

sg13g2_stdcell_slow_1p08V_125C Library

Cell Groups
A21OIx
A221OI
A22OI
AND2x
AND3x
AND4x
AO21x
BTLx
BUx
DECAPx
DFFRRx
DLHQ
DLHRQ
DLHR
DLLRQ
DLLR
DLY1
DLY2
DLY4
EINVINx
FILLx
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_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00517	0.00558	0.00509	0.60000
sg13g2_a21oi_1	0.00270	0.00278	0.00260	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	361.20200	878.05500	2041.52000
sg13g2_a21oi_1	180.60000	439.03300	1020.77000

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	0.06250	0.32940	0.12960	0.78663	2.50740	0.60000	3.79841
	A2->Y (FR)	0.01860	0.00100	0.07448	0.32940	0.12960	0.79838	2.50740	0.60000	3.80692
	B1->Y (FR)	0.01860	0.00100	0.05896	0.32940	0.12960	0.79793	2.50740	0.60000	3.97675
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.06945	0.32940	0.06480	0.78651	2.50740	0.30000	3.79318
	A2->Y (FR)	0.01860	0.00100	0.08089	0.32940	0.06480	0.79979	2.50740	0.30000	3.80905
	B1->Y (FR)	0.01860	0.00100	0.06559	0.32940	0.06480	0.79939	2.50740	0.30000	3.97898

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	0.05378	0.32940	0.12960	0.66661	2.50740	0.60000	3.42922
	A2->Y (RF)	0.01860	0.00100	0.06093	0.32940	0.12960	0.66084	2.50740	0.60000	3.31221
	B1->Y (RF)	0.01860	0.00100	0.02743	0.32940	0.12960	0.46391	2.50740	0.60000	2.58711
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.05950	0.32940	0.06480	0.66772	2.50740	0.30000	3.42861
	A2->Y (RF)	0.01860	0.00100	0.06612	0.32940	0.06480	0.66126	2.50740	0.30000	3.31038
	B1->Y (RF)	0.01860	0.00100	0.03075	0.32940	0.06480	0.46504	2.50740	0.30000	2.58958

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	0.05896	0.32940	0.12960	0.79793	2.50740	0.60000	3.97675
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04465	0.32940	0.12960	0.78382	2.50740	0.60000	3.96629
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.03611	0.32940	0.12960	0.63321	2.50740	0.60000	3.32122
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06559	0.32940	0.06480	0.79939	2.50740	0.30000	3.97898
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05164	0.32940	0.06480	0.78337	2.50740	0.30000	3.95857
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04131	0.32940	0.06480	0.63360	2.50740	0.30000	3.31711

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	0.02743	0.32940	0.12960	0.46391	2.50740	0.60000	2.58711
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02717	0.32940	0.12960	0.46327	2.50740	0.60000	2.58478
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02690	0.32940	0.12960	0.46287	2.50740	0.60000	2.58335
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.03075	0.32940	0.06480	0.46504	2.50740	0.30000	2.58958
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03051	0.32940	0.06480	0.46442	2.50740	0.30000	2.58731
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.03026	0.32940	0.06480	0.46396	2.50740	0.30000	2.58704

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	0.00584	0.32940	0.12960	0.00589	2.50740	0.60000	0.00588
	A2	0.01860	0.00100	0.00679	0.32940	0.12960	0.00666	2.50740	0.60000	0.00734
	B1	0.01860	0.00100	0.00429	0.32940	0.12960	0.00444	2.50740	0.60000	0.00484
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00298	0.32940	0.06480	0.00290	2.50740	0.30000	0.00295
	A2	0.01860	0.00100	0.00338	0.32940	0.06480	0.00348	2.50740	0.30000	0.00354
	B1	0.01860	0.00100	0.00223	0.32940	0.06480	0.00224	2.50740	0.30000	0.00234

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	0.00558	0.32940	0.12960	0.00508	2.50740	0.60000	0.00495
	A2	0.01860	0.00100	0.00762	0.32940	0.12960	0.00716	2.50740	0.60000	0.00674
	B1	0.01860	0.00100	0.00184	0.32940	0.12960	0.00215	2.50740	0.60000	0.00193
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00309	0.32940	0.06480	0.00284	2.50740	0.30000	0.00271
	A2	0.01860	0.00100	0.00403	0.32940	0.06480	0.00379	2.50740	0.30000	0.00361
	B1	0.01860	0.00100	0.00121	0.32940	0.06480	0.00127	2.50740	0.30000	0.00120

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	0.00506	0.32940	0.12960	0.00523	2.50740	0.60000	0.00564
	B1	(!A1 * A2)	0.01860	0.00100	0.00429	0.32940	0.12960	0.00464	2.50740	0.60000	0.00532
	B1	(!A1 * !A2)	0.01860	0.00100	0.00429	0.32940	0.12960	0.00444	2.50740	0.60000	0.00484
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00252	0.32940	0.06480	0.00258	2.50740	0.30000	0.00264
	B1	(!A1 * A2)	0.01860	0.00100	0.00224	0.32940	0.06480	0.00227	2.50740	0.30000	0.00249
	B1	(!A1 * !A2)	0.01860	0.00100	0.00223	0.32940	0.06480	0.00224	2.50740	0.30000	0.00234

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	0.00427	0.32940	0.12960	0.00455	2.50740	0.60000	0.00416
	B1	(!A1 * A2)	0.01860	0.00100	0.00184	0.32940	0.12960	0.00215	2.50740	0.60000	0.00193
	B1	(!A1 * !A2)	0.01860	0.00100	0.00175	0.32940	0.12960	0.00200	2.50740	0.60000	0.00170
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00243	0.32940	0.06480	0.00248	2.50740	0.30000	0.00241
	B1	(!A1 * A2)	0.01860	0.00100	0.00121	0.32940	0.06480	0.00127	2.50740	0.30000	0.00120
	B1	(!A1 * !A2)	0.01860	0.00100	0.00117	0.32940	0.06480	0.00120	2.50740	0.30000	0.00112

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00064	0.32940	-0.00063	2.50740	-0.00063
sg13g2_a21oi_1	0.01860	-0.00032	0.32940	-0.00032	2.50740	-0.00031

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00123	0.32940	0.00125	2.50740	0.00126
sg13g2_a21oi_1	0.01860	0.00056	0.32940	0.00057	2.50740	0.00057

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	-0.00020	0.32940	-0.00019	2.50740	-0.00020
	(!A2 * !B1)	0.01860	-0.00064	0.32940	-0.00063	2.50740	-0.00063
sg13g2_a21oi_1	B1	0.01860	-0.00003	0.32940	-0.00003	2.50740	-0.00003
	(!A2 * !B1)	0.01860	-0.00032	0.32940	-0.00032	2.50740	-0.00031

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	0.00020	0.32940	0.00019	2.50740	0.00020
	(!A2 * !B1)	0.01860	0.00123	0.32940	0.00125	2.50740	0.00126
sg13g2_a21oi_1	B1	0.01860	0.00003	0.32940	0.00003	2.50740	0.00003
	(!A2 * !B1)	0.01860	0.00056	0.32940	0.00057	2.50740	0.00057

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00021	0.32940	-0.00021	2.50740	-0.00021
sg13g2_a21oi_1	0.01860	-0.00011	0.32940	-0.00011	2.50740	-0.00011

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00076	0.32940	0.00055	2.50740	0.00048
sg13g2_a21oi_1	0.01860	0.00038	0.32940	0.00027	2.50740	0.00024

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	-0.00013	0.32940	-0.00013	2.50740	-0.00013
	(!A1 * !B1)	0.01860	-0.00021	0.32940	-0.00021	2.50740	-0.00021
sg13g2_a21oi_1	B1	0.01860	-0.00007	0.32940	-0.00007	2.50740	-0.00007
	(!A1 * !B1)	0.01860	-0.00011	0.32940	-0.00011	2.50740	-0.00011

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	0.00013	0.32940	0.00013	2.50740	0.00013
	(!A1 * !B1)	0.01860	0.00076	0.32940	0.00055	2.50740	0.00048
sg13g2_a21oi_1	B1	0.01860	0.00007	0.32940	0.00007	2.50740	0.00007
	(!A1 * !B1)	0.01860	0.00038	0.32940	0.00027	2.50740	0.00024

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00063	0.32940	0.00063	2.50740	0.00064
sg13g2_a21oi_1	0.01860	0.00035	0.32940	0.00035	2.50740	0.00035

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00063	0.32940	-0.00063	2.50740	-0.00064
sg13g2_a21oi_1	0.01860	-0.00035	0.32940	-0.00035	2.50740	-0.00035

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	0.00063	0.32940	0.00063	2.50740	0.00064
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00035	0.32940	0.00035	2.50740	0.00035

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	-0.00063	0.32940	-0.00063	2.50740	-0.00064
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00035	0.32940	-0.00035	2.50740	-0.00035

A221OI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00276	0.00277	0.00260	0.00266	0.00243	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	226.42500	553.23500	1387.73000

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	0.16205	0.32940	0.12960	2.06681	2.50740	0.60000	9.22148
	A2->Y (FR)	0.01860	0.00100	0.17929	0.32940	0.12960	2.08335	2.50740	0.60000	9.23496
	B1->Y (FR)	0.01860	0.00100	0.14589	0.32940	0.12960	2.05504	2.50740	0.60000	9.37756
	B2->Y (FR)	0.01860	0.00100	0.16307	0.32940	0.12960	2.07117	2.50740	0.60000	9.38414
	C1->Y (FR)	0.01860	0.00100	0.10750	0.32940	0.12960	2.02189	2.50740	0.60000	9.44092

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	0.07677	0.32940	0.12960	1.13831	2.50740	0.60000	5.53730
	A2->Y (RF)	0.01860	0.00100	0.08562	0.32940	0.12960	1.13537	2.50740	0.60000	5.41963
	B1->Y (RF)	0.01860	0.00100	0.06942	0.32940	0.12960	1.11939	2.50740	0.60000	5.51559
	B2->Y (RF)	0.01860	0.00100	0.07602	0.32940	0.12960	1.11423	2.50740	0.60000	5.39814
	C1->Y (RF)	0.01860	0.00100	0.03533	0.32940	0.12960	0.71431	2.50740	0.60000	3.83420

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	0.16205	0.32940	0.12960	2.06681	2.50740	0.60000	9.22148
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.14083	0.32940	0.12960	2.04595	2.50740	0.60000	9.21374
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.12498	0.32940	0.12960	1.72914	2.50740	0.60000	7.85636
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.17929	0.32940	0.12960	2.08335	2.50740	0.60000	9.23496
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.15842	0.32940	0.12960	2.06332	2.50740	0.60000	9.22144
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.13918	0.32940	0.12960	1.74574	2.50740	0.60000	7.86479
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.14589	0.32940	0.12960	2.05504	2.50740	0.60000	9.37756
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.12462	0.32940	0.12960	2.03351	2.50740	0.60000	9.36488
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.10310	0.32940	0.12960	1.70888	2.50740	0.60000	7.94189
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.16307	0.32940	0.12960	2.07117	2.50740	0.60000	9.38414
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.14211	0.32940	0.12960	2.04903	2.50740	0.60000	9.36930
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.11721	0.32940	0.12960	1.72073	2.50740	0.60000	7.94430
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.10750	0.32940	0.12960	2.02189	2.50740	0.60000	9.44092

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	0.07677	0.32940	0.12960	1.13831	2.50740	0.60000	5.53730
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.07605	0.32940	0.12960	1.13567	2.50740	0.60000	5.53168
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.07933	0.32940	0.12960	1.14072	2.50740	0.60000	5.53663
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.08304	0.32940	0.12960	1.13283	2.50740	0.60000	5.41958
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.08232	0.32940	0.12960	1.13034	2.50740	0.60000	5.41405
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.08562	0.32940	0.12960	1.13537	2.50740	0.60000	5.41963
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.06942	0.32940	0.12960	1.11939	2.50740	0.60000	5.51559
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.06884	0.32940	0.12960	1.11700	2.50740	0.60000	5.50984
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.06850	0.32940	0.12960	1.11619	2.50740	0.60000	5.50937
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.07602	0.32940	0.12960	1.11423	2.50740	0.60000	5.39814
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.07545	0.32940	0.12960	1.11170	2.50740	0.60000	5.39243
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.07507	0.32940	0.12960	1.11103	2.50740	0.60000	5.39176
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03533	0.32940	0.12960	0.71431	2.50740	0.60000	3.83420

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	0.00643	0.32940	0.12960	0.00621	2.50740	0.60000	0.00605
	A2	0.01860	0.00100	0.00656	0.32940	0.12960	0.00628	2.50740	0.60000	0.00614
	B1	0.01860	0.00100	0.00610	0.32940	0.12960	0.00586	2.50740	0.60000	0.00573
	B2	0.01860	0.00100	0.00624	0.32940	0.12960	0.00595	2.50740	0.60000	0.00576
	C1	0.01860	0.00100	0.00297	0.32940	0.12960	0.00275	2.50740	0.60000	0.00263

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	0.00438	0.32940	0.12960	0.00396	2.50740	0.60000	0.00337
	A2	0.01860	0.00100	0.00554	0.32940	0.12960	0.00515	2.50740	0.60000	0.00463
	B1	0.01860	0.00100	0.00166	0.32940	0.12960	0.00137	2.50740	0.60000	0.00090
	B2	0.01860	0.00100	0.00285	0.32940	0.12960	0.00267	2.50740	0.60000	0.00212
	C1	0.01860	0.00100	0.00252	0.32940	0.12960	0.00252	2.50740	0.60000	0.00204

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	0.00643	0.32940	0.12960	0.00621	2.50740	0.60000	0.00605
	A1	(!B1 * B2)	0.01860	0.00100	0.00617	0.32940	0.12960	0.00595	2.50740	0.60000	0.00591
	A1	(!B1 * !B2)	0.01860	0.00100	0.00752	0.32940	0.12960	0.00731	2.50740	0.60000	0.00707
	A2	(B1 * !B2)	0.01860	0.00100	0.00656	0.32940	0.12960	0.00628	2.50740	0.60000	0.00614
	A2	(!B1 * B2)	0.01860	0.00100	0.00632	0.32940	0.12960	0.00606	2.50740	0.60000	0.00596
	A2	(!B1 * !B2)	0.01860	0.00100	0.00768	0.32940	0.12960	0.00745	2.50740	0.60000	0.00719
	B1	(A1 * !A2)	0.01860	0.00100	0.00634	0.32940	0.12960	0.00610	2.50740	0.60000	0.00584
	B1	(!A1 * A2)	0.01860	0.00100	0.00607	0.32940	0.12960	0.00587	2.50740	0.60000	0.00543
	B1	(!A1 * !A2)	0.01860	0.00100	0.00610	0.32940	0.12960	0.00586	2.50740	0.60000	0.00573
	B2	(A1 * !A2)	0.01860	0.00100	0.00647	0.32940	0.12960	0.00619	2.50740	0.60000	0.00593
	B2	(!A1 * A2)	0.01860	0.00100	0.00623	0.32940	0.12960	0.00594	2.50740	0.60000	0.00573
	B2	(!A1 * !A2)	0.01860	0.00100	0.00624	0.32940	0.12960	0.00595	2.50740	0.60000	0.00576
	C1	(!A1 * A2)	0.01860	0.00100	0.00297	0.32940	0.12960	0.00275	2.50740	0.60000	0.00263

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	0.00560	0.32940	0.12960	0.00517	2.50740	0.60000	0.00446
	A1	(!B1 * B2)	0.01860	0.00100	0.00438	0.32940	0.12960	0.00396	2.50740	0.60000	0.00337
	A1	(!B1 * !B2)	0.01860	0.00100	0.00367	0.32940	0.12960	0.00326	2.50740	0.60000	0.00260
	A2	(B1 * !B2)	0.01860	0.00100	0.00676	0.32940	0.12960	0.00637	2.50740	0.60000	0.00561
	A2	(!B1 * B2)	0.01860	0.00100	0.00554	0.32940	0.12960	0.00515	2.50740	0.60000	0.00463
	A2	(!B1 * !B2)	0.01860	0.00100	0.00484	0.32940	0.12960	0.00446	2.50740	0.60000	0.00392
	B1	(A1 * !A2)	0.01860	0.00100	0.00288	0.32940	0.12960	0.00256	2.50740	0.60000	0.00178
	B1	(!A1 * A2)	0.01860	0.00100	0.00166	0.32940	0.12960	0.00137	2.50740	0.60000	0.00090
	B1	(!A1 * !A2)	0.01860	0.00100	0.00163	0.32940	0.12960	0.00129	2.50740	0.60000	0.00084
	B2	(A1 * !A2)	0.01860	0.00100	0.00407	0.32940	0.12960	0.00377	2.50740	0.60000	0.00309
	B2	(!A1 * A2)	0.01860	0.00100	0.00285	0.32940	0.12960	0.00267	2.50740	0.60000	0.00212
	B2	(!A1 * !A2)	0.01860	0.00100	0.00282	0.32940	0.12960	0.00250	2.50740	0.60000	0.00201
	C1	(!A1 * A2)	0.01860	0.00100	0.00252	0.32940	0.12960	0.00252	2.50740	0.60000	0.00204

