

sg13g2_stdcell_fast_1p65V_m40C Library

Cell Groups
A21OIx
A221OI
A22OI
AND2x
AND3x
AND4x
AO21x
BTLx
BUx
DECAPx
DFFRRx
DLHQ
DLHRQ
DLHR
DLLRQ
DLLR
DLY1
DLY2
DLY4
EINVINx
GCLK
INx
ITL

KEEPSTATE
MUX2x
MUX4
NAND2B1
NAND2B2
NAND2x
NAND3B1
NAND3
NAND4
NOR2Bx
NOR2x
NOR3x
NOR4x
NP_ANT
O21AI
OR2x
OR3x
OR4x
SDFRRS
SGCLK
TIE0
TIE1
XNOR2_1
XOR2_1

A21OIx



*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	Y
0	x	0	1
x	x	1	0
1	0	0	1
1	1	x	0

Footprint

Cell Name	Area
sg13g2_a21oi_2	14.51520
sg13g2_a21oi_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_a21oi_2	0.00603	0.00668	0.00589	0.60000
sg13g2_a21oi_1	0.00313	0.00333	0.00300	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	823.98800	2427.10000	3998.11000
sg13g2_a21oi_1	411.99300	1213.55000	1999.05000

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_a21oi_2	A1->Y (FR)	0.01860	0.00100	0.02152	0.32940	0.12960	0.26747	2.50740	0.60000	1.36037
	A2->Y (FR)	0.01860	0.00100	0.02585	0.32940	0.12960	0.27170	2.50740	0.60000	1.36992
	B1->Y (FR)	0.01860	0.00100	0.02141	0.32940	0.12960	0.30253	2.50740	0.60000	1.62185
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.02339	0.32940	0.06480	0.26688	2.50740	0.30000	1.35683
	A2->Y (FR)	0.01860	0.00100	0.02761	0.32940	0.06480	0.27127	2.50740	0.30000	1.37054
	B1->Y (FR)	0.01860	0.00100	0.02311	0.32940	0.06480	0.30298	2.50740	0.30000	1.62271

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_a21oi_2	A1->Y (RF)	0.01860	0.00100	0.01986	0.32940	0.12960	0.26175	2.50740	0.60000	1.40128
	A2->Y (RF)	0.01860	0.00100	0.02157	0.32940	0.12960	0.23377	2.50740	0.60000	1.20539
	B1->Y (RF)	0.01860	0.00100	0.01089	0.32940	0.12960	0.19073	2.50740	0.60000	1.04648
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.02139	0.32940	0.06480	0.26187	2.50740	0.30000	1.39962
	A2->Y (RF)	0.01860	0.00100	0.02301	0.32940	0.06480	0.23361	2.50740	0.30000	1.20328
	B1->Y (RF)	0.01860	0.00100	0.01218	0.32940	0.06480	0.19122	2.50740	0.30000	1.04877

Delay(ns) to Y 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_a21oi_2	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02141	0.32940	0.12960	0.30253	2.50740	0.60000	1.62185
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01667	0.32940	0.12960	0.29825	2.50740	0.60000	1.62172
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01414	0.32940	0.12960	0.25470	2.50740	0.60000	1.39494
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02311	0.32940	0.06480	0.30298	2.50740	0.30000	1.62271
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01861	0.32940	0.06480	0.29680	2.50740	0.30000	1.61224
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01578	0.32940	0.06480	0.25420	2.50740	0.30000	1.39042

Delay(ns) to Y 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_a21oi_2	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01153	0.32940	0.12960	0.19215	2.50740	0.60000	1.04213
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01115	0.32940	0.12960	0.19047	2.50740	0.60000	1.03935
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01089	0.32940	0.12960	0.19073	2.50740	0.60000	1.04648
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01273	0.32940	0.06480	0.19266	2.50740	0.30000	1.04417
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01239	0.32940	0.06480	0.19098	2.50740	0.30000	1.04222
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01218	0.32940	0.06480	0.19122	2.50740	0.30000	1.04877

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_a21oi_2	A1	0.01860	0.00100	0.01409	0.32940	0.12960	0.02070	2.50740	0.60000	0.10379
	A2	0.01860	0.00100	0.01801	0.32940	0.12960	0.02405	2.50740	0.60000	0.11253
	B1	0.01860	0.00100	0.00942	0.32940	0.12960	0.01820	2.50740	0.60000	0.10809
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00720	0.32940	0.06480	0.01032	2.50740	0.30000	0.05170
	A2	0.01860	0.00100	0.00897	0.32940	0.06480	0.01178	2.50740	0.30000	0.05625
	B1	0.01860	0.00100	0.00458	0.32940	0.06480	0.00896	2.50740	0.30000	0.05377

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_a21oi_2	A1	0.01860	0.00100	0.01251	0.32940	0.12960	0.01896	2.50740	0.60000	0.09262
	A2	0.01860	0.00100	0.01691	0.32940	0.12960	0.02275	2.50740	0.60000	0.10048
	B1	0.01860	0.00100	0.00532	0.32940	0.12960	0.01494	2.50740	0.60000	0.10611
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00671	0.32940	0.06480	0.00997	2.50740	0.30000	0.04697
	A2	0.01860	0.00100	0.00887	0.32940	0.06480	0.01173	2.50740	0.30000	0.05036
	B1	0.01860	0.00100	0.00320	0.32940	0.06480	0.00786	2.50740	0.30000	0.05375

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.00942	0.32940	0.12960	0.01820	2.50740	0.60000	0.10809
	B1	(!A1 * A2)	0.01860	0.00100	0.00809	0.32940	0.12960	0.01718	2.50740	0.60000	0.10741
	B1	(!A1 * !A2)	0.01860	0.00100	0.00826	0.32940	0.12960	0.01865	2.50740	0.60000	0.11973
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00458	0.32940	0.06480	0.00896	2.50740	0.30000	0.05377
	B1	(!A1 * A2)	0.01860	0.00100	0.00406	0.32940	0.06480	0.00861	2.50740	0.30000	0.05362
	B1	(!A1 * !A2)	0.01860	0.00100	0.00412	0.32940	0.06480	0.00936	2.50740	0.30000	0.05992

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.01256	0.32940	0.12960	0.02142	2.50740	0.60000	0.10314
	B1	(!A1 * A2)	0.01860	0.00100	0.00570	0.32940	0.12960	0.01449	2.50740	0.60000	0.09673
	B1	(!A1 * !A2)	0.01860	0.00100	0.00532	0.32940	0.12960	0.01494	2.50740	0.60000	0.10611
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00682	0.32940	0.06480	0.01124	2.50740	0.30000	0.05186
	B1	(!A1 * A2)	0.01860	0.00100	0.00341	0.32940	0.06480	0.00772	2.50740	0.30000	0.04925
	B1	(!A1 * !A2)	0.01860	0.00100	0.00320	0.32940	0.06480	0.00786	2.50740	0.30000	0.05375

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00271	0.32940	-0.00275	2.50740	-0.00273
sg13g2_a21oi_1	0.01860	-0.00123	0.32940	-0.00127	2.50740	-0.00128

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00275	0.32940	0.00284	2.50740	0.00285
sg13g2_a21oi_1	0.01860	0.00123	0.32940	0.00127	2.50740	0.00128

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00271	0.32940	-0.00275	2.50740	-0.00273
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	-0.00123	0.32940	-0.00127	2.50740	-0.00128

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00275	0.32940	0.00284	2.50740	0.00285
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * !B1)	0.01860	0.00123	0.32940	0.00127	2.50740	0.00128

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_a21oi_2	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * !B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	B1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_a21oi_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	(A1 * A2)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	(A1 * A2)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

A221OI



*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	B2	C1	Y
0	x	0	x	0	1
0	x	x	x	1	0
0	x	1	0	0	1
x	x	1	1	x	0
1	0	0	x	0	1
1	0	x	x	1	0
1	0	1	0	0	1
1	1	x	x	x	0

Footprint

Cell Name	Area
sg13g2_a221oi_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	A1	A2	B1	B2	C1	Y
sg13g2_a221oi_1	0.00328	0.00338	0.00299	0.00310	0.00272	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	615.40700	1955.81000	3301.51000

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_a221oi_1	A1->Y (FR)	0.01860	0.00100	0.04326	0.32940	0.12960	0.60628	2.50740	0.60000	2.81824
	A2->Y (FR)	0.01860	0.00100	0.04956	0.32940	0.12960	0.61101	2.50740	0.60000	2.82119
	B1->Y (FR)	0.01860	0.00100	0.04521	0.32940	0.12960	0.63299	2.50740	0.60000	3.04163
	B2->Y (FR)	0.01860	0.00100	0.05127	0.32940	0.12960	0.63616	2.50740	0.60000	3.04209
	C1->Y (FR)	0.01860	0.00100	0.03335	0.32940	0.12960	0.64323	2.50740	0.60000	3.22101

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_a221oi_1	A1->Y (RF)	0.01860	0.00100	0.02727	0.32940	0.12960	0.40547	2.50740	0.60000	2.14317
	A2->Y (RF)	0.01860	0.00100	0.02900	0.32940	0.12960	0.37870	2.50740	0.60000	1.91091
	B1->Y (RF)	0.01860	0.00100	0.02400	0.32940	0.12960	0.39703	2.50740	0.60000	2.13551
	B2->Y (RF)	0.01860	0.00100	0.02648	0.32940	0.12960	0.37322	2.50740	0.60000	1.90066
	C1->Y (RF)	0.01860	0.00100	0.01456	0.32940	0.12960	0.28607	2.50740	0.60000	1.57960

Delay(ns) to Y 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_a221oi_1	A1->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.05053	0.32940	0.12960	0.61152	2.50740	0.60000	2.81658
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.04326	0.32940	0.12960	0.60628	2.50740	0.60000	2.81824
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.03974	0.32940	0.12960	0.52734	2.50740	0.60000	2.50631
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.05659	0.32940	0.12960	0.61560	2.50740	0.60000	2.81943
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.04956	0.32940	0.12960	0.61101	2.50740	0.60000	2.82119
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.04489	0.32940	0.12960	0.53104	2.50740	0.60000	2.50672
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.04521	0.32940	0.12960	0.63299	2.50740	0.60000	3.04163
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03789	0.32940	0.12960	0.62700	2.50740	0.60000	3.04032
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.03238	0.32940	0.12960	0.53521	2.50740	0.60000	2.63590
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.05127	0.32940	0.12960	0.63616	2.50740	0.60000	3.04209
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04419	0.32940	0.12960	0.63059	2.50740	0.60000	3.04084
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.03746	0.32940	0.12960	0.53779	2.50740	0.60000	2.63509
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03335	0.32940	0.12960	0.64323	2.50740	0.60000	3.22101

Delay(ns) to Y 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_a221oi_1	A1->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.02727	0.32940	0.12960	0.40547	2.50740	0.60000	2.14317
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.02632	0.32940	0.12960	0.40301	2.50740	0.60000	2.13996
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.02752	0.32940	0.12960	0.40502	2.50740	0.60000	2.14123
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.02880	0.32940	0.12960	0.37889	2.50740	0.60000	1.90975
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.02782	0.32940	0.12960	0.37669	2.50740	0.60000	1.90687
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.02900	0.32940	0.12960	0.37870	2.50740	0.60000	1.91091
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02491	0.32940	0.12960	0.40025	2.50740	0.60000	2.13348
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02424	0.32940	0.12960	0.39803	2.50740	0.60000	2.13177
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02400	0.32940	0.12960	0.39703	2.50740	0.60000	2.13551
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02648	0.32940	0.12960	0.37322	2.50740	0.60000	1.90066
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02581	0.32940	0.12960	0.37127	2.50740	0.60000	1.89656
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02556	0.32940	0.12960	0.37133	2.50740	0.60000	1.90030
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01456	0.32940	0.12960	0.28607	2.50740	0.60000	1.57960

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_a221oi_1	A1	0.01860	0.00100	0.01578	0.32940	0.12960	0.01647	2.50740	0.60000	0.04022
	A2	0.01860	0.00100	0.01604	0.32940	0.12960	0.01653	2.50740	0.60000	0.04149
	B1	0.01860	0.00100	0.01188	0.32940	0.12960	0.01280	2.50740	0.60000	0.03256
	B2	0.01860	0.00100	0.01207	0.32940	0.12960	0.01268	2.50740	0.60000	0.03356
	C1	0.01860	0.00100	0.00629	0.32940	0.12960	0.00819	2.50740	0.60000	0.03307

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_a221oi_1	A1	0.01860	0.00100	0.00898	0.32940	0.12960	0.00953	2.50740	0.60000	0.02884
	A2	0.01860	0.00100	0.01238	0.32940	0.12960	0.01285	2.50740	0.60000	0.03347
	B1	0.01860	0.00100	0.00576	0.32940	0.12960	0.00673	2.50740	0.60000	0.02755
	B2	0.01860	0.00100	0.00923	0.32940	0.12960	0.01032	2.50740	0.60000	0.03124
	C1	0.01860	0.00100	0.00814	0.32940	0.12960	0.01006	2.50740	0.60000	0.03113

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a22loi_1	A1	(B1 * !B2)	0.01860	0.00100	0.01578	0.32940	0.12960	0.01647	2.50740	0.60000	0.04022
	A1	(!B1 * B2)	0.01860	0.00100	0.01518	0.32940	0.12960	0.01605	2.50740	0.60000	0.03991
	A1	(!B1 * !B2)	0.01860	0.00100	0.01908	0.32940	0.12960	0.01991	2.50740	0.60000	0.04460
	A2	(B1 * !B2)	0.01860	0.00100	0.01604	0.32940	0.12960	0.01653	2.50740	0.60000	0.04149
	A2	(!B1 * B2)	0.01860	0.00100	0.01557	0.32940	0.12960	0.01611	2.50740	0.60000	0.04173
	A2	(!B1 * !B2)	0.01860	0.00100	0.01947	0.32940	0.12960	0.02003	2.50740	0.60000	0.04577
	B1	(A1 * !A2)	0.01860	0.00100	0.01188	0.32940	0.12960	0.01280	2.50740	0.60000	0.03256
	B1	(!A1 * A2)	0.01860	0.00100	0.01126	0.32940	0.12960	0.01243	2.50740	0.60000	0.03242
	B1	(!A1 * !A2)	0.01860	0.00100	0.01126	0.32940	0.12960	0.01265	2.50740	0.60000	0.03574
	B2	(A1 * !A2)	0.01860	0.00100	0.01207	0.32940	0.12960	0.01268	2.50740	0.60000	0.03356
	B2	(!A1 * A2)	0.01860	0.00100	0.01160	0.32940	0.12960	0.01233	2.50740	0.60000	0.03319
	B2	(!A1 * !A2)	0.01860	0.00100	0.01159	0.32940	0.12960	0.01257	2.50740	0.60000	0.03590
	C1	(!A1 * A2)	0.01860	0.00100	0.00629	0.32940	0.12960	0.00819	2.50740	0.60000	0.03307

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a221oi_1	A1	(B1 * !B2)	0.01860	0.00100	0.01241	0.32940	0.12960	0.01306	2.50740	0.60000	0.03266
	A1	(!B1 * B2)	0.01860	0.00100	0.00898	0.32940	0.12960	0.00953	2.50740	0.60000	0.02884
	A1	(!B1 * !B2)	0.01860	0.00100	0.00728	0.32940	0.12960	0.00791	2.50740	0.60000	0.02770
	A2	(B1 * !B2)	0.01860	0.00100	0.01580	0.32940	0.12960	0.01631	2.50740	0.60000	0.03723
	A2	(!B1 * B2)	0.01860	0.00100	0.01238	0.32940	0.12960	0.01285	2.50740	0.60000	0.03347
	A2	(!B1 * !B2)	0.01860	0.00100	0.01067	0.32940	0.12960	0.01126	2.50740	0.60000	0.03319
	B1	(A1 * !A2)	0.01860	0.00100	0.00938	0.32940	0.12960	0.01054	2.50740	0.60000	0.02849
	B1	(!A1 * A2)	0.01860	0.00100	0.00595	0.32940	0.12960	0.00710	2.50740	0.60000	0.02547
	B1	(!A1 * !A2)	0.01860	0.00100	0.00576	0.32940	0.12960	0.00673	2.50740	0.60000	0.02755
	B2	(A1 * !A2)	0.01860	0.00100	0.01285	0.32940	0.12960	0.01372	2.50740	0.60000	0.03340
	B2	(!A1 * A2)	0.01860	0.00100	0.00941	0.32940	0.12960	0.01037	2.50740	0.60000	0.02919
	B2	(!A1 * !A2)	0.01860	0.00100	0.00923	0.32940	0.12960	0.01032	2.50740	0.60000	0.03124
	C1	(!A1 * A2)	0.01860	0.00100	0.00814	0.32940	0.12960	0.01006	2.50740	0.60000	0.03113

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	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_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2 * !C1)	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_a221oi_1	(B1 * B2 * !C1)	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_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(A1 * A2 * !C1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(A1 * A2 * !C1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B2 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(A1 * A2 * !C1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for B2 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	C1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(A1 * A2 * !C1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00098	0.32940	-0.00101	2.50740	-0.00102

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00098	0.32940	0.00101	2.50740	0.00102

Passive power(pJ) for C1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2)	0.01860	-0.00098	0.32940	-0.00101	2.50740	-0.00102

Passive power(pJ) for C1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2)	0.01860	0.00098	0.32940	0.00101	2.50740	0.00102

A22OI



*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	B2	Y
0	x	0	0	1
0	x	x	1	0
x	x	1	x	0
1	0	0	0	1
1	0	x	1	0
1	1	x	x	0

