	0.30000	0.64739

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	0.01382	0.32940	0.06480	0.02241	2.50740	0.30000	0.10549
	A2	0.01860	0.00100	0.01682	0.32940	0.06480	0.02438	2.50740	0.30000	0.10967
	B1	0.01860	0.00100	0.01255	0.32940	0.06480	0.02293	2.50740	0.30000	0.11228

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	0.01610	0.32940	0.06480	0.02370	2.50740	0.30000	0.10603
	A2	0.01860	0.00100	0.01633	0.32940	0.06480	0.02399	2.50740	0.30000	0.10792
	B1	0.01860	0.00100	0.01118	0.32940	0.06480	0.02155	2.50740	0.30000	0.10597

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	0.01554	0.32940	0.06480	0.02571	2.50740	0.30000	0.11406
	B1	(!A1 * A2)	0.01860	0.00100	0.01255	0.32940	0.06480	0.02293	2.50740	0.30000	0.11228

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	0.01164	0.32940	0.06480	0.02136	2.50740	0.30000	0.10427
	B1	(!A1 * A2)	0.01860	0.00100	0.01118	0.32940	0.06480	0.02155	2.50740	0.30000	0.10597

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00020	0.32940	-0.00018	2.50740	-0.00018

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00020	0.32940	0.00018	2.50740	0.00018

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	-0.00020	0.32940	-0.00018	2.50740	-0.00018
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00020	0.32940	0.00018	2.50740	0.00018
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00010	0.32940	-0.00008	2.50740	-0.00009

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00010	0.32940	0.00008	2.50740	0.00009

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	-0.00010	0.32940	-0.00008	2.50740	-0.00009
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00010	0.32940	0.00008	2.50740	0.00009
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 rising :

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

Passive power(pJ) for B1 falling :

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

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	-0.00101	0.32940	-0.00103	2.50740	-0.00104

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00101	0.32940	0.00103	2.50740	0.00104

BTLx



*sg13g2_stdcell_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	-1.90857
	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	-1.90781
	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	-1.91700
	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	0.07937	0.32940	0.53801	0.08996	2.50740	2.41961	0.10941
	TE_B	0.01860	0.02061	0.01733	0.32940	0.53801	0.01319	2.50740	2.41961	0.02034
sg13g2_ebufn_4	A	0.01860	0.01094	0.04010	0.32940	0.26914	0.04442	2.50740	1.20994	0.05134
	TE_B	0.01860	0.01094	0.00902	0.32940	0.26914	0.00702	2.50740	1.20994	0.00395
sg13g2_ebufn_2	A	0.01860	0.00605	0.02133	0.32940	0.13465	0.02248	2.50740	0.60505	0.02589
	TE_B	0.01860	0.00605	0.00495	0.32940	0.13465	0.00402	2.50740	0.60505	0.00395

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	0.07610	0.32940	0.54707	0.07208	2.50740	2.42867	0.06552
	TE_B	0.01860	0.02967	0.00763	0.32940	0.54707	0.00439	2.50740	2.42867	0.01825
sg13g2_ebufn_4	A	0.01860	0.01554	0.03836	0.32940	0.27374	0.03631	2.50740	1.21454	0.03444
	TE_B	0.01860	0.01554	0.00422	0.32940	0.27374	0.00361	2.50740	1.21454	0.00798
sg13g2_ebufn_2	A	0.01860	0.00841	0.01819	0.32940	0.13701	0.01809	2.50740	0.60741	0.01940
	TE_B	0.01860	0.00841	0.00252	0.32940	0.13701	0.00231	2.50740	0.60741	0.00287

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01111	0.32940	0.03754	2.50740	0.27117
sg13g2_ebufn_4	0.01860	0.00625	0.32940	0.01932	2.50740	0.13600
sg13g2_ebufn_2	0.01860	0.00314	0.32940	0.01534	2.50740	0.11837

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01267	0.32940	0.03995	2.50740	0.27043
sg13g2_ebufn_4	0.01860	0.00665	0.32940	0.02016	2.50740	0.13535
sg13g2_ebufn_2	0.01860	0.00432	0.32940	0.01678	2.50740	0.11813

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	-0.00800	0.32940	0.00062	2.50740	0.11245
sg13g2_ebufn_4	0.01860	-0.00344	0.32940	0.00757	2.50740	0.12296
sg13g2_ebufn_2	0.01860	-0.00169	0.32940	0.00939	2.50740	0.11173

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	0.09671	0.32940	0.11022	2.50740	0.22102
sg13g2_ebufn_4	0.01860	0.04955	0.32940	0.06347	2.50740	0.17731
sg13g2_ebufn_2	0.01860	0.02563	0.32940	0.03833	2.50740	0.13889

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	0.62535
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.02930	0.32940	0.51840	0.17419	2.50740	2.40000	0.62351
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.03633	0.32940	0.25920	0.19999	2.50740	1.20000	0.74730
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.02880	0.32940	0.12960	0.16984	2.50740	0.60000	0.61737
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.02562	0.32940	0.06480	0.15398	2.50740	0.30000	0.58130

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	0.58643
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.03191	0.32940	0.51840	0.17022	2.50740	2.40000	0.58675
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.03140	0.32940	0.25920	0.16101	2.50740	1.20000	0.49340
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.03053	0.32940	0.12960	0.16104	2.50740	0.60000	0.55659
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.02689	0.32940	0.06480	0.14521	2.50740	0.30000	0.52984

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	0.15568	0.32940	1.03680	0.23172	2.50740	4.80000	0.95237
sg13g2_buf_8	A	0.01860	0.00100	0.07539	0.32940	0.51840	0.11546	2.50740	2.40000	0.47322
sg13g2_buf_4	A	0.01860	0.00100	0.03809	0.32940	0.25920	0.05325	2.50740	1.20000	0.19748
sg13g2_buf_2	A	0.01860	0.00100	0.01910	0.32940	0.12960	0.03007	2.50740	0.60000	0.13096
sg13g2_buf_1	A	0.01860	0.00100	0.01062	0.32940	0.06480	0.02122	2.50740	0.30000	0.10632