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00007	0.32940	-0.00007	2.50740	-0.00007

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00007	0.32940	0.00007	2.50740	0.00007

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00008	0.32940	-0.00008	2.50740	-0.00009

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00008	0.32940	0.00008	2.50740	0.00009

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	(B1 * B2 * !C1)	0.01860	-0.00008	0.32940	-0.00008	2.50740	-0.00009

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	0.00008	0.32940	0.00008	2.50740	0.00009

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00120	0.32940	0.00121	2.50740	0.00123

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00116	0.32940	-0.00117	2.50740	-0.00117

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	-0.00006	0.32940	-0.00007	2.50740	-0.00007
	(A1 * A2 * !C1)	0.01860	0.00120	0.32940	0.00121	2.50740	0.00123

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	0.00006	0.32940	0.00007	2.50740	0.00007
	(A1 * A2 * !C1)	0.01860	-0.00116	0.32940	-0.00117	2.50740	-0.00117

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00122	0.32940	0.00123	2.50740	0.00124

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00118	0.32940	-0.00118	2.50740	-0.00118

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	-0.00004	0.32940	-0.00005	2.50740	-0.00005
	(A1 * A2 * !C1)	0.01860	0.00122	0.32940	0.00123	2.50740	0.00124

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	0.00004	0.32940	0.00005	2.50740	0.00005
	(A1 * A2 * !C1)	0.01860	-0.00118	0.32940	-0.00118	2.50740	-0.00118

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00034	0.32940	0.00034	2.50740	0.00034

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00057	0.32940	0.00058	2.50740	0.00059

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	0.00034	0.32940	0.00034	2.50740	0.00034

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	0.00057	0.32940	0.00058	2.50740	0.00059

A22OI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

Truth Table

INPUT				OUTPUT
A1	A2	B1	B2	Y
0	x	0	x	1
0	x	1	0	1
x	x	1	1	0
1	0	0	x	1
1	0	1	0	1
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	0.00260	0.00286	0.00334	0.00341	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	90.96430	562.87800	1261.30000

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	0.07102	0.32940	0.06480	0.67403	2.50740	0.30000	3.33235
	A2->Y (FR)	0.01860	0.00100	0.07887	0.32940	0.06480	0.68285	2.50740	0.30000	3.34233
	B1->Y (FR)	0.01860	0.00100	0.05618	0.32940	0.06480	0.64716	2.50740	0.30000	3.32923
	B2->Y (FR)	0.01860	0.00100	0.04776	0.32940	0.06480	0.63827	2.50740	0.30000	3.31885

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	0.07554	0.32940	0.06480	0.68358	2.50740	0.30000	3.44528
	A2->Y (RF)	0.01860	0.00100	0.08156	0.32940	0.06480	0.67656	2.50740	0.30000	3.32690
	B1->Y (RF)	0.01860	0.00100	0.05800	0.32940	0.06480	0.64876	2.50740	0.30000	3.29698
	B2->Y (RF)	0.01860	0.00100	0.05061	0.32940	0.06480	0.65534	2.50740	0.30000	3.41366

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	0.00198	0.32940	0.06480	0.00186	2.50740	0.30000	0.00193
	A2	0.01860	0.00100	0.00257	0.32940	0.06480	0.00241	2.50740	0.30000	0.00248
	B1	0.01860	0.00100	0.00125	0.32940	0.06480	0.00104	2.50740	0.30000	0.00124
	B2	0.01860	0.00100	0.00105	0.32940	0.06480	0.00096	2.50740	0.30000	0.00106

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	0.00019	0.32940	0.06480	0.00018	2.50740	0.30000	0.00019
	A2	0.01860	0.00100	0.00101	0.32940	0.06480	0.00103	2.50740	0.30000	0.00089
	B1	0.01860	0.00100	-0.00125	0.32940	0.06480	-0.00104	2.50740	0.30000	-0.00124
	B2	0.01860	0.00100	-0.00105	0.32940	0.06480	-0.00096	2.50740	0.30000	-0.00106

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00301	0.32940	0.00278	2.50740	0.00271

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00336	0.32940	0.00334	2.50740	0.00333

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00334	0.32940	0.00309	2.50740	0.00303

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00287	0.32940	0.00285	2.50740	0.00284

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00552	0.32940	0.00562	2.50740	0.00581

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00123	0.32940	0.00126	2.50740	0.00126

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00439	0.32940	0.00448	2.50740	0.00470

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00120	0.32940	0.00123	2.50740	0.00124

AND2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00239	0.00239	0.60000
sg13g2_and2_1	0.00239	0.00239	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	989.91400	1027.40000	1069.62000
sg13g2_and2_1	514.62900	635.37100	854.87300

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	0.12788	0.32940	0.12960	0.56357	2.50740	0.60000	1.95583
	B->X (RR)	0.01860	0.00100	0.13470	0.32940	0.12960	0.56722	2.50740	0.60000	1.97274
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.10300	0.32940	0.06480	0.50465	2.50740	0.30000	1.81311
	B->X (RR)	0.01860	0.00100	0.11019	0.32940	0.06480	0.51434	2.50740	0.30000	1.84576

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	0.10371	0.32940	0.12960	0.50293	2.50740	0.60000	1.72876
	B->X (FF)	0.01860	0.00100	0.11071	0.32940	0.12960	0.51653	2.50740	0.60000	1.77221
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.08422	0.32940	0.06480	0.45108	2.50740	0.30000	1.59047
	B->X (FF)	0.01860	0.00100	0.09151	0.32940	0.06480	0.46826	2.50740	0.30000	1.64246

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	0.00817	0.32940	0.12960	0.00866	2.50740	0.60000	0.00952
	B	0.01860	0.00100	0.00919	0.32940	0.12960	0.00974	2.50740	0.60000	0.00974
sg13g2_and2_1	A	0.01860	0.00100	0.00527	0.32940	0.06480	0.00526	2.50740	0.30000	0.00715
	B	0.01860	0.00100	0.00630	0.32940	0.06480	0.00635	2.50740	0.30000	0.00744

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	0.00734	0.32940	0.12960	0.00775	2.50740	0.60000	0.00820
	B	0.01860	0.00100	0.00743	0.32940	0.12960	0.00790	2.50740	0.60000	0.00892
sg13g2_and2_1	A	0.01860	0.00100	0.00462	0.32940	0.06480	0.00464	2.50740	0.30000	0.00621
	B	0.01860	0.00100	0.00473	0.32940	0.06480	0.00483	2.50740	0.30000	0.00657

AND3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00227	0.00234	0.00237	0.60000
sg13g2_and3_1	0.00227	0.00234	0.00235	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	985.88700	1063.90000	1349.75000
sg13g2_and3_1	508.20000	629.03800	1214.70000

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	0.17844	0.32940	0.12960	0.63306	2.50740	0.60000	2.06493
	B->X (RR)	0.01860	0.00100	0.19222	0.32940	0.12960	0.64476	2.50740	0.60000	2.09689
	C->X (RR)	0.01860	0.00100	0.19845	0.32940	0.12960	0.64177	2.50740	0.60000	2.07071
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.14350	0.32940	0.06480	0.55993	2.50740	0.30000	1.91037
	B->X (RR)	0.01860	0.00100	0.15747	0.32940	0.06480	0.57606	2.50740	0.30000	1.94994
	C->X (RR)	0.01860	0.00100	0.16361	0.32940	0.06480	0.57654	2.50740	0.30000	1.93823

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	0.10934	0.32940	0.12960	0.51421	2.50740	0.60000	1.75622
	B->X (FF)	0.01860	0.00100	0.11699	0.32940	0.12960	0.52772	2.50740	0.60000	1.79569
	C->X (FF)	0.01860	0.00100	0.12217	0.32940	0.12960	0.53827	2.50740	0.60000	1.82833
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.09062	0.32940	0.06480	0.46481	2.50740	0.30000	1.62163
	B->X (FF)	0.01860	0.00100	0.09842	0.32940	0.06480	0.48070	2.50740	0.30000	1.67219
	C->X (FF)	0.01860	0.00100	0.10345	0.32940	0.06480	0.49296	2.50740	0.30000	1.70978

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	0.00943	0.32940	0.12960	0.00982	2.50740	0.60000	0.01024
	B	0.01860	0.00100	0.01000	0.32940	0.12960	0.01042	2.50740	0.60000	0.01046
	C	0.01860	0.00100	0.01097	0.32940	0.12960	0.01139	2.50740	0.60000	0.01117
sg13g2_and3_1	A	0.01860	0.00100	0.00644	0.32940	0.06480	0.00651	2.50740	0.30000	0.00804
	B	0.01860	0.00100	0.00702	0.32940	0.06480	0.00716	2.50740	0.30000	0.00798
	C	0.01860	0.00100	0.00799	0.32940	0.06480	0.00812	2.50740	0.30000	0.00864

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	0.00699	0.32940	0.12960	0.00735	2.50740	0.60000	0.00774
	B	0.01860	0.00100	0.00757	0.32940	0.12960	0.00794	2.50740	0.60000	0.00860
	C	0.01860	0.00100	0.00766	0.32940	0.12960	0.00812	2.50740	0.60000	0.00887
sg13g2_and3_1	A	0.01860	0.00100	0.00424	0.32940	0.06480	0.00425	2.50740	0.30000	0.00561
	B	0.01860	0.00100	0.00485	0.32940	0.06480	0.00486	2.50740	0.30000	0.00647
	C	0.01860	0.00100	0.00499	0.32940	0.06480	0.00505	2.50740	0.30000	0.00657

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00040	0.32940	-0.00041	2.50740	-0.00045
sg13g2_and3_1	0.01860	-0.00041	0.32940	-0.00041	2.50740	-0.00045

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00040	0.32940	0.00041	2.50740	0.00045
sg13g2_and3_1	0.01860	0.00041	0.32940	0.00041	2.50740	0.00045

AND4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00217	0.00217	0.00241	0.00238	0.60000
sg13g2_and4_1	0.00217	0.00217	0.00241	0.00238	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	986.08400	1055.52000	1709.58000
sg13g2_and4_1	508.39400	599.24000	1574.52000

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	0.23150	0.32940	0.12960	0.70296	2.50740	0.60000	2.17025
	B->X (RR)	0.01860	0.00100	0.25103	0.32940	0.12960	0.72150	2.50740	0.60000	2.20542
	C->X (RR)	0.01860	0.00100	0.26263	0.32940	0.12960	0.72500	2.50740	0.60000	2.18530
	D->X (RR)	0.01860	0.00100	0.26900	0.32940	0.12960	0.72795	2.50740	0.60000	2.15739
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.18715	0.32940	0.06480	0.61756	2.50740	0.30000	2.00664
	B->X (RR)	0.01860	0.00100	0.20709	0.32940	0.06480	0.63886	2.50740	0.30000	2.04883
	C->X (RR)	0.01860	0.00100	0.21862	0.32940	0.06480	0.64468	2.50740	0.30000	2.04206
	D->X (RR)	0.01860	0.00100	0.22506	0.32940	0.06480	0.64873	2.50740	0.30000	2.02678

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	0.11418	0.32940	0.12960	0.52183	2.50740	0.60000	1.76899
	B->X (FF)	0.01860	0.00100	0.12165	0.32940	0.12960	0.53468	2.50740	0.60000	1.80614
	C->X (FF)	0.01860	0.00100	0.12728	0.32940	0.12960	0.54473	2.50740	0.60000	1.83675
	D->X (FF)	0.01860	0.00100	0.13160	0.32940	0.12960	0.55452	2.50740	0.60000	1.86719
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.09659	0.32940	0.06480	0.47485	2.50740	0.30000	1.63961
	B->X (FF)	0.01860	0.00100	0.10426	0.32940	0.06480	0.48939	2.50740	0.30000	1.68924
	C->X (FF)	0.01860	0.00100	0.10979	0.32940	0.06480	0.50096	2.50740	0.30000	1.72444
	D->X (FF)	0.01860	0.00100	0.11364	0.32940	0.06480	0.51139	2.50740	0.30000	1.75817

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	0.00987	0.32940	0.12960	0.01001	2.50740	0.60000	0.01044
	B	0.01860	0.00100	0.01115	0.32940	0.12960	0.01150	2.50740	0.60000	0.01140
	C	0.01860	0.00100	0.01174	0.32940	0.12960	0.01210	2.50740	0.60000	0.01164
	D	0.01860	0.00100	0.01174	0.32940	0.12960	0.01213	2.50740	0.60000	0.01136
sg13g2_and4_1	A	0.01860	0.00100	0.00676	0.32940	0.06480	0.00688	2.50740	0.30000	0.00795
	B	0.01860	0.00100	0.00806	0.32940	0.06480	0.00811	2.50740	0.30000	0.00867
	C	0.01860	0.00100	0.00866	0.32940	0.06480	0.00872	2.50740	0.30000	0.00912
	D	0.01860	0.00100	0.00868	0.32940	0.06480	0.00872	2.50740	0.30000	0.00881

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	0.00717	0.32940	0.12960	0.00745	2.50740	0.60000	0.00801
	B	0.01860	0.00100	0.00738	0.32940	0.12960	0.00783	2.50740	0.60000	0.00849
	C	0.01860	0.00100	0.00786	0.32940	0.12960	0.00831	2.50740	0.60000	0.00889
	D	0.01860	0.00100	0.00816	0.32940	0.12960	0.00875	2.50740	0.60000	0.00959
sg13g2_and4_1	A	0.01860	0.00100	0.00444	0.32940	0.06480	0.00442	2.50740	0.30000	0.00556
	B	0.01860	0.00100	0.00469	0.32940	0.06480	0.00469	2.50740	0.30000	0.00620
	C	0.01860	0.00100	0.00519	0.32940	0.06480	0.00519	2.50740	0.30000	0.00650
	D	0.01860	0.00100	0.00546	0.32940	0.06480	0.00560	2.50740	0.30000	0.00680

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00015	0.32940	-0.00014	2.50740	-0.00014
sg13g2_and4_1	0.01860	-0.00015	0.32940	-0.00014	2.50740	-0.00014

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00056	0.32940	0.00057	2.50740	0.00057
sg13g2_and4_1	0.01860	0.00057	0.32940	0.00057	2.50740	0.00057

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	-0.00015	0.32940	-0.00014	2.50740	-0.00014
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00015	0.32940	-0.00014	2.50740	-0.00014

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	0.00056	0.32940	0.00057	2.50740	0.00057
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00057	0.32940	0.00057	2.50740	0.00057

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00035	0.32940	-0.00035	2.50740	-0.00035
sg13g2_and4_1	0.01860	-0.00035	0.32940	-0.00035	2.50740	-0.00035

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00037	0.32940	0.00037	2.50740	0.00038
sg13g2_and4_1	0.01860	0.00037	0.32940	0.00037	2.50740	0.00038

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	-0.00035	0.32940	-0.00035	2.50740	-0.00035
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00035	0.32940	-0.00035	2.50740	-0.00035

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	$(A * C * !D) + (A * !C)$	0.01860	0.00037	0.32940	0.00037	2.50740	0.00038
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00037	0.32940	0.00037	2.50740	0.00038

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	0.00091	0.32940	0.00090	2.50740	0.00092
sg13g2_and4_1	0.01860	0.00091	0.32940	0.00090	2.50740	0.00092

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00010	0.32940	-0.00018	2.50740	-0.00020
sg13g2_and4_1	0.01860	-0.00010	0.32940	-0.00018	2.50740	-0.00020

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	0.00091	0.32940	0.00090	2.50740	0.00092
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00091	0.32940	0.00090	2.50740	0.00092

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	-0.00010	0.32940	-0.00018	2.50740	-0.00020
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	-0.00010	0.32940	-0.00018	2.50740	-0.00020

A021x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00271	0.00265	0.00246	0.60000
sg13g2_a21o_1	0.00253	0.00258	0.00233	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	549.63600	929.29300	1228.44000
sg13g2_a21o_1	412.50400	650.20900	1047.73000