Footprint

Cell Name	Area
sg13g2_a22oi_1	10.84860

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A1	A2	B1	B2	Y
sg13g2_a22oi_1	0.00343	0.00343	0.00397	0.00403	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	406.81900	1461.89000	2677.82000

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_a22oi_1	A1->Y (FR)	0.01860	0.00100	0.02416	0.32940	0.06480	0.24407	2.50740	0.30000	1.26407
	A2->Y (FR)	0.01860	0.00100	0.02718	0.32940	0.06480	0.24721	2.50740	0.30000	1.27330
	B1->Y (FR)	0.01860	0.00100	0.02049	0.32940	0.06480	0.25727	2.50740	0.30000	1.37893
	B2->Y (FR)	0.01860	0.00100	0.01771	0.32940	0.06480	0.25281	2.50740	0.30000	1.36809

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_a22oi_1	A1->Y (RF)	0.01860	0.00100	0.02645	0.32940	0.06480	0.26766	2.50740	0.30000	1.41338
	A2->Y (RF)	0.01860	0.00100	0.02797	0.32940	0.06480	0.23947	2.50740	0.30000	1.21657
	B1->Y (RF)	0.01860	0.00100	0.01995	0.32940	0.06480	0.22923	2.50740	0.30000	1.19978
	B2->Y (RF)	0.01860	0.00100	0.01852	0.32940	0.06480	0.25738	2.50740	0.30000	1.39626

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_a22oi_1	A1	0.01860	0.00100	0.00515	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	0.00480	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	0.00088	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	0.00106	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000

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_a22oi_1	A1	0.01860	0.00100	0.00076	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	A2	0.01860	0.00100	0.00171	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B1	0.01860	0.00100	0.00351	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000
	B2	0.01860	0.00100	-0.00032	0.32940	0.06480	0.00000	2.50740	0.30000	0.00000

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00563	0.32940	0.01570	2.50740	0.10947

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00793	0.32940	0.02658	2.50740	0.11969

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00805	0.32940	0.01872	2.50740	0.11537

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00863	0.32940	0.02546	2.50740	0.12181

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00449	0.32940	0.01546	2.50740	0.11609

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00417	0.32940	0.01637	2.50740	0.11557

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00500	0.32940	0.01637	2.50740	0.10695

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00366	0.32940	0.01584	2.50740	0.11210

AND2x



*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_2	10.88640
sg13g2_and2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_2	0.00285	0.00290	0.60000
sg13g2_and2_1	0.00289	0.00292	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	1611.43000	1783.93000	2156.78000
sg13g2_and2_1	881.88800	1184.62000	1427.23000

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_2	A->X (RR)	0.01860	0.00100	0.04110	0.32940	0.12960	0.19729	2.50740	0.60000	0.69449
	B->X (RR)	0.01860	0.00100	0.04275	0.32940	0.12960	0.18558	2.50740	0.60000	0.63138
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.03324	0.32940	0.06480	0.17192	2.50740	0.30000	0.64539
	B->X (RR)	0.01860	0.00100	0.03488	0.32940	0.06480	0.16282	2.50740	0.30000	0.58877

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_2	A->X (FF)	0.01860	0.00100	0.03489	0.32940	0.12960	0.17320	2.50740	0.60000	0.56265
	B->X (FF)	0.01860	0.00100	0.03735	0.32940	0.12960	0.18221	2.50740	0.60000	0.61426
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.02883	0.32940	0.06480	0.14865	2.50740	0.30000	0.51368
	B->X (FF)	0.01860	0.00100	0.03141	0.32940	0.06480	0.15960	2.50740	0.30000	0.56877

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_2	A	0.01860	0.00100	0.02205	0.32940	0.12960	0.03057	2.50740	0.60000	0.11565
	B	0.01860	0.00100	0.02500	0.32940	0.12960	0.03245	2.50740	0.60000	0.11742
sg13g2_and2_1	A	0.01860	0.00100	0.01259	0.32940	0.06480	0.02197	2.50740	0.30000	0.10561
	B	0.01860	0.00100	0.01554	0.32940	0.06480	0.02384	2.50740	0.30000	0.11002

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_2	A	0.01860	0.00100	0.01941	0.32940	0.12960	0.02830	2.50740	0.60000	0.10904
	B	0.01860	0.00100	0.01971	0.32940	0.12960	0.02905	2.50740	0.60000	0.11365
sg13g2_and2_1	A	0.01860	0.00100	0.01100	0.32940	0.06480	0.02064	2.50740	0.30000	0.10200
	B	0.01860	0.00100	0.01119	0.32940	0.06480	0.02113	2.50740	0.30000	0.10483

AND3x



*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_2	12.70080
sg13g2_and3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_2	0.00263	0.00284	0.00289	0.60000
sg13g2_and3_1	0.00264	0.00287	0.00288	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	1615.46000	2042.82000	2698.25000
sg13g2_and3_1	885.91900	1378.40000	2021.60000

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_and3_2	A->X (RR)	0.01860	0.00100	0.05477	0.32940	0.12960	0.22628	2.50740	0.60000	0.79132
	B->X (RR)	0.01860	0.00100	0.05916	0.32940	0.12960	0.21825	2.50740	0.60000	0.74861
	C->X (RR)	0.01860	0.00100	0.06084	0.32940	0.12960	0.20386	2.50740	0.60000	0.67714
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.04312	0.32940	0.06480	0.19663	2.50740	0.30000	0.73492
	B->X (RR)	0.01860	0.00100	0.04753	0.32940	0.06480	0.19137	2.50740	0.30000	0.69623
	C->X (RR)	0.01860	0.00100	0.04921	0.32940	0.06480	0.17921	2.50740	0.30000	0.63357

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_2	A->X (FF)	0.01860	0.00100	0.03646	0.32940	0.12960	0.17454	2.50740	0.60000	0.52808
	B->X (FF)	0.01860	0.00100	0.03907	0.32940	0.12960	0.18333	2.50740	0.60000	0.57045
	C->X (FF)	0.01860	0.00100	0.04080	0.32940	0.12960	0.19048	2.50740	0.60000	0.62107
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.03050	0.32940	0.06480	0.15014	2.50740	0.30000	0.47557
	B->X (FF)	0.01860	0.00100	0.03320	0.32940	0.06480	0.16039	2.50740	0.30000	0.52172
	C->X (FF)	0.01860	0.00100	0.03479	0.32940	0.06480	0.16917	2.50740	0.30000	0.57717

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_2	A	0.01860	0.00100	0.02674	0.32940	0.12960	0.03173	2.50740	0.60000	0.10682
	B	0.01860	0.00100	0.02878	0.32940	0.12960	0.03259	2.50740	0.60000	0.11091
	C	0.01860	0.00100	0.03161	0.32940	0.12960	0.03469	2.50740	0.60000	0.11847
sg13g2_and3_1	A	0.01860	0.00100	0.01545	0.32940	0.06480	0.02356	2.50740	0.30000	0.10119
	B	0.01860	0.00100	0.01750	0.32940	0.06480	0.02441	2.50740	0.30000	0.10233
	C	0.01860	0.00100	0.02031	0.32940	0.06480	0.02630	2.50740	0.30000	0.11049

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_2	A	0.01860	0.00100	0.01891	0.32940	0.12960	0.02652	2.50740	0.60000	0.10194
	B	0.01860	0.00100	0.02026	0.32940	0.12960	0.02807	2.50740	0.60000	0.10410
	C	0.01860	0.00100	0.02058	0.32940	0.12960	0.02877	2.50740	0.60000	0.11177
sg13g2_and3_1	A	0.01860	0.00100	0.01037	0.32940	0.06480	0.01875	2.50740	0.30000	0.09280
	B	0.01860	0.00100	0.01161	0.32940	0.06480	0.01989	2.50740	0.30000	0.09604
	C	0.01860	0.00100	0.01183	0.32940	0.06480	0.02104	2.50740	0.30000	0.10175

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00083	0.32940	-0.00112	2.50740	-0.00122
sg13g2_and3_1	0.01860	-0.00084	0.32940	-0.00112	2.50740	-0.00122

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00083	0.32940	0.00112	2.50740	0.00122
sg13g2_and3_1	0.01860	0.00084	0.32940	0.00112	2.50740	0.00122

AND4x



*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_2	16.32960
sg13g2_and4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_2	0.00251	0.00253	0.00296	0.00292	0.60000
sg13g2_and4_1	0.00253	0.00254	0.00297	0.00293	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	1619.64000	2202.61000	3239.66000
sg13g2_and4_1	890.08400	1505.62000	2625.89000

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_and4_2	A->X (RR)	0.01860	0.00100	0.06893	0.32940	0.12960	0.25231	2.50740	0.60000	0.87405
	B->X (RR)	0.01860	0.00100	0.07559	0.32940	0.12960	0.24710	2.50740	0.60000	0.84060
	C->X (RR)	0.01860	0.00100	0.07941	0.32940	0.12960	0.23585	2.50740	0.60000	0.78509
	D->X (RR)	0.01860	0.00100	0.08126	0.32940	0.12960	0.22342	2.50740	0.60000	0.71466
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.05383	0.32940	0.06480	0.21979	2.50740	0.30000	0.81744
	B->X (RR)	0.01860	0.00100	0.06052	0.32940	0.06480	0.21665	2.50740	0.30000	0.78774
	C->X (RR)	0.01860	0.00100	0.06432	0.32940	0.06480	0.20812	2.50740	0.30000	0.73671
	D->X (RR)	0.01860	0.00100	0.06617	0.32940	0.06480	0.19740	2.50740	0.30000	0.67172

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_2	A->X (FF)	0.01860	0.00100	0.03757	0.32940	0.12960	0.17511	2.50740	0.60000	0.49560
	B->X (FF)	0.01860	0.00100	0.04022	0.32940	0.12960	0.18273	2.50740	0.60000	0.53406
	C->X (FF)	0.01860	0.00100	0.04213	0.32940	0.12960	0.19013	2.50740	0.60000	0.57559
	D->X (FF)	0.01860	0.00100	0.04356	0.32940	0.12960	0.19668	2.50740	0.60000	0.62434
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.03196	0.32940	0.06480	0.15080	2.50740	0.30000	0.44099
	B->X (FF)	0.01860	0.00100	0.03467	0.32940	0.06480	0.16038	2.50740	0.30000	0.48293
	C->X (FF)	0.01860	0.00100	0.03646	0.32940	0.06480	0.16872	2.50740	0.30000	0.52992
	D->X (FF)	0.01860	0.00100	0.03764	0.32940	0.06480	0.17574	2.50740	0.30000	0.58205

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_2	A	0.01860	0.00100	0.03040	0.32940	0.12960	0.03166	2.50740	0.60000	0.10307
	B	0.01860	0.00100	0.03338	0.32940	0.12960	0.03364	2.50740	0.60000	0.10513
	C	0.01860	0.00100	0.03546	0.32940	0.12960	0.03517	2.50740	0.60000	0.11161
	D	0.01860	0.00100	0.03714	0.32940	0.12960	0.03657	2.50740	0.60000	0.12291
sg13g2_and4_1	A	0.01860	0.00100	0.01722	0.32940	0.06480	0.02377	2.50740	0.30000	0.09445
	B	0.01860	0.00100	0.02021	0.32940	0.06480	0.02535	2.50740	0.30000	0.09621
	C	0.01860	0.00100	0.02229	0.32940	0.06480	0.02704	2.50740	0.30000	0.10307
	D	0.01860	0.00100	0.02397	0.32940	0.06480	0.02873	2.50740	0.30000	0.10861

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_2	A	0.01860	0.00100	0.01940	0.32940	0.12960	0.02648	2.50740	0.60000	0.09801
	B	0.01860	0.00100	0.02007	0.32940	0.12960	0.02684	2.50740	0.60000	0.09905
	C	0.01860	0.00100	0.02119	0.32940	0.12960	0.02803	2.50740	0.60000	0.10379
	D	0.01860	0.00100	0.02141	0.32940	0.12960	0.02795	2.50740	0.60000	0.11202
sg13g2_and4_1	A	0.01860	0.00100	0.01088	0.32940	0.06480	0.01847	2.50740	0.30000	0.08612
	B	0.01860	0.00100	0.01141	0.32940	0.06480	0.01881	2.50740	0.30000	0.08912
	C	0.01860	0.00100	0.01237	0.32940	0.06480	0.02004	2.50740	0.30000	0.09565
	D	0.01860	0.00100	0.01238	0.32940	0.06480	0.02044	2.50740	0.30000	0.10048

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00083	0.32940	-0.00084	2.50740	-0.00082
sg13g2_and4_1	0.01860	-0.00083	0.32940	-0.00083	2.50740	-0.00082

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00119	0.32940	0.00122	2.50740	0.00123
sg13g2_and4_1	0.01860	0.00120	0.32940	0.00122	2.50740	0.00123

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(B * C * !D) + (B * !C)$	0.01860	-0.00083	0.32940	-0.00084	2.50740	-0.00082
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00083	0.32940	-0.00083	2.50740	-0.00082

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(B * C * !D) + (B * !C)$	0.01860	0.00119	0.32940	0.00122	2.50740	0.00123
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00120	0.32940	0.00122	2.50740	0.00123

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00068	0.32940	-0.00069	2.50740	-0.00069
sg13g2_and4_1	0.01860	-0.00068	0.32940	-0.00069	2.50740	-0.00069

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00075	0.32940	0.00079	2.50740	0.00080
sg13g2_and4_1	0.01860	0.00076	0.32940	0.00079	2.50740	0.00080

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * C * !D) + (A * !C)$	0.01860	-0.00068	0.32940	-0.00069	2.50740	-0.00069
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00068	0.32940	-0.00069	2.50740	-0.00069

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * C * !D) + (A * !C)$	0.01860	0.00075	0.32940	0.00079	2.50740	0.00080
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00076	0.32940	0.00079	2.50740	0.00080

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !B * D) + (!A * D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !B * D) + (!A * D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00102	0.32940	0.00097	2.50740	0.00096
sg13g2_and4_1	0.01860	0.00100	0.32940	0.00096	2.50740	0.00096

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00032	0.32940	0.00015	2.50740	0.00007
sg13g2_and4_1	0.01860	0.00033	0.32940	0.00015	2.50740	0.00007

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * C) + (!A * C)$	0.01860	0.00102	0.32940	0.00097	2.50740	0.00096
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00100	0.32940	0.00096	2.50740	0.00096

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * !B * C) + (!A * C)$	0.01860	0.00032	0.32940	0.00015	2.50740	0.00007
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00033	0.32940	0.00015	2.50740	0.00007

A021x



*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_2	14.51520
sg13g2_a21o_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_2	0.00337	0.00335	0.00292	0.60000
sg13g2_a21o_1	0.00316	0.00323	0.00277	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	1463.02000	1989.28000	2488.15000
sg13g2_a21o_1	1094.65000	1428.47000	1866.63000

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_2	A1->X (RR)	0.01860	0.00100	0.04371	0.32940	0.12960	0.20013	2.50740	0.60000	0.67732
	A2->X (RR)	0.01860	0.00100	0.04512	0.32940	0.12960	0.18668	2.50740	0.60000	0.61257
	B1->X (RR)	0.01860	0.00100	0.02940	0.32940	0.12960	0.16646	2.50740	0.60000	0.51581
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.04053	0.32940	0.06480	0.18984	2.50740	0.30000	0.68991
	A2->X (RR)	0.01860	0.00100	0.04205	0.32940	0.06480	0.17811	2.50740	0.30000	0.62870
	B1->X (RR)	0.01860	0.00100	0.02750	0.32940	0.06480	0.15642	2.50740	0.30000	0.52432

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_2	A1->X (FF)	0.01860	0.00100	0.05430	0.32940	0.12960	0.18988	2.50740	0.60000	0.61503
	A2->X (FF)	0.01860	0.00100	0.05929	0.32940	0.12960	0.19975	2.50740	0.60000	0.66661
	B1->X (FF)	0.01860	0.00100	0.05492	0.32940	0.12960	0.21745	2.50740	0.60000	0.76498
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.04308	0.32940	0.06480	0.16180	2.50740	0.30000	0.53152
	A2->X (FF)	0.01860	0.00100	0.04768	0.32940	0.06480	0.17246	2.50740	0.30000	0.58651
	B1->X (FF)	0.01860	0.00100	0.04305	0.32940	0.06480	0.18532	2.50740	0.30000	0.66954

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_2	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.02940	0.32940	0.12960	0.16646	2.50740	0.60000	0.51581
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02825	0.32940	0.12960	0.15847	2.50740	0.60000	0.49633
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.02750	0.32940	0.06480	0.15642	2.50740	0.30000	0.52432
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02607	0.32940	0.06480	0.14832	2.50740	0.30000	0.50272

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_2	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.05492	0.32940	0.12960	0.21745	2.50740	0.60000	0.76498
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.04898	0.32940	0.12960	0.20669	2.50740	0.60000	0.74487
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.04305	0.32940	0.06480	0.18532	2.50740	0.30000	0.66954
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.03791	0.32940	0.06480	0.17466	2.50740	0.30000	0.65051

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_2	A1	0.01860	0.00100	0.02363	0.32940	0.12960	0.03216	2.50740	0.60000	0.12244
	A2	0.01860	0.00100	0.02697	0.32940	0.12960	0.03424	2.50740	0.60000	0.12698
	B1	0.01860	0.00100	0.02082	0.32940	0.12960	0.03092	2.50740	0.60000	0.12775
sg13g2_a21o_1	A1	0.01860	0.00100	0.01406	0.32940	0.06480	0.02263	2.50740	0.30000	0.10569
	A2	0.01860	0.00100	0.01711	0.32940	0.06480	0.02458	2.50740	0.30000	0.10981
	B1	0.01860	0.00100	0.01267	0.32940	0.06480	0.02291	2.50740	0.30000	0.11192