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	0.15189	0.32940	1.03680	0.23153	2.50740	4.80000	0.92073
sg13g2_buf_8	A	0.01860	0.00100	0.07469	0.32940	0.51840	0.11529	2.50740	2.40000	0.45741
sg13g2_buf_4	A	0.01860	0.00100	0.03723	0.32940	0.25920	0.05265	2.50740	1.20000	0.19506
sg13g2_buf_2	A	0.01860	0.00100	0.01884	0.32940	0.12960	0.02983	2.50740	0.60000	0.13095
sg13g2_buf_1	A	0.01860	0.00100	0.01076	0.32940	0.06480	0.02118	2.50740	0.30000	0.10518

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	0.65076
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.08591	0.32940	0.06480	0.21598	2.50740	0.30000	0.59120

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	0.55581
	RESET_B->Q (FF)	0.01860	0.00100	0.12934	0.32940	0.12960	0.28212	2.50740	0.60000	0.76096
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.08338	0.32940	0.06480	0.20029	2.50740	0.30000	0.51214
	RESET_B->Q (FF)	0.01860	0.00100	0.11118	0.32940	0.06480	0.26203	2.50740	0.30000	0.73260

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	0.59682
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09776	0.32940	0.12960	0.27816	2.50740	0.60000	0.80213
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.06388	0.32940	0.06480	0.20473	2.50740	0.30000	0.56142
	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	0.54168

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	0.08071	0.32940	0.12960	0.26491	2.50740	0.60000	1.03884
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.05766	0.32940	0.06480	0.15838	2.50740	0.30000	0.60687

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	0.07778	0.32940	0.12960	0.26627	2.50740	0.60000	1.04160
	RESET_B	0.01860	0.00100	0.06235	0.32940	0.12960	0.24195	2.50740	0.60000	0.93658
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.05600	0.32940	0.06480	0.15692	2.50740	0.30000	0.59932
	RESET_B	0.01860	0.00100	0.04050	0.32940	0.06480	0.13540	2.50740	0.30000	0.50747

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	0.07786	0.32940	0.12960	0.26615	2.50740	0.60000	1.03744
	RESET_B	0.01860	0.00100	0.06231	0.32940	0.12960	0.24344	2.50740	0.60000	0.93782
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.05601	0.32940	0.06480	0.15732	2.50740	0.30000	0.60347
	RESET_B	0.01860	0.00100	0.04046	0.32940	0.06480	0.13623	2.50740	0.30000	0.50924

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	0.08076	0.32940	0.12960	0.26558	2.50740	0.60000	1.03866
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.05768	0.32940	0.06480	0.15768	2.50740	0.30000	0.60736

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00125	0.32940	0.00676	2.50740	0.05298
sg13g2_dfrbp_1	0.01860	0.00139	0.32940	0.00684	2.50740	0.05303

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00222	0.32940	0.00785	2.50740	0.05432
sg13g2_dfrbp_1	0.01860	0.00241	0.32940	0.00801	2.50740	0.05442

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	0.00125	0.32940	0.00676	2.50740	0.05298
	(!CLK * RESET_B)	0.01860	0.02048	0.32940	0.02673	2.50740	0.08339
	(!CLK * !RESET_B)	0.01860	-0.00046	0.32940	-0.00046	2.50740	-0.00046
sg13g2_dfrbp_1	CLK	0.01860	0.00139	0.32940	0.00684	2.50740	0.05303
	(!CLK * RESET_B)	0.01860	0.01789	0.32940	0.02425	2.50740	0.08039
	(!CLK * !RESET_B)	0.01860	-0.00031	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	0.00222	0.32940	0.00785	2.50740	0.05432
	(!CLK * RESET_B)	0.01860	0.01774	0.32940	0.02435	2.50740	0.08120
	(!CLK * !RESET_B)	0.01860	0.00061	0.32940	0.00064	2.50740	0.00064
sg13g2_dfrbp_1	CLK	0.01860	0.00241	0.32940	0.00801	2.50740	0.05442
	(!CLK * RESET_B)	0.01860	0.01633	0.32940	0.02290	2.50740	0.07919
	(!CLK * !RESET_B)	0.01860	0.00052	0.32940	0.00054	2.50740	0.00055

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	0.02210	0.32940	0.02908	2.50740	0.10432
sg13g2_dfrbp_1	0.01860	0.02017	0.32940	0.02729	2.50740	0.10215

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	0.01646	0.32940	0.02367	2.50740	0.09886
sg13g2_dfrbp_1	0.01860	0.01443	0.32940	0.02162	2.50740	0.09639

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	0.00266	0.32940	0.00737	2.50740	0.05429
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.02210	0.32940	0.02908	2.50740	0.10432
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00339	0.32940	0.00800	2.50740	0.05490
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.02017	0.32940	0.02729	2.50740	0.10215
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.07774	0.32940	0.09379	2.50740	0.22174
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.01646	0.32940	0.02367	2.50740	0.09886
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.05328	0.32940	0.06915	2.50740	0.19471
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.01443	0.32940	0.02162	2.50740	0.09639
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01694	0.32940	0.03109	2.50740	0.15710
sg13g2_dfrbp_1	0.01860	0.01649	0.32940	0.02962	2.50740	0.14714

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03550	0.32940	0.05054	2.50740	0.17927
sg13g2_dfrbp_1	0.01860	0.03259	0.32940	0.04667	2.50740	0.16839

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	0.01694	0.32940	0.03109	2.50740	0.15710
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01789	0.32940	0.03195	2.50740	0.15781
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01656	0.32940	0.03068	2.50740	0.15657
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01793	0.32940	0.03201	2.50740	0.15780
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01700	0.32940	0.03021	2.50740	0.14778
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01646	0.32940	0.02961	2.50740	0.14712
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01603	0.32940	0.02921	2.50740	0.14676
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01649	0.32940	0.02962	2.50740	0.14714