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	0.13447	0.32940	0.12960	0.57288	2.50740	0.60000	1.97041
	A2->X (RR)	0.01860	0.00100	0.14036	0.32940	0.12960	0.57404	2.50740	0.60000	1.99000
	B1->X (RR)	0.01860	0.00100	0.08375	0.32940	0.12960	0.50952	2.50740	0.60000	1.86783
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.12639	0.32940	0.06480	0.54581	2.50740	0.30000	1.91917
	A2->X (RR)	0.01860	0.00100	0.13236	0.32940	0.06480	0.55012	2.50740	0.30000	1.94084
	B1->X (RR)	0.01860	0.00100	0.07936	0.32940	0.06480	0.48633	2.50740	0.30000	1.81582

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	0.17643	0.32940	0.12960	0.57831	2.50740	0.60000	1.80810
	A2->X (FF)	0.01860	0.00100	0.18996	0.32940	0.12960	0.59877	2.50740	0.60000	1.85304
	B1->X (FF)	0.01860	0.00100	0.17586	0.32940	0.12960	0.59081	2.50740	0.60000	1.86208
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.14018	0.32940	0.06480	0.51329	2.50740	0.30000	1.66901
	A2->X (FF)	0.01860	0.00100	0.15216	0.32940	0.06480	0.53222	2.50740	0.30000	1.71175
	B1->X (FF)	0.01860	0.00100	0.13738	0.32940	0.06480	0.51769	2.50740	0.30000	1.69694

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	0.08375	0.32940	0.12960	0.50952	2.50740	0.60000	1.86783
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.08005	0.32940	0.12960	0.49562	2.50740	0.60000	1.82111
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.07936	0.32940	0.06480	0.48633	2.50740	0.30000	1.81582
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.07434	0.32940	0.06480	0.47108	2.50740	0.30000	1.76302

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	0.17586	0.32940	0.12960	0.59081	2.50740	0.60000	1.86208
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.15895	0.32940	0.12960	0.56783	2.50740	0.60000	1.80787
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.13738	0.32940	0.06480	0.51769	2.50740	0.30000	1.69694
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.12274	0.32940	0.06480	0.49495	2.50740	0.30000	1.64022

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	0.00881	0.32940	0.12960	0.00925	2.50740	0.60000	0.01029
	A2	0.01860	0.00100	0.00998	0.32940	0.12960	0.01056	2.50740	0.60000	0.01086
	B1	0.01860	0.00100	0.00763	0.32940	0.12960	0.00788	2.50740	0.60000	0.00957
sg13g2_a21o_1	A1	0.01860	0.00100	0.00592	0.32940	0.06480	0.00597	2.50740	0.30000	0.00748
	A2	0.01860	0.00100	0.00694	0.32940	0.06480	0.00707	2.50740	0.30000	0.00780
	B1	0.01860	0.00100	0.00471	0.32940	0.06480	0.00461	2.50740	0.30000	0.00671

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	0.00949	0.32940	0.12960	0.00987	2.50740	0.60000	0.01031
	A2	0.01860	0.00100	0.00949	0.32940	0.12960	0.01005	2.50740	0.60000	0.01085
	B1	0.01860	0.00100	0.00752	0.32940	0.12960	0.00796	2.50740	0.60000	0.00913
sg13g2_a21o_1	A1	0.01860	0.00100	0.00650	0.32940	0.06480	0.00657	2.50740	0.30000	0.00766
	A2	0.01860	0.00100	0.00650	0.32940	0.06480	0.00670	2.50740	0.30000	0.00769
	B1	0.01860	0.00100	0.00454	0.32940	0.06480	0.00471	2.50740	0.30000	0.00635

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	0.00885	0.32940	0.12960	0.00924	2.50740	0.60000	0.01107
	B1	(!A1 * A2)	0.01860	0.00100	0.00763	0.32940	0.12960	0.00788	2.50740	0.60000	0.00957
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00576	0.32940	0.06480	0.00571	2.50740	0.30000	0.00781
	B1	(!A1 * A2)	0.01860	0.00100	0.00471	0.32940	0.06480	0.00461	2.50740	0.30000	0.00671

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	0.00768	0.32940	0.12960	0.00813	2.50740	0.60000	0.00945
	B1	(!A1 * A2)	0.01860	0.00100	0.00752	0.32940	0.12960	0.00796	2.50740	0.60000	0.00913
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00466	0.32940	0.06480	0.00476	2.50740	0.30000	0.00675
	B1	(!A1 * A2)	0.01860	0.00100	0.00454	0.32940	0.06480	0.00471	2.50740	0.30000	0.00635

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00009	0.32940	0.00009	2.50740	0.00010
sg13g2_a21o_1	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	-0.00007	0.32940	-0.00009	2.50740	-0.00008
sg13g2_a21o_1	0.01860	0.00003	0.32940	0.00002	2.50740	0.00002

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A2 * B1)	0.01860	0.00033	0.32940	0.00019	2.50740	0.00015
	(!A2 * B1)	0.01860	0.00009	0.32940	0.00009	2.50740	0.00010
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00023	0.32940	0.00009	2.50740	0.00005
	(!A2 * B1)	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	(A2 * B1)	0.01860	-0.00007	0.32940	-0.00008	2.50740	-0.00008
	(!A2 * B1)	0.01860	-0.00007	0.32940	-0.00009	2.50740	-0.00008
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00003	0.32940	0.00003	2.50740	0.00002
	(!A2 * B1)	0.01860	0.00003	0.32940	0.00002	2.50740	0.00002

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00005	0.32940	0.00005	2.50740	0.00005
sg13g2_a21o_1	0.01860	0.00001	0.32940	0.00001	2.50740	0.00001

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	-0.00004	0.32940	-0.00004	2.50740	-0.00004
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	0.00029	0.32940	0.00015	2.50740	0.00011
	(!A1 * B1)	0.01860	0.00005	0.32940	0.00005	2.50740	0.00005
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00025	0.32940	0.00011	2.50740	0.00007
	(!A1 * B1)	0.01860	0.00001	0.32940	0.00001	2.50740	0.00001

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	-0.00002	0.32940	-0.00003	2.50740	-0.00003
	(!A1 * B1)	0.01860	-0.00004	0.32940	-0.00004	2.50740	-0.00004
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00001	0.32940	0.00001	2.50740	0.00001
	(!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	0.00039	0.32940	0.00040	2.50740	0.00040
sg13g2_a21o_1	0.01860	0.00032	0.32940	0.00032	2.50740	0.00032

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00044	0.32940	0.00046	2.50740	0.00047
sg13g2_a21o_1	0.01860	0.00053	0.32940	0.00054	2.50740	0.00055

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	0.00039	0.32940	0.00040	2.50740	0.00040
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00032	0.32940	0.00032	2.50740	0.00032

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	0.00044	0.32940	0.00046	2.50740	0.00047
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00053	0.32940	0.00054	2.50740	0.00055

BTLx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00541	0.01657	2.40000
sg13g2_ebufn_4	0.00278	0.00988	1.20000
sg13g2_ebufn_2	0.00245	0.00601	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1655.51000	2491.41000	4310.14000
sg13g2_ebufn_4	1066.77000	1399.01000	2222.85000
sg13g2_ebufn_2	765.92600	931.97500	1199.63000

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	0.01605	0.10850	0.32940	0.53345	0.86054	2.50740	2.41505	3.38820
	TE_B->Z (RR)	0.01860	0.01605	0.09723	0.32940	0.53345	0.22746	2.50740	2.41505	0.54324
	TE_B->Z (FR)	0.01860	0.01605	0.05049	0.32940	0.53345	0.77456	2.50740	2.41505	3.79264
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.00856	0.11233	0.32940	0.26676	0.86303	2.50740	1.20756	3.39054
	TE_B->Z (RR)	0.01860	0.00856	0.07772	0.32940	0.26676	0.18170	2.50740	1.20756	0.39944
	TE_B->Z (FR)	0.01860	0.00856	0.05129	0.32940	0.26676	0.77348	2.50740	1.20756	3.78798
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00481	0.09483	0.32940	0.13341	0.81393	2.50740	0.60381	3.26255
	TE_B->Z (RR)	0.01860	0.00481	0.06801	0.32940	0.13341	0.15673	2.50740	0.60381	0.33282
	TE_B->Z (FR)	0.01860	0.00481	0.05122	0.32940	0.13341	0.76902	2.50740	0.60381	3.77287

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	0.02932	0.12400	0.32940	0.54672	0.73399	2.50740	2.42832	2.71392
	TE_B->Z (RF)	0.01860	0.02932	0.04229	0.32940	0.54672	0.03587	2.50740	2.42832	0.04349
	TE_B->Z (FF)	0.01860	0.02932	0.15346	0.32940	0.54672	1.12916	2.50740	2.42832	4.47364
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01543	0.12815	0.32940	0.27363	0.73784	2.50740	1.21443	2.72055
	TE_B->Z (RF)	0.01860	0.01543	0.04144	0.32940	0.27363	0.03370	2.50740	1.21443	0.03707
	TE_B->Z (FF)	0.01860	0.01543	0.11737	0.32940	0.27363	1.06295	2.50740	1.21443	4.30043
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00840	0.09847	0.32940	0.13700	0.67912	2.50740	0.60740	2.56186
	TE_B->Z (RF)	0.01860	0.00840	0.04043	0.32940	0.13700	0.03453	2.50740	0.60740	0.03507
	TE_B->Z (FF)	0.01860	0.00840	0.09968	0.32940	0.13700	1.01784	2.50740	0.60740	4.18693

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	0.01605	0.01304	0.32940	0.53345	0.01724	2.50740	2.41505	0.01995
	TE_B	0.01860	0.01605	0.00828	0.32940	0.53345	0.00728	2.50740	2.41505	0.00639
sg13g2_ebufn_4	A	0.01860	0.00856	0.00665	0.32940	0.26676	0.00844	2.50740	1.20756	0.00934
	TE_B	0.01860	0.00856	0.00409	0.32940	0.26676	0.00366	2.50740	1.20756	0.00433
sg13g2_ebufn_2	A	0.01860	0.00481	0.00365	0.32940	0.13341	0.00410	2.50740	0.60381	0.00446
	TE_B	0.01860	0.00481	0.00204	0.32940	0.13341	0.00192	2.50740	0.60381	0.00245

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	0.02932	0.02386	0.32940	0.54672	0.02705	2.50740	2.42832	0.02128
	TE_B	0.01860	0.02932	0.00947	0.32940	0.54672	0.10415	2.50740	2.42832	0.47373
sg13g2_ebufn_4	A	0.01860	0.01543	0.01193	0.32940	0.27363	0.01354	2.50740	1.21443	0.01035
	TE_B	0.01860	0.01543	0.00476	0.32940	0.27363	0.05368	2.50740	1.21443	0.24189
sg13g2_ebufn_2	A	0.01860	0.00840	0.00604	0.32940	0.13700	0.00688	2.50740	0.60740	0.00504
	TE_B	0.01860	0.00840	0.00251	0.32940	0.13700	0.02768	2.50740	0.60740	0.12297

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.02324	0.32940	0.02273	2.50740	0.02839
sg13g2_ebufn_4	0.01860	0.01188	0.32940	0.01158	2.50740	0.01438
sg13g2_ebufn_2	0.01860	0.00647	0.32940	0.00630	2.50740	0.00885

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00815	0.32940	0.00790	2.50740	0.01347
sg13g2_ebufn_4	0.01860	0.00440	0.32940	0.00426	2.50740	0.00698
sg13g2_ebufn_2	0.01860	0.00283	0.32940	0.00275	2.50740	0.00528

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	-0.00229	0.32940	-0.00352	2.50740	-0.00169
sg13g2_ebufn_4	0.01860	-0.00015	0.32940	-0.00098	2.50740	0.00152
sg13g2_ebufn_2	0.01860	0.00056	0.32940	0.00007	2.50740	0.00248

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	0.03624	0.32940	0.03602	2.50740	0.03845
sg13g2_ebufn_4	0.01860	0.01900	0.32940	0.01877	2.50740	0.02155
sg13g2_ebufn_2	0.01860	0.01015	0.32940	0.01005	2.50740	0.01263

BU_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.01599	4.80000
sg13g2_buf_8	0.00803	2.40000
sg13g2_buf_4	0.00349	1.20000
sg13g2_buf_2	0.00245	0.60000
sg13g2_buf_1	0.00218	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	5028.73000	6741.42000	8454.12000
sg13g2_buf_8	2514.38000	3370.78000	4227.18000
sg13g2_buf_4	1257.51000	1653.21000	2048.91000
sg13g2_buf_2	697.49800	882.31900	1067.14000
sg13g2_buf_1	494.47500	531.75500	569.03400

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	0.08398	0.32940	1.03680	0.51296	2.50740	4.80000	1.88450
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.08347	0.32940	0.51840	0.51173	2.50740	2.40000	1.87992
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.10804	0.32940	0.25920	0.55860	2.50740	1.20000	2.02320
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.08424	0.32940	0.12960	0.50667	2.50740	0.60000	1.87385
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.07499	0.32940	0.06480	0.47590	2.50740	0.30000	1.78737

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	0.09349	0.32940	1.03680	0.49010	2.50740	4.80000	1.68915
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.09285	0.32940	0.51840	0.48924	2.50740	2.40000	1.68988
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.09158	0.32940	0.25920	0.48565	2.50740	1.20000	1.66344
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.09023	0.32940	0.12960	0.47623	2.50740	0.60000	1.64892
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.07890	0.32940	0.06480	0.44131	2.50740	0.30000	1.55847

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	0.05915	0.32940	1.03680	0.06223	2.50740	4.80000	0.07118
sg13g2_buf_8	A	0.01860	0.00100	0.02925	0.32940	0.51840	0.03101	2.50740	2.40000	0.03587
sg13g2_buf_4	A	0.01860	0.00100	0.01405	0.32940	0.25920	0.01500	2.50740	1.20000	0.01548
sg13g2_buf_2	A	0.01860	0.00100	0.00773	0.32940	0.12960	0.00801	2.50740	0.60000	0.00963
sg13g2_buf_1	A	0.01860	0.00100	0.00466	0.32940	0.06480	0.00466	2.50740	0.30000	0.00639

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	0.05713	0.32940	1.03680	0.06131	2.50740	4.80000	0.06799
sg13g2_buf_8	A	0.01860	0.00100	0.02825	0.32940	0.51840	0.03030	2.50740	2.40000	0.03339
sg13g2_buf_4	A	0.01860	0.00100	0.01418	0.32940	0.25920	0.01523	2.50740	1.20000	0.01599
sg13g2_buf_2	A	0.01860	0.00100	0.00753	0.32940	0.12960	0.00799	2.50740	0.60000	0.00926
sg13g2_buf_1	A	0.01860	0.00100	0.00461	0.32940	0.06480	0.00471	2.50740	0.30000	0.00627

DECAP_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	98.63550	98.63550	98.63550
sg13g2_decap_8	197.30100	197.30100	197.30100

DFFRRx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00155	0.00562	0.00279	0.60000	0.60000
sg13g2_dfrbp_1	0.00168	0.00610	0.00257	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	2762.66000	3213.96000	3740.72000
sg13g2_dfrbp_1	2077.23000	2501.97000	2984.47000

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	0.37766	0.32940	0.12960	0.77189	2.50740	0.60000	2.13924
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.30514	0.32940	0.06480	0.70877	2.50740	0.30000	2.06634

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	0.32963	0.32940	0.12960	0.69749	2.50740	0.60000	1.87437
	RESET_B->Q (FF)	0.01860	0.00100	0.44131	0.32940	0.12960	0.84250	2.50740	0.60000	2.23511
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.29440	0.32940	0.06480	0.66430	2.50740	0.30000	1.83787
	RESET_B->Q (FF)	0.01860	0.00100	0.39001	0.32940	0.06480	0.78924	2.50740	0.30000	2.16189

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	0.22017	0.32940	0.12960	0.68028	2.50740	0.60000	2.00935
	RESET_B->Q_N (FR)	0.01860	0.00100	0.33419	0.32940	0.12960	0.82292	2.50740	0.60000	2.36741
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.22578	0.32940	0.06480	0.67133	2.50740	0.30000	2.00269
	RESET_B->Q_N (FR)	0.01860	0.00100	0.32213	0.32940	0.06480	0.79362	2.50740	0.30000	2.31965

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	0.24488	0.32940	0.12960	0.70925	2.50740	0.60000	1.92698
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.22848	0.32940	0.06480	0.65974	2.50740	0.30000	1.87259

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	-0.09536	1.26300	1.26300	-0.28063	2.50740	2.50740	-0.36894
	setup	CLK (R)	0.01860	0.01860	0.19562	1.26300	1.26300	0.40475	2.50740	2.50740	0.51947
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.09781	1.26300	1.26300	-0.29142	2.50740	2.50740	-0.38960
	setup	CLK (R)	0.01860	0.01860	0.18339	1.26300	1.26300	0.40206	2.50740	2.50740	0.52242