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_2	A1	0.01860	0.00100	0.02707	0.32940	0.12960	0.03281	2.50740	0.60000	0.12157
	A2	0.01860	0.00100	0.02774	0.32940	0.12960	0.03213	2.50740	0.60000	0.12320
	B1	0.01860	0.00100	0.02245	0.32940	0.12960	0.03063	2.50740	0.60000	0.12295
sg13g2_a21o_1	A1	0.01860	0.00100	0.01649	0.32940	0.06480	0.02386	2.50740	0.30000	0.10647
	A2	0.01860	0.00100	0.01667	0.32940	0.06480	0.02408	2.50740	0.30000	0.10790
	B1	0.01860	0.00100	0.01165	0.32940	0.06480	0.02195	2.50740	0.30000	0.10512

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_2	B1	(A1 * !A2)	0.01860	0.00100	0.02443	0.32940	0.12960	0.03501	2.50740	0.60000	0.13070
	B1	(!A1 * A2)	0.01860	0.00100	0.02082	0.32940	0.12960	0.03092	2.50740	0.60000	0.12775
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.01567	0.32940	0.06480	0.02614	2.50740	0.30000	0.11416
	B1	(!A1 * A2)	0.01860	0.00100	0.01267	0.32940	0.06480	0.02291	2.50740	0.30000	0.11192

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_2	B1	(A1 * !A2)	0.01860	0.00100	0.02340	0.32940	0.12960	0.03031	2.50740	0.60000	0.12384
	B1	(!A1 * A2)	0.01860	0.00100	0.02245	0.32940	0.12960	0.03063	2.50740	0.60000	0.12295
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.01211	0.32940	0.06480	0.02168	2.50740	0.30000	0.10472
	B1	(!A1 * A2)	0.01860	0.00100	0.01165	0.32940	0.06480	0.02195	2.50740	0.30000	0.10512

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_2	(A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_2	(A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!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_2	0.01860	-0.00052	0.32940	-0.00054	2.50740	-0.00055
sg13g2_a21o_1	0.01860	-0.00074	0.32940	-0.00076	2.50740	-0.00077

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00052	0.32940	0.00054	2.50740	0.00055
sg13g2_a21o_1	0.01860	0.00074	0.32940	0.00076	2.50740	0.00077

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * A2)	0.01860	-0.00052	0.32940	-0.00054	2.50740	-0.00055
sg13g2_a21o_1	(A1 * A2)	0.01860	-0.00074	0.32940	-0.00076	2.50740	-0.00077

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A1 * A2)	0.01860	0.00052	0.32940	0.00054	2.50740	0.00055
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00074	0.32940	0.00076	2.50740	0.00077

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	0.00660	0.01898	2.40000
sg13g2_ebufn_4	0.00337	0.01147	1.20000
sg13g2_ebufn_2	0.00300	0.00708	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1242.29000	6703.58000	13150.90000
sg13g2_ebufn_4	985.81400	3586.25000	6679.77000
sg13g2_ebufn_2	819.87000	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	0.02074	0.03584	0.32940	0.53814	0.27774	2.50740	2.41974	1.04982
	TE_B->Z (RR)	0.01860	0.02074	0.04033	0.32940	0.53814	0.10117	2.50740	2.41974	0.21653
	TE_B->Z (FR)	0.01860	0.02074	0.01878	0.32940	0.53814	0.25997	2.50740	2.41974	1.25850
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01100	0.03647	0.32940	0.26920	0.27749	2.50740	1.21000	1.04596
	TE_B->Z (RR)	0.01860	0.01100	0.03069	0.32940	0.26920	0.07427	2.50740	1.21000	0.14688
	TE_B->Z (FR)	0.01860	0.01100	0.01816	0.32940	0.26920	0.25811	2.50740	1.21000	1.25520
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00608	0.03161	0.32940	0.13468	0.25417	2.50740	0.60508	1.00131
	TE_B->Z (RR)	0.01860	0.00608	0.02657	0.32940	0.13468	0.06021	2.50740	0.60508	0.12152
	TE_B->Z (FR)	0.01860	0.00608	0.01821	0.32940	0.13468	0.25454	2.50740	0.60508	1.24234

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	0.02981	0.04350	0.32940	0.54721	0.24831	2.50740	2.42881	0.89530
	TE_B->Z (RF)	0.01860	0.02981	0.01806	0.32940	0.54721	-0.22209	2.50740	2.42881	-1.90773
	TE_B->Z (FF)	0.01860	0.02981	0.04008	0.32940	0.54721	0.20111	2.50740	2.42881	0.65233
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01560	0.04441	0.32940	0.27380	0.24925	2.50740	1.21460	0.89616
	TE_B->Z (RF)	0.01860	0.01560	0.01516	0.32940	0.27380	-0.22101	2.50740	1.21460	-1.90732
	TE_B->Z (FF)	0.01860	0.01560	0.03093	0.32940	0.27380	0.17036	2.50740	1.21460	0.58375
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00844	0.03439	0.32940	0.13704	0.22125	2.50740	0.60744	0.83227
	TE_B->Z (RF)	0.01860	0.00844	0.00764	0.32940	0.13704	-0.23030	2.50740	0.60744	-1.91636
	TE_B->Z (FF)	0.01860	0.00844	0.02684	0.32940	0.13704	0.14996	2.50740	0.60744	0.53426

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	0.02074	0.08031	0.32940	0.53814	0.09109	2.50740	2.41974	0.10907
	TE_B	0.01860	0.02074	0.01762	0.32940	0.53814	0.01426	2.50740	2.41974	0.00895
sg13g2_ebufn_4	A	0.01860	0.01100	0.04028	0.32940	0.26920	0.04470	2.50740	1.21000	0.05264
	TE_B	0.01860	0.01100	0.00920	0.32940	0.26920	0.00757	2.50740	1.21000	0.00524
sg13g2_ebufn_2	A	0.01860	0.00608	0.02139	0.32940	0.13468	0.02276	2.50740	0.60508	0.02527
	TE_B	0.01860	0.00608	0.00507	0.32940	0.13468	0.00408	2.50740	0.60508	0.00416

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	0.02981	0.07647	0.32940	0.54721	0.07227	2.50740	2.42881	0.06854
	TE_B	0.01860	0.02981	0.00763	0.32940	0.54721	0.00481	2.50740	2.42881	0.01029
sg13g2_ebufn_4	A	0.01860	0.01560	0.03838	0.32940	0.27380	0.03622	2.50740	1.21460	0.03388
	TE_B	0.01860	0.01560	0.00424	0.32940	0.27380	0.00329	2.50740	1.21460	0.00788
sg13g2_ebufn_2	A	0.01860	0.00844	0.01813	0.32940	0.13704	0.01808	2.50740	0.60744	0.01934
	TE_B	0.01860	0.00844	0.00255	0.32940	0.13704	0.00181	2.50740	0.60744	0.00232

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01142	0.32940	0.03748	2.50740	0.27099
sg13g2_ebufn_4	0.01860	0.00638	0.32940	0.01928	2.50740	0.13582
sg13g2_ebufn_2	0.01860	0.00336	0.32940	0.01542	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	0.01419	0.32940	0.04129	2.50740	0.27171
sg13g2_ebufn_4	0.01860	0.00766	0.32940	0.02105	2.50740	0.13616
sg13g2_ebufn_2	0.01860	0.00485	0.32940	0.01721	2.50740	0.11853

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	-0.00659	0.32940	0.00196	2.50740	0.11349
sg13g2_ebufn_4	0.01860	-0.00263	0.32940	0.00825	2.50740	0.12343
sg13g2_ebufn_2	0.01860	-0.00109	0.32940	0.00981	2.50740	0.11201

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	0.09748	0.32940	0.11046	2.50740	0.22163
sg13g2_ebufn_4	0.01860	0.05007	0.32940	0.06383	2.50740	0.17774
sg13g2_ebufn_2	0.01860	0.02609	0.32940	0.03866	2.50740	0.13917

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	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01953	4.80000
sg13g2_buf_8	0.00979	2.40000
sg13g2_buf_4	0.00423	1.20000
sg13g2_buf_2	0.00298	0.60000
sg13g2_buf_1	0.00265	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7714.47000	10319.30000	12924.20000
sg13g2_buf_8	3857.26000	5159.68000	6462.10000
sg13g2_buf_4	1614.29000	2412.18000	3210.06000
sg13g2_buf_2	1028.62000	1336.10000	1643.58000
sg13g2_buf_1	711.89000	797.55300	883.21600

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	0.02986	0.32940	1.03680	0.17586	2.50740	4.80000	0.62555
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.02945	0.32940	0.51840	0.17457	2.50740	2.40000	0.62345
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.03673	0.32940	0.25920	0.20085	2.50740	1.20000	0.74894
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.02917	0.32940	0.12960	0.17090	2.50740	0.60000	0.61947
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.02601	0.32940	0.06480	0.15498	2.50740	0.30000	0.58344

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	0.03259	0.32940	1.03680	0.17141	2.50740	4.80000	0.58707
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.03210	0.32940	0.51840	0.17055	2.50740	2.40000	0.58698
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.03170	0.32940	0.25920	0.16165	2.50740	1.20000	0.49471
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.03096	0.32940	0.12960	0.16237	2.50740	0.60000	0.55913
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.02728	0.32940	0.06480	0.14633	2.50740	0.30000	0.53220

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	0.15452	0.32940	1.03680	0.23034	2.50740	4.80000	0.93904
sg13g2_buf_8	A	0.01860	0.00100	0.07592	0.32940	0.51840	0.11249	2.50740	2.40000	0.47358
sg13g2_buf_4	A	0.01860	0.00100	0.03853	0.32940	0.25920	0.05266	2.50740	1.20000	0.19776
sg13g2_buf_2	A	0.01860	0.00100	0.01940	0.32940	0.12960	0.03049	2.50740	0.60000	0.13179
sg13g2_buf_1	A	0.01860	0.00100	0.01099	0.32940	0.06480	0.02077	2.50740	0.30000	0.10728

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	0.15387	0.32940	1.03680	0.23686	2.50740	4.80000	0.92576
sg13g2_buf_8	A	0.01860	0.00100	0.07551	0.32940	0.51840	0.11620	2.50740	2.40000	0.46059
sg13g2_buf_4	A	0.01860	0.00100	0.03783	0.32940	0.25920	0.05282	2.50740	1.20000	0.19761
sg13g2_buf_2	A	0.01860	0.00100	0.01927	0.32940	0.12960	0.03049	2.50740	0.60000	0.13012
sg13g2_buf_1	A	0.01860	0.00100	0.01088	0.32940	0.06480	0.02113	2.50740	0.30000	0.10560

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	5984.39000	5984.39000	5984.39000
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	0.00180	0.00655	0.00324	0.60000	0.60000
sg13g2_dfrbp_1	0.00192	0.00711	0.00314	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4783.36000	5625.53000	6222.85000
sg13g2_dfrbp_1	3675.26000	4489.18000	5112.30000

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_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.11248	0.32940	0.12960	0.24522	2.50740	0.60000	0.65740
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.09166	0.32940	0.06480	0.22437	2.50740	0.30000	0.60537

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	0.10133	0.32940	0.12960	0.22279	2.50740	0.60000	0.56420
	RESET_B->Q (FF)	0.01860	0.00100	0.13357	0.32940	0.12960	0.28810	2.50740	0.60000	0.76946
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.08931	0.32940	0.06480	0.20974	2.50740	0.30000	0.52893
	RESET_B->Q (FF)	0.01860	0.00100	0.11665	0.32940	0.06480	0.26917	2.50740	0.30000	0.74360

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	0.06860	0.32940	0.12960	0.21949	2.50740	0.60000	0.60544
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10137	0.32940	0.12960	0.28383	2.50740	0.60000	0.81039
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.06896	0.32940	0.06480	0.21387	2.50740	0.30000	0.57845
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09650	0.32940	0.06480	0.27242	2.50740	0.30000	0.79278

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	0.07450	0.32940	0.12960	0.22784	2.50740	0.60000	0.59797
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.06997	0.32940	0.06480	0.21238	2.50740	0.30000	0.55562

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	-0.11063	2.50740	2.50740	-0.15053
	setup	CLK (R)	0.01860	0.01860	0.05624	1.26300	1.26300	0.14031	2.50740	2.50740	0.18299
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02690	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.17119
	setup	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.15381	2.50740	2.50740	0.21546

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	-0.10524	2.50740	2.50740	-0.17709
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.15920	2.50740	2.50740	0.22727
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01223	1.26300	1.26300	-0.09984	2.50740	2.50740	-0.15053
	setup	CLK (R)	0.01860	0.01860	0.04646	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	0.05868	1.26300	1.26300	0.18889	2.50740	2.50740	0.30696
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.18079	2.50740	2.50740	-0.29811
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.05624	1.26300	1.26300	0.20238	2.50740	2.50740	0.34238
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.18619	2.50740	2.50740	-0.31582

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dfrbp_2	-	3.3435
sg13g2_dfrbp_1	-	3.3435

Min Pulse Width (ns) for CLK:

Cell Name	High	Low
sg13g2_dfrbp_2	3.3435	3.3435
sg13g2_dfrbp_1	3.3435	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.08413	0.32940	0.12960	0.26763	2.50740	0.60000	1.04245
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06227	0.32940	0.06480	0.16197	2.50740	0.30000	0.60851

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	0.08131	0.32940	0.12960	0.26871	2.50740	0.60000	1.04491
	RESET_B	0.01860	0.00100	0.06421	0.32940	0.12960	0.24399	2.50740	0.60000	0.94235
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06061	0.32940	0.06480	0.16097	2.50740	0.30000	0.60518
	RESET_B	0.01860	0.00100	0.04270	0.32940	0.06480	0.13716	2.50740	0.30000	0.51140

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	0.08139	0.32940	0.12960	0.26886	2.50740	0.60000	1.04061
	RESET_B	0.01860	0.00100	0.06419	0.32940	0.12960	0.24486	2.50740	0.60000	0.93772
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06062	0.32940	0.06480	0.16119	2.50740	0.30000	0.60234
	RESET_B	0.01860	0.00100	0.04266	0.32940	0.06480	0.13863	2.50740	0.30000	0.50911

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	0.08418	0.32940	0.12960	0.26687	2.50740	0.60000	1.04580
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06232	0.32940	0.06480	0.16156	2.50740	0.30000	0.61145

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00164	0.32940	0.00710	2.50740	0.05331
sg13g2_dfrbp_1	0.01860	0.00187	0.32940	0.00724	2.50740	0.05337

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00206	0.32940	0.00767	2.50740	0.05412
sg13g2_dfrbp_1	0.01860	0.00233	0.32940	0.00788	2.50740	0.05424

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	0.00164	0.32940	0.00710	2.50740	0.05331
	(!CLK * RESET_B)	0.01860	0.02225	0.32940	0.02833	2.50740	0.08465
	(!CLK * !RESET_B)	0.01860	-0.00007	0.32940	-0.00008	2.50740	-0.00008
sg13g2_dfrbp_1	CLK	0.01860	0.00187	0.32940	0.00724	2.50740	0.05337
	(!CLK * RESET_B)	0.01860	0.01925	0.32940	0.02543	2.50740	0.08129
	(!CLK * !RESET_B)	0.01860	0.00015	0.32940	0.00014	2.50740	0.00015

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	0.00206	0.32940	0.00767	2.50740	0.05412
	(!CLK * RESET_B)	0.01860	0.01834	0.32940	0.02476	2.50740	0.08146
	(!CLK * !RESET_B)	0.01860	0.00023	0.32940	0.00025	2.50740	0.00026
sg13g2_dfrbp_1	CLK	0.01860	0.00233	0.32940	0.00788	2.50740	0.05424
	(!CLK * RESET_B)	0.01860	0.01733	0.32940	0.02380	2.50740	0.07985
	(!CLK * !RESET_B)	0.01860	0.00006	0.32940	0.00008	2.50740	0.00008

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	0.02493	0.32940	0.03166	2.50740	0.10662
sg13g2_dfrbp_1	0.01860	0.00486	0.32940	0.00939	2.50740	0.05623

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	0.01605	0.32940	0.02305	2.50740	0.09794
sg13g2_dfrbp_1	0.01860	0.01440	0.32940	0.02148	2.50740	0.09604

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	0.00408	0.32940	0.00873	2.50740	0.05565
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.02493	0.32940	0.03166	2.50740	0.10662
	(!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	0.00486	0.32940	0.00939	2.50740	0.05623
	(CLK * !D * !Q * Q_N)	0.01860	0.00018	0.32940	0.00011	2.50740	0.00012
	(!CLK * D * !Q * Q_N)	0.01860	0.02251	0.32940	0.02943	2.50740	0.10397
	(!CLK * !D * !Q * Q_N)	0.01860	0.00028	0.32940	0.00022	2.50740	0.00022

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	0.07923	0.32940	0.09514	2.50740	0.22340
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.01605	0.32940	0.02305	2.50740	0.09794
	(!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	0.05545	0.32940	0.07119	2.50740	0.19693
	(CLK * !D * !Q * Q_N)	0.01860	-0.00018	0.32940	-0.00011	2.50740	-0.00012
	(!CLK * D * !Q * Q_N)	0.01860	0.01440	0.32940	0.02148	2.50740	0.09604
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00028	0.32940	-0.00022	2.50740	-0.00022

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01860	0.32940	0.03243	2.50740	0.15817
sg13g2_dfrbp_1	0.01860	0.01887	0.32940	0.03125	2.50740	0.14836