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	0.03550	0.32940	0.05054	2.50740	0.17927
	(D * RESET_B * !Q * Q_N)	0.01860	0.03719	0.32940	0.05220	2.50740	0.18087
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01873	0.32940	0.03308	2.50740	0.15692
	(!D * RESET_B * Q * !Q_N)	0.01860	0.01962	0.32940	0.10677	2.50740	0.23046
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01869	0.32940	0.03309	2.50740	0.15693
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01873	0.32940	0.03307	2.50740	0.15692
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03259	0.32940	0.04667	2.50740	0.16839
	(D * RESET_B * !Q * Q_N)	0.01860	0.03346	0.32940	0.04755	2.50740	0.16917
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01782	0.32940	0.03129	2.50740	0.14795
	(!D * RESET_B * Q * !Q_N)	0.01860	0.01737	0.32940	0.08373	2.50740	0.20029
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01777	0.32940	0.03134	2.50740	0.14801
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01781	0.32940	0.03128	2.50740	0.14794

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	0.51729

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	0.45813

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	0.03032	0.32940	0.06480	0.03117	2.50740	0.30000	0.03752
	GATE	0.01860	0.00100	0.02683	0.32940	0.06480	0.02816	2.50740	0.30000	0.03665

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	0.02982	0.32940	0.06480	0.03078	2.50740	0.30000	0.03704
	GATE	0.01860	0.00100	0.02872	0.32940	0.06480	0.03013	2.50740	0.30000	0.03011

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00474	0.32940	0.01466	2.50740	0.10084

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00623	0.32940	0.01632	2.50740	0.10125

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	0.00467	0.32940	0.01452	2.50740	0.10075
	(!GATE * !Q)	0.01860	0.00474	0.32940	0.01466	2.50740	0.10084

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	0.00606	0.32940	0.01625	2.50740	0.10120
	(!GATE * !Q)	0.01860	0.00623	0.32940	0.01632	2.50740	0.10125

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01177	0.32940	0.02426	2.50740	0.13092

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01616	0.32940	0.04018	2.50740	0.14735

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	0.01177	0.32940	0.02426	2.50740	0.13092

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	0.01616	0.32940	0.04018	2.50740	0.14735

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	0.52388

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	0.53039
	GATE->Q (RF)	0.01860	0.00100	0.07788	0.32940	0.06480	0.18981	2.50740	0.30000	0.46321
	RESET_B->Q (FF)	0.01860	0.00100	0.03191	0.32940	0.06480	0.16308	2.50740	0.30000	0.57254

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	0.00572	0.32940	0.06480	0.00550	2.50740	0.30000	0.00873
	GATE	0.01860	0.00100	0.02703	0.32940	0.06480	0.02809	2.50740	0.30000	0.03986

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	0.00396	0.32940	0.06480	-0.00550	2.50740	0.30000	-0.00873
	GATE	0.01860	0.00100	0.02656	0.32940	0.06480	0.02829	2.50740	0.30000	0.02815
	RESET_B	0.01860	0.00100	0.01364	0.32940	0.06480	0.02549	2.50740	0.30000	0.12389

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02927	0.32940	0.03972	2.50740	0.12974

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02916	0.32940	0.05509	2.50740	0.14502

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	-0.00007	0.32940	0.00990	2.50740	0.09606
	!RESET_B	0.01860	0.02927	0.32940	0.03972	2.50740	0.12974

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	0.00159	0.32940	0.01175	2.50740	0.09666
	!RESET_B	0.01860	0.02916	0.32940	0.05509	2.50740	0.14502

Passive power(pJ) for RESET_B rising :

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

Passive power(pJ) for RESET_B falling :

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

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

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

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

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

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01224	0.32940	0.02466	2.50740	0.13114

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01656	0.32940	0.03988	2.50740	0.14693

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	0.01701	0.32940	0.03019	2.50740	0.14502
	(!D * !RESET_B * !Q)	0.01860	0.01224	0.32940	0.02466	2.50740	0.13114

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	0.02164	0.32940	0.03581	2.50740	0.14951
	(!D * RESET_B * !Q)	0.01860	0.01656	0.32940	0.03988	2.50740	0.14693
	(!D * !RESET_B * !Q)	0.01860	0.01661	0.32940	0.03994	2.50740	0.14697

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	0.53669

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	0.46348
	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	0.60158
	GATE->Q_N (RR)	0.01860	0.00100	0.09825	0.32940	0.06480	0.21770	2.50740	0.30000	0.53333
	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	0.48914

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	0.01106	0.32940	0.06480	0.01130	2.50740	0.30000	0.01274
	GATE	0.01860	0.00100	0.02150	0.32940	0.06480	0.02231	2.50740	0.30000	0.02912

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	0.00966	0.32940	0.06480	0.00276	2.50740	0.30000	0.00347
	GATE	0.01860	0.00100	0.02110	0.32940	0.06480	0.02196	2.50740	0.30000	0.02336
	RESET_B	0.01860	0.00100	0.01438	0.32940	0.06480	0.02119	2.50740	0.30000	0.07898

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	0.00972	0.32940	0.06480	0.00275	2.50740	0.30000	0.00401
	GATE	0.01860	0.00100	0.02699	0.32940	0.06480	0.03446	2.50740	0.30000	0.08935
	RESET_B	0.01860	0.00100	0.01443	0.32940	0.06480	0.02156	2.50740	0.30000	0.07961

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	0.01107	0.32940	0.06480	0.01104	2.50740	0.30000	0.01258
	GATE	0.01860	0.00100	0.02151	0.32940	0.06480	0.02211	2.50740	0.30000	0.02832

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02868	0.32940	0.03919	2.50740	0.12927

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02907	0.32940	0.05470	2.50740	0.14470