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	-0.04646	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.26859
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.35079	2.50740	2.50740	0.47520
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.25973
	setup	CLK (R)	0.01860	0.01860	0.17850	1.26300	1.26300	0.33730	2.50740	2.50740	0.46044

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	0.20540	1.26300	1.26300	0.42634	2.50740	2.50740	0.57555
	removal	CLK (R)	0.01860	0.01860	-0.17605	1.26300	1.26300	-0.39126	2.50740	2.50740	-0.53423
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.19562	1.26300	1.26300	0.42364	2.50740	2.50740	0.57850
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.38317	2.50740	2.50740	-0.53128

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	0.02956	0.32940	0.12960	0.10542	2.50740	0.60000	0.38183
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02439	0.32940	0.06480	0.06188	2.50740	0.30000	0.20119

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	0.03011	0.32940	0.12960	0.10630	2.50740	0.60000	0.38330
	RESET_B	0.01860	0.00100	0.02230	0.32940	0.12960	0.09911	2.50740	0.60000	0.37206
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02377	0.32940	0.06480	0.06139	2.50740	0.30000	0.20136
	RESET_B	0.01860	0.00100	0.01581	0.32940	0.06480	0.05339	2.50740	0.30000	0.19111

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	0.03012	0.32940	0.12960	0.10648	2.50740	0.60000	0.38286
	RESET_B	0.01860	0.00100	0.02234	0.32940	0.12960	0.09858	2.50740	0.60000	0.37318
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02377	0.32940	0.06480	0.06150	2.50740	0.30000	0.20115
	RESET_B	0.01860	0.00100	0.01581	0.32940	0.06480	0.05345	2.50740	0.30000	0.19139

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	0.02956	0.32940	0.12960	0.10544	2.50740	0.60000	0.38188
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02436	0.32940	0.06480	0.06172	2.50740	0.30000	0.20111

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00151	0.32940	0.00142	2.50740	0.00249
sg13g2_dfrbp_1	0.01860	0.00159	0.32940	0.00149	2.50740	0.00254

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00116	0.32940	0.00105	2.50740	0.00214
sg13g2_dfrbp_1	0.01860	0.00129	0.32940	0.00116	2.50740	0.00223

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	0.00151	0.32940	0.00142	2.50740	0.00249
	(!CLK * RESET_B)	0.01860	0.00956	0.32940	0.00950	2.50740	0.01046
	(!CLK * !RESET_B)	0.01860	-0.00000	0.32940	-0.00001	2.50740	-0.00001
sg13g2_dfrbp_1	CLK	0.01860	0.00159	0.32940	0.00149	2.50740	0.00254
	(!CLK * RESET_B)	0.01860	0.00816	0.32940	0.00808	2.50740	0.00909
	(!CLK * !RESET_B)	0.01860	0.00009	0.32940	0.00010	2.50740	0.00010

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	0.00116	0.32940	0.00105	2.50740	0.00214
	(!CLK * RESET_B)	0.01860	0.00743	0.32940	0.00727	2.50740	0.00831
	(!CLK * !RESET_B)	0.01860	0.00000	0.32940	0.00001	2.50740	0.00001
sg13g2_dfrbp_1	CLK	0.01860	0.00129	0.32940	0.00116	2.50740	0.00223
	(!CLK * RESET_B)	0.01860	0.00684	0.32940	0.00672	2.50740	0.00775
	(!CLK * !RESET_B)	0.01860	-0.00000	0.32940	0.00000	2.50740	0.00001

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	0.00332	0.32940	0.00320	2.50740	0.00389
sg13g2_dfrbp_1	0.01860	0.00363	0.32940	0.00350	2.50740	0.00417

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	0.00728	0.32940	0.00683	2.50740	0.00796
sg13g2_dfrbp_1	0.01860	0.00648	0.32940	0.00600	2.50740	0.00713

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	0.00332	0.32940	0.00320	2.50740	0.00389
	(CLK * !D * !Q * Q_N)	0.01860	0.00140	0.32940	0.00140	2.50740	0.00140
	(!CLK * D * !Q * Q_N)	0.01860	0.01173	0.32940	0.01147	2.50740	0.01243
	(!CLK * !D * !Q * Q_N)	0.01860	0.00137	0.32940	0.00137	2.50740	0.00138
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00363	0.32940	0.00350	2.50740	0.00417
	(CLK * !D * !Q * Q_N)	0.01860	0.00171	0.32940	0.00170	2.50740	0.00170
	(!CLK * D * !Q * Q_N)	0.01860	0.01053	0.32940	0.01031	2.50740	0.01128
	(!CLK * !D * !Q * Q_N)	0.01860	0.00173	0.32940	0.00173	2.50740	0.00174

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	0.02917	0.32940	0.02852	2.50740	0.03098
	(CLK * !D * !Q * Q_N)	0.01860	-0.00090	0.32940	-0.00106	2.50740	-0.00112
	(!CLK * D * !Q * Q_N)	0.01860	0.00728	0.32940	0.00683	2.50740	0.00796
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00111	0.32940	-0.00124	2.50740	-0.00129
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.02171	0.32940	0.02104	2.50740	0.02348
	(CLK * !D * !Q * Q_N)	0.01860	-0.00119	0.32940	-0.00135	2.50740	-0.00141
	(!CLK * D * !Q * Q_N)	0.01860	0.00648	0.32940	0.00600	2.50740	0.00713
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00126	0.32940	-0.00141	2.50740	-0.00146

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00949	0.32940	0.00906	2.50740	0.01193
sg13g2_dfrbp_1	0.01860	0.00910	0.32940	0.00870	2.50740	0.01133

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01684	0.32940	0.01644	2.50740	0.01918
sg13g2_dfrbp_1	0.01860	0.01556	0.32940	0.01512	2.50740	0.01782

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	0.00916	0.32940	0.00873	2.50740	0.01164
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00958	0.32940	0.00916	2.50740	0.01203
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00910	0.32940	0.00866	2.50740	0.01157
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00949	0.32940	0.00906	2.50740	0.01193
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.00938	0.32940	0.00893	2.50740	0.01160
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00910	0.32940	0.00870	2.50740	0.01133
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00901	0.32940	0.00858	2.50740	0.01123
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00897	0.32940	0.00857	2.50740	0.01120

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	0.01810	0.32940	0.01769	2.50740	0.02044
	(D * RESET_B * !Q * Q_N)	0.01860	0.01684	0.32940	0.01644	2.50740	0.01918
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00876	0.32940	0.00846	2.50740	0.01128
	(!D * RESET_B * Q * !Q_N)	0.01860	0.02625	0.32940	0.02982	2.50740	0.03241
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00872	0.32940	0.00842	2.50740	0.01121
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00876	0.32940	0.00843	2.50740	0.01125
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01706	0.32940	0.01662	2.50740	0.01932
	(D * RESET_B * !Q * Q_N)	0.01860	0.01556	0.32940	0.01512	2.50740	0.01782
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00899	0.32940	0.00868	2.50740	0.01138
	(!D * RESET_B * Q * !Q_N)	0.01860	0.02341	0.32940	0.02445	2.50740	0.02699
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00895	0.32940	0.00861	2.50740	0.01132
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00897	0.32940	0.00865	2.50740	0.01135

DLHQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00213	0.00213	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	1392.37000	1694.91000	2124.80000

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	0.27295	0.32940	0.06480	0.67158	2.50740	0.30000	1.96720
	GATE->Q (RR)	0.01860	0.00100	0.23260	0.32940	0.06480	0.63316	2.50740	0.30000	1.92283

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	0.24118	0.32940	0.06480	0.60073	2.50740	0.30000	1.70356
	GATE->Q (RF)	0.01860	0.00100	0.25026	0.32940	0.06480	0.61267	2.50740	0.30000	1.71688

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	-0.14671	1.26300	1.26300	-0.32920	2.50740	2.50740	-0.41026
	setup	GATE (F)	0.01860	0.01860	0.15894	1.26300	1.26300	0.38587	2.50740	2.50740	0.51947

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	-0.06113	1.26300	1.26300	-0.03778	2.50740	2.50740	-0.01181
	setup	GATE (F)	0.01860	0.01860	0.07580	1.26300	1.26300	0.05127	2.50740	2.50740	0.02656

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	0.01154	0.32940	0.06480	0.01183	2.50740	0.30000	0.01129
	GATE	0.01860	0.00100	0.00927	0.32940	0.06480	0.00955	2.50740	0.30000	0.00918

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	0.01191	0.32940	0.06480	0.01229	2.50740	0.30000	0.01215
	GATE	0.01860	0.00100	0.01016	0.32940	0.06480	0.01064	2.50740	0.30000	0.01076

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00277	0.32940	0.00260	2.50740	0.00465

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00308	0.32940	0.00292	2.50740	0.00490

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	0.00339	0.32940	0.00317	2.50740	0.00519
	(!GATE * !Q)	0.01860	0.00277	0.32940	0.00260	2.50740	0.00465

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	0.00287	0.32940	0.00276	2.50740	0.00479
	(!GATE * !Q)	0.01860	0.00308	0.32940	0.00292	2.50740	0.00490

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00723	0.32940	0.00691	2.50740	0.00947

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.01176	0.32940	0.01213	2.50740	0.01470

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	0.00723	0.32940	0.00691	2.50740	0.00947

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	0.01176	0.32940	0.01213	2.50740	0.01470

DLHRQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00198	0.00272	0.00204	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	1556.96000	1833.49000	2128.17000

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	0.29005	0.32940	0.06480	0.69653	2.50740	0.30000	1.98983
	GATE->Q (RR)	0.01860	0.00100	0.26147	0.32940	0.06480	0.67139	2.50740	0.30000	1.96223

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	0.25633	0.32940	0.06480	0.61939	2.50740	0.30000	1.73080
	GATE->Q (RF)	0.01860	0.00100	0.26892	0.32940	0.06480	0.63775	2.50740	0.30000	1.75827
	RESET_B->Q (FF)	0.01860	0.00100	0.09762	0.32940	0.06480	0.48047	2.50740	0.30000	1.67856

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	-0.13204	1.26300	1.26300	-0.29682	2.50740	2.50740	-0.36894
	setup	GATE (F)	0.01860	0.01860	0.15405	1.26300	1.26300	0.36158	2.50740	2.50740	0.48110

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	-0.06847	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.08558	1.26300	1.26300	0.04857	2.50740	2.50740	0.02361

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	-0.02201	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.17709
	removal	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.17269	2.50740	2.50740	0.23022

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	0.00077	0.32940	0.06480	0.00075	2.50740	0.30000	0.00024
	GATE	0.01860	0.00100	0.00956	0.32940	0.06480	0.00978	2.50740	0.30000	0.00942

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	-0.00077	0.32940	0.06480	-0.00075	2.50740	0.30000	-0.00024
	GATE	0.01860	0.00100	0.00956	0.32940	0.06480	0.01005	2.50740	0.30000	0.01012
	RESET_B	0.01860	0.00100	0.00593	0.32940	0.06480	0.00612	2.50740	0.30000	0.00847

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01356	0.32940	0.01367	2.50740	0.01581

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01647	0.32940	0.01981	2.50740	0.02188

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	0.00111	0.32940	0.00092	2.50740	0.00295
	!RESET_B	0.01860	0.01356	0.32940	0.01367	2.50740	0.01581

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	0.00377	0.32940	0.00366	2.50740	0.00568
	!RESET_B	0.01860	0.01647	0.32940	0.01981	2.50740	0.02188

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	0.00011	0.32940	0.00010	2.50740	0.00010

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	0.00020	0.32940	0.00011	2.50740	0.00008

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	0.00011	0.32940	0.00010	2.50740	0.00010
	(!D * !GATE * !Q)	0.01860	0.00011	0.32940	0.00010	2.50740	0.00010

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	0.00020	0.32940	0.00011	2.50740	0.00008
	(!D * !GATE * !Q)	0.01860	0.00020	0.32940	0.00011	2.50740	0.00008

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00743	0.32940	0.00711	2.50740	0.00965

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01188	0.32940	0.01232	2.50740	0.01490

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	0.00972	0.32940	0.00925	2.50740	0.01187
	(!D * !RESET_B * !Q)	0.01860	0.00743	0.32940	0.00711	2.50740	0.00965

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	0.00953	0.32940	0.00917	2.50740	0.01190
	(!D * RESET_B * !Q)	0.01860	0.01188	0.32940	0.01232	2.50740	0.01490
	(!D * !RESET_B * !Q)	0.01860	0.01192	0.32940	0.01238	2.50740	0.01488

DLHR



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00193	0.00288	0.00209	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	2052.81000	2357.27000	2640.92000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.31396	0.32940	0.06480	0.73174	2.50740	0.30000	2.02192
	GATE->Q (RR)	0.01860	0.00100	0.28683	0.32940	0.06480	0.70883	2.50740	0.30000	2.00071

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	0.26574	0.32940	0.06480	0.63435	2.50740	0.30000	1.73714
	GATE->Q (RF)	0.01860	0.00100	0.27860	0.32940	0.06480	0.65390	2.50740	0.30000	1.76734
	RESET_B->Q (FF)	0.01860	0.00100	0.10653	0.32940	0.06480	0.50369	2.50740	0.30000	1.73714

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	0.32647	0.32940	0.06480	0.71567	2.50740	0.30000	1.96993
	GATE->Q_N (RR)	0.01860	0.00100	0.33936	0.32940	0.06480	0.73511	2.50740	0.30000	2.00206
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16659	0.32940	0.06480	0.58106	2.50740	0.30000	1.92267

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	0.38195	0.32940	0.06480	0.73305	2.50740	0.30000	1.86927
	GATE->Q_N (RF)	0.01860	0.00100	0.35521	0.32940	0.06480	0.70989	2.50740	0.30000	1.84808

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	-0.14182	1.26300	1.26300	-0.30222	2.50740	2.50740	-0.37780
	setup	GATE (F)	0.01860	0.01860	0.16627	1.26300	1.26300	0.36698	2.50740	2.50740	0.48995

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	-0.07091	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.09047	1.26300	1.26300	0.05127	2.50740	2.50740	0.02361

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	-0.00734	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.08559
	removal	GATE (F)	0.01860	0.01860	0.03423	1.26300	1.26300	0.12143	2.50740	2.50740	0.15348

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	0.00361	0.32940	0.06480	0.00379	2.50740	0.30000	0.00347
	GATE	0.01860	0.00100	0.00790	0.32940	0.06480	0.00824	2.50740	0.30000	0.00793

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	0.00201	0.32940	0.06480	0.00060	2.50740	0.30000	0.00014
	GATE	0.01860	0.00100	0.00791	0.32940	0.06480	0.00829	2.50740	0.30000	0.00823
	RESET_B	0.01860	0.00100	0.00598	0.32940	0.06480	0.00615	2.50740	0.30000	0.00703

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	0.00202	0.32940	0.06480	0.00060	2.50740	0.30000	0.00038
	GATE	0.01860	0.00100	0.01149	0.32940	0.06480	0.01176	2.50740	0.30000	0.01292
	RESET_B	0.01860	0.00100	0.00598	0.32940	0.06480	0.00625	2.50740	0.30000	0.00731

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	0.00361	0.32940	0.06480	0.00381	2.50740	0.30000	0.00357
	GATE	0.01860	0.00100	0.00789	0.32940	0.06480	0.00815	2.50740	0.30000	0.00798

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01321	0.32940	0.01330	2.50740	0.01544

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01615	0.32940	0.01955	2.50740	0.02166

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	0.00278	0.32940	0.00259	2.50740	0.00465
	!RESET_B	0.01860	0.01321	0.32940	0.01330	2.50740	0.01544

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	0.00536	0.32940	0.00525	2.50740	0.00730
	!RESET_B	0.01860	0.01615	0.32940	0.01955	2.50740	0.02166

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	0.00002	0.32940	0.00001	2.50740	0.00001

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00028	0.32940	0.00019	2.50740	0.00016

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	0.00002	0.32940	0.00001	2.50740	0.00001
	(!D * !GATE * !Q)	0.01860	0.00002	0.32940	0.00001	2.50740	0.00001

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00028	0.32940	0.00019	2.50740	0.00016
	(!D * !GATE * !Q)	0.01860	0.00028	0.32940	0.00019	2.50740	0.00016

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00715	0.32940	0.00684	2.50740	0.00940

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01173	0.32940	0.01214	2.50740	0.01472

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	0.00944	0.32940	0.00896	2.50740	0.01159
	(!D * !RESET_B * !Q)	0.01860	0.00715	0.32940	0.00684	2.50740	0.00940