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.03836	0.32940	0.05298	2.50740	0.18151
sg13g2_dfrbp_1	0.01860	0.03647	0.32940	0.05013	2.50740	0.17108

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	0.01860	0.32940	0.03243	2.50740	0.15817
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01966	0.32940	0.03343	2.50740	0.15905
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01824	0.32940	0.03203	2.50740	0.15773
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01971	0.32940	0.03347	2.50740	0.15908
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01939	0.32940	0.03188	2.50740	0.14897
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01884	0.32940	0.03122	2.50740	0.14834
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01841	0.32940	0.03083	2.50740	0.14798
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01887	0.32940	0.03125	2.50740	0.14836

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	0.03836	0.32940	0.05298	2.50740	0.18151
	(D * RESET_B * !Q * Q_N)	0.01860	0.04005	0.32940	0.05466	2.50740	0.18313
	(D * !RESET_B * !Q * Q_N)	0.01860	0.02017	0.32940	0.03422	2.50740	0.15784
	(!D * RESET_B * Q * !Q_N)	0.01860	0.01633	0.32940	0.11171	2.50740	0.23512
	(!D * RESET_B * !Q * Q_N)	0.01860	0.02011	0.32940	0.03427	2.50740	0.15785
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.02017	0.32940	0.03421	2.50740	0.15782
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03647	0.32940	0.05013	2.50740	0.17108
	(D * RESET_B * !Q * Q_N)	0.01860	0.03735	0.32940	0.05103	2.50740	0.17197
	(D * !RESET_B * !Q * Q_N)	0.01860	0.02080	0.32940	0.03389	2.50740	0.14994
	(!D * RESET_B * Q * !Q_N)	0.01860	0.01533	0.32940	0.09047	2.50740	0.20652
	(!D * RESET_B * !Q * Q_N)	0.01860	0.02076	0.32940	0.03390	2.50740	0.14997
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.02079	0.32940	0.03388	2.50740	0.14992

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	0.00261	0.00269	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2628.78000	3037.36000	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	0.08375	0.32940	0.06480	0.20991	2.50740	0.30000	0.59161
	GATE->Q (RR)	0.01860	0.00100	0.07170	0.32940	0.06480	0.19646	2.50740	0.30000	0.52125

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	0.07594	0.32940	0.06480	0.19139	2.50740	0.30000	0.52507
	GATE->Q (RF)	0.01860	0.00100	0.07782	0.32940	0.06480	0.18884	2.50740	0.30000	0.45708

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	0.07969
	setup	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	-0.02698	2.50740	2.50740	-0.07379

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	0.03126	0.32940	0.06480	0.03209	2.50740	0.30000	0.03837
	GATE	0.01860	0.00100	0.02784	0.32940	0.06480	0.02966	2.50740	0.30000	0.03873

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	0.03092	0.32940	0.06480	0.03191	2.50740	0.30000	0.03746
	GATE	0.01860	0.00100	0.02983	0.32940	0.06480	0.03133	2.50740	0.30000	0.03132

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00503	0.32940	0.01478	2.50740	0.10091

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00676	0.32940	0.01673	2.50740	0.10159

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	0.00495	0.32940	0.01465	2.50740	0.10077
	(!GATE * !Q)	0.01860	0.00503	0.32940	0.01478	2.50740	0.10091

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	0.00663	0.32940	0.01668	2.50740	0.10154
	(!GATE * !Q)	0.01860	0.00676	0.32940	0.01673	2.50740	0.10159

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01295	0.32940	0.02516	2.50740	0.13192

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01576	0.32940	0.04192	2.50740	0.14916

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	0.01295	0.32940	0.02516	2.50740	0.13192

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	0.01576	0.32940	0.04192	2.50740	0.14916

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	0.00246	0.00334	0.00259	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2977.27000	3583.85000	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_dlhrq_1	D->Q (RR)	0.01860	0.00100	0.08970	0.32940	0.06480	0.21824	2.50740	0.30000	0.59609
	GATE->Q (RR)	0.01860	0.00100	0.08100	0.32940	0.06480	0.20905	2.50740	0.30000	0.53420

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	0.08002	0.32940	0.06480	0.19723	2.50740	0.30000	0.53747
	GATE->Q (RF)	0.01860	0.00100	0.08286	0.32940	0.06480	0.19743	2.50740	0.30000	0.47421
	RESET_B->Q (FF)	0.01860	0.00100	0.03300	0.32940	0.06480	0.16631	2.50740	0.30000	0.57832

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	0.04890	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	0.03238	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_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00734	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.15938
	removal	GATE (F)	0.01860	0.01860	0.01467	1.26300	1.26300	0.10794	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	0.00494	0.32940	0.06480	0.00448	2.50740	0.30000	0.00728
	GATE	0.01860	0.00100	0.02821	0.32940	0.06480	0.02934	2.50740	0.30000	0.03878

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	0.00576	0.32940	0.06480	-0.00448	2.50740	0.30000	-0.00728
	GATE	0.01860	0.00100	0.02812	0.32940	0.06480	0.02977	2.50740	0.30000	0.02943
	RESET_B	0.01860	0.00100	0.01479	0.32940	0.06480	0.02664	2.50740	0.30000	0.12488

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.03151	0.32940	0.04201	2.50740	0.13187

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.02949	0.32940	0.05770	2.50740	0.14745

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	0.00023	0.32940	0.00999	2.50740	0.09608
	!RESET_B	0.01860	0.03151	0.32940	0.04201	2.50740	0.13187

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	0.00218	0.32940	0.01225	2.50740	0.09703
	!RESET_B	0.01860	0.02949	0.32940	0.05770	2.50740	0.14745

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	0.01361	0.32940	0.02560	2.50740	0.13183

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01576	0.32940	0.04220	2.50740	0.14893

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	0.01942	0.32940	0.03214	2.50740	0.14634
	(!D * !RESET_B * !Q)	0.01860	0.01361	0.32940	0.02560	2.50740	0.13183

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	0.02321	0.32940	0.03698	2.50740	0.15025
	(!D * RESET_B * !Q)	0.01860	0.01576	0.32940	0.04220	2.50740	0.14893
	(!D * !RESET_B * !Q)	0.01860	0.01580	0.32940	0.04224	2.50740	0.14897

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	0.00241	0.00352	0.00265	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3709.29000	4395.13000	4779.32000

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	0.09726	0.32940	0.06480	0.22935	2.50740	0.30000	0.60827
	GATE->Q (RR)	0.01860	0.00100	0.08878	0.32940	0.06480	0.22108	2.50740	0.30000	0.54815

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	0.08290	0.32940	0.06480	0.20114	2.50740	0.30000	0.53732
	GATE->Q (RF)	0.01860	0.00100	0.08583	0.32940	0.06480	0.20184	2.50740	0.30000	0.47591
	RESET_B->Q (FF)	0.01860	0.00100	0.03570	0.32940	0.06480	0.17508	2.50740	0.30000	0.58079

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	0.10073	0.32940	0.06480	0.22482	2.50740	0.30000	0.60699
	GATE->Q_N (RR)	0.01860	0.00100	0.10378	0.32940	0.06480	0.22531	2.50740	0.30000	0.54579
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05353	0.32940	0.06480	0.19291	2.50740	0.30000	0.59182

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	0.11756	0.32940	0.06480	0.22833	2.50740	0.30000	0.56073
	GATE->Q_N (RF)	0.01860	0.00100	0.10899	0.32940	0.06480	0.22000	2.50740	0.30000	0.50028

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	-0.04401	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.04722
	setup	GATE (F)	0.01860	0.01860	0.05379	1.26300	1.26300	0.10254	2.50740	2.50740	0.12101

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	-0.02201	1.26300	1.26300	0.03238	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	-0.05936	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	0.01097	0.32940	0.06480	0.01107	2.50740	0.30000	0.01361
	GATE	0.01860	0.00100	0.02238	0.32940	0.06480	0.02317	2.50740	0.30000	0.02866

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	0.01081	0.32940	0.06480	0.00237	2.50740	0.30000	0.00481
	GATE	0.01860	0.00100	0.02218	0.32940	0.06480	0.02281	2.50740	0.30000	0.02455
	RESET_B	0.01860	0.00100	0.01526	0.32940	0.06480	0.02206	2.50740	0.30000	0.07869

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	0.01085	0.32940	0.06480	0.00261	2.50740	0.30000	0.00290
	GATE	0.01860	0.00100	0.02876	0.32940	0.06480	0.03575	2.50740	0.30000	0.08983
	RESET_B	0.01860	0.00100	0.01529	0.32940	0.06480	0.02263	2.50740	0.30000	0.08031

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	0.01097	0.32940	0.06480	0.01094	2.50740	0.30000	0.01331
	GATE	0.01860	0.00100	0.02239	0.32940	0.06480	0.02293	2.50740	0.30000	0.02928

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.03084	0.32940	0.04150	2.50740	0.13161

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.02964	0.32940	0.05748	2.50740	0.14754

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	0.00169	0.32940	0.01161	2.50740	0.09805
	!RESET_B	0.01860	0.03084	0.32940	0.04150	2.50740	0.13161

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	0.00354	0.32940	0.01372	2.50740	0.09886
	!RESET_B	0.01860	0.02964	0.32940	0.05748	2.50740	0.14754

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	0.00000	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_dlhr_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_dlhr_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_dlhr_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_dlhr_1	0.01860	0.01312	0.32940	0.02527	2.50740	0.13195

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01637	0.32940	0.04186	2.50740	0.14916

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	0.01892	0.32940	0.03175	2.50740	0.14632
	(!D * !RESET_B * !Q)	0.01860	0.01312	0.32940	0.02527	2.50740	0.13195

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	0.02377	0.32940	0.03761	2.50740	0.15128
	(!D * RESET_B * !Q)	0.01860	0.01637	0.32940	0.04186	2.50740	0.14916
	(!D * !RESET_B * !Q)	0.01860	0.01641	0.32940	0.04190	2.50740	0.14920

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	0.00237	0.00336	0.00254	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2977.19000	3585.19000	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	0.08904	0.32940	0.06480	0.21706	2.50740	0.30000	0.59387
	GATE_N->Q (FR)	0.01860	0.00100	0.09841	0.32940	0.06480	0.24140	2.50740	0.30000	0.69545
	RESET_B->Q (RR)	0.01860	0.00100	0.04090	0.32940	0.06480	0.17240	2.50740	0.30000	0.61148

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	0.07938	0.32940	0.06480	0.19565	2.50740	0.30000	0.53336
	GATE_N->Q (FF)	0.01860	0.00100	0.07543	0.32940	0.06480	0.20894	2.50740	0.30000	0.62788
	RESET_B->Q (FF)	0.01860	0.00100	0.03322	0.32940	0.06480	0.16578	2.50740	0.30000	0.57864

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	-0.03179	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	-0.14301	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_dllrq_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01467	1.26300	1.26300	-0.02159	2.50740	2.50740	0.00295
	removal	GATE_N (R)	0.01860	0.01860	0.02201	1.26300	1.26300	0.02968	2.50740	2.50740	0.00885

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	0.01526	0.32940	0.06480	0.01635	2.50740	0.30000	0.02290
	GATE_N	0.01860	0.00100	0.02715	0.32940	0.06480	0.01414	2.50740	0.30000	0.01415
	RESET_B	0.01860	0.00100	0.01940	0.32940	0.06480	0.02855	2.50740	0.30000	0.12978

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	0.02206	0.32940	0.06480	0.00143	2.50740	0.30000	0.00241
	GATE_N	0.01860	0.00100	0.02465	0.32940	0.06480	0.01276	2.50740	0.30000	0.02037
	RESET_B	0.01860	0.00100	0.01498	0.32940	0.06480	0.02674	2.50740	0.30000	0.12635

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.02101	0.32940	0.03028	2.50740	0.11658

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01336	0.32940	0.04510	2.50740	0.13520

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	0.00003	0.32940	0.00990	2.50740	0.09631
	!RESET_B	0.01860	0.02101	0.32940	0.03028	2.50740	0.11658

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	0.00214	0.32940	0.01228	2.50740	0.09743
	!RESET_B	0.01860	0.01336	0.32940	0.04510	2.50740	0.13520

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	0.01220	0.32940	0.02440	2.50740	0.13092

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	0.01604	0.32940	0.04228	2.50740	0.14947

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	0.02274	0.32940	0.03473	2.50740	0.14044
	(!D * !RESET_B * !Q)	0.01860	0.01220	0.32940	0.02440	2.50740	0.13092

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	0.02342	0.32940	0.03624	2.50740	0.14199
	(!D * RESET_B * !Q)	0.01860	0.01604	0.32940	0.04228	2.50740	0.14947
	(!D * !RESET_B * !Q)	0.01860	0.01608	0.32940	0.04233	2.50740	0.14951

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	0.00248	0.00348	0.00267	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3709.89000	4417.04000	4779.26000

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	0.09782	0.32940	0.06480	0.22950	2.50740	0.30000	0.60694
	GATE_N->Q (FR)	0.01860	0.00100	0.10728	0.32940	0.06480	0.25467	2.50740	0.30000	0.70912

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	0.08387	0.32940	0.06480	0.20199	2.50740	0.30000	0.53967
	GATE_N->Q (FF)	0.01860	0.00100	0.08033	0.32940	0.06480	0.21680	2.50740	0.30000	0.63748
	RESET_B->Q (FF)	0.01860	0.00100	0.03558	0.32940	0.06480	0.17635	2.50740	0.30000	0.53178

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	0.10157	0.32940	0.06480	0.22523	2.50740	0.30000	0.60844
	GATE_N->Q_N (FR)	0.01860	0.00100	0.09809	0.32940	0.06480	0.24066	2.50740	0.30000	0.70570
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05367	0.32940	0.06480	0.19438	2.50740	0.30000	0.59332

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	0.11793	0.32940	0.06480	0.22845	2.50740	0.30000	0.55981
	GATE_N->Q_N (FF)	0.01860	0.00100	0.12730	0.32940	0.06480	0.25352	2.50740	0.30000	0.66160

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	-0.03668	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.06746	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	-0.14571	2.50740	2.50740	-0.21251
	setup	GATE_N (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.19158	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	0.01349	2.50740	2.50740	0.05903
	removal	GATE_N (R)	0.01860	0.01860	0.01956	1.26300	1.26300	-0.00270	2.50740	2.50740	-0.04427

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	0.02215	0.32940	0.06480	0.10959	2.50740	0.30000	0.43208
	GATE_N	0.01860	0.00100	0.04550	0.32940	0.06480	0.13286	2.50740	0.30000	0.45435

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	0.02390	0.32940	0.06480	0.08798	2.50740	0.30000	0.41339
	GATE_N	0.01860	0.00100	0.04191	0.32940	0.06480	0.13065	2.50740	0.30000	0.46138
	RESET_B	0.01860	0.00100	0.04708	0.32940	0.06480	0.14565	2.50740	0.30000	0.55038

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	0.02400	0.32940	0.06480	0.08845	2.50740	0.30000	0.41019
	GATE_N	0.01860	0.00100	0.05808	0.32940	0.06480	0.16045	2.50740	0.30000	0.59600
	RESET_B	0.01860	0.00100	0.04714	0.32940	0.06480	0.14671	2.50740	0.30000	0.54933

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	0.02216	0.32940	0.06480	0.10931	2.50740	0.30000	0.43336
	GATE_N	0.01860	0.00100	0.04553	0.32940	0.06480	0.13273	2.50740	0.30000	0.45658

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.03274	0.32940	0.04293	2.50740	0.13277

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.02849	0.32940	0.06220	2.50740	0.15198

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	0.00179	0.32940	0.01167	2.50740	0.09795
	!RESET_B	0.01860	0.03274	0.32940	0.04293	2.50740	0.13277

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	0.00445	0.32940	0.01461	2.50740	0.09960
	!RESET_B	0.01860	0.02849	0.32940	0.06220	2.50740	0.15198

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	0.00734	0.32940	0.03971	2.50740	0.14597

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	0.01612	0.32940	0.02896	2.50740	0.13601

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	0.02296	0.32940	0.03492	2.50740	0.14036
	(!D * RESET_B * !Q)	0.01860	0.00734	0.32940	0.03971	2.50740	0.14597
	(!D * !RESET_B * !Q)	0.01860	0.00737	0.32940	0.03975	2.50740	0.14597

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	0.02375	0.32940	0.03653	2.50740	0.14210
	(!D * !RESET_B * !Q)	0.01860	0.01612	0.32940	0.02896	2.50740	0.13601

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	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00169	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	1089.91000	1219.16000	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	0.05613	0.32940	0.06480	0.17369	2.50740	0.30000	0.45809

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	0.06444	0.32940	0.06480	0.20236	2.50740	0.30000	0.66217

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	0.02456	0.32940	0.06480	0.03144	2.50740	0.30000	0.09174

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	0.02341	0.32940	0.06480	0.03082	2.50740	0.30000	0.09079

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	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00169	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	1542.40000	1671.65000	1800.90000

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	0.08588	0.32940	0.06480	0.21382	2.50740	0.30000	0.53028

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	0.09507	0.32940	0.06480	0.24682	2.50740	0.30000	0.72136

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	0.02988	0.32940	0.06480	0.03583	2.50740	0.30000	0.09301

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	0.02906	0.32940	0.06480	0.03527	2.50740	0.30000	0.09221

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	0.00169	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	3719.07000	3848.29000	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	0.18681	0.32940	0.06480	0.33613	2.50740	0.30000	0.71264

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	0.18930	0.32940	0.06480	0.36761	2.50740	0.30000	0.89135

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	0.04498	0.32940	0.06480	0.04835	2.50740	0.30000	0.10268