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	0.00151	0.32940	0.01156	2.50740	0.09788
	!RESET_B	0.01860	0.02868	0.32940	0.03919	2.50740	0.12927

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	0.00286	0.32940	0.01311	2.50740	0.09819
	!RESET_B	0.01860	0.02907	0.32940	0.05470	2.50740	0.14470

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	-0.00004	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00004	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	-0.00004	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00004	0.32940	0.00000	2.50740	0.00000
	(!D * !GATE * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01171	0.32940	0.02412	2.50740	0.13081

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01700	0.32940	0.03956	2.50740	0.14677

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	0.01651	0.32940	0.02971	2.50740	0.14487
	(!D * !RESET_B * !Q)	0.01860	0.01171	0.32940	0.02412	2.50740	0.13081

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	0.02227	0.32940	0.03643	2.50740	0.15023
	(!D * RESET_B * !Q)	0.01860	0.01700	0.32940	0.03956	2.50740	0.14677
	(!D * !RESET_B * !Q)	0.01860	0.01704	0.32940	0.03961	2.50740	0.14682

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	0.58834
	GATE_N->Q (FR)	0.01860	0.00100	0.09306	0.32940	0.06480	0.23341	2.50740	0.30000	0.68222
	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	0.52458
	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	0.01540	0.32940	0.06480	0.01634	2.50740	0.30000	0.02216
	GATE_N	0.01860	0.00100	0.02415	0.32940	0.06480	0.01421	2.50740	0.30000	0.01342
	RESET_B	0.01860	0.00100	0.01891	0.32940	0.06480	0.02811	2.50740	0.30000	0.12880

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	0.01928	0.32940	0.06480	0.00094	2.50740	0.30000	0.00241
	GATE_N	0.01860	0.00100	0.02129	0.32940	0.06480	0.01247	2.50740	0.30000	0.02066
	RESET_B	0.01860	0.00100	0.01392	0.32940	0.06480	0.02580	2.50740	0.30000	0.12671

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01955	0.32940	0.02902	2.50740	0.11522

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01395	0.32940	0.04350	2.50740	0.13354

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	-0.00016	0.32940	0.00986	2.50740	0.09616
	!RESET_B	0.01860	0.01955	0.32940	0.02902	2.50740	0.11522

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	0.00138	0.32940	0.01161	2.50740	0.09671
	!RESET_B	0.01860	0.01395	0.32940	0.04350	2.50740	0.13354

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	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	(D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01071	0.32940	0.02316	2.50740	0.12978

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	0.01647	0.32940	0.03986	2.50740	0.14718

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	0.02120	0.32940	0.03338	2.50740	0.13917
	(!D * !RESET_B * !Q)	0.01860	0.01071	0.32940	0.02316	2.50740	0.12978

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	0.02100	0.32940	0.03404	2.50740	0.13972
	(!D * RESET_B * !Q)	0.01860	0.01647	0.32940	0.03986	2.50740	0.14718
	(!D * !RESET_B * !Q)	0.01860	0.01651	0.32940	0.03991	2.50740	0.14723

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	0.59935
	GATE_N->Q (FR)	0.01860	0.00100	0.10178	0.32940	0.06480	0.24664	2.50740	0.30000	0.69783

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	0.53283
	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	0.69664
	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	0.55172
	GATE_N->Q_N (FF)	0.01860	0.00100	0.12106	0.32940	0.06480	0.24534	2.50740	0.30000	0.65055

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	0.02284	0.32940	0.06480	0.11037	2.50740	0.30000	0.43556
	GATE_N	0.01860	0.00100	0.04372	0.32940	0.06480	0.13111	2.50740	0.30000	0.45241

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	0.02214	0.32940	0.06480	0.08912	2.50740	0.30000	0.41235
	GATE_N	0.01860	0.00100	0.03985	0.32940	0.06480	0.12819	2.50740	0.30000	0.45731
	RESET_B	0.01860	0.00100	0.04537	0.32940	0.06480	0.14428	2.50740	0.30000	0.54564

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	0.02225	0.32940	0.06480	0.08917	2.50740	0.30000	0.41071
	GATE_N	0.01860	0.00100	0.05486	0.32940	0.06480	0.15738	2.50740	0.30000	0.59332
	RESET_B	0.01860	0.00100	0.04540	0.32940	0.06480	0.14540	2.50740	0.30000	0.54641

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	0.02286	0.32940	0.06480	0.10985	2.50740	0.30000	0.43402
	GATE_N	0.01860	0.00100	0.04375	0.32940	0.06480	0.13081	2.50740	0.30000	0.45221

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.03002	0.32940	0.04030	2.50740	0.13034

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02776	0.32940	0.05939	2.50740	0.14942

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	0.00153	0.32940	0.01155	2.50740	0.09790
	!RESET_B	0.01860	0.03002	0.32940	0.04030	2.50740	0.13034

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	0.00398	0.32940	0.01421	2.50740	0.09932
	!RESET_B	0.01860	0.02776	0.32940	0.05939	2.50740	0.14942

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	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!D * GATE_N * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00756	0.32940	0.03716	2.50740	0.14373

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	0.01495	0.32940	0.02811	2.50740	0.13530

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	0.02160	0.32940	0.03372	2.50740	0.13966
	(!D * RESET_B * !Q)	0.01860	0.00756	0.32940	0.03716	2.50740	0.14373
	(!D * !RESET_B * !Q)	0.01860	0.00760	0.32940	0.03720	2.50740	0.14376

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	0.02163	0.32940	0.03461	2.50740	0.14026
	(!D * !RESET_B * !Q)	0.01860	0.01495	0.32940	0.02811	2.50740	0.13530

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	0.45324

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	0.65638

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	0.09074

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	0.08989

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	0.52338

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	0.03427	2.50740	0.30000	0.09197