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	0.00975	0.32940	0.00939	2.50740	0.01212
	(!D * RESET_B * !Q)	0.01860	0.01173	0.32940	0.01214	2.50740	0.01472
	(!D * !RESET_B * !Q)	0.01860	0.01177	0.32940	0.01219	2.50740	0.01477

DLLRQ



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00189	0.00272	0.00202	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	1451.47000	1806.15000	2128.29000

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	0.28860	0.32940	0.06480	0.69384	2.50740	0.30000	1.98550
	GATE_N->Q (FR)	0.01860	0.00100	0.32483	0.32940	0.06480	0.74216	2.50740	0.30000	2.05334
	RESET_B->Q (RR)	0.01860	0.00100	0.12890	0.32940	0.06480	0.53275	2.50740	0.30000	1.88422

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	0.25505	0.32940	0.06480	0.61583	2.50740	0.30000	1.72083
	GATE_N->Q (FF)	0.01860	0.00100	0.24410	0.32940	0.06480	0.62280	2.50740	0.30000	1.81950
	RESET_B->Q (FF)	0.01860	0.00100	0.09849	0.32940	0.06480	0.48001	2.50740	0.30000	1.67455

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	-0.10514	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.15348
	setup	GATE_N (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.14571	2.50740	2.50740	0.17709

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	-0.13204	1.26300	1.26300	-0.32110	2.50740	2.50740	-0.40436
	setup	GATE_N (R)	0.01860	0.01860	0.14671	1.26300	1.26300	0.36968	2.50740	2.50740	0.48995

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	-0.05624	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.16824
	removal	GATE_N (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.17269	2.50740	2.50740	0.20070

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	0.00474	0.32940	0.06480	0.00514	2.50740	0.30000	0.00471
	GATE_N	0.01860	0.00100	0.00560	0.32940	0.06480	0.00517	2.50740	0.30000	0.00484
	RESET_B	0.01860	0.00100	0.00629	0.32940	0.06480	0.00638	2.50740	0.30000	0.00771

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	0.00413	0.32940	0.06480	0.00039	2.50740	0.30000	0.00016
	GATE_N	0.01860	0.00100	0.00471	0.32940	0.06480	0.00435	2.50740	0.30000	0.00429
	RESET_B	0.01860	0.00100	0.00500	0.32940	0.06480	0.00518	2.50740	0.30000	0.00746

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00951	0.32940	0.00918	2.50740	0.01124

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01002	0.32940	0.01396	2.50740	0.01603

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	0.00105	0.32940	0.00086	2.50740	0.00290
	!RESET_B	0.01860	0.00951	0.32940	0.00918	2.50740	0.01124

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	0.00477	0.32940	0.00466	2.50740	0.00670
	!RESET_B	0.01860	0.01002	0.32940	0.01396	2.50740	0.01603

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	0.00115	0.32940	0.00115	2.50740	0.00115

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	0.00126	0.32940	0.00117	2.50740	0.00114

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	0.00010	0.32940	0.00009	2.50740	0.00009
	(!D * GATE_N * !Q)	0.01860	0.00115	0.32940	0.00115	2.50740	0.00115

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	0.00021	0.32940	0.00012	2.50740	0.00008
	(!D * GATE_N * !Q)	0.01860	0.00126	0.32940	0.00117	2.50740	0.00114

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	0.00733	0.32940	0.00702	2.50740	0.00956

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	0.01182	0.32940	0.01228	2.50740	0.01478

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	0.01060	0.32940	0.01021	2.50740	0.01256
	(!D * !RESET_B * !Q)	0.01860	0.00733	0.32940	0.00702	2.50740	0.00956

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	0.01014	0.32940	0.00991	2.50740	0.01234
	(!D * RESET_B * !Q)	0.01860	0.01182	0.32940	0.01228	2.50740	0.01478
	(!D * !RESET_B * !Q)	0.01860	0.01187	0.32940	0.01231	2.50740	0.01484

DLLR



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00200	0.00284	0.00215	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	1946.83000	2405.45000	2656.45000

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	0.31691	0.32940	0.06480	0.73394	2.50740	0.30000	2.02279
	GATE_N->Q (FR)	0.01860	0.00100	0.35282	0.32940	0.06480	0.78324	2.50740	0.30000	2.09697

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	0.26900	0.32940	0.06480	0.63683	2.50740	0.30000	1.73855
	GATE_N->Q (FF)	0.01860	0.00100	0.25944	0.32940	0.06480	0.64659	2.50740	0.30000	1.84597
	RESET_B->Q (FF)	0.01860	0.00100	0.10661	0.32940	0.06480	0.51122	2.50740	0.30000	1.74416

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	0.32927	0.32940	0.06480	0.71801	2.50740	0.30000	1.97030
	GATE_N->Q_N (FR)	0.01860	0.00100	0.32010	0.32940	0.06480	0.72774	2.50740	0.30000	2.07923
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16783	0.32940	0.06480	0.58264	2.50740	0.30000	1.93020

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	0.38457	0.32940	0.06480	0.73539	2.50740	0.30000	1.87073
	GATE_N->Q_N (FF)	0.01860	0.00100	0.42093	0.32940	0.06480	0.78467	2.50740	0.30000	1.94408

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	-0.11737	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.16234
	setup	GATE_N (R)	0.01860	0.01860	0.13693	1.26300	1.26300	0.15381	2.50740	2.50740	0.18595

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	-0.13693	1.26300	1.26300	-0.32380	2.50740	2.50740	-0.40731
	setup	GATE_N (R)	0.01860	0.01860	0.15405	1.26300	1.26300	0.37777	2.50740	2.50740	0.49881

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	-0.04157	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.09150
	removal	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.12952	2.50740	2.50740	0.13282

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	0.00753	0.32940	0.06480	0.04518	2.50740	0.30000	0.18157
	GATE_N	0.01860	0.00100	0.01765	0.32940	0.06480	0.05552	2.50740	0.30000	0.19221

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	0.00666	0.32940	0.06480	0.03792	2.50740	0.30000	0.17415
	GATE_N	0.01860	0.00100	0.01640	0.32940	0.06480	0.05428	2.50740	0.30000	0.19044
	RESET_B	0.01860	0.00100	0.01759	0.32940	0.06480	0.05483	2.50740	0.30000	0.19337

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	0.00668	0.32940	0.06480	0.03807	2.50740	0.30000	0.17470
	GATE_N	0.01860	0.00100	0.02323	0.32940	0.06480	0.06085	2.50740	0.30000	0.20003
	RESET_B	0.01860	0.00100	0.01866	0.32940	0.06480	0.05605	2.50740	0.30000	0.19478

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	0.00751	0.32940	0.06480	0.04509	2.50740	0.30000	0.18179
	GATE_N	0.01860	0.00100	0.01763	0.32940	0.06480	0.05572	2.50740	0.30000	0.19174

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01387	0.32940	0.01397	2.50740	0.01615

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01402	0.32940	0.02040	2.50740	0.02252

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	0.00282	0.32940	0.00264	2.50740	0.00468
	!RESET_B	0.01860	0.01387	0.32940	0.01397	2.50740	0.01615

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	0.00268	0.32940	0.00258	2.50740	0.00462
	!RESET_B	0.01860	0.01402	0.32940	0.02040	2.50740	0.02252

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	-0.00001	2.50740	-0.00001

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00137	0.32940	0.00127	2.50740	0.00124

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	0.00218	0.32940	0.00217	2.50740	0.00217
	(!D * GATE_N * !Q)	0.01860	-0.00000	0.32940	-0.00001	2.50740	-0.00001

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	(D * GATE_N * !Q)	0.01860	0.00030	0.32940	0.00021	2.50740	0.00018
	(!D * GATE_N * !Q)	0.01860	0.00137	0.32940	0.00127	2.50740	0.00124

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	0.01055	0.32940	0.01243	2.50740	0.01500

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	0.00683	0.32940	0.00661	2.50740	0.00919

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	0.01063	0.32940	0.01025	2.50740	0.01260
	(!D * RESET_B * !Q)	0.01860	0.01055	0.32940	0.01243	2.50740	0.01500
	(!D * !RESET_B * !Q)	0.01860	0.01166	0.32940	0.01353	2.50740	0.01609

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	0.01036	0.32940	0.01011	2.50740	0.01254
	(!D * !RESET_B * !Q)	0.01860	0.00683	0.32940	0.00661	2.50740	0.00919

DLY1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00138	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	797.60700	914.86300	1032.12000

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	0.18051	0.32940	0.06480	0.58369	2.50740	0.30000	1.85280

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	0.21021	0.32940	0.06480	0.59456	2.50740	0.30000	1.83153

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	0.01008	0.32940	0.06480	0.01012	2.50740	0.30000	0.01084

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	0.00956	0.32940	0.06480	0.00971	2.50740	0.30000	0.01059

DLY2



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00139	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	840.62200	957.87600	1075.13000

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	0.25743	0.32940	0.06480	0.67165	2.50740	0.30000	1.99595

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	0.29301	0.32940	0.06480	0.69803	2.50740	0.30000	1.99545

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	0.01172	0.32940	0.06480	0.01180	2.50740	0.30000	0.01233

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	0.01131	0.32940	0.06480	0.01142	2.50740	0.30000	0.01228

DLY4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00142	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	1694.07000	1811.33000	1928.58000

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	0.53794	0.32940	0.06480	0.99445	2.50740	0.30000	2.43583

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	0.56920	0.32940	0.06480	1.02234	2.50740	0.30000	2.44043

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	0.01642	0.32940	0.06480	0.01631	2.50740	0.30000	0.01658

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	0.01612	0.32940	0.06480	0.01609	2.50740	0.30000	0.01662

EINVIN_x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00764	0.00850	1.20000
sg13g2_einvn_2	0.00390	0.00453	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	717.43200	1402.49000	2087.55000
sg13g2_einvn_2	355.00100	697.53100	1040.06000

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	0.00870	0.03650	0.32940	0.26690	0.77499	2.50740	1.20770	3.95402
	TE_B->Z (RR)	0.01860	0.00870	0.07567	0.32940	0.26690	0.17849	2.50740	1.20770	0.39939
	TE_B->Z (FR)	0.01860	0.00870	0.04494	0.32940	0.26690	0.76762	2.50740	1.20770	3.77624
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00486	0.03949	0.32940	0.13346	0.77477	2.50740	0.60386	3.95188
	TE_B->Z (RR)	0.01860	0.00486	0.07489	0.32940	0.13346	0.17836	2.50740	0.60386	0.40728
	TE_B->Z (FR)	0.01860	0.00486	0.04747	0.32940	0.13346	0.76789	2.50740	0.60386	3.77492

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	0.01547	0.03195	0.32940	0.27366	0.64855	2.50740	1.21447	3.41999
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00841	0.03429	0.32940	0.13701	0.64922	2.50740	0.60741	3.41875

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	0.00870	0.00809	0.32940	0.26690	0.00788	2.50740	1.20770	0.00960
	TE_B	0.01860	0.00870	0.01197	0.32940	0.26690	0.01151	2.50740	1.20770	0.01173
sg13g2_einvn_2	A	0.01860	0.00486	0.00411	0.32940	0.13346	0.00397	2.50740	0.60386	0.00477
	TE_B	0.01860	0.00486	0.00584	0.32940	0.13346	0.00559	2.50740	0.60386	0.00553

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	0.01547	0.00772	0.32940	0.27366	0.00882	2.50740	1.21447	0.00833
sg13g2_einvn_2	A	0.01860	0.00841	0.00400	0.32940	0.13701	0.00446	2.50740	0.60741	0.00425

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	-0.00823	0.32940	-0.00867	2.50740	-0.00609
sg13g2_einvn_2	0.01860	-0.00354	0.32940	-0.00380	2.50740	-0.00252

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	0.01126	0.32940	0.01128	2.50740	0.01444
sg13g2_einvn_2	0.01860	0.00573	0.32940	0.00571	2.50740	0.00726

FILLx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_8	14.51520
sg13g2_fill_4	7.25760

Pin Capacitance Information

Leakage Information

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

GCLK



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00216	0.00458	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	1635.28000	1811.98000	1934.02000

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	0.11287	0.32940	0.06480	0.51322	2.50740	0.30000	1.83882

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	0.09044	0.32940	0.06480	0.46543	2.50740	0.30000	1.63426

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	-0.06244	1.26300	1.26300	-0.21857	2.50740	2.50740	-0.31448
	setup	CLK (R)	0.01860	0.01860	0.11846	1.26300	1.26300	0.31841	2.50740	2.50740	0.48523

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	-0.02623	1.26300	1.26300	-0.02159	2.50740	2.50740	-0.01544
	setup	CLK (R)	0.01860	0.01860	0.06974	1.26300	1.26300	0.08365	2.50740	2.50740	0.09167

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	0.00809	0.32940	0.06480	0.00822	2.50740	0.30000	0.00938

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	0.00637	0.32940	0.06480	0.00659	2.50740	0.30000	0.00841

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01484	0.32940	0.01563	2.50740	0.01722

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00894	0.32940	0.02203	2.50740	0.02401

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	0.01484	0.32940	0.01563	2.50740	0.01722

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	0.00894	0.32940	0.02203	2.50740	0.02401

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00439	0.32940	0.00406	2.50740	0.00660

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00515	0.32940	0.00485	2.50740	0.00741

INx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.04345	4.80000
sg13g2_inv_8	0.02117	2.40000
sg13g2_inv_4	0.01058	1.20000
sg13g2_inv_2	0.00531	0.60000
sg13g2_inv_1	0.00272	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	2162.56000	4902.83000	7643.11000
sg13g2_inv_8	1081.28000	2451.44000	3821.60000
sg13g2_inv_4	540.64200	1225.71000	1910.78000
sg13g2_inv_2	270.32100	612.84900	955.37800
sg13g2_inv_1	135.29100	306.49700	477.70300

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	0.02202	0.32940	1.03680	0.48871	2.50740	4.80000	2.69051
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.02188	0.32940	0.51840	0.48765	2.50740	2.40000	2.68904
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.02246	0.32940	0.25920	0.48763	2.50740	1.20000	2.68770
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.02394	0.32940	0.12960	0.48704	2.50740	0.60000	2.68550
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02824	0.32940	0.06480	0.48836	2.50740	0.30000	2.68779

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	0.02181	0.32940	1.03680	0.46119	2.50740	4.80000	2.58549
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.02170	0.32940	0.51840	0.46114	2.50740	2.40000	2.58568
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.02224	0.32940	0.25920	0.46084	2.50740	1.20000	2.58520
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.02361	0.32940	0.12960	0.45946	2.50740	0.60000	2.57900
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.02765	0.32940	0.06480	0.46064	2.50740	0.30000	2.58054

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	0.01791	0.32940	1.03680	0.02221	2.50740	4.80000	0.01699
sg13g2_inv_8	A	0.01860	0.00100	0.00855	0.32940	0.51840	0.01045	2.50740	2.40000	0.00810
sg13g2_inv_4	A	0.01860	0.00100	0.00432	0.32940	0.25920	0.00511	2.50740	1.20000	0.00401
sg13g2_inv_2	A	0.01860	0.00100	0.00220	0.32940	0.12960	0.00255	2.50740	0.60000	0.00205
sg13g2_inv_1	A	0.01860	0.00100	0.00132	0.32940	0.06480	0.00146	2.50740	0.30000	0.00119

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	0.01616	0.32940	1.03680	0.01918	2.50740	4.80000	0.01826
sg13g2_inv_8	A	0.01860	0.00100	0.00775	0.32940	0.51840	0.00935	2.50740	2.40000	0.00832
sg13g2_inv_4	A	0.01860	0.00100	0.00394	0.32940	0.25920	0.00463	2.50740	1.20000	0.00449
sg13g2_inv_2	A	0.01860	0.00100	0.00206	0.32940	0.12960	0.00235	2.50740	0.60000	0.00228
sg13g2_inv_1	A	0.01860	0.00100	0.00140	0.32940	0.06480	0.00144	2.50740	0.30000	0.00133

ITL



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.01500	0.01451	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	1299.58000	2669.69000	4039.80000

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	0.01635	0.03506	0.32940	0.53375	0.77633	2.50740	2.41535	3.96121
	TE_B->Z (RR)	0.01860	0.01635	0.09342	0.32940	0.53375	0.22499	2.50740	2.41535	0.53954
	TE_B->Z (FR)	0.01860	0.01635	0.04549	0.32940	0.53375	0.77053	2.50740	2.41535	3.78162

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	0.02971	0.03147	0.32940	0.54711	0.65010	2.50740	2.42871	3.42736

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	0.01635	0.01603	0.32940	0.53375	0.01634	2.50740	2.41535	0.02106
	TE_B	0.01860	0.01635	0.02671	0.32940	0.53375	0.02400	2.50740	2.41535	0.02222