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	0.04467	0.32940	0.06480	0.04737	2.50740	0.30000	0.10117

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	0.00824	0.01038	1.20000
sg13g2_einvn_2	0.00419	0.00553	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	4387.32000	5429.26000	6471.20000
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	0.01108	0.01390	0.32940	0.26928	0.29503	2.50740	1.21008	1.59875
	TE_B->Z (RR)	0.01860	0.01108	0.02971	0.32940	0.26928	0.07376	2.50740	1.21008	0.15362
	TE_B->Z (FR)	0.01860	0.01108	0.01717	0.32940	0.26928	0.25530	2.50740	1.21008	1.24832
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00610	0.01498	0.32940	0.13470	0.29453	2.50740	0.60510	1.59591
	TE_B->Z (RR)	0.01860	0.00610	0.02846	0.32940	0.13470	0.06826	2.50740	0.60510	0.13729
	TE_B->Z (FR)	0.01860	0.00610	0.01778	0.32940	0.13470	0.25518	2.50740	0.60510	1.24951

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	0.01564	0.01291	0.32940	0.27384	0.25707	2.50740	1.21464	1.40283
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00846	0.01382	0.32940	0.13706	0.25692	2.50740	0.60746	1.40127

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	0.01108	0.02043	0.32940	0.26928	0.03683	2.50740	1.21008	0.19213
	TE_B	0.01860	0.01108	0.04273	0.32940	0.26928	0.03225	2.50740	1.21008	0.02847
sg13g2_einvn_2	A	0.01860	0.00610	0.01025	0.32940	0.13470	0.01813	2.50740	0.60510	0.09537
	TE_B	0.01860	0.00610	0.02095	0.32940	0.13470	0.01582	2.50740	0.60510	0.01478

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	0.01564	0.01868	0.32940	0.27384	0.03378	2.50740	1.21464	0.16940
sg13g2_einvn_2	A	0.01860	0.00846	0.00956	0.32940	0.13706	0.01696	2.50740	0.60746	0.08431

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	-0.01678	0.32940	-0.03949	2.50740	0.07555
sg13g2_einvn_2	0.01860	-0.00881	0.32940	-0.01869	2.50740	0.04601

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	0.01678	0.32940	0.03949	2.50740	0.15542
sg13g2_einvn_2	0.01860	0.00881	0.32940	0.02068	2.50740	0.08538

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	0.00268	0.00563	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	3351.73000	3485.75000	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	0.03629	0.32940	0.06480	0.16321	2.50740	0.30000	0.58825

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	0.03122	0.32940	0.06480	0.15934	2.50740	0.30000	0.57311

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	-0.01727	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.22729
	setup	CLK (R)	0.01860	0.01860	0.02903	1.26300	1.26300	0.17809	2.50740	2.50740	0.38138

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	-0.00499	1.26300	1.26300	-0.00540	2.50740	2.50740	0.01144
	setup	CLK (R)	0.01860	0.01860	0.01944	1.26300	1.26300	0.03508	2.50740	2.50740	0.04020

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	0.02377	0.32940	0.06480	0.03194	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	0.01584	0.32940	0.06480	0.02634	2.50740	0.30000	0.11282

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.03398	0.32940	0.04595	2.50740	0.13906

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01738	0.32940	0.06315	2.50740	0.15509

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	0.03398	0.32940	0.04595	2.50740	0.13906

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	0.01738	0.32940	0.06315	2.50740	0.15509

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00695	0.32940	0.01916	2.50740	0.12547

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01127	0.32940	0.02392	2.50740	0.13092

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	0.05110	4.80000
sg13g2_inv_8	0.02499	2.40000
sg13g2_inv_4	0.01250	1.20000
sg13g2_inv_2	0.00627	0.60000
sg13g2_inv_1	0.00320	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3337.24000	7505.02000	11672.80000
sg13g2_inv_8	1668.61000	3752.55000	5836.48000
sg13g2_inv_4	834.31700	1876.25000	2918.19000
sg13g2_inv_2	417.15800	938.11400	1459.07000
sg13g2_inv_1	208.57800	469.06300	729.54800

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	0.00895	0.32940	1.03680	0.20628	2.50740	4.80000	1.13569
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.00884	0.32940	0.51840	0.20553	2.50740	2.40000	1.13345
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.00901	0.32940	0.25920	0.20526	2.50740	1.20000	1.13258
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.00978	0.32940	0.12960	0.20497	2.50740	0.60000	1.13196
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01142	0.32940	0.06480	0.20504	2.50740	0.30000	1.13008

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	0.00873	0.32940	1.03680	0.19137	2.50740	4.80000	1.06058
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.00865	0.32940	0.51840	0.19136	2.50740	2.40000	1.06124
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.00878	0.32940	0.25920	0.19108	2.50740	1.20000	1.06071
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.00946	0.32940	0.12960	0.18985	2.50740	0.60000	1.05364
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01095	0.32940	0.06480	0.19005	2.50740	0.30000	1.05364

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	0.04740	0.32940	1.03680	0.14483	2.50740	4.80000	1.04310
sg13g2_inv_8	A	0.01860	0.00100	0.02279	0.32940	0.51840	0.06993	2.50740	2.40000	0.51652
sg13g2_inv_4	A	0.01860	0.00100	0.01132	0.32940	0.25920	0.03446	2.50740	1.20000	0.25647
sg13g2_inv_2	A	0.01860	0.00100	0.00563	0.32940	0.12960	0.01742	2.50740	0.60000	0.13054
sg13g2_inv_1	A	0.01860	0.00100	0.00302	0.32940	0.06480	0.00884	2.50740	0.30000	0.06500

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	0.03891	0.32940	1.03680	0.12693	2.50740	4.80000	0.96597
sg13g2_inv_8	A	0.01860	0.00100	0.01867	0.32940	0.51840	0.06212	2.50740	2.40000	0.47324
sg13g2_inv_4	A	0.01860	0.00100	0.00933	0.32940	0.25920	0.03079	2.50740	1.20000	0.23797
sg13g2_inv_2	A	0.01860	0.00100	0.00475	0.32940	0.12960	0.01551	2.50740	0.60000	0.11768
sg13g2_inv_1	A	0.01860	0.00100	0.00291	0.32940	0.06480	0.00823	2.50740	0.30000	0.05947

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	39.91680

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01622	0.01751	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	8566.03000	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	0.02102	0.01350	0.32940	0.53842	0.29633	2.50740	2.42002	1.60349
	TE_B->Z (RR)	0.01860	0.02102	0.03939	0.32940	0.53842	0.10068	2.50740	2.42002	0.21656
	TE_B->Z (FR)	0.01860	0.02102	0.01836	0.32940	0.53842	0.25769	2.50740	2.42002	1.25186

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	0.03008	0.01284	0.32940	0.54748	0.25866	2.50740	2.42908	1.40807

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	0.02102	0.04049	0.32940	0.53842	0.07586	2.50740	2.42002	0.39493
	TE_B	0.01860	0.02102	0.09275	0.32940	0.53842	0.06553	2.50740	2.42002	0.06038

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	0.03008	0.03640	0.32940	0.54748	0.06700	2.50740	2.42908	0.32896

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	-0.02252	0.32940	-0.05922	2.50740	0.01264

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	0.02252	0.32940	0.05922	2.50740	0.17288

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	116.27500	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

MUX2x



*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_2	19.95840
sg13g2_mux2_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_2	0.00231	0.00243	0.00586	0.60000
sg13g2_mux2_1	0.00233	0.00246	0.00587	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	2161.21000	2771.13000	3144.89000
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_2	A0->X (RR)	0.01860	0.00100	0.04272	0.32940	0.12960	0.19884	2.50740	0.60000	0.63419
	A1->X (RR)	0.01860	0.00100	0.02978	0.32940	0.12960	0.19966	2.50740	0.60000	0.63562
	S->X (-R)	0.01860	0.00100	0.04621	0.32940	0.12960	0.18924	2.50740	0.60000	0.61795
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.03668	0.32940	0.06480	0.17783	2.50740	0.30000	0.58961
	A1->X (RR)	0.01860	0.00100	0.02953	0.32940	0.06480	0.17934	2.50740	0.30000	0.59280
	S->X (-R)	0.01860	0.00100	0.04015	0.32940	0.06480	0.17112	2.50740	0.30000	0.58136

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_2	A0->X (FF)	0.01860	0.00100	0.03353	0.32940	0.12960	0.21939	2.50740	0.60000	0.72432
	A1->X (FF)	0.01860	0.00100	0.05566	0.32940	0.12960	0.22171	2.50740	0.60000	0.73247
	S->X (-F)	0.01860	0.00100	0.06074	0.32940	0.12960	0.20437	2.50740	0.60000	0.67659
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.03353	0.32940	0.06480	0.19392	2.50740	0.30000	0.67607
	A1->X (FF)	0.01860	0.00100	0.04559	0.32940	0.06480	0.19632	2.50740	0.30000	0.68543
	S->X (-F)	0.01860	0.00100	0.05081	0.32940	0.06480	0.18216	2.50740	0.30000	0.63755

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_2	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.04621	0.32940	0.12960	0.18924	2.50740	0.60000	0.61795
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.06368	0.32940	0.12960	0.19867	2.50740	0.60000	0.58610
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.04015	0.32940	0.06480	0.17112	2.50740	0.30000	0.58136
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.05751	0.32940	0.06480	0.18721	2.50740	0.30000	0.57155

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_2	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.06074	0.32940	0.12960	0.20437	2.50740	0.60000	0.67659
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.07619	0.32940	0.12960	0.20364	2.50740	0.60000	0.54448
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.05081	0.32940	0.06480	0.18216	2.50740	0.30000	0.63755
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.06626	0.32940	0.06480	0.18701	2.50740	0.30000	0.52629

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_2	A0	0.01860	0.00100	0.02922	0.32940	0.12960	0.03748	2.50740	0.60000	0.12356
	A1	0.01860	0.00100	0.03118	0.32940	0.12960	0.04797	2.50740	0.60000	0.13301
	S	0.01860	0.00100	0.03309	0.32940	0.12960	0.04110	2.50740	0.60000	0.13178
sg13g2_mux2_1	A0	0.01860	0.00100	0.01970	0.32940	0.06480	0.02882	2.50740	0.30000	0.11425
	A1	0.01860	0.00100	0.02061	0.32940	0.06480	0.03463	2.50740	0.30000	0.11988
	S	0.01860	0.00100	0.02387	0.32940	0.06480	0.03256	2.50740	0.30000	0.12400

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_2	A0	0.01860	0.00100	0.03330	0.32940	0.12960	0.05054	2.50740	0.60000	0.13506
	A1	0.01860	0.00100	0.03124	0.32940	0.12960	0.03713	2.50740	0.60000	0.12494
	S	0.01860	0.00100	0.03053	0.32940	0.12960	0.03620	2.50740	0.60000	0.12901
sg13g2_mux2_1	A0	0.01860	0.00100	0.02105	0.32940	0.06480	0.03623	2.50740	0.30000	0.11900
	A1	0.01860	0.00100	0.01987	0.32940	0.06480	0.02933	2.50740	0.30000	0.11418
	S	0.01860	0.00100	0.01981	0.32940	0.06480	0.02839	2.50740	0.30000	0.11900

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_2	S	(A0 * !A1)	0.01860	0.00100	0.02917	0.32940	0.12960	0.02900	2.50740	0.60000	0.03510
	S	(!A0 * A1)	0.01860	0.00100	0.03309	0.32940	0.12960	0.04110	2.50740	0.60000	0.13178
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01991	0.32940	0.06480	0.02040	2.50740	0.30000	0.02547
	S	(!A0 * A1)	0.01860	0.00100	0.02387	0.32940	0.06480	0.03256	2.50740	0.30000	0.12400

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_2	S	(A0 * !A1)	0.01860	0.00100	0.03509	0.32940	0.12960	0.03296	2.50740	0.60000	0.04017
	S	(!A0 * A1)	0.01860	0.00100	0.03053	0.32940	0.12960	0.03620	2.50740	0.60000	0.12901
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.02430	0.32940	0.06480	0.02495	2.50740	0.30000	0.02955
	S	(!A0 * A1)	0.01860	0.00100	0.01981	0.32940	0.06480	0.02839	2.50740	0.30000	0.11900

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00263	0.32940	0.01212	2.50740	0.09805
sg13g2_mux2_1	0.01860	0.00262	0.32940	0.01213	2.50740	0.09805

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00686	0.32940	0.01673	2.50740	0.10150
sg13g2_mux2_1	0.01860	0.00685	0.32940	0.01674	2.50740	0.10149

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	0.00322	0.00319	0.00321	0.00330	0.00926	0.00560	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	2333.78000	3933.01000	5424.72000

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	0.06450	0.32940	0.06480	0.21480	2.50740	0.30000	0.69343
	A1->X (RR)	0.01860	0.00100	0.06359	0.32940	0.06480	0.21383	2.50740	0.30000	0.69265
	A2->X (RR)	0.01860	0.00100	0.06760	0.32940	0.06480	0.21937	2.50740	0.30000	0.70217
	A3->X (RR)	0.01860	0.00100	0.06571	0.32940	0.06480	0.21898	2.50740	0.30000	0.70129
	S0->X (-R)	0.01860	0.00100	0.05741	0.32940	0.06480	0.22141	2.50740	0.30000	0.70666
	S1->X (-R)	0.01860	0.00100	0.03472	0.32940	0.06480	0.17777	2.50740	0.30000	0.61698

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	0.07109	0.32940	0.06480	0.21350	2.50740	0.30000	0.65203
	A1->X (FF)	0.01860	0.00100	0.07137	0.32940	0.06480	0.21393	2.50740	0.30000	0.65533
	A2->X (FF)	0.01860	0.00100	0.07558	0.32940	0.06480	0.21975	2.50740	0.30000	0.66385
	A3->X (FF)	0.01860	0.00100	0.07523	0.32940	0.06480	0.21956	2.50740	0.30000	0.66359
	S0->X (-F)	0.01860	0.00100	0.06555	0.32940	0.06480	0.22537	2.50740	0.30000	0.69740
	S1->X (-F)	0.01860	0.00100	0.03978	0.32940	0.06480	0.17980	2.50740	0.30000	0.62957

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	0.05741	0.32940	0.06480	0.22141	2.50740	0.30000	0.70666
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.05455	0.32940	0.06480	0.21407	2.50740	0.30000	0.69184
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.08347	0.32940	0.06480	0.23201	2.50740	0.30000	0.65000
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.08150	0.32940	0.06480	0.22813	2.50740	0.30000	0.64437
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.03478	0.32940	0.06480	0.17775	2.50740	0.30000	0.61654
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.03472	0.32940	0.06480	0.17777	2.50740	0.30000	0.61698
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.04570	0.32940	0.06480	0.18275	2.50740	0.30000	0.58208
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.04563	0.32940	0.06480	0.18273	2.50740	0.30000	0.58209

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	0.06555	0.32940	0.06480	0.22537	2.50740	0.30000	0.69740
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.06056	0.32940	0.06480	0.21572	2.50740	0.30000	0.67821
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.08682	0.32940	0.06480	0.23026	2.50740	0.30000	0.61304
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.08286	0.32940	0.06480	0.22456	2.50740	0.30000	0.60541
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.03978	0.32940	0.06480	0.17980	2.50740	0.30000	0.62957
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.03969	0.32940	0.06480	0.17975	2.50740	0.30000	0.62878
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.04807	0.32940	0.06480	0.18090	2.50740	0.30000	0.54785
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.04816	0.32940	0.06480	0.18093	2.50740	0.30000	0.54788

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	0.02697	0.32940	0.06480	0.03278	2.50740	0.30000	0.11651
	A1	0.01860	0.00100	0.03712	0.32940	0.06480	0.04257	2.50740	0.30000	0.12688
	A2	0.01860	0.00100	0.03817	0.32940	0.06480	0.04363	2.50740	0.30000	0.12697
	A3	0.01860	0.00100	0.03746	0.32940	0.06480	0.04293	2.50740	0.30000	0.12646
	S0	0.01860	0.00100	0.02315	0.32940	0.06480	0.02997	2.50740	0.30000	0.10905
	S1	0.01860	0.00100	0.01556	0.32940	0.06480	0.02245	2.50740	0.30000	0.08834

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	0.03547	0.32940	0.06480	0.04117	2.50740	0.30000	0.12329
	A1	0.01860	0.00100	0.03855	0.32940	0.06480	0.04423	2.50740	0.30000	0.12892
	A2	0.01860	0.00100	0.02949	0.32940	0.06480	0.03473	2.50740	0.30000	0.11774
	A3	0.01860	0.00100	0.03786	0.32940	0.06480	0.04308	2.50740	0.30000	0.12661
	S0	0.01860	0.00100	0.04025	0.32940	0.06480	0.03914	2.50740	0.30000	-0.02864
	S1	0.01860	0.00100	0.02045	0.32940	0.06480	0.02519	2.50740	0.30000	0.07797

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	0.03603	0.32940	0.06480	0.01933	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03589	0.32940	0.06480	0.01914	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02320	0.32940	0.06480	0.03018	2.50740	0.30000	0.10928
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.02315	0.32940	0.06480	0.02997	2.50740	0.30000	0.10905
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01500	0.32940	0.06480	0.01970	2.50740	0.30000	0.07252
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01499	0.32940	0.06480	0.01971	2.50740	0.30000	0.07281
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01556	0.32940	0.06480	0.02245	2.50740	0.30000	0.08834
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01556	0.32940	0.06480	0.02246	2.50740	0.30000	0.08831