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	0.70427

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	0.88443

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	0.10047

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	0.10115

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	0.02065	0.32940	0.26917	0.03688	2.50740	1.20997	0.19240
	TE_B	0.01860	0.01097	0.04072	0.32940	0.26917	0.03185	2.50740	1.20997	0.02836
sg13g2_einvn_2	A	0.01860	0.00606	0.01049	0.32940	0.13466	0.01829	2.50740	0.60506	0.09452
	TE_B	0.01860	0.00606	0.02002	0.32940	0.13466	0.01573	2.50740	0.60506	0.01387

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	0.01827	0.32940	0.27369	0.03315	2.50740	1.21449	0.16509
sg13g2_einvn_2	A	0.01860	0.00841	0.00926	0.32940	0.13701	0.01673	2.50740	0.60741	0.08462

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	-0.01781	0.32940	-0.03903	2.50740	0.07521
sg13g2_einvn_2	0.01860	-0.00932	0.32940	-0.01910	2.50740	0.04572

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	0.01781	0.32940	0.03903	2.50740	0.15512
sg13g2_einvn_2	0.01860	0.00932	0.32940	0.02049	2.50740	0.08533

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

GCLK



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, Temp -40.00*

Truth Table

INPUT		OUTPUT
GATE	CLK	GCLK
x	0	0
x	1	GCLK

Footprint

Cell Name	Area
sg13g2_lgcp_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	GATE	CLK	GCLK
sg13g2_lgcp_1	0.00254	0.00566	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	3351.79000	3485.76000	3690.93000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.03614	0.32940	0.06480	0.16320	2.50740	0.30000	0.58967

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.03095	0.32940	0.06480	0.15871	2.50740	0.30000	0.57078

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01587	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.23154
	setup	CLK (R)	0.01860	0.01860	0.03147	1.26300	1.26300	0.18079	2.50740	2.50740	0.38433

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.00744	1.26300	1.26300	-0.00810	2.50740	2.50740	0.00449
	setup	CLK (R)	0.01860	0.01860	0.01919	1.26300	1.26300	0.04048	2.50740	2.50740	0.04328

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_lgcp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.02372	0.32940	0.06480	0.03204	2.50740	0.30000	0.11852

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.01568	0.32940	0.06480	0.02624	2.50740	0.30000	0.11183

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.03088	0.32940	0.04296	2.50740	0.13646

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01628	0.32940	0.06024	2.50740	0.15228

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	0.03088	0.32940	0.04296	2.50740	0.13646

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	!CLK	0.01860	0.01628	0.32940	0.06024	2.50740	0.15228

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00590	0.32940	0.01836	2.50740	0.12516

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00970	0.32940	0.02268	2.50740	0.13006

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	0.04798	0.32940	1.03680	0.14506	2.50740	4.80000	1.03358
sg13g2_inv_8	A	0.01860	0.00100	0.02306	0.32940	0.51840	0.06948	2.50740	2.40000	0.51390
sg13g2_inv_4	A	0.01860	0.00100	0.01147	0.32940	0.25920	0.03521	2.50740	1.20000	0.25881
sg13g2_inv_2	A	0.01860	0.00100	0.00574	0.32940	0.12960	0.01756	2.50740	0.60000	0.13146
sg13g2_inv_1	A	0.01860	0.00100	0.00313	0.32940	0.06480	0.00898	2.50740	0.30000	0.06549

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	0.03787	0.32940	1.03680	0.12548	2.50740	4.80000	0.97186
sg13g2_inv_8	A	0.01860	0.00100	0.01809	0.32940	0.51840	0.06150	2.50740	2.40000	0.47000
sg13g2_inv_4	A	0.01860	0.00100	0.00904	0.32940	0.25920	0.03074	2.50740	1.20000	0.23854
sg13g2_inv_2	A	0.01860	0.00100	0.00457	0.32940	0.12960	0.01534	2.50740	0.60000	0.11947
sg13g2_inv_1	A	0.01860	0.00100	0.00276	0.32940	0.06480	0.00799	2.50740	0.30000	0.06037

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	0.03982	0.32940	0.53830	0.07479	2.50740	2.41990	0.38973
	TE_B	0.01860	0.02090	0.08991	0.32940	0.53830	0.06496	2.50740	2.41990	0.05585

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	0.03516	0.32940	0.54729	0.06487	2.50740	2.42889	0.33389

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	-0.02378	0.32940	-0.05830	2.50740	0.01200

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	0.02378	0.32940	0.05830	2.50740	0.17241

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	0.11383
	A1	0.01860	0.00100	0.02003	0.32940	0.06480	0.03386	2.50740	0.30000	0.11918
	S	0.01860	0.00100	0.01748	0.32940	0.06480	0.02613	2.50740	0.30000	0.11721

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	0.02901	2.50740	0.30000	0.11385
	S	0.01860	0.00100	0.01672	0.32940	0.06480	0.02568	2.50740	0.30000	0.11534

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	0.01730	0.32940	0.06480	0.01764	2.50740	0.30000	0.02260
	S	(!A0 * A1)	0.01860	0.00100	0.01748	0.32940	0.06480	0.02613	2.50740	0.30000	0.11721

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	0.01740	0.32940	0.06480	0.01784	2.50740	0.30000	0.02272
	S	(!A0 * A1)	0.01860	0.00100	0.01672	0.32940	0.06480	0.02568	2.50740	0.30000	0.11534

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00868	0.32940	0.01829	2.50740	0.10424

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00902	0.32940	0.01894	2.50740	0.10390

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	0.02393	0.32940	0.06480	0.02950	2.50740	0.30000	0.11439
	A1	0.01860	0.00100	0.02315	0.32940	0.06480	0.02870	2.50740	0.30000	0.11228
	A2	0.01860	0.00100	0.02438	0.32940	0.06480	0.02984	2.50740	0.30000	0.11342
	A3	0.01860	0.00100	0.03033	0.32940	0.06480	0.03578	2.50740	0.30000	0.11892
	S0	0.01860	0.00100	0.02142	0.32940	0.06480	0.02921	2.50740	0.30000	0.10823
	S1	0.01860	0.00100	0.02309	0.32940	0.06480	0.06593	2.50740	0.30000	0.13219