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	0.02971	0.01503	0.32940	0.54711	0.01746	2.50740	2.42871	0.01587

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	-0.01792	0.32940	-0.01989	2.50740	-0.02010

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	0.01792	0.32940	0.01989	2.50740	0.02281

KEEPSTATE



sg13g2_stdcell_slow_1p08V_125C Cell
Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage
1.08, Temp 125.00

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	140.38400	162.92000	185.45600

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_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00191	0.00203	0.00463	0.60000
sg13g2_mux2_1	0.00190	0.00200	0.00463	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	1020.32000	1363.36000	1627.01000
sg13g2_mux2_1	751.57700	1057.00000	1491.98000

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	0.14055	0.32940	0.12960	0.57972	2.50740	0.60000	1.98177
	A1->X (RR)	0.01860	0.00100	0.10564	0.32940	0.12960	0.58035	2.50740	0.60000	1.99914
	S->X (-R)	0.01860	0.00100	0.14508	0.32940	0.12960	0.58000	2.50740	0.60000	2.00521
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.12148	0.32940	0.06480	0.53335	2.50740	0.30000	1.86808
	A1->X (RR)	0.01860	0.00100	0.10519	0.32940	0.06480	0.53608	2.50740	0.30000	1.89406
	S->X (-R)	0.01860	0.00100	0.12646	0.32940	0.06480	0.53839	2.50740	0.30000	1.90118

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	0.15274	0.32940	0.12960	0.60755	2.50740	0.60000	1.90401
	A1->X (FF)	0.01860	0.00100	0.17896	0.32940	0.12960	0.61639	2.50740	0.60000	1.91847
	S->X (-F)	0.01860	0.00100	0.19669	0.32940	0.12960	0.60657	2.50740	0.60000	1.87416
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.14005	0.32940	0.06480	0.54356	2.50740	0.30000	1.77354
	A1->X (FF)	0.01860	0.00100	0.15071	0.32940	0.06480	0.55264	2.50740	0.30000	1.78833
	S->X (-F)	0.01860	0.00100	0.16552	0.32940	0.06480	0.54675	2.50740	0.30000	1.75641

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	0.14508	0.32940	0.12960	0.58000	2.50740	0.60000	2.00521
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.20196	0.32940	0.12960	0.62087	2.50740	0.60000	1.88863
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.12646	0.32940	0.06480	0.53839	2.50740	0.30000	1.90118
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.18305	0.32940	0.06480	0.58727	2.50740	0.30000	1.85129

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	0.19669	0.32940	0.12960	0.60657	2.50740	0.60000	1.87416
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.24892	0.32940	0.12960	0.65132	2.50740	0.60000	1.80662
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.16552	0.32940	0.06480	0.54675	2.50740	0.30000	1.75641
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.21753	0.32940	0.06480	0.59661	2.50740	0.30000	1.75046

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	0.01004	0.32940	0.12960	0.01042	2.50740	0.60000	0.01120
	A1	0.01860	0.00100	0.01191	0.32940	0.12960	0.01460	2.50740	0.60000	0.01611
	S	0.01860	0.00100	0.01067	0.32940	0.12960	0.01132	2.50740	0.60000	0.01186
sg13g2_mux2_1	A0	0.01860	0.00100	0.00718	0.32940	0.06480	0.00711	2.50740	0.30000	0.00892
	A1	0.01860	0.00100	0.00904	0.32940	0.06480	0.01004	2.50740	0.30000	0.01215
	S	0.01860	0.00100	0.00786	0.32940	0.06480	0.00803	2.50740	0.30000	0.00918

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	0.01288	0.32940	0.12960	0.01468	2.50740	0.60000	0.01664
	A1	0.01860	0.00100	0.01068	0.32940	0.12960	0.01103	2.50740	0.60000	0.01312
	S	0.01860	0.00100	0.01012	0.32940	0.12960	0.01082	2.50740	0.60000	0.01166
sg13g2_mux2_1	A0	0.01860	0.00100	0.00951	0.32940	0.06480	0.01002	2.50740	0.30000	0.01238
	A1	0.01860	0.00100	0.00783	0.32940	0.06480	0.00788	2.50740	0.30000	0.01006
	S	0.01860	0.00100	0.00737	0.32940	0.06480	0.00766	2.50740	0.30000	0.00883

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	0.01041	0.32940	0.12960	0.01133	2.50740	0.60000	0.01062
	S	(!A0 * A1)	0.01860	0.00100	0.01067	0.32940	0.12960	0.01132	2.50740	0.60000	0.01186
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00758	0.32940	0.06480	0.00798	2.50740	0.30000	0.00749
	S	(!A0 * A1)	0.01860	0.00100	0.00786	0.32940	0.06480	0.00803	2.50740	0.30000	0.00918

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	0.01062	0.32940	0.12960	0.01127	2.50740	0.60000	0.01117
	S	(!A0 * A1)	0.01860	0.00100	0.01012	0.32940	0.12960	0.01082	2.50740	0.60000	0.01166
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00786	0.32940	0.06480	0.00814	2.50740	0.30000	0.00808
	S	(!A0 * A1)	0.01860	0.00100	0.00737	0.32940	0.06480	0.00766	2.50740	0.30000	0.00883

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00312	0.32940	0.00290	2.50740	0.00492
sg13g2_mux2_1	0.01860	0.00312	0.32940	0.00290	2.50740	0.00492

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00336	0.32940	0.00313	2.50740	0.00512
sg13g2_mux2_1	0.01860	0.00336	0.32940	0.00313	2.50740	0.00513

MUX4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00256	0.00254	0.00256	0.00265	0.00769	0.00474	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	997.59300	2353.50000	3423.64000

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	0.21862	0.32940	0.06480	0.66177	2.50740	0.30000	2.15944
	A1->X (RR)	0.01860	0.00100	0.21228	0.32940	0.06480	0.65857	2.50740	0.30000	2.15434
	A2->X (RR)	0.01860	0.00100	0.22891	0.32940	0.06480	0.67761	2.50740	0.30000	2.19688
	A3->X (RR)	0.01860	0.00100	0.22333	0.32940	0.06480	0.67369	2.50740	0.30000	2.19176
	S0->X (-R)	0.01860	0.00100	0.19527	0.32940	0.06480	0.64778	2.50740	0.30000	2.12797
	S1->X (-R)	0.01860	0.00100	0.11152	0.32940	0.06480	0.53106	2.50740	0.30000	1.84716

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	0.24872	0.32940	0.06480	0.66460	2.50740	0.30000	1.94028
	A1->X (FF)	0.01860	0.00100	0.25041	0.32940	0.06480	0.66473	2.50740	0.30000	1.94052
	A2->X (FF)	0.01860	0.00100	0.26763	0.32940	0.06480	0.68722	2.50740	0.30000	1.98242
	A3->X (FF)	0.01860	0.00100	0.26822	0.32940	0.06480	0.68690	2.50740	0.30000	1.98033
	S0->X (-F)	0.01860	0.00100	0.23397	0.32940	0.06480	0.66064	2.50740	0.30000	1.95593
	S1->X (-F)	0.01860	0.00100	0.16544	0.32940	0.06480	0.56876	2.50740	0.30000	1.69467

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	0.19527	0.32940	0.06480	0.64778	2.50740	0.30000	2.12797
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.18197	0.32940	0.06480	0.62645	2.50740	0.30000	2.07529
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.28092	0.32940	0.06480	0.72178	2.50740	0.30000	2.05613
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.27046	0.32940	0.06480	0.70844	2.50740	0.30000	2.03721
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.11152	0.32940	0.06480	0.53106	2.50740	0.30000	1.84716
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.11123	0.32940	0.06480	0.53107	2.50740	0.30000	1.84679
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.14916	0.32940	0.06480	0.56603	2.50740	0.30000	1.80672
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.14861	0.32940	0.06480	0.56570	2.50740	0.30000	1.80646

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	0.23397	0.32940	0.06480	0.66064	2.50740	0.30000	1.95593
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.21118	0.32940	0.06480	0.63060	2.50740	0.30000	1.89644
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.30538	0.32940	0.06480	0.73334	2.50740	0.30000	1.95214
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.28726	0.32940	0.06480	0.70987	2.50740	0.30000	1.92442
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.13524	0.32940	0.06480	0.52957	2.50740	0.30000	1.68058
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.13508	0.32940	0.06480	0.52924	2.50740	0.30000	1.68027
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.16524	0.32940	0.06480	0.56866	2.50740	0.30000	1.69458
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.16544	0.32940	0.06480	0.56876	2.50740	0.30000	1.69467

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	0.00997	0.32940	0.06480	0.01005	2.50740	0.30000	0.01074
	A1	0.01860	0.00100	0.00982	0.32940	0.06480	0.00998	2.50740	0.30000	0.01057
	A2	0.01860	0.00100	0.01017	0.32940	0.06480	0.01035	2.50740	0.30000	0.01103
	A3	0.01860	0.00100	0.01005	0.32940	0.06480	0.01018	2.50740	0.30000	0.01082
	S0	0.01860	0.00100	0.00256	0.32940	0.06480	0.00044	2.50740	0.30000	0.00430
	S1	0.01860	0.00100	0.00398	0.32940	0.06480	0.00411	2.50740	0.30000	0.00589

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	0.00942	0.32940	0.06480	0.00961	2.50740	0.30000	0.01045
	A1	0.01860	0.00100	0.01419	0.32940	0.06480	0.01439	2.50740	0.30000	0.01532
	A2	0.01860	0.00100	0.01031	0.32940	0.06480	0.01050	2.50740	0.30000	0.01137
	A3	0.01860	0.00100	0.01432	0.32940	0.06480	0.01453	2.50740	0.30000	0.01538
	S0	0.01860	0.00100	0.00496	0.32940	0.06480	0.00686	2.50740	0.30000	0.01153
	S1	0.01860	0.00100	0.00406	0.32940	0.06480	0.00430	2.50740	0.30000	0.00625

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	0.00925	0.32940	0.06480	0.00940	2.50740	0.30000	0.00895
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00922	0.32940	0.06480	0.00943	2.50740	0.30000	0.00896
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00256	0.32940	0.06480	0.00044	2.50740	0.30000	0.00430
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00255	0.32940	0.06480	0.00038	2.50740	0.30000	0.00412
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00616	0.32940	0.06480	0.00705	2.50740	0.30000	0.00838
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00564	0.32940	0.06480	0.00652	2.50740	0.30000	0.00790
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00398	0.32940	0.06480	0.00411	2.50740	0.30000	0.00589
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00349	0.32940	0.06480	0.00365	2.50740	0.30000	0.00530

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	0.01009	0.32940	0.06480	0.01037	2.50740	0.30000	0.01019
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00973	0.32940	0.06480	0.01071	2.50740	0.30000	0.01038
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00552	0.32940	0.06480	0.00637	2.50740	0.30000	0.01103
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00496	0.32940	0.06480	0.00686	2.50740	0.30000	0.01153
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00577	0.32940	0.06480	0.00673	2.50740	0.30000	0.00849
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00576	0.32940	0.06480	0.00671	2.50740	0.30000	0.00846
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00384	0.32940	0.06480	0.00407	2.50740	0.30000	0.00618
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00406	0.32940	0.06480	0.00430	2.50740	0.30000	0.00625

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01136	0.32940	0.01320	2.50740	0.01572

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01022	0.32940	0.01001	2.50740	0.01212

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	0.01136	0.32940	0.01320	2.50740	0.01572
	(A0 * A1 * !S1)	0.01860	0.01147	0.32940	0.01409	2.50740	0.01651
	(!A2 * !A3 * S1)	0.01860	0.00652	0.32940	0.00618	2.50740	0.01107
	(!A0 * !A1 * !S1)	0.01860	0.00732	0.32940	0.00685	2.50740	0.01165

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	0.00980	0.32940	0.00952	2.50740	0.01165
	(A0 * A1 * !S1)	0.01860	0.01022	0.32940	0.01001	2.50740	0.01212
	(!A2 * !A3 * S1)	0.01860	0.00969	0.32940	0.00942	2.50740	0.01149
	(!A0 * !A1 * !S1)	0.01860	0.01171	0.32940	0.01479	2.50740	0.01695

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00328	0.32940	0.00319	2.50740	0.00585

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00320	0.32940	0.00313	2.50740	0.00578

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	0.00257	0.32940	0.00248	2.50740	0.00516
	(A0 * A2 * !S0)	0.01860	0.00257	0.32940	0.00248	2.50740	0.00516
	(!A1 * !A3 * S0)	0.01860	0.00328	0.32940	0.00319	2.50740	0.00585
	(!A0 * !A2 * !S0)	0.01860	0.00335	0.32940	0.00323	2.50740	0.00590

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	0.00246	0.32940	0.00244	2.50740	0.00514
	(A0 * A2 * !S0)	0.01860	0.00245	0.32940	0.00243	2.50740	0.00514
	(!A1 * !A3 * S0)	0.01860	0.00320	0.32940	0.00313	2.50740	0.00578
	(!A0 * !A2 * !S0)	0.01860	0.00323	0.32940	0.00318	2.50740	0.00581

NAND2B1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00215	0.00292	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	215.66100	541.41100	1046.65000

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	0.07803	0.32940	0.06480	0.47851	2.50740	0.30000	1.79245
	B->Y (FR)	0.01860	0.00100	0.03531	0.32940	0.06480	0.49705	2.50740	0.30000	2.69730

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	0.09405	0.32940	0.06480	0.64488	2.50740	0.30000	2.46660
	B->Y (RF)	0.01860	0.00100	0.05665	0.32940	0.06480	0.64633	2.50740	0.30000	3.29305

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	0.00167	0.32940	0.06480	0.00179	2.50740	0.30000	0.00145
	B	0.01860	0.00100	0.00150	0.32940	0.06480	0.00144	2.50740	0.30000	0.00115

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	0.00334	0.32940	0.06480	0.00347	2.50740	0.30000	0.00285
	B	0.01860	0.00100	0.00349	0.32940	0.06480	0.00343	2.50740	0.30000	0.00325

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	0.00313	0.32940	0.00304	2.50740	0.00513

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	0.00188	0.32940	0.00178	2.50740	0.00383

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	0.00313	0.32940	0.00304	2.50740	0.00513

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	0.00188	0.32940	0.00178	2.50740	0.00383

NAND2B2



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00206	0.00511	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	360.32600	852.38000	2001.47000

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	0.10300	0.32940	0.12960	0.52970	2.50740	0.60000	1.92306
	B->Y (FR)	0.01860	0.00100	0.02756	0.32940	0.12960	0.48897	2.50740	0.60000	2.69149

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	0.13043	0.32940	0.12960	0.73108	2.50740	0.60000	2.73389
	B->Y (RF)	0.01860	0.00100	0.04028	0.32940	0.12960	0.66795	2.50740	0.60000	3.49128

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	0.00310	0.32940	0.12960	0.00335	2.50740	0.60000	0.00245
	B	0.01860	0.00100	0.00426	0.32940	0.12960	0.00403	2.50740	0.60000	0.00367

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	0.00703	0.32940	0.12960	0.00739	2.50740	0.60000	0.00683
	B	0.01860	0.00100	0.00552	0.32940	0.12960	0.00562	2.50740	0.60000	0.00548

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	0.00529	0.32940	0.00498	2.50740	0.00674

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	0.00464	0.32940	0.00445	2.50740	0.00623

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	0.00529	0.32940	0.00498	2.50740	0.00674

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	0.00464	0.32940	0.00445	2.50740	0.00623

NAND2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00526	0.00534	0.60000
sg13g2_nand2_1	0.00278	0.00282	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	88.78190	627.16000	1910.21000
sg13g2_nand2_1	45.52210	316.16000	955.34400

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	0.02788	0.32940	0.12960	0.49129	2.50740	0.60000	2.69165
	B->Y (FR)	0.01860	0.00100	0.03363	0.32940	0.12960	0.49764	2.50740	0.60000	2.69925
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.03137	0.32940	0.06480	0.49142	2.50740	0.30000	2.68965
	B->Y (FR)	0.01860	0.00100	0.03621	0.32940	0.06480	0.49670	2.50740	0.30000	2.69621

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	0.04044	0.32940	0.12960	0.66675	2.50740	0.60000	3.49224
	B->Y (RF)	0.01860	0.00100	0.04944	0.32940	0.12960	0.66166	2.50740	0.60000	3.37566
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.04465	0.32940	0.06480	0.64952	2.50740	0.30000	3.40749
	B->Y (RF)	0.01860	0.00100	0.05130	0.32940	0.06480	0.64190	2.50740	0.30000	3.28938