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	0.04115	0.32940	0.06480	0.03867	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.04025	0.32940	0.06480	0.03914	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02214	0.32940	0.06480	0.02944	2.50740	0.30000	0.10880
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.01521	0.32940	0.06480	0.00713	2.50740	0.30000	0.00624
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.02045	0.32940	0.06480	0.02519	2.50740	0.30000	0.07797
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02181	0.32940	0.06480	0.02653	2.50740	0.30000	0.07997
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00910	0.32940	0.06480	0.01623	2.50740	0.30000	0.08005
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01043	0.32940	0.06480	0.01728	2.50740	0.30000	0.08219

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00989	0.32940	0.03102	2.50740	0.21261

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01262	0.32940	0.03971	2.50740	0.21882

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	0.00688	0.32940	0.02783	2.50740	0.20947
	(A0 * A1 * !S1)	0.01860	0.00785	0.32940	0.02819	2.50740	0.20945
	(!A2 * !A3 * S1)	0.01860	0.00989	0.32940	0.03102	2.50740	0.21261
	(!A0 * !A1 * !S1)	0.01860	0.01140	0.32940	0.03195	2.50740	0.21313

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	0.01363	0.32940	0.04091	2.50740	0.22027
	(A0 * A1 * !S1)	0.01860	0.01473	0.32940	0.04396	2.50740	0.22285
	(!A2 * !A3 * S1)	0.01860	0.01262	0.32940	0.03971	2.50740	0.21882
	(!A0 * !A1 * !S1)	0.01860	0.01224	0.32940	0.03354	2.50740	0.21219

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00335	0.32940	0.01557	2.50740	0.11867

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00781	0.32940	0.02060	2.50740	0.12211

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	0.00335	0.32940	0.01557	2.50740	0.11867
	(A0 * A2 * !S0)	0.01860	0.00332	0.32940	0.01554	2.50740	0.11864
	(!A1 * !A3 * S0)	0.01860	0.00596	0.32940	0.01849	2.50740	0.12154
	(!A0 * !A2 * !S0)	0.01860	0.00594	0.32940	0.01848	2.50740	0.12152

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	0.00783	0.32940	0.02064	2.50740	0.12215
	(A0 * A2 * !S0)	0.01860	0.00781	0.32940	0.02060	2.50740	0.12211
	(!A1 * !A3 * S0)	0.01860	0.00712	0.32940	0.01964	2.50740	0.12108
	(!A0 * !A2 * !S0)	0.01860	0.00712	0.32940	0.01963	2.50740	0.12107

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	0.00264	0.00350	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	357.06300	1055.55000	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	0.02703	0.32940	0.06480	0.15612	2.50740	0.30000	0.58851
	B->Y (FR)	0.01860	0.00100	0.01461	0.32940	0.06480	0.20825	2.50740	0.30000	1.12496

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	0.03209	0.32940	0.06480	0.20385	2.50740	0.30000	0.79451
	B->Y (RF)	0.01860	0.00100	0.01910	0.32940	0.06480	0.22877	2.50740	0.30000	1.20984

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	0.00545	0.32940	0.06480	0.00588	2.50740	0.30000	0.00697
	B	0.01860	0.00100	0.00324	0.32940	0.06480	0.00811	2.50740	0.30000	0.05833

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	0.00871	0.32940	0.06480	0.00894	2.50740	0.30000	0.01092
	B	0.01860	0.00100	0.00800	0.32940	0.06480	0.01161	2.50740	0.30000	0.05733

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	0.00596	0.32940	0.01614	2.50740	0.10281

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	0.00352	0.32940	0.01369	2.50740	0.09898

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	0.00596	0.32940	0.01614	2.50740	0.10281

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	0.00352	0.32940	0.01369	2.50740	0.09898

NAND2B2



*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_2	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_2	0.00250	0.00587	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	909.41600	1748.14000	2981.53000

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_2	A_N->Y (RR)	0.01860	0.00100	0.03517	0.32940	0.12960	0.17900	2.50740	0.60000	0.63209
	B->Y (FR)	0.01860	0.00100	0.01114	0.32940	0.12960	0.20509	2.50740	0.60000	1.11592

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_2	A_N->Y (FF)	0.01860	0.00100	0.04186	0.32940	0.12960	0.23762	2.50740	0.60000	0.85685
	B->Y (RF)	0.01860	0.00100	0.01548	0.32940	0.12960	0.26412	2.50740	0.60000	1.43782

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_2	A_N	0.01860	0.00100	0.00965	0.32940	0.12960	0.01024	2.50740	0.60000	0.01321
	B	0.01860	0.00100	0.01061	0.32940	0.12960	0.02012	2.50740	0.60000	0.11256

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_2	A_N	0.01860	0.00100	0.01689	0.32940	0.12960	0.01813	2.50740	0.60000	0.02026
	B	0.01860	0.00100	0.01242	0.32940	0.12960	0.02083	2.50740	0.60000	0.10199

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	0.01860	0.01064	0.32940	0.01910	2.50740	0.10358

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	0.01860	0.01168	0.32940	0.02075	2.50740	0.10385

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	!B	0.01860	0.01064	0.32940	0.01910	2.50740	0.10358

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nand2b_2	!B	0.01860	0.01168	0.32940	0.02075	2.50740	0.10385

NAND2x



*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_2	10.88640
sg13g2_nand2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_2	0.00617	0.00643	0.60000
sg13g2_nand2_1	0.00324	0.00338	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	406.16600	1419.67000	2827.89000
sg13g2_nand2_1	203.35200	727.00900	1458.99000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_2	A->Y (FR)	0.01860	0.00100	0.01142	0.32940	0.12960	0.20558	2.50740	0.60000	1.11423
	B->Y (FR)	0.01860	0.00100	0.01411	0.32940	0.12960	0.20859	2.50740	0.60000	1.12379
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.01276	0.32940	0.06480	0.20500	2.50740	0.30000	1.11444
	B->Y (FR)	0.01860	0.00100	0.01503	0.32940	0.06480	0.20798	2.50740	0.30000	1.12330

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_2	A->Y (RF)	0.01860	0.00100	0.01535	0.32940	0.12960	0.26399	2.50740	0.60000	1.43748
	B->Y (RF)	0.01860	0.00100	0.01753	0.32940	0.12960	0.23575	2.50740	0.60000	1.25010
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.01658	0.32940	0.06480	0.25604	2.50740	0.30000	1.40330
	B->Y (RF)	0.01860	0.00100	0.01802	0.32940	0.06480	0.22798	2.50740	0.30000	1.20976

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_2	A	0.01860	0.00100	0.00609	0.32940	0.12960	0.01575	2.50740	0.60000	0.10565
	B	0.01860	0.00100	0.00713	0.32940	0.12960	0.01634	2.50740	0.60000	0.11395
sg13g2_nand2_1	A	0.01860	0.00100	0.00321	0.32940	0.06480	0.00804	2.50740	0.30000	0.05495
	B	0.01860	0.00100	0.00322	0.32940	0.06480	0.00811	2.50740	0.30000	0.05873

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_2	A	0.01860	0.00100	0.00790	0.32940	0.12960	0.01644	2.50740	0.60000	0.09747
	B	0.01860	0.00100	0.01452	0.32940	0.12960	0.02193	2.50740	0.60000	0.11356
sg13g2_nand2_1	A	0.01860	0.00100	0.00423	0.32940	0.06480	0.00842	2.50740	0.30000	0.05098
	B	0.01860	0.00100	0.00767	0.32940	0.06480	0.01160	2.50740	0.30000	0.05736

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	0.00256	0.00338	0.00340	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	360.90900	1221.39000	2342.21000

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	0.02846	0.32940	0.06480	0.15652	2.50740	0.30000	0.58769
	B->Y (FR)	0.01860	0.00100	0.01645	0.32940	0.06480	0.20923	2.50740	0.30000	1.11433
	C->Y (FR)	0.01860	0.00100	0.01775	0.32940	0.06480	0.21203	2.50740	0.30000	1.12192

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	0.03842	0.32940	0.06480	0.26469	2.50740	0.30000	1.05743
	B->Y (RF)	0.01860	0.00100	0.02837	0.32940	0.06480	0.29890	2.50740	0.30000	1.55289
	C->Y (RF)	0.01860	0.00100	0.03083	0.32940	0.06480	0.27590	2.50740	0.30000	1.35971

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	0.00595	0.32940	0.06480	0.00617	2.50740	0.30000	0.00795
	B	0.01860	0.00100	0.00401	0.32940	0.06480	0.00808	2.50740	0.30000	0.05076
	C	0.01860	0.00100	0.00443	0.32940	0.06480	0.00859	2.50740	0.30000	0.05432

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	0.01078	0.32940	0.06480	0.01076	2.50740	0.30000	0.01164
	B	0.01860	0.00100	0.01007	0.32940	0.06480	0.01275	2.50740	0.30000	0.04904
	C	0.01860	0.00100	0.01364	0.32940	0.06480	0.01636	2.50740	0.30000	0.06026

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	0.00586	0.32940	0.01608	2.50740	0.10269

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	0.00363	0.32940	0.01379	2.50740	0.09905

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	0.00586	0.32940	0.01608	2.50740	0.10269

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	0.00363	0.32940	0.01379	2.50740	0.09905

NAND3



*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	x	x	1
1	0	x	1
1	1	0	1
1	1	1	0

Footprint

Cell Name	Area
sg13g2_nand3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nand3_1	0.00311	0.00328	0.00327	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	207.35200	893.01200	2188.64000

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_nand3_1	A->Y (FR)	0.01860	0.00100	0.01467	0.32940	0.06480	0.20637	2.50740	0.30000	1.10731
	B->Y (FR)	0.01860	0.00100	0.01692	0.32940	0.06480	0.20947	2.50740	0.30000	1.11435
	C->Y (FR)	0.01860	0.00100	0.01798	0.32940	0.06480	0.21210	2.50740	0.30000	1.12192

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_nand3_1	A->Y (RF)	0.01860	0.00100	0.02281	0.32940	0.06480	0.31620	2.50740	0.30000	1.70368
	B->Y (RF)	0.01860	0.00100	0.02695	0.32940	0.06480	0.29832	2.50740	0.30000	1.55251
	C->Y (RF)	0.01860	0.00100	0.02873	0.32940	0.06480	0.27392	2.50740	0.30000	1.35878

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_nand3_1	A	0.01860	0.00100	0.00387	0.32940	0.06480	0.00808	2.50740	0.30000	0.04844
	B	0.01860	0.00100	0.00400	0.32940	0.06480	0.00812	2.50740	0.30000	0.05047
	C	0.01860	0.00100	0.00445	0.32940	0.06480	0.00858	2.50740	0.30000	0.05434

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_nand3_1	A	0.01860	0.00100	0.00620	0.32940	0.06480	0.00968	2.50740	0.30000	0.04611
	B	0.01860	0.00100	0.00976	0.32940	0.06480	0.01266	2.50740	0.30000	0.04967
	C	0.01860	0.00100	0.01292	0.32940	0.06480	0.01582	2.50740	0.30000	0.06014

NAND4



*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	x	x	x	1
1	0	x	x	1
1	1	0	x	1
1	1	1	0	1
1	1	1	1	0

Footprint

Cell Name	Area
sg13g2_nand4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nand4_1	0.00309	0.00325	0.00326	0.00328	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	211.44400	1017.88000	2918.10000

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_nand4_1	A->Y (FR)	0.01860	0.00100	0.01547	0.32940	0.06480	0.20659	2.50740	0.30000	1.10063
	B->Y (FR)	0.01860	0.00100	0.01774	0.32940	0.06480	0.20979	2.50740	0.30000	1.10907
	C->Y (FR)	0.01860	0.00100	0.01888	0.32940	0.06480	0.21261	2.50740	0.30000	1.11533
	D->Y (FR)	0.01860	0.00100	0.01922	0.32940	0.06480	0.21477	2.50740	0.30000	1.12322

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_nand4_1	A->Y (RF)	0.01860	0.00100	0.02796	0.32940	0.06480	0.37128	2.50740	0.30000	1.97661
	B->Y (RF)	0.01860	0.00100	0.03479	0.32940	0.06480	0.36111	2.50740	0.30000	1.85280
	C->Y (RF)	0.01860	0.00100	0.03886	0.32940	0.06480	0.34331	2.50740	0.30000	1.68856
	D->Y (RF)	0.01860	0.00100	0.04055	0.32940	0.06480	0.32619	2.50740	0.30000	1.53683

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_nand4_1	A	0.01860	0.00100	0.00380	0.32940	0.06480	0.00743	2.50740	0.30000	0.04402
	B	0.01860	0.00100	0.00415	0.32940	0.06480	0.00769	2.50740	0.30000	0.04596
	C	0.01860	0.00100	0.00452	0.32940	0.06480	0.00799	2.50740	0.30000	0.04764
	D	0.01860	0.00100	0.00478	0.32940	0.06480	0.00814	2.50740	0.30000	0.05104

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_nand4_1	A	0.01860	0.00100	0.00754	0.32940	0.06480	0.01054	2.50740	0.30000	0.04352
	B	0.01860	0.00100	0.01112	0.32940	0.06480	0.01345	2.50740	0.30000	0.04585
	C	0.01860	0.00100	0.01432	0.32940	0.06480	0.01636	2.50740	0.30000	0.05182
	D	0.01860	0.00100	0.01749	0.32940	0.06480	0.01947	2.50740	0.30000	0.06126

NOR2Bx



*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_N	Y
x	0	0
0	1	1
1	1	0

Footprint

Cell Name	Area
sg13g2_nor2b_2	12.70080
sg13g2_nor2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B_N	Y
sg13g2_nor2b_2	0.00628	0.00305	0.60000
sg13g2_nor2b_1	0.00323	0.00259	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	1443.41000	2040.20000	2771.89000
sg13g2_nor2b_1	862.05600	1172.43000	1492.50000

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_nor2b_2	A->Y (FR)	0.01860	0.00100	0.01661	0.32940	0.12960	0.29567	2.50740	0.60000	1.60537
	B_N->Y (RR)	0.01860	0.00100	0.03930	0.32940	0.12960	0.26134	2.50740	0.60000	0.99097
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.01882	0.32940	0.06480	0.29664	2.50740	0.30000	1.60869
	B_N->Y (RR)	0.01860	0.00100	0.03592	0.32940	0.06480	0.24557	2.50740	0.30000	0.95132

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_nor2b_2	A->Y (RF)	0.01860	0.00100	0.01129	0.32940	0.12960	0.19569	2.50740	0.60000	1.07138
	B_N->Y (FF)	0.01860	0.00100	0.03552	0.32940	0.12960	0.16764	2.50740	0.60000	0.57389
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.01223	0.32940	0.06480	0.19015	2.50740	0.30000	1.03753
	B_N->Y (FF)	0.01860	0.00100	0.03037	0.32940	0.06480	0.14883	2.50740	0.30000	0.53455

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_nor2b_2	A	0.01860	0.00100	0.00789	0.32940	0.12960	0.01684	2.50740	0.60000	0.10518
	B_N	0.01860	0.00100	0.01889	0.32940	0.12960	0.01928	2.50740	0.60000	0.02157
sg13g2_nor2b_1	A	0.01860	0.00100	0.00389	0.32940	0.06480	0.00853	2.50740	0.30000	0.05355
	B_N	0.01860	0.00100	0.01047	0.32940	0.06480	0.01073	2.50740	0.30000	0.01275

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_nor2b_2	A	0.01860	0.00100	0.00568	0.32940	0.12960	0.01470	2.50740	0.60000	0.09588
	B_N	0.01860	0.00100	0.00885	0.32940	0.12960	0.00899	2.50740	0.60000	0.01042
sg13g2_nor2b_1	A	0.01860	0.00100	0.00350	0.32940	0.06480	0.00769	2.50740	0.30000	0.04876
	B_N	0.01860	0.00100	0.00485	0.32940	0.06480	0.00495	2.50740	0.30000	0.00409

Passive power(pJ) for B_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	0.01860	0.01192	0.32940	0.02251	2.50740	0.12313
sg13g2_nor2b_1	0.01860	0.00601	0.32940	0.01569	2.50740	0.10160

Passive power(pJ) for B_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	0.01860	0.01158	0.32940	0.02255	2.50740	0.12186
sg13g2_nor2b_1	0.01860	0.00663	0.32940	0.01651	2.50740	0.10126

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	A	0.01860	0.01192	0.32940	0.02251	2.50740	0.12313
sg13g2_nor2b_1	A	0.01860	0.00601	0.32940	0.01569	2.50740	0.10160

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor2b_2	A	0.01860	0.01158	0.32940	0.02255	2.50740	0.12186
sg13g2_nor2b_1	A	0.01860	0.00663	0.32940	0.01651	2.50740	0.10126

NOR2x



*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_2	10.88640
sg13g2_nor2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_2	0.00660	0.00630	0.30000
sg13g2_nor2_1	0.00340	0.00323	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	834.31500	1688.03000	2677.84000
sg13g2_nor2_1	417.19800	844.01900	1338.89000

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_2	A->Y (FR)	0.01860	0.00100	0.02007	0.32940	0.06480	0.17065	2.50740	0.30000	0.88057
	B->Y (FR)	0.01860	0.00100	0.01685	0.32940	0.06480	0.19796	2.50740	0.30000	1.06579
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02108	0.32940	0.06480	0.26420	2.50740	0.30000	1.36875
	B->Y (FR)	0.01860	0.00100	0.01883	0.32940	0.06480	0.29624	2.50740	0.30000	1.60754