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	0.11265
	A1	0.01860	0.00100	0.03165	0.32940	0.06480	0.03713	2.50740	0.30000	0.12092
	A2	0.01860	0.00100	0.03487	0.32940	0.06480	0.04014	2.50740	0.30000	0.12429
	A3	0.01860	0.00100	0.02659	0.32940	0.06480	0.03183	2.50740	0.30000	0.11452
	S0	0.01860	0.00100	0.03876	0.32940	0.06480	0.03475	2.50740	0.30000	-0.03253
	S1	0.01860	0.00100	0.02021	0.32940	0.06480	0.06528	2.50740	0.30000	0.13197

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	0.03430	0.32940	0.06480	0.01817	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03416	0.32940	0.06480	0.01831	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02144	0.32940	0.06480	0.02997	2.50740	0.30000	0.10931
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.02142	0.32940	0.06480	0.02921	2.50740	0.30000	0.10823
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01829	0.32940	0.06480	0.07274	2.50740	0.30000	0.12659
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02156	0.32940	0.06480	0.06368	2.50740	0.30000	0.11665
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.02309	0.32940	0.06480	0.06593	2.50740	0.30000	0.13219
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.02619	0.32940	0.06480	0.05794	2.50740	0.30000	0.12375

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	0.03896	0.32940	0.06480	0.03384	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03876	0.32940	0.06480	0.03475	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.01995	0.32940	0.06480	0.02274	2.50740	0.30000	0.10213
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01980	0.32940	0.06480	0.02281	2.50740	0.30000	0.09883
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.03446	0.32940	0.06480	0.05865	2.50740	0.30000	0.11330
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02612	0.32940	0.06480	0.07860	2.50740	0.30000	0.13356
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.02346	0.32940	0.06480	0.04710	2.50740	0.30000	0.11265
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.02021	0.32940	0.06480	0.06528	2.50740	0.30000	0.13197

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00879	0.32940	0.03037	2.50740	0.21227

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01147	0.32940	0.03879	2.50740	0.21825

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	0.00579	0.32940	0.02713	2.50740	0.20912
	(A0 * A1 * !S1)	0.01860	0.00675	0.32940	0.02752	2.50740	0.20913
	(!A2 * !A3 * S1)	0.01860	0.00879	0.32940	0.03037	2.50740	0.21227
	(!A0 * !A1 * !S1)	0.01860	0.01030	0.32940	0.03130	2.50740	0.21279

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	0.01247	0.32940	0.04010	2.50740	0.21969
	(A0 * A1 * !S1)	0.01860	0.01355	0.32940	0.04296	2.50740	0.22215
	(!A2 * !A3 * S1)	0.01860	0.01147	0.32940	0.03879	2.50740	0.21825
	(!A0 * !A1 * !S1)	0.01860	0.01094	0.32940	0.03255	2.50740	0.21151

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00287	0.32940	0.01523	2.50740	0.11847

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00756	0.32940	0.02045	2.50740	0.12201

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	0.00287	0.32940	0.01523	2.50740	0.11847
	(A0 * A2 * !S0)	0.01860	0.00284	0.32940	0.01519	2.50740	0.11843
	(!A1 * !A3 * S0)	0.01860	0.00547	0.32940	0.01814	2.50740	0.12128
	(!A0 * !A2 * !S0)	0.01860	0.00546	0.32940	0.01813	2.50740	0.12126

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	0.00758	0.32940	0.02048	2.50740	0.12206
	(A0 * A2 * !S0)	0.01860	0.00756	0.32940	0.02045	2.50740	0.12201
	(!A1 * !A3 * S0)	0.01860	0.00687	0.32940	0.01950	2.50740	0.12101
	(!A0 * !A2 * !S0)	0.01860	0.00687	0.32940	0.01948	2.50740	0.12098

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	0.58926
	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	0.79321
	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	0.00563	0.32940	0.06480	0.00600	2.50740	0.30000	0.00746
	B	0.01860	0.00100	0.00366	0.32940	0.06480	0.00868	2.50740	0.30000	0.05949

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	0.00869	0.32940	0.06480	0.00894	2.50740	0.30000	0.01111
	B	0.01860	0.00100	0.00780	0.32940	0.06480	0.01140	2.50740	0.30000	0.05649

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	0.00580	0.32940	0.01607	2.50740	0.10279

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	0.00329	0.32940	0.01350	2.50740	0.09885

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	0.00580	0.32940	0.01607	2.50740	0.10279

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	0.00329	0.32940	0.01350	2.50740	0.09885

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	0.05482
	B	0.01860	0.00100	0.00341	0.32940	0.06480	0.00832	2.50740	0.30000	0.05890

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	0.00395	0.32940	0.06480	0.00821	2.50740	0.30000	0.05067
	B	0.01860	0.00100	0.00739	0.32940	0.06480	0.01123	2.50740	0.30000	0.05692

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	0.58574
	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	0.00741	0.32940	0.06480	0.00781	2.50740	0.30000	0.00829
	B	0.01860	0.00100	0.00422	0.32940	0.06480	0.00838	2.50740	0.30000	0.05111
	C	0.01860	0.00100	0.00460	0.32940	0.06480	0.00873	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	0.01766	0.32940	0.06480	0.01763	2.50740	0.30000	0.01871
	B	0.01860	0.00100	0.00980	0.32940	0.06480	0.01248	2.50740	0.30000	0.04911
	C	0.01860	0.00100	0.01340	0.32940	0.06480	0.01610	2.50740	0.30000	0.05965

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	0.00414	0.32940	0.01443	2.50740	0.10110

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	-0.00355	0.32940	0.00664	2.50740	0.09197

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	0.00414	0.32940	0.01443	2.50740	0.10110