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	0.00251	0.32940	0.12960	0.00279	2.50740	0.60000	0.00218
	B	0.01860	0.00100	0.00336	0.32940	0.12960	0.00335	2.50740	0.60000	0.00264
sg13g2_nand2_1	A	0.01860	0.00100	0.00142	0.32940	0.06480	0.00156	2.50740	0.30000	0.00118
	B	0.01860	0.00100	0.00152	0.32940	0.06480	0.00144	2.50740	0.30000	0.00120

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	0.00382	0.32940	0.12960	0.00392	2.50740	0.60000	0.00389
	B	0.01860	0.00100	0.00635	0.32940	0.12960	0.00625	2.50740	0.60000	0.00593
sg13g2_nand2_1	A	0.01860	0.00100	0.00206	0.32940	0.06480	0.00206	2.50740	0.30000	0.00193
	B	0.01860	0.00100	0.00334	0.32940	0.06480	0.00329	2.50740	0.30000	0.00311

NAND3B1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00208	0.00282	0.00281	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	138.71800	476.70200	1524.31000

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	0.08302	0.32940	0.06480	0.48121	2.50740	0.30000	1.79132
	B->Y (FR)	0.01860	0.00100	0.04099	0.32940	0.06480	0.50226	2.50740	0.30000	2.70260
	C->Y (FR)	0.01860	0.00100	0.04453	0.32940	0.06480	0.50755	2.50740	0.30000	2.70878

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	0.11729	0.32940	0.06480	0.86276	2.50740	0.30000	3.40838
	B->Y (RF)	0.01860	0.00100	0.08922	0.32940	0.06480	0.86630	2.50740	0.30000	4.19700
	C->Y (RF)	0.01860	0.00100	0.09762	0.32940	0.06480	0.86159	2.50740	0.30000	4.04052

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	0.00182	0.32940	0.06480	0.00189	2.50740	0.30000	0.00156
	B	0.01860	0.00100	0.00188	0.32940	0.06480	0.00186	2.50740	0.30000	0.00145
	C	0.01860	0.00100	0.00216	0.32940	0.06480	0.00206	2.50740	0.30000	0.00166

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	0.00455	0.32940	0.06480	0.00474	2.50740	0.30000	0.00471
	B	0.01860	0.00100	0.00452	0.32940	0.06480	0.00449	2.50740	0.30000	0.00449
	C	0.01860	0.00100	0.00581	0.32940	0.06480	0.00575	2.50740	0.30000	0.00611

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	0.00316	0.32940	0.00306	2.50740	0.00516

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	0.00176	0.32940	0.00166	2.50740	0.00371

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	0.00316	0.32940	0.00306	2.50740	0.00516

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	0.00176	0.32940	0.00166	2.50740	0.00371

NAND3



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00275	0.00284	0.00279	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	38.61200	251.51900	1433.09000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand3_1	A->Y (FR)	0.01860	0.00100	0.03648	0.32940	0.06480	0.49646	2.50740	0.30000	2.69581
	B->Y (FR)	0.01860	0.00100	0.04192	0.32940	0.06480	0.50233	2.50740	0.30000	2.70273
	C->Y (FR)	0.01860	0.00100	0.04472	0.32940	0.06480	0.50765	2.50740	0.30000	2.70911

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	0.07005	0.32940	0.06480	0.85480	2.50740	0.30000	4.25570
	B->Y (RF)	0.01860	0.00100	0.08363	0.32940	0.06480	0.86174	2.50740	0.30000	4.19350
	C->Y (RF)	0.01860	0.00100	0.09013	0.32940	0.06480	0.85347	2.50740	0.30000	4.03252

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	0.00170	0.32940	0.06480	0.00180	2.50740	0.30000	0.00139
	B	0.01860	0.00100	0.00187	0.32940	0.06480	0.00174	2.50740	0.30000	0.00141
	C	0.01860	0.00100	0.00217	0.32940	0.06480	0.00198	2.50740	0.30000	0.00164

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	0.00315	0.32940	0.06480	0.00315	2.50740	0.30000	0.00371
	B	0.01860	0.00100	0.00444	0.32940	0.06480	0.00440	2.50740	0.30000	0.00485
	C	0.01860	0.00100	0.00551	0.32940	0.06480	0.00546	2.50740	0.30000	0.00587

NAND4



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00271	0.00280	0.00281	0.00278	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	39.16620	184.39100	1910.73000

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	0.03824	0.32940	0.06480	0.49840	2.50740	0.30000	2.69793
	B->Y (FR)	0.01860	0.00100	0.04410	0.32940	0.06480	0.50469	2.50740	0.30000	2.70519
	C->Y (FR)	0.01860	0.00100	0.04729	0.32940	0.06480	0.51020	2.50740	0.30000	2.71232
	D->Y (FR)	0.01860	0.00100	0.04827	0.32940	0.06480	0.51460	2.50740	0.30000	2.71801

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	0.09185	0.32940	0.06480	1.06166	2.50740	0.30000	5.11343
	B->Y (RF)	0.01860	0.00100	0.11336	0.32940	0.06480	1.08052	2.50740	0.30000	5.09438
	C->Y (RF)	0.01860	0.00100	0.12578	0.32940	0.06480	1.08161	2.50740	0.30000	4.96463
	D->Y (RF)	0.01860	0.00100	0.13167	0.32940	0.06480	1.08178	2.50740	0.30000	4.85623

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	0.00161	0.32940	0.06480	0.00172	2.50740	0.30000	0.00129
	B	0.01860	0.00100	0.00187	0.32940	0.06480	0.00183	2.50740	0.30000	0.00142
	C	0.01860	0.00100	0.00213	0.32940	0.06480	0.00202	2.50740	0.30000	0.00157
	D	0.01860	0.00100	0.00232	0.32940	0.06480	0.00209	2.50740	0.30000	0.00173

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	0.00374	0.32940	0.06480	0.00375	2.50740	0.30000	0.00349
	B	0.01860	0.00100	0.00503	0.32940	0.06480	0.00495	2.50740	0.30000	0.00476
	C	0.01860	0.00100	0.00614	0.32940	0.06480	0.00600	2.50740	0.30000	0.00572
	D	0.01860	0.00100	0.00721	0.32940	0.06480	0.00707	2.50740	0.30000	0.00684

NOR2Bx



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00536	0.00252	0.60000
sg13g2_nor2b_1	0.00277	0.00212	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	612.97100	1082.41000	1394.70000
sg13g2_nor2b_1	342.15600	634.14800	843.07100

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	0.04466	0.32940	0.12960	0.78177	2.50740	0.60000	3.95353
	B_N->Y (RR)	0.01860	0.00100	0.11892	0.32940	0.12960	0.83989	2.50740	0.60000	3.30990
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.05227	0.32940	0.06480	0.78361	2.50740	0.30000	3.95647
	B_N->Y (RR)	0.01860	0.00100	0.10853	0.32940	0.06480	0.80756	2.50740	0.30000	3.22027

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	0.02756	0.32940	0.12960	0.47356	2.50740	0.60000	2.63804
	B_N->Y (FF)	0.01860	0.00100	0.10426	0.32940	0.12960	0.49384	2.50740	0.60000	1.69433
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.03037	0.32940	0.06480	0.46349	2.50740	0.30000	2.58380
	B_N->Y (FF)	0.01860	0.00100	0.08775	0.32940	0.06480	0.44871	2.50740	0.30000	1.56632

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	0.00358	0.32940	0.12960	0.00376	2.50740	0.60000	0.00421
	B_N	0.01860	0.00100	0.00735	0.32940	0.12960	0.00753	2.50740	0.60000	0.00795
sg13g2_nor2b_1	A	0.01860	0.00100	0.00181	0.32940	0.06480	0.00185	2.50740	0.30000	0.00233
	B_N	0.01860	0.00100	0.00379	0.32940	0.06480	0.00377	2.50740	0.30000	0.00389

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	0.00253	0.32940	0.12960	0.00277	2.50740	0.60000	0.00246
	B_N	0.01860	0.00100	0.00355	0.32940	0.12960	0.00369	2.50740	0.60000	0.00268
sg13g2_nor2b_1	A	0.01860	0.00100	0.00163	0.32940	0.06480	0.00167	2.50740	0.30000	0.00153
	B_N	0.01860	0.00100	0.00193	0.32940	0.06480	0.00192	2.50740	0.30000	0.00140

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	0.00501	0.32940	0.00474	2.50740	0.00705
sg13g2_nor2b_1	0.01860	0.00296	0.32940	0.00278	2.50740	0.00483

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	0.00500	0.32940	0.00478	2.50740	0.00692
sg13g2_nor2b_1	0.01860	0.00299	0.32940	0.00284	2.50740	0.00482

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	0.00501	0.32940	0.00474	2.50740	0.00705
sg13g2_nor2b_1	A	0.01860	0.00296	0.32940	0.00278	2.50740	0.00483

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	0.00500	0.32940	0.00478	2.50740	0.00692
sg13g2_nor2b_1	A	0.01860	0.00299	0.32940	0.00284	2.50740	0.00482

NOR2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00542	0.00530	0.30000
sg13g2_nor2_1	0.00283	0.00277	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	501.85600	817.90500	1261.26000
sg13g2_nor2_1	250.91600	408.95500	630.64100

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	0.05725	0.32940	0.06480	0.48212	2.50740	0.30000	2.37425
	B->Y (FR)	0.01860	0.00100	0.04522	0.32940	0.06480	0.48792	2.50740	0.30000	2.53646
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.06126	0.32940	0.06480	0.77406	2.50740	0.30000	3.77578
	B->Y (FR)	0.01860	0.00100	0.05247	0.32940	0.06480	0.78313	2.50740	0.30000	3.95462

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	0.03273	0.32940	0.06480	0.33158	2.50740	0.30000	1.82617
	B->Y (RF)	0.01860	0.00100	0.02718	0.32940	0.06480	0.32324	2.50740	0.30000	1.81473
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.03508	0.32940	0.06480	0.46919	2.50740	0.30000	2.59088
	B->Y (RF)	0.01860	0.00100	0.03045	0.32940	0.06480	0.46348	2.50740	0.30000	2.58374

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	0.00692	0.32940	0.06480	0.00693	2.50740	0.30000	0.00700
	B	0.01860	0.00100	0.00365	0.32940	0.06480	0.00378	2.50740	0.30000	0.00431
sg13g2_nor2_1	A	0.01860	0.00100	0.00342	0.32940	0.06480	0.00341	2.50740	0.30000	0.00379
	B	0.01860	0.00100	0.00182	0.32940	0.06480	0.00189	2.50740	0.30000	0.00219

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	0.00362	0.32940	0.06480	0.00334	2.50740	0.30000	0.00456
	B	0.01860	0.00100	0.00248	0.32940	0.06480	0.00269	2.50740	0.30000	0.00374
sg13g2_nor2_1	A	0.01860	0.00100	0.00178	0.32940	0.06480	0.00160	2.50740	0.30000	0.00164
	B	0.01860	0.00100	0.00162	0.32940	0.06480	0.00167	2.50740	0.30000	0.00158

NOR3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00538	0.00537	0.00528	0.60000
sg13g2_nor3_1	0.00285	0.00286	0.00276	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	435.73000	936.24600	1629.82000
sg13g2_nor3_1	218.59400	471.51100	815.15300

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	0.10467	0.32940	0.12960	1.10960	2.50740	0.60000	5.01088
	B->Y (FR)	0.01860	0.00100	0.09776	0.32940	0.12960	1.11341	2.50740	0.60000	5.18308
	C->Y (FR)	0.01860	0.00100	0.07092	0.32940	0.12960	1.09506	2.50740	0.60000	5.27442
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.11493	0.32940	0.06480	1.10812	2.50740	0.30000	4.99984
	B->Y (FR)	0.01860	0.00100	0.10841	0.32940	0.06480	1.11257	2.50740	0.30000	5.17131
	C->Y (FR)	0.01860	0.00100	0.08595	0.32940	0.06480	1.09856	2.50740	0.30000	5.26621

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	0.03673	0.32940	0.12960	0.47852	2.50740	0.60000	2.60305
	B->Y (RF)	0.01860	0.00100	0.03626	0.32940	0.12960	0.47322	2.50740	0.60000	2.59536
	C->Y (RF)	0.01860	0.00100	0.03017	0.32940	0.12960	0.46579	2.50740	0.60000	2.58636
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.03923	0.32940	0.06480	0.46659	2.50740	0.30000	2.54106
	B->Y (RF)	0.01860	0.00100	0.03850	0.32940	0.06480	0.46253	2.50740	0.30000	2.53759
	C->Y (RF)	0.01860	0.00100	0.03332	0.32940	0.06480	0.45624	2.50740	0.30000	2.52981

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	0.01120	0.32940	0.12960	0.01108	2.50740	0.60000	0.01149
	B	0.01860	0.00100	0.00842	0.32940	0.12960	0.00822	2.50740	0.60000	0.00854
	C	0.01860	0.00100	0.00519	0.32940	0.12960	0.00520	2.50740	0.60000	0.00551
sg13g2_nor3_1	A	0.01860	0.00100	0.00578	0.32940	0.06480	0.00572	2.50740	0.30000	0.00588
	B	0.01860	0.00100	0.00440	0.32940	0.06480	0.00427	2.50740	0.30000	0.00437
	C	0.01860	0.00100	0.00285	0.32940	0.06480	0.00280	2.50740	0.30000	0.00303

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	0.00444	0.32940	0.12960	0.00393	2.50740	0.60000	0.00371
	B	0.01860	0.00100	0.00396	0.32940	0.12960	0.00361	2.50740	0.60000	0.00325
	C	0.01860	0.00100	0.00269	0.32940	0.12960	0.00295	2.50740	0.60000	0.00274
sg13g2_nor3_1	A	0.01860	0.00100	0.00228	0.32940	0.06480	0.00201	2.50740	0.30000	0.00200
	B	0.01860	0.00100	0.00210	0.32940	0.06480	0.00193	2.50740	0.30000	0.00186
	C	0.01860	0.00100	0.00173	0.32940	0.06480	0.00179	2.50740	0.30000	0.00175

NOR4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00537	0.00530	0.00471	0.00484	0.60000
sg13g2_nor4_1	0.00281	0.00280	0.00248	0.00252	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	418.34100	895.98000	1991.79000
sg13g2_nor4_1	209.18900	447.99800	995.89200

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	0.16859	0.32940	0.12960	1.47268	2.50740	0.60000	6.35775
	B->Y (FR)	0.01860	0.00100	0.16232	0.32940	0.12960	1.46929	2.50740	0.60000	6.46945
	C->Y (FR)	0.01860	0.00100	0.14060	0.32940	0.12960	1.45267	2.50740	0.60000	6.59318
	D->Y (FR)	0.01860	0.00100	0.09720	0.32940	0.12960	1.41474	2.50740	0.60000	6.62720
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.17697	0.32940	0.06480	1.46487	2.50740	0.30000	6.33360
	B->Y (FR)	0.01860	0.00100	0.17117	0.32940	0.06480	1.46254	2.50740	0.30000	6.44563
	C->Y (FR)	0.01860	0.00100	0.15138	0.32940	0.06480	1.44839	2.50740	0.30000	6.57190
	D->Y (FR)	0.01860	0.00100	0.11164	0.32940	0.06480	1.41403	2.50740	0.30000	6.60891

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	0.03880	0.32940	0.12960	0.48641	2.50740	0.60000	2.61425
	B->Y (RF)	0.01860	0.00100	0.04016	0.32940	0.12960	0.48249	2.50740	0.60000	2.60955
	C->Y (RF)	0.01860	0.00100	0.03863	0.32940	0.12960	0.47636	2.50740	0.60000	2.60078
	D->Y (RF)	0.01860	0.00100	0.03259	0.32940	0.12960	0.46838	2.50740	0.60000	2.58939
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.04201	0.32940	0.06480	0.48610	2.50740	0.30000	2.61444
	B->Y (RF)	0.01860	0.00100	0.04319	0.32940	0.06480	0.48288	2.50740	0.30000	2.61042
	C->Y (RF)	0.01860	0.00100	0.04140	0.32940	0.06480	0.47699	2.50740	0.30000	2.60229
	D->Y (RF)	0.01860	0.00100	0.03558	0.32940	0.06480	0.46981	2.50740	0.30000	2.59351