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_2	A->Y (RF)	0.01860	0.00100	0.01352	0.32940	0.06480	0.13288	2.50740	0.30000	0.68785
	B->Y (RF)	0.01860	0.00100	0.01110	0.32940	0.06480	0.12784	2.50740	0.30000	0.66941
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.01437	0.32940	0.06480	0.19321	2.50740	0.30000	1.04721
	B->Y (RF)	0.01860	0.00100	0.01227	0.32940	0.06480	0.19014	2.50740	0.30000	1.03749

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_2	A	0.01860	0.00100	0.01664	0.32940	0.06480	0.02808	2.50740	0.30000	0.15306
	B	0.01860	0.00100	0.00807	0.32940	0.06480	0.02141	2.50740	0.30000	0.14072
sg13g2_nor2_1	A	0.01860	0.00100	0.00822	0.32940	0.06480	0.01222	2.50740	0.30000	0.06164
	B	0.01860	0.00100	0.00389	0.32940	0.06480	0.00848	2.50740	0.30000	0.05372

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_2	A	0.01860	0.00100	0.00714	0.32940	0.06480	0.01959	2.50740	0.30000	0.13951
	B	0.01860	0.00100	0.00566	0.32940	0.06480	0.01780	2.50740	0.30000	0.12818
sg13g2_nor2_1	A	0.01860	0.00100	0.00355	0.32940	0.06480	0.00784	2.50740	0.30000	0.05321
	B	0.01860	0.00100	0.00348	0.32940	0.06480	0.00771	2.50740	0.30000	0.04892

NOR3x



*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_2	16.32960
sg13g2_nor3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_2	0.00656	0.00647	0.00620	0.60000
sg13g2_nor3_1	0.00344	0.00342	0.00324	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	1251.47000	2285.09000	3978.83000
sg13g2_nor3_1	628.42700	1191.44000	2091.28000

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_nor3_2	A->Y (FR)	0.01860	0.00100	0.03341	0.32940	0.12960	0.33906	2.50740	0.60000	1.63018
	B->Y (FR)	0.01860	0.00100	0.03116	0.32940	0.12960	0.36465	2.50740	0.60000	1.85288
	C->Y (FR)	0.01860	0.00100	0.02311	0.32940	0.12960	0.38099	2.50740	0.60000	2.03567
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.03597	0.32940	0.06480	0.33796	2.50740	0.30000	1.62819
	B->Y (FR)	0.01860	0.00100	0.03377	0.32940	0.06480	0.36286	2.50740	0.30000	1.84380
	C->Y (FR)	0.01860	0.00100	0.02654	0.32940	0.06480	0.38025	2.50740	0.30000	2.02152

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_2	A->Y (RF)	0.01860	0.00100	0.01535	0.32940	0.12960	0.19692	2.50740	0.60000	1.04620
	B->Y (RF)	0.01860	0.00100	0.01499	0.32940	0.12960	0.19411	2.50740	0.60000	1.03717
	C->Y (RF)	0.01860	0.00100	0.01252	0.32940	0.12960	0.19067	2.50740	0.60000	1.02779
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.01598	0.32940	0.06480	0.19182	2.50740	0.30000	1.01842
	B->Y (RF)	0.01860	0.00100	0.01570	0.32940	0.06480	0.19029	2.50740	0.30000	1.01369
	C->Y (RF)	0.01860	0.00100	0.01362	0.32940	0.06480	0.18667	2.50740	0.30000	1.00366

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_2	A	0.01860	0.00100	0.02789	0.32940	0.12960	0.03305	2.50740	0.60000	0.12146
	B	0.01860	0.00100	0.01985	0.32940	0.12960	0.02532	2.50740	0.60000	0.10177
	C	0.01860	0.00100	0.01115	0.32940	0.12960	0.01876	2.50740	0.60000	0.09654
sg13g2_nor3_1	A	0.01860	0.00100	0.01424	0.32940	0.06480	0.01698	2.50740	0.30000	0.06310
	B	0.01860	0.00100	0.01022	0.32940	0.06480	0.01308	2.50740	0.30000	0.05273
	C	0.01860	0.00100	0.00591	0.32940	0.06480	0.00984	2.50740	0.30000	0.04887

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_2	A	0.01860	0.00100	0.00880	0.32940	0.12960	0.01602	2.50740	0.60000	0.09613
	B	0.01860	0.00100	0.00826	0.32940	0.12960	0.01524	2.50740	0.60000	0.08875
	C	0.01860	0.00100	0.00645	0.32940	0.12960	0.01395	2.50740	0.60000	0.08271
sg13g2_nor3_1	A	0.01860	0.00100	0.00455	0.32940	0.06480	0.00781	2.50740	0.30000	0.05010
	B	0.01860	0.00100	0.00440	0.32940	0.06480	0.00790	2.50740	0.30000	0.04607
	C	0.01860	0.00100	0.00393	0.32940	0.06480	0.00743	2.50740	0.30000	0.04369

NOR4x



*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_2	21.77280
sg13g2_nor4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_2	0.00658	0.00637	0.00547	0.00551	0.60000
sg13g2_nor4_1	0.00341	0.00334	0.00286	0.00286	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	1430.21000	3050.08000	5284.73000
sg13g2_nor4_1	715.11300	1525.05000	2642.39000

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_2	A->Y (FR)	0.01860	0.00100	0.05158	0.32940	0.12960	0.42812	2.50740	0.60000	1.94516
	B->Y (FR)	0.01860	0.00100	0.04946	0.32940	0.12960	0.44425	2.50740	0.60000	2.11171
	C->Y (FR)	0.01860	0.00100	0.04223	0.32940	0.12960	0.46017	2.50740	0.60000	2.28520
	D->Y (FR)	0.01860	0.00100	0.02913	0.32940	0.12960	0.46746	2.50740	0.60000	2.42124
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.05378	0.32940	0.06480	0.42377	2.50740	0.30000	1.93274
	B->Y (FR)	0.01860	0.00100	0.05169	0.32940	0.06480	0.44002	2.50740	0.30000	2.09537
	C->Y (FR)	0.01860	0.00100	0.04501	0.32940	0.06480	0.45643	2.50740	0.30000	2.27088
	D->Y (FR)	0.01860	0.00100	0.03252	0.32940	0.06480	0.46372	2.50740	0.30000	2.40206

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_2	A->Y (RF)	0.01860	0.00100	0.01614	0.32940	0.12960	0.19996	2.50740	0.60000	1.04800
	B->Y (RF)	0.01860	0.00100	0.01656	0.32940	0.12960	0.19810	2.50740	0.60000	1.04187
	C->Y (RF)	0.01860	0.00100	0.01598	0.32940	0.12960	0.19509	2.50740	0.60000	1.03316
	D->Y (RF)	0.01860	0.00100	0.01360	0.32940	0.12960	0.19135	2.50740	0.60000	1.02277
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.01713	0.32940	0.06480	0.19980	2.50740	0.30000	1.04783
	B->Y (RF)	0.01860	0.00100	0.01753	0.32940	0.06480	0.19846	2.50740	0.30000	1.04492
	C->Y (RF)	0.01860	0.00100	0.01689	0.32940	0.06480	0.19552	2.50740	0.30000	1.03580
	D->Y (RF)	0.01860	0.00100	0.01461	0.32940	0.06480	0.19212	2.50740	0.30000	1.02780

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_2	A	0.01860	0.00100	0.03487	0.32940	0.12960	0.03792	2.50740	0.60000	0.11937
	B	0.01860	0.00100	0.03078	0.32940	0.12960	0.03395	2.50740	0.60000	0.10579
	C	0.01860	0.00100	0.02291	0.32940	0.12960	0.02719	2.50740	0.60000	0.09180
	D	0.01860	0.00100	0.01414	0.32940	0.12960	0.02079	2.50740	0.60000	0.08761
sg13g2_nor4_1	A	0.01860	0.00100	0.01738	0.32940	0.06480	0.01891	2.50740	0.30000	0.05997
	B	0.01860	0.00100	0.01512	0.32940	0.06480	0.01678	2.50740	0.30000	0.05319
	C	0.01860	0.00100	0.01122	0.32940	0.06480	0.01335	2.50740	0.30000	0.04622
	D	0.01860	0.00100	0.00690	0.32940	0.06480	0.01017	2.50740	0.30000	0.04380

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_2	A	0.01860	0.00100	0.01478	0.32940	0.12960	0.02039	2.50740	0.60000	0.09622
	B	0.01860	0.00100	0.01052	0.32940	0.12960	0.01595	2.50740	0.60000	0.08496
	C	0.01860	0.00100	0.00882	0.32940	0.12960	0.01496	2.50740	0.60000	0.07859
	D	0.01860	0.00100	0.00688	0.32940	0.12960	0.01352	2.50740	0.60000	0.07377
sg13g2_nor4_1	A	0.01860	0.00100	0.00728	0.32940	0.06480	0.00987	2.50740	0.30000	0.04798
	B	0.01860	0.00100	0.00550	0.32940	0.06480	0.00837	2.50740	0.30000	0.04322
	C	0.01860	0.00100	0.00484	0.32940	0.06480	0.00791	2.50740	0.30000	0.03981
	D	0.01860	0.00100	0.00407	0.32940	0.06480	0.00738	2.50740	0.30000	0.03762

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00379	0.32940	-0.00376	2.50740	-0.00385
sg13g2_nor4_1	0.01860	-0.00173	0.32940	-0.00170	2.50740	-0.00175

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00379	0.32940	0.00376	2.50740	0.00385
sg13g2_nor4_1	0.01860	0.00173	0.32940	0.00170	2.50740	0.00175

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!B * C) + (!B * !C * D)	0.01860	-0.00379	0.32940	-0.00376	2.50740	-0.00385
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00173	0.32940	-0.00170	2.50740	-0.00175

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	(!B * C) + (!B * !C * D)	0.01860	0.00379	0.32940	0.00376	2.50740	0.00385
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00173	0.32940	0.00170	2.50740	0.00175

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	(!A * C) + (!A * !C * D)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	(!A * C) + (!A * !C * D)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !C) + (!A * B * !C)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !C) + (!A * B * !C)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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	0.00112

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	8.16751	8.16751	8.16751

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	-0.00033	0.32940	-0.00034	2.50740	-0.00035

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00033	0.32940	0.00034	2.50740	0.00035

O21AI



*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	Y
0	0	x	1
x	1	0	1
x	1	1	0
1	x	0	1
1	x	1	0

Footprint

Cell Name	Area
sg13g2_o21ai_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_o21ai_1	0.00373	0.00374	0.00335	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	444.88600	1609.43000	2871.46000

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_o21ai_1	A1->Y (FR)	0.01860	0.00100	0.03432	0.32940	0.06480	0.31901	2.50740	0.30000	1.60141
	A2->Y (FR)	0.01860	0.00100	0.03020	0.32940	0.06480	0.35006	2.50740	0.30000	1.86925
	B1->Y (FR)	0.01860	0.00100	0.01609	0.32940	0.06480	0.24161	2.50740	0.30000	1.32588

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_o21ai_1	A1->Y (RF)	0.01860	0.00100	0.02479	0.32940	0.06480	0.23229	2.50740	0.30000	1.16239
	A2->Y (RF)	0.01860	0.00100	0.02076	0.32940	0.06480	0.22672	2.50740	0.30000	1.14748
	B1->Y (RF)	0.01860	0.00100	0.02186	0.32940	0.06480	0.26233	2.50740	0.30000	1.39218

Delay(ns) to Y 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_o21ai_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.01609	0.32940	0.06480	0.24161	2.50740	0.30000	1.32588
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01528	0.32940	0.06480	0.23919	2.50740	0.30000	1.32153

Delay(ns) to Y 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_o21ai_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02186	0.32940	0.06480	0.26233	2.50740	0.30000	1.39218
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01698	0.32940	0.06480	0.25553	2.50740	0.30000	1.37661

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_o21ai_1	A1	0.01860	0.00100	0.00989	0.32940	0.06480	0.01254	2.50740	0.30000	0.05254
	A2	0.01860	0.00100	0.00483	0.32940	0.06480	0.00796	2.50740	0.30000	0.04398
	B1	0.01860	0.00100	0.00187	0.32940	0.06480	0.00647	2.50740	0.30000	0.05112

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_o21ai_1	A1	0.01860	0.00100	0.00903	0.32940	0.06480	0.01153	2.50740	0.30000	0.04845
	A2	0.01860	0.00100	0.00853	0.32940	0.06480	0.01158	2.50740	0.30000	0.04449
	B1	0.01860	0.00100	0.00447	0.32940	0.06480	0.00855	2.50740	0.30000	0.04794

Internal switching power(pJ) to Y rising (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_o21ai_1	B1	(A1 * !A2)	0.01860	0.00100	0.00664	0.32940	0.06480	0.01112	2.50740	0.30000	0.05500
	B1	(!A1 * A2)	0.01860	0.00100	0.00187	0.32940	0.06480	0.00647	2.50740	0.30000	0.05112

Internal switching power(pJ) to Y falling (conditional):

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_o21ai_1	B1	(A1 * !A2)	0.01860	0.00100	0.00540	0.32940	0.06480	0.00887	2.50740	0.30000	0.04876
	B1	(!A1 * A2)	0.01860	0.00100	0.00447	0.32940	0.06480	0.00855	2.50740	0.30000	0.04794

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!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_o21ai_1	(!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_o21ai_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!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_o21ai_1	(!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_o21ai_1	0.01860	-0.00018	0.32940	-0.00017	2.50740	-0.00016

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00143	0.32940	0.00148	2.50740	0.00148

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !A2)	0.01860	-0.00018	0.32940	-0.00017	2.50740	-0.00016

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	(!A1 * !A2)	0.01860	0.00143	0.32940	0.00148	2.50740	0.00148

OR2x



*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_2	10.88640
sg13g2_or2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_2	0.00279	0.00259	0.60000
sg13g2_or2_1	0.00282	0.00263	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	904.48000	1261.49000	1766.23000
sg13g2_or2_1	696.08500	922.85700	1113.97000

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_2	A->X (RR)	0.01860	0.00100	0.03440	0.32940	0.12960	0.18305	2.50740	0.60000	0.61772
	B->X (RR)	0.01860	0.00100	0.03244	0.32940	0.12960	0.17420	2.50740	0.60000	0.55782
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.02930	0.32940	0.06480	0.16234	2.50740	0.30000	0.57347
	B->X (RR)	0.01860	0.00100	0.02722	0.32940	0.06480	0.15134	2.50740	0.30000	0.50663

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_2	A->X (FF)	0.01860	0.00100	0.05621	0.32940	0.12960	0.19645	2.50740	0.60000	0.64728
	B->X (FF)	0.01860	0.00100	0.05359	0.32940	0.12960	0.21315	2.50740	0.60000	0.72737
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.04315	0.32940	0.06480	0.16829	2.50740	0.30000	0.59779
	B->X (FF)	0.01860	0.00100	0.04050	0.32940	0.06480	0.18069	2.50740	0.30000	0.66809

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_2	A	0.01860	0.00100	0.02039	0.32940	0.12960	0.02812	2.50740	0.60000	0.10669
	B	0.01860	0.00100	0.02005	0.32940	0.12960	0.02713	2.50740	0.60000	0.10382
sg13g2_or2_1	A	0.01860	0.00100	0.01170	0.32940	0.06480	0.02049	2.50740	0.30000	0.09853
	B	0.01860	0.00100	0.01142	0.32940	0.06480	0.01981	2.50740	0.30000	0.09484

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_2	A	0.01860	0.00100	0.02654	0.32940	0.12960	0.03064	2.50740	0.60000	0.10573
	B	0.01860	0.00100	0.02347	0.32940	0.12960	0.02855	2.50740	0.60000	0.10199
sg13g2_or2_1	A	0.01860	0.00100	0.01515	0.32940	0.06480	0.02273	2.50740	0.30000	0.09801
	B	0.01860	0.00100	0.01205	0.32940	0.06480	0.02045	2.50740	0.30000	0.09331

OR3x



*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_2	14.51520
sg13g2_or3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_2	0.00295	0.00288	0.00274	0.60000
sg13g2_or3_1	0.00297	0.00291	0.00278	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	911.99300	1393.40000	2004.67000
sg13g2_or3_1	703.34600	1119.64000	1554.38000

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_2	A->X (RR)	0.01860	0.00100	0.03840	0.32940	0.12960	0.19654	2.50740	0.60000	0.66383
	B->X (RR)	0.01860	0.00100	0.03684	0.32940	0.12960	0.18814	2.50740	0.60000	0.60341
	C->X (RR)	0.01860	0.00100	0.03412	0.32940	0.12960	0.17897	2.50740	0.60000	0.55438
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.03318	0.32940	0.06480	0.17713	2.50740	0.30000	0.62366
	B->X (RR)	0.01860	0.00100	0.03188	0.32940	0.06480	0.16760	2.50740	0.30000	0.55692
	C->X (RR)	0.01860	0.00100	0.02909	0.32940	0.06480	0.15640	2.50740	0.30000	0.50228

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_2	A->X (FF)	0.01860	0.00100	0.07676	0.32940	0.12960	0.20919	2.50740	0.60000	0.64395
	B->X (FF)	0.01860	0.00100	0.07431	0.32940	0.12960	0.22641	2.50740	0.60000	0.73133
	C->X (FF)	0.01860	0.00100	0.06743	0.32940	0.12960	0.23603	2.50740	0.60000	0.78259
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.06027	0.32940	0.06480	0.18084	2.50740	0.30000	0.59832
	B->X (FF)	0.01860	0.00100	0.05782	0.32940	0.06480	0.19516	2.50740	0.30000	0.67757
	C->X (FF)	0.01860	0.00100	0.05082	0.32940	0.06480	0.20012	2.50740	0.30000	0.71867