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	-0.00355	0.32940	0.00664	2.50740	0.09197

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	0.06181
	B	0.01860	0.00100	0.00410	0.32940	0.06480	0.00869	2.50740	0.30000	0.05389

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	0.00750	2.50740	0.30000	0.05219
	B	0.01860	0.00100	0.00321	0.32940	0.06480	0.00742	2.50740	0.30000	0.04863

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	0.06126
	B	0.01860	0.00100	0.01030	0.32940	0.06480	0.01310	2.50740	0.30000	0.05067
	C	0.01860	0.00100	0.00591	0.32940	0.06480	0.00969	2.50740	0.30000	0.04759

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	0.00398	0.32940	0.06480	0.00743	2.50740	0.30000	0.04465
	C	0.01860	0.00100	0.00356	0.32940	0.06480	0.00718	2.50740	0.30000	0.04150

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	0.01730	0.32940	0.06480	0.01883	2.50740	0.30000	0.05985
	B	0.01860	0.00100	0.01537	0.32940	0.06480	0.01703	2.50740	0.30000	0.05265
	C	0.01860	0.00100	0.01146	0.32940	0.06480	0.01360	2.50740	0.30000	0.04644
	D	0.01860	0.00100	0.00708	0.32940	0.06480	0.01034	2.50740	0.30000	0.04393

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	0.00728	0.32940	0.06480	0.01002	2.50740	0.30000	0.04782
	B	0.01860	0.00100	0.00516	0.32940	0.06480	0.00803	2.50740	0.30000	0.04290
	C	0.01860	0.00100	0.00452	0.32940	0.06480	0.00757	2.50740	0.30000	0.03958
	D	0.01860	0.00100	0.00380	0.32940	0.06480	0.00716	2.50740	0.30000	0.03799

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00199	0.32940	-0.00197	2.50740	-0.00202

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00199	0.32940	0.00197	2.50740	0.00202

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	-0.00199	0.32940	-0.00197	2.50740	-0.00202

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	0.00199	0.32940	0.00197	2.50740	0.00202

Passive power(pJ) for B rising :

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

Passive power(pJ) for B falling :

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

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

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

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

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

Passive power(pJ) for C rising :

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

Passive power(pJ) for C falling :

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

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

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

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

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

Passive power(pJ) for D rising :

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

Passive power(pJ) for D falling :

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

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	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00000	0.32940	0.00000	2.50740	0.00000

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	-0.00051	0.32940	-0.00052	2.50740	-0.00053

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00051	0.32940	0.00052	2.50740	0.00053

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	0.50392

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	0.66750

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	0.09740
	B	0.01860	0.00100	0.01116	0.32940	0.06480	0.01951	2.50740	0.30000	0.09514

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	0.02268	2.50740	0.30000	0.09662
	B	0.01860	0.00100	0.01182	0.32940	0.06480	0.02032	2.50740	0.30000	0.09274

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	0.62188
	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	0.49963

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	0.71609

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	0.10232
	B	0.01860	0.00100	0.01166	0.32940	0.06480	0.01914	2.50740	0.30000	0.09524
	C	0.01860	0.00100	0.01143	0.32940	0.06480	0.01957	2.50740	0.30000	0.09209

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	0.10572
	B	0.01860	0.00100	0.01828	0.32940	0.06480	0.02440	2.50740	0.30000	0.09712
	C	0.01860	0.00100	0.01439	0.32940	0.06480	0.02155	2.50740	0.30000	0.09217

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	0.61784
	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	0.45950

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	0.80055

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	0.01522	0.32940	0.06480	0.02224	2.50740	0.30000	0.10145
	B	0.01860	0.00100	0.01291	0.32940	0.06480	0.01951	2.50740	0.30000	0.09031
	C	0.01860	0.00100	0.01201	0.32940	0.06480	0.01838	2.50740	0.30000	0.08357
	D	0.01860	0.00100	0.01159	0.32940	0.06480	0.01838	2.50740	0.30000	0.08285

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	0.02274	0.32940	0.06480	0.02509	2.50740	0.30000	0.10190
	B	0.01860	0.00100	0.02304	0.32940	0.06480	0.02631	2.50740	0.30000	0.09589
	C	0.01860	0.00100	0.01987	0.32940	0.06480	0.02411	2.50740	0.30000	0.08827
	D	0.01860	0.00100	0.01595	0.32940	0.06480	0.02135	2.50740	0.30000	0.08469

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00230	0.32940	-0.00234	2.50740	-0.00238

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00410	0.32940	0.00409	2.50740	0.00409

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	-0.00230	0.32940	-0.00234	2.50740	-0.00238

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	0.00410	0.32940	0.00409	2.50740	0.00409

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00031	0.32940	-0.00034	2.50740	-0.00035

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00031	0.32940	0.00034	2.50740	0.00035

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	-0.00031	0.32940	-0.00034	2.50740	-0.00035

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	0.00031	0.32940	0.00034	2.50740	0.00035

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.00000	0.32940	0.00000	2.50740	0.00000

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	0.64533
	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	0.58502
	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	0.64533

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	0.58502

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	0.63649
	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	0.58756
	SET_B->Q_N (FF)	0.01860	0.00100	0.03862	0.32940	0.06480	0.18813	2.50740	0.30000	0.57681

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	0.63649

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	0.58756

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	0.03117	0.32940	0.06480	0.03843	2.50740	0.30000	0.10168
	SET_B	0.01860	0.00100	0.05802	0.32940	0.06480	0.16444	2.50740	0.30000	0.63824

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	0.03034	0.32940	0.06480	0.03780	2.50740	0.30000	0.10589
	RESET_B	0.01860	0.00100	0.06749	0.32940	0.06480	0.16204	2.50740	0.30000	0.56153

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	0.03117	0.32940	0.06480	0.03843	2.50740	0.30000	0.10168

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	0.03034	0.32940	0.06480	0.03780	2.50740	0.30000	0.10589

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	0.03033	0.32940	0.06480	0.03835	2.50740	0.30000	0.10535
	RESET_B	0.01860	0.00100	0.06746	0.32940	0.06480	0.16315	2.50740	0.30000	0.55939

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	0.03115	0.32940	0.06480	0.03834	2.50740	0.30000	0.10221
	SET_B	0.01860	0.00100	0.05796	0.32940	0.06480	0.16428	2.50740	0.30000	0.63978

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	0.03033	0.32940	0.06480	0.03835	2.50740	0.30000	0.10535

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	0.03115	0.32940	0.06480	0.03834	2.50740	0.30000	0.10221

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00590	0.32940	0.01020	2.50740	0.05876

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00789	0.32940	0.01248	2.50740	0.06044

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	0.01875	0.32940	0.02396	2.50740	0.07865
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00590	0.32940	0.01020	2.50740	0.05876

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	0.02142	0.32940	0.02679	2.50740	0.08099
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00789	0.32940	0.01248	2.50740	0.06044

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00919	0.32940	0.01304	2.50740	0.06423

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00503	0.32940	0.00908	2.50740	0.06049

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	0.02187	0.32940	0.02650	2.50740	0.08320
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00919	0.32940	0.01304	2.50740	0.06423

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	0.03038	0.32940	0.03462	2.50740	0.09158
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00503	0.32940	0.00908	2.50740	0.06049

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00760	0.32940	0.02043	2.50740	0.13711

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02852	0.32940	0.04768	2.50740	0.11424

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	0.01946	0.32940	0.02769	2.50740	0.09624
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02230	0.32940	0.02926	2.50740	0.09745
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02075	0.32940	0.03459	2.50740	0.15785
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00760	0.32940	0.02043	2.50740	0.13711

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	0.02642	0.32940	0.03438	2.50740	0.10116
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02852	0.32940	0.04768	2.50740	0.11424
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00537	0.32940	0.05877	2.50740	0.17872
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00615	0.32940	0.01855	2.50740	0.13341

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01709	0.32940	0.03144	2.50740	0.15803

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01828	0.32940	0.03292	2.50740	0.15695

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	0.01698	0.32940	0.03125	2.50740	0.15760
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02105	0.32940	0.03532	2.50740	0.16101
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01709	0.32940	0.03144	2.50740	0.15803
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01696	0.32940	0.03123	2.50740	0.15759
	(!RESET_B * !Q * Q_N)	0.01860	0.01912	0.32940	0.03349	2.50740	0.16007
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01707	0.32940	0.03144	2.50740	0.15802

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	0.01755	0.32940	0.03223	2.50740	0.15641
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03257	0.32940	0.04778	2.50740	0.17639
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01535	0.32940	0.03078	2.50740	0.15667
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.03667	0.32940	0.05208	2.50740	0.17813
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01777	0.32940	0.03241	2.50740	0.15643
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01756	0.32940	0.03223	2.50740	0.15641
	(!RESET_B * !Q * Q_N)	0.01860	0.01828	0.32940	0.03292	2.50740	0.15695
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01776	0.32940	0.03239	2.50740	0.15642

SGCLK



*sg13g2_stdcell_fast_1p65V_m40C Cell Library: Process
sg13g2_stdcell_fast_1p65V_m40C, Voltage 1.65, Temp -40.00*

Truth Table

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

Footprint

Cell Name	Area
sg13g2_slgcp_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	GATE	SCE	CLK	GCLK
sg13g2_slgcp_1	0.00199	0.00248	0.00544	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	3361.95000	3668.47000	4067.18000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.03588	0.32940	0.06480	0.16312	2.50740	0.30000	0.58911

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.03108	0.32940	0.06480	0.15903	2.50740	0.30000	0.57287

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01660	1.26300	1.26300	-0.08635	2.50740	2.50740	-0.11288
	setup	CLK (R)	0.01860	0.01860	0.03176	1.26300	1.26300	0.13762	2.50740	2.50740	0.19356

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02889	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.27001
	setup	CLK (R)	0.01860	0.01860	0.04448	1.26300	1.26300	0.18889	2.50740	2.50740	0.36120

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02152	1.26300	1.26300	-0.12143	2.50740	2.50740	-0.18514
	setup	CLK (R)	0.01860	0.01860	0.00200	1.26300	1.26300	0.00200	2.50740	2.50740	0.00200

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02847	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.18194
	setup	CLK (R)	0.01860	0.01860	0.04770	1.26300	1.26300	0.18079	2.50740	2.50740	0.32313

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_slgcp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.02410	0.32940	0.06480	0.03279	2.50740	0.30000	0.11891

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.01651	0.32940	0.06480	0.02696	2.50740	0.30000	0.11201

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.03121	0.32940	0.04213	2.50740	0.12510

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01961	0.32940	0.06297	2.50740	0.14504

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	0.03121	0.32940	0.04213	2.50740	0.12510

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	!CLK	0.01860	0.01961	0.32940	0.06297	2.50740	0.14504

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01400	0.32940	0.02336	2.50740	0.11047

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02111	0.32940	0.06105	2.50740	0.14539

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00577	0.32940	0.01825	2.50740	0.12513

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00796	0.32940	0.02108	2.50740	0.12842

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	0.64357
	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	0.02380	2.50740	0.30000	0.11079
	B	0.01860	0.00100	0.01451	0.32940	0.06480	0.02351	2.50740	0.30000	0.10788

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	0.11001
	B	0.01860	0.00100	0.01440	0.32940	0.06480	0.02244	2.50740	0.30000	0.10691

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	0.61445
	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	0.10866
	B	0.01860	0.00100	0.01329	0.32940	0.06480	0.02066	2.50740	0.30000	0.10348

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	0.01695	0.32940	0.06480	0.02537	2.50740	0.30000	0.11054
	B	0.01860	0.00100	0.01562	0.32940	0.06480	0.02519	2.50740	0.30000	0.10615