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_2	A	0.01860	0.00100	0.02140	0.32940	0.12960	0.02959	2.50740	0.60000	0.11080
	B	0.01860	0.00100	0.02087	0.32940	0.12960	0.02784	2.50740	0.60000	0.10597
	C	0.01860	0.00100	0.02043	0.32940	0.12960	0.02734	2.50740	0.60000	0.10565
sg13g2_or3_1	A	0.01860	0.00100	0.01238	0.32940	0.06480	0.02031	2.50740	0.30000	0.10224
	B	0.01860	0.00100	0.01202	0.32940	0.06480	0.01941	2.50740	0.30000	0.09314
	C	0.01860	0.00100	0.01172	0.32940	0.06480	0.01982	2.50740	0.30000	0.09266

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_2	A	0.01860	0.00100	0.03532	0.32940	0.12960	0.03482	2.50740	0.60000	0.11373
	B	0.01860	0.00100	0.03182	0.32940	0.12960	0.03213	2.50740	0.60000	0.10592
	C	0.01860	0.00100	0.02804	0.32940	0.12960	0.03006	2.50740	0.60000	0.10308
sg13g2_or3_1	A	0.01860	0.00100	0.02202	0.32940	0.06480	0.02738	2.50740	0.30000	0.10594
	B	0.01860	0.00100	0.01851	0.32940	0.06480	0.02454	2.50740	0.30000	0.09609
	C	0.01860	0.00100	0.01468	0.32940	0.06480	0.02155	2.50740	0.30000	0.09154

OR4x



*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_2	16.32960
sg13g2_or4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_2	0.00297	0.00293	0.00239	0.00242	0.60000
sg13g2_or4_1	0.00297	0.00294	0.00240	0.00244	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	915.50800	1555.85000	2202.02000
sg13g2_or4_1	707.09900	1314.87000	1993.61000

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_2	A->X (RR)	0.01860	0.00100	0.03993	0.32940	0.12960	0.20161	2.50740	0.60000	0.65890
	B->X (RR)	0.01860	0.00100	0.03935	0.32940	0.12960	0.19556	2.50740	0.60000	0.60587
	C->X (RR)	0.01860	0.00100	0.03753	0.32940	0.12960	0.18690	2.50740	0.60000	0.55856
	D->X (RR)	0.01860	0.00100	0.03461	0.32940	0.12960	0.17828	2.50740	0.60000	0.51526
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.03458	0.32940	0.06480	0.18299	2.50740	0.30000	0.61956
	B->X (RR)	0.01860	0.00100	0.03426	0.32940	0.06480	0.17602	2.50740	0.30000	0.56205
	C->X (RR)	0.01860	0.00100	0.03267	0.32940	0.06480	0.16689	2.50740	0.30000	0.50864
	D->X (RR)	0.01860	0.00100	0.02970	0.32940	0.06480	0.15576	2.50740	0.30000	0.46202

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_2	A->X (FF)	0.01860	0.00100	0.10527	0.32940	0.12960	0.23820	2.50740	0.60000	0.69731
	B->X (FF)	0.01860	0.00100	0.10286	0.32940	0.12960	0.25086	2.50740	0.60000	0.77894
	C->X (FF)	0.01860	0.00100	0.09609	0.32940	0.12960	0.26226	2.50740	0.60000	0.83815
	D->X (FF)	0.01860	0.00100	0.08448	0.32940	0.12960	0.26683	2.50740	0.60000	0.87274
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.08312	0.32940	0.06480	0.20465	2.50740	0.30000	0.64990
	B->X (FF)	0.01860	0.00100	0.08072	0.32940	0.06480	0.21569	2.50740	0.30000	0.72555
	C->X (FF)	0.01860	0.00100	0.07398	0.32940	0.06480	0.22443	2.50740	0.30000	0.77913
	D->X (FF)	0.01860	0.00100	0.06220	0.32940	0.06480	0.22590	2.50740	0.30000	0.80384

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_2	A	0.01860	0.00100	0.02451	0.32940	0.12960	0.03146	2.50740	0.60000	0.11081
	B	0.01860	0.00100	0.02201	0.32940	0.12960	0.02890	2.50740	0.60000	0.10124
	C	0.01860	0.00100	0.02119	0.32940	0.12960	0.02663	2.50740	0.60000	0.09765
	D	0.01860	0.00100	0.02057	0.32940	0.12960	0.02699	2.50740	0.60000	0.09328
sg13g2_or4_1	A	0.01860	0.00100	0.01529	0.32940	0.06480	0.02222	2.50740	0.30000	0.10172
	B	0.01860	0.00100	0.01296	0.32940	0.06480	0.01953	2.50740	0.30000	0.09193
	C	0.01860	0.00100	0.01234	0.32940	0.06480	0.01867	2.50740	0.30000	0.08424
	D	0.01860	0.00100	0.01186	0.32940	0.06480	0.01910	2.50740	0.30000	0.08303

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_2	A	0.01860	0.00100	0.03943	0.32940	0.12960	0.03425	2.50740	0.60000	0.11355
	B	0.01860	0.00100	0.03973	0.32940	0.12960	0.03562	2.50740	0.60000	0.10652
	C	0.01860	0.00100	0.03631	0.32940	0.12960	0.03202	2.50740	0.60000	0.09605
	D	0.01860	0.00100	0.03248	0.32940	0.12960	0.02981	2.50740	0.60000	0.09369
sg13g2_or4_1	A	0.01860	0.00100	0.02329	0.32940	0.06480	0.02551	2.50740	0.30000	0.10287
	B	0.01860	0.00100	0.02359	0.32940	0.06480	0.02665	2.50740	0.30000	0.09698
	C	0.01860	0.00100	0.02015	0.32940	0.06480	0.02399	2.50740	0.30000	0.08913
	D	0.01860	0.00100	0.01630	0.32940	0.06480	0.02176	2.50740	0.30000	0.08525

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00201	0.32940	-0.00205	2.50740	-0.00208
sg13g2_or4_1	0.01860	-0.00201	0.32940	-0.00205	2.50740	-0.00209

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00380	0.32940	0.00379	2.50740	0.00380
sg13g2_or4_1	0.01860	0.00380	0.32940	0.00379	2.50740	0.00380

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!B * C) + (!B * !C * D)	0.01860	-0.00201	0.32940	-0.00205	2.50740	-0.00208
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00201	0.32940	-0.00205	2.50740	-0.00209

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!B * C) + (!B * !C * D)	0.01860	0.00380	0.32940	0.00379	2.50740	0.00380
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00380	0.32940	0.00379	2.50740	0.00380

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00002	0.32940	-0.00005	2.50740	-0.00006
sg13g2_or4_1	0.01860	-0.00002	0.32940	-0.00005	2.50740	-0.00006

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00002	0.32940	0.00005	2.50740	0.00006
sg13g2_or4_1	0.01860	0.00002	0.32940	0.00005	2.50740	0.00006

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!A * C) + (!A * !C * D)	0.01860	-0.00002	0.32940	-0.00005	2.50740	-0.00006
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00002	0.32940	-0.00005	2.50740	-0.00006

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	(!A * C) + (!A * !C * D)	0.01860	0.00002	0.32940	0.00005	2.50740	0.00006
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00002	0.32940	0.00005	2.50740	0.00006

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !D) + (!A * B * !D)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !C) + (!A * B * !C)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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_2	$(A * !C) + (!A * B * !C)$	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
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	0.00218	0.00225	0.00399	0.00196	0.00589	0.00343	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	5790.42000	6734.86000	7421.60000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.14222	0.32940	0.06480	0.27471	2.50740	0.30000	0.66347
	SET_B->Q (FR)	0.01860	0.00100	0.05922	0.32940	0.06480	0.20802	2.50740	0.30000	0.64089

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	0.11954	0.32940	0.06480	0.24308	2.50740	0.30000	0.59703
	RESET_B->Q (FF)	0.01860	0.00100	0.09986	0.32940	0.06480	0.23540	2.50740	0.30000	0.62741

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	0.14222	0.32940	0.06480	0.27471	2.50740	0.30000	0.66347

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	0.11954	0.32940	0.06480	0.24308	2.50740	0.30000	0.59703

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	0.09905	0.32940	0.06480	0.24494	2.50740	0.30000	0.64748
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07871	0.32940	0.06480	0.24087	2.50740	0.30000	0.68521

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	0.11962	0.32940	0.06480	0.25992	2.50740	0.30000	0.60510
	SET_B->Q_N (FF)	0.01860	0.00100	0.04014	0.32940	0.06480	0.19175	2.50740	0.30000	0.58457

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	0.09905	0.32940	0.06480	0.24494	2.50740	0.30000	0.64748

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	0.11962	0.32940	0.06480	0.25992	2.50740	0.30000	0.60510

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	-0.04401	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.20366
	setup	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.16190	2.50740	2.50740	0.22137

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	0.07825	1.26300	1.26300	0.18349	2.50740	2.50740	0.27744

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	-0.05624	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.22432
	setup	CLK (R)	0.01860	0.01860	0.07336	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	-0.11603	2.50740	2.50740	-0.15938
	setup	CLK (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.17269	2.50740	2.50740	0.25973

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	0.06602	1.26300	1.26300	0.19968	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	0.07825	1.26300	1.26300	0.12952	2.50740	2.50740	0.18004

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	0.06476	2.50740	2.50740	0.08264
	removal	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.04048	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	0.24285	2.50740	2.50740	0.55489
	removal	CLK (R)	0.01860	0.01860	0.01712	1.26300	1.26300	0.03778	2.50740	2.50740	0.02952
	hold	RESET_B (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.19185
	setup	RESET_B (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.16730	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	0.03378	0.32940	0.06480	0.04069	2.50740	0.30000	0.10358
	SET_B	0.01860	0.00100	0.06148	0.32940	0.06480	0.16793	2.50740	0.30000	0.64191

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	0.03267	0.32940	0.06480	0.03980	2.50740	0.30000	0.10747
	RESET_B	0.01860	0.00100	0.07049	0.32940	0.06480	0.16467	2.50740	0.30000	0.56515

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	0.03378	0.32940	0.06480	0.04069	2.50740	0.30000	0.10358

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	0.03267	0.32940	0.06480	0.03980	2.50740	0.30000	0.10747

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	0.03266	0.32940	0.06480	0.04006	2.50740	0.30000	0.10674
	RESET_B	0.01860	0.00100	0.07046	0.32940	0.06480	0.16533	2.50740	0.30000	0.56228

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	0.03377	0.32940	0.06480	0.04039	2.50740	0.30000	0.10475
	SET_B	0.01860	0.00100	0.06142	0.32940	0.06480	0.16737	2.50740	0.30000	0.64373

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	0.03266	0.32940	0.06480	0.04006	2.50740	0.30000	0.10674

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	0.03377	0.32940	0.06480	0.04039	2.50740	0.30000	0.10475

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00635	0.32940	0.01059	2.50740	0.05893

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00865	0.32940	0.01311	2.50740	0.06092

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	0.02089	0.32940	0.02600	2.50740	0.08045
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00635	0.32940	0.01059	2.50740	0.05893

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	0.02221	0.32940	0.02745	2.50740	0.08140
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00865	0.32940	0.01311	2.50740	0.06092

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00939	0.32940	0.01309	2.50740	0.06419

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00606	0.32940	0.01014	2.50740	0.06124

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	0.02376	0.32940	0.02827	2.50740	0.08471
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00939	0.32940	0.01309	2.50740	0.06419

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	0.03143	0.32940	0.03559	2.50740	0.09223
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00606	0.32940	0.01014	2.50740	0.06124

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02807	0.32940	0.03479	2.50740	0.10274

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.03267	0.32940	0.05299	2.50740	0.11937

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	0.02124	0.32940	0.02923	2.50740	0.09764
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02807	0.32940	0.03479	2.50740	0.10274
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02299	0.32940	0.03660	2.50740	0.15929
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00813	0.32940	0.02069	2.50740	0.13708

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	0.02860	0.32940	0.03650	2.50740	0.10304
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.03267	0.32940	0.05299	2.50740	0.11937
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00588	0.32940	0.06206	2.50740	0.18147
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00782	0.32940	0.01997	2.50740	0.13450

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01988	0.32940	0.03357	2.50740	0.15969

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.02211	0.32940	0.03638	2.50740	0.16055

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	0.01975	0.32940	0.03341	2.50740	0.15933
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02385	0.32940	0.03751	2.50740	0.16290
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01988	0.32940	0.03357	2.50740	0.15969
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01973	0.32940	0.03339	2.50740	0.15931
	(!RESET_B * !Q * Q_N)	0.01860	0.02193	0.32940	0.03564	2.50740	0.16182
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01986	0.32940	0.03357	2.50740	0.15970

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	0.02111	0.32940	0.03531	2.50740	0.15968
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03861	0.32940	0.05344	2.50740	0.18170
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02019	0.32940	0.03530	2.50740	0.16164
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.04151	0.32940	0.05657	2.50740	0.18299
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02160	0.32940	0.03586	2.50740	0.16003
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.02112	0.32940	0.03531	2.50740	0.15968
	(!RESET_B * !Q * Q_N)	0.01860	0.02211	0.32940	0.03638	2.50740	0.16055
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.02159	0.32940	0.03585	2.50740	0.16002

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	0.00225	0.00272	0.00573	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	3362.00000	3668.47000	4067.22000

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	0.03657	0.32940	0.06480	0.16450	2.50740	0.30000	0.59155

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	0.03156	0.32940	0.06480	0.16032	2.50740	0.30000	0.57499

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	-0.01790	1.26300	1.26300	-0.08905	2.50740	2.50740	-0.11417
	setup	CLK (R)	0.01860	0.01860	0.03291	1.26300	1.26300	0.13762	2.50740	2.50740	0.19121

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	-0.02877	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.27179
	setup	CLK (R)	0.01860	0.01860	0.04563	1.26300	1.26300	0.18889	2.50740	2.50740	0.33556

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	-0.02010	1.26300	1.26300	-0.12143	2.50740	2.50740	-0.18797
	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	0.04884	1.26300	1.26300	0.18079	2.50740	2.50740	0.31231

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	0.02418	0.32940	0.06480	0.03227	2.50740	0.30000	0.11814

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	0.01707	0.32940	0.06480	0.02727	2.50740	0.30000	0.11272

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.03466	0.32940	0.04527	2.50740	0.12784

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02024	0.32940	0.06640	2.50740	0.14829

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	0.03466	0.32940	0.04527	2.50740	0.12784

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	0.02024	0.32940	0.06640	2.50740	0.14829

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01638	0.32940	0.02548	2.50740	0.11236

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.02147	0.32940	0.06470	2.50740	0.14857

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00725	0.32940	0.01963	2.50740	0.12615

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00858	0.32940	0.02151	2.50740	0.12864

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	1134.26000	1134.26000	1134.26000

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	977.89400	977.89400	977.89400

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	0.00643	0.00556	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	683.65600	1834.60000	2725.61000

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	0.03627	0.32940	0.06480	0.16398	2.50740	0.30000	0.59208
	A->Y (FR)	0.01860	0.00100	0.02682	0.32940	0.06480	0.27027	2.50740	0.30000	1.36479
	B->Y (RR)	0.01860	0.00100	0.03400	0.32940	0.06480	0.17194	2.50740	0.30000	0.64508
	B->Y (FR)	0.01860	0.00100	0.02411	0.32940	0.06480	0.30215	2.50740	0.30000	1.60461

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	0.03659	0.32940	0.06480	0.21744	2.50740	0.30000	0.82045
	A->Y (RF)	0.01860	0.00100	0.02470	0.32940	0.06480	0.23595	2.50740	0.30000	1.21213
	B->Y (FF)	0.01860	0.00100	0.03665	0.32940	0.06480	0.20867	2.50740	0.30000	0.77089
	B->Y (RF)	0.01860	0.00100	0.02044	0.32940	0.06480	0.23043	2.50740	0.30000	1.19640

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	0.01538	0.32940	0.06480	0.02388	2.50740	0.30000	0.11088
	B	0.01860	0.00100	0.01523	0.32940	0.06480	0.02395	2.50740	0.30000	0.10789

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	0.01329	0.32940	0.06480	0.02357	2.50740	0.30000	0.11040
	B	0.01860	0.00100	0.01420	0.32940	0.06480	0.02202	2.50740	0.30000	0.10661

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	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00664	0.00574	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	1083.25000	1605.39000	2318.26000

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	0.03662	0.32940	0.06480	0.25367	2.50740	0.30000	0.98377
	A->X (FR)	0.01860	0.00100	0.02950	0.32940	0.06480	0.27369	2.50740	0.30000	1.37209
	B->X (RR)	0.01860	0.00100	0.03747	0.32940	0.06480	0.24319	2.50740	0.30000	0.91594
	B->X (FR)	0.01860	0.00100	0.02470	0.32940	0.06480	0.26819	2.50740	0.30000	1.35950

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	0.04112	0.32940	0.06480	0.15998	2.50740	0.30000	0.55259
	A->X (RF)	0.01860	0.00100	0.02335	0.32940	0.06480	0.23424	2.50740	0.30000	1.20383
	B->X (FF)	0.01860	0.00100	0.03839	0.32940	0.06480	0.17093	2.50740	0.30000	0.61694
	B->X (RF)	0.01860	0.00100	0.02109	0.32940	0.06480	0.26185	2.50740	0.30000	1.39952

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	0.01316	0.32940	0.06480	0.02250	2.50740	0.30000	0.10912
	B	0.01860	0.00100	0.01406	0.32940	0.06480	0.02149	2.50740	0.30000	0.10521

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	0.01676	0.32940	0.06480	0.02519	2.50740	0.30000	0.10998
	B	0.01860	0.00100	0.01529	0.32940	0.06480	0.02482	2.50740	0.30000	0.10567