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	0.01492	0.32940	0.12960	0.01467	2.50740	0.60000	0.01448
	B	0.01860	0.00100	0.01235	0.32940	0.12960	0.01207	2.50740	0.60000	0.01194
	C	0.01860	0.00100	0.00995	0.32940	0.12960	0.00967	2.50740	0.60000	0.00962
	D	0.01860	0.00100	0.00552	0.32940	0.12960	0.00538	2.50740	0.60000	0.00543
sg13g2_nor4_1	A	0.01860	0.00100	0.00744	0.32940	0.06480	0.00728	2.50740	0.30000	0.00723
	B	0.01860	0.00100	0.00615	0.32940	0.06480	0.00600	2.50740	0.30000	0.00592
	C	0.01860	0.00100	0.00506	0.32940	0.06480	0.00492	2.50740	0.30000	0.00487
	D	0.01860	0.00100	0.00299	0.32940	0.06480	0.00289	2.50740	0.30000	0.00299

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	0.00537	0.32940	0.12960	0.00504	2.50740	0.60000	0.00476
	B	0.01860	0.00100	0.00484	0.32940	0.12960	0.00463	2.50740	0.60000	0.00458
	C	0.01860	0.00100	0.00310	0.32940	0.12960	0.00287	2.50740	0.60000	0.00265
	D	0.01860	0.00100	0.00051	0.32940	0.12960	0.00079	2.50740	0.60000	0.00044
sg13g2_nor4_1	A	0.01860	0.00100	0.00264	0.32940	0.06480	0.00248	2.50740	0.30000	0.00240
	B	0.01860	0.00100	0.00247	0.32940	0.06480	0.00236	2.50740	0.30000	0.00222
	C	0.01860	0.00100	0.00164	0.32940	0.06480	0.00155	2.50740	0.30000	0.00139
	D	0.01860	0.00100	0.00049	0.32940	0.06480	0.00059	2.50740	0.30000	0.00053

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00015	0.32940	-0.00010	2.50740	-0.00018
sg13g2_nor4_1	0.01860	0.00014	0.32940	0.00002	2.50740	-0.00002

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00026	0.32940	0.00027	2.50740	0.00026
sg13g2_nor4_1	0.01860	0.00006	0.32940	0.00007	2.50740	0.00006

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	0.00015	0.32940	-0.00010	2.50740	-0.00018
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00014	0.32940	0.00002	2.50740	-0.00002

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	0.00026	0.32940	0.00027	2.50740	0.00026
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00006	0.32940	0.00007	2.50740	0.00006

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00022	0.32940	-0.00007	2.50740	-0.00014
sg13g2_nor4_1	0.01860	0.00019	0.32940	0.00005	2.50740	0.00002

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00017	0.32940	0.00019	2.50740	0.00019
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	0.00022	0.32940	-0.00007	2.50740	-0.00014
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00019	0.32940	0.00005	2.50740	0.00002

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	0.00017	0.32940	0.00019	2.50740	0.00019
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	0.00089	0.32940	0.00091	2.50740	0.00092
sg13g2_nor4_1	0.01860	0.00058	0.32940	0.00058	2.50740	0.00059

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	-0.00014	0.32940	-0.00012	2.50740	-0.00012
sg13g2_nor4_1	0.01860	-0.00026	0.32940	-0.00026	2.50740	-0.00025

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	0.00089	0.32940	0.00091	2.50740	0.00092
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00058	0.32940	0.00058	2.50740	0.00059

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	$(A * !D) + (!A * B * !D)$	0.01860	-0.00014	0.32940	-0.00012	2.50740	-0.00012
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00026	0.32940	-0.00026	2.50740	-0.00025

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00225	0.32940	0.00225	2.50740	0.00225
sg13g2_nor4_1	0.01860	0.00124	0.32940	0.00124	2.50740	0.00124

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00110	0.32940	0.00116	2.50740	0.00117
sg13g2_nor4_1	0.01860	0.00027	0.32940	0.00029	2.50740	0.00030

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	0.00225	0.32940	0.00225	2.50740	0.00225
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00124	0.32940	0.00124	2.50740	0.00124

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	0.00110	0.32940	0.00116	2.50740	0.00117
sg13g2_nor4_1	(A * !C) + (!A * B * !C)	0.01860	0.00027	0.32940	0.00029	2.50740	0.00030

NP_ANT



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00095

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	3.56275	3.56543	3.56810

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	-0.00035	0.32940	-0.00035	2.50740	-0.00035

Passive power(pJ) for A falling :

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

O21AI



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00310	0.00314	0.00290	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	110.31800	493.36000	1064.96000

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	0.09730	0.32940	0.06480	0.90928	2.50740	0.30000	4.24661
	A2->Y (FR)	0.01860	0.00100	0.08646	0.32940	0.06480	0.91594	2.50740	0.30000	4.45069
	B1->Y (FR)	0.01860	0.00100	0.03693	0.32940	0.06480	0.55020	2.50740	0.30000	2.96520

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	0.07054	0.32940	0.06480	0.66299	2.50740	0.30000	3.26558
	A2->Y (RF)	0.01860	0.00100	0.05939	0.32940	0.06480	0.64918	2.50740	0.30000	3.24745
	B1->Y (RF)	0.01860	0.00100	0.05949	0.32940	0.06480	0.66866	2.50740	0.30000	3.40975

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	0.03693	0.32940	0.06480	0.55020	2.50740	0.30000	2.96520
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03617	0.32940	0.06480	0.54877	2.50740	0.30000	2.96117

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	0.05949	0.32940	0.06480	0.66866	2.50740	0.30000	3.40975
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.04562	0.32940	0.06480	0.65071	2.50740	0.30000	3.38513

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	0.00374	0.32940	0.06480	0.00367	2.50740	0.30000	0.00372
	A2	0.01860	0.00100	0.00205	0.32940	0.06480	0.00197	2.50740	0.30000	0.00225
	B1	0.01860	0.00100	0.00103	0.32940	0.06480	0.00113	2.50740	0.30000	0.00100

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	0.00407	0.32940	0.06480	0.00383	2.50740	0.30000	0.00376
	A2	0.01860	0.00100	0.00378	0.32940	0.06480	0.00376	2.50740	0.30000	0.00364
	B1	0.01860	0.00100	0.00189	0.32940	0.06480	0.00189	2.50740	0.30000	0.00197

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	0.00274	0.32940	0.06480	0.00278	2.50740	0.30000	0.00260
	B1	(!A1 * A2)	0.01860	0.00100	0.00103	0.32940	0.06480	0.00113	2.50740	0.30000	0.00100

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	0.00235	0.32940	0.06480	0.00223	2.50740	0.30000	0.00233
	B1	(!A1 * A2)	0.01860	0.00100	0.00189	0.32940	0.06480	0.00189	2.50740	0.30000	0.00197

Passive power(pJ) for A1 rising :

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

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00040	0.32940	0.00029	2.50740	0.00025

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	-0.00017	0.32940	-0.00017	2.50740	-0.00018

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	0.00040	0.32940	0.00029	2.50740	0.00025

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00013	0.32940	-0.00012	2.50740	-0.00013

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00036	0.32940	0.00024	2.50740	0.00021

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	-0.00013	0.32940	-0.00012	2.50740	-0.00013

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	0.00036	0.32940	0.00024	2.50740	0.00021

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00019	0.32940	0.00020	2.50740	0.00020

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	0.00047	0.32940	0.00048	2.50740	0.00049

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	0.00019	0.32940	0.00020	2.50740	0.00020

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	0.00047	0.32940	0.00048	2.50740	0.00049

OR2x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00231	0.00215	0.60000
sg13g2_or2_1	0.00231	0.00215	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	458.43200	743.36100	1137.65000
sg13g2_or2_1	323.46000	522.72600	660.02700

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	0.10153	0.32940	0.12960	0.54282	2.50740	0.60000	1.97099
	B->X (RR)	0.01860	0.00100	0.09513	0.32940	0.12960	0.52821	2.50740	0.60000	1.92898
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.08485	0.32940	0.06480	0.49886	2.50740	0.30000	1.84694
	B->X (RR)	0.01860	0.00100	0.07833	0.32940	0.06480	0.48112	2.50740	0.30000	1.79430

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	0.18297	0.32940	0.12960	0.59018	2.50740	0.60000	1.83017
	B->X (FF)	0.01860	0.00100	0.17443	0.32940	0.12960	0.59176	2.50740	0.60000	1.85006
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.14127	0.32940	0.06480	0.51509	2.50740	0.30000	1.67744
	B->X (FF)	0.01860	0.00100	0.13220	0.32940	0.06480	0.51068	2.50740	0.30000	1.67517

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	0.00795	0.32940	0.12960	0.00841	2.50740	0.60000	0.00894
	B	0.01860	0.00100	0.00777	0.32940	0.12960	0.00802	2.50740	0.60000	0.00879
sg13g2_or2_1	A	0.01860	0.00100	0.00496	0.32940	0.06480	0.00498	2.50740	0.30000	0.00641
	B	0.01860	0.00100	0.00476	0.32940	0.06480	0.00469	2.50740	0.30000	0.00627

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	0.00885	0.32940	0.12960	0.00936	2.50740	0.60000	0.00892
	B	0.01860	0.00100	0.00779	0.32940	0.12960	0.00823	2.50740	0.60000	0.00852
sg13g2_or2_1	A	0.01860	0.00100	0.00592	0.32940	0.06480	0.00609	2.50740	0.30000	0.00688
	B	0.01860	0.00100	0.00484	0.32940	0.06480	0.00502	2.50740	0.30000	0.00638

OR3x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00240	0.00235	0.00226	0.60000
sg13g2_or3_1	0.00240	0.00235	0.00226	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	462.38000	738.67800	1231.98000
sg13g2_or3_1	327.31600	560.77900	862.21900

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	0.11537	0.32940	0.12960	0.57128	2.50740	0.60000	2.05749
	B->X (RR)	0.01860	0.00100	0.10993	0.32940	0.12960	0.55835	2.50740	0.60000	2.01277
	C->X (RR)	0.01860	0.00100	0.10167	0.32940	0.12960	0.54165	2.50740	0.60000	1.96625
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.09913	0.32940	0.06480	0.53067	2.50740	0.30000	1.94586
	B->X (RR)	0.01860	0.00100	0.09421	0.32940	0.06480	0.51582	2.50740	0.30000	1.89642
	C->X (RR)	0.01860	0.00100	0.08573	0.32940	0.06480	0.49721	2.50740	0.30000	1.84361

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	0.25582	0.32940	0.12960	0.67640	2.50740	0.60000	1.88601
	B->X (FF)	0.01860	0.00100	0.24839	0.32940	0.12960	0.67630	2.50740	0.60000	1.93128
	C->X (FF)	0.01860	0.00100	0.22878	0.32940	0.12960	0.66147	2.50740	0.60000	1.92849
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.20449	0.32940	0.06480	0.58971	2.50740	0.30000	1.74524
	B->X (FF)	0.01860	0.00100	0.19706	0.32940	0.06480	0.58710	2.50740	0.30000	1.76920
	C->X (FF)	0.01860	0.00100	0.17675	0.32940	0.06480	0.56812	2.50740	0.30000	1.74997

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	0.00823	0.32940	0.12960	0.00872	2.50740	0.60000	0.00895
	B	0.01860	0.00100	0.00796	0.32940	0.12960	0.00844	2.50740	0.60000	0.00859
	C	0.01860	0.00100	0.00782	0.32940	0.12960	0.00820	2.50740	0.60000	0.00874
sg13g2_or3_1	A	0.01860	0.00100	0.00529	0.32940	0.06480	0.00532	2.50740	0.30000	0.00652
	B	0.01860	0.00100	0.00503	0.32940	0.06480	0.00497	2.50740	0.30000	0.00633
	C	0.01860	0.00100	0.00483	0.32940	0.06480	0.00473	2.50740	0.30000	0.00630

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	0.01138	0.32940	0.12960	0.01179	2.50740	0.60000	0.01147
	B	0.01860	0.00100	0.01020	0.32940	0.12960	0.01059	2.50740	0.60000	0.01053
	C	0.01860	0.00100	0.00889	0.32940	0.12960	0.00919	2.50740	0.60000	0.00967
sg13g2_or3_1	A	0.01860	0.00100	0.00835	0.32940	0.06480	0.00855	2.50740	0.30000	0.00898
	B	0.01860	0.00100	0.00715	0.32940	0.06480	0.00732	2.50740	0.30000	0.00789
	C	0.01860	0.00100	0.00581	0.32940	0.06480	0.00596	2.50740	0.30000	0.00712

OR4x



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00239	0.00233	0.00204	0.00208	0.60000
sg13g2_or4_1	0.00239	0.00233	0.00203	0.00207	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	453.53000	704.29300	1323.92000
sg13g2_or4_1	318.55900	547.89900	1023.44000

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	0.12027	0.32940	0.12960	0.58442	2.50740	0.60000	2.09627
	B->X (RR)	0.01860	0.00100	0.11764	0.32940	0.12960	0.57493	2.50740	0.60000	2.06011
	C->X (RR)	0.01860	0.00100	0.11141	0.32940	0.12960	0.56197	2.50740	0.60000	2.02139
	D->X (RR)	0.01860	0.00100	0.10275	0.32940	0.12960	0.54527	2.50740	0.60000	1.97011
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.10382	0.32940	0.06480	0.54640	2.50740	0.30000	1.99626
	B->X (RR)	0.01860	0.00100	0.10179	0.32940	0.06480	0.53572	2.50740	0.30000	1.95218
	C->X (RR)	0.01860	0.00100	0.09597	0.32940	0.06480	0.52095	2.50740	0.30000	1.90313
	D->X (RR)	0.01860	0.00100	0.08716	0.32940	0.06480	0.50147	2.50740	0.30000	1.84711

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	0.35129	0.32940	0.12960	0.80071	2.50740	0.60000	2.00582
	B->X (FF)	0.01860	0.00100	0.34476	0.32940	0.12960	0.79516	2.50740	0.60000	2.04508
	C->X (FF)	0.01860	0.00100	0.32442	0.32940	0.12960	0.77917	2.50740	0.60000	2.07046
	D->X (FF)	0.01860	0.00100	0.29023	0.32940	0.12960	0.74777	2.50740	0.60000	2.05141
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.28381	0.32940	0.06480	0.69164	2.50740	0.30000	1.85174
	B->X (FF)	0.01860	0.00100	0.27696	0.32940	0.06480	0.68542	2.50740	0.30000	1.87464
	C->X (FF)	0.01860	0.00100	0.25701	0.32940	0.06480	0.66800	2.50740	0.30000	1.88411
	D->X (FF)	0.01860	0.00100	0.22186	0.32940	0.06480	0.63363	2.50740	0.30000	1.84555

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	0.00859	0.32940	0.12960	0.00904	2.50740	0.60000	0.00917
	B	0.01860	0.00100	0.00830	0.32940	0.12960	0.00886	2.50740	0.60000	0.00878
	C	0.01860	0.00100	0.00760	0.32940	0.12960	0.00801	2.50740	0.60000	0.00825
	D	0.01860	0.00100	0.00681	0.32940	0.12960	0.00717	2.50740	0.60000	0.00762
sg13g2_or4_1	A	0.01860	0.00100	0.00565	0.32940	0.06480	0.00581	2.50740	0.30000	0.00667
	B	0.01860	0.00100	0.00538	0.32940	0.06480	0.00547	2.50740	0.30000	0.00640
	C	0.01860	0.00100	0.00466	0.32940	0.06480	0.00467	2.50740	0.30000	0.00571
	D	0.01860	0.00100	0.00380	0.32940	0.06480	0.00374	2.50740	0.30000	0.00507

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	0.01249	0.32940	0.12960	0.01276	2.50740	0.60000	0.01215
	B	0.01860	0.00100	0.01188	0.32940	0.12960	0.01212	2.50740	0.60000	0.01168
	C	0.01860	0.00100	0.01077	0.32940	0.12960	0.01095	2.50740	0.60000	0.01100
	D	0.01860	0.00100	0.00871	0.32940	0.12960	0.00887	2.50740	0.60000	0.00948
sg13g2_or4_1	A	0.01860	0.00100	0.00923	0.32940	0.06480	0.00943	2.50740	0.30000	0.00954
	B	0.01860	0.00100	0.00861	0.32940	0.06480	0.00878	2.50740	0.30000	0.00900
	C	0.01860	0.00100	0.00751	0.32940	0.06480	0.00769	2.50740	0.30000	0.00833
	D	0.01860	0.00100	0.00545	0.32940	0.06480	0.00556	2.50740	0.30000	0.00653

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00006	0.32940	-0.00005	2.50740	-0.00009
sg13g2_or4_1	0.01860	0.00006	0.32940	-0.00005	2.50740	-0.00009

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00052	0.32940	0.00054	2.50740	0.00052
sg13g2_or4_1	0.01860	0.00052	0.32940	0.00054	2.50740	0.00052

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	0.00006	0.32940	-0.00005	2.50740	-0.00009
sg13g2_or4_1	$(!B * C) + (!B * !C * D)$	0.01860	0.00006	0.32940	-0.00005	2.50740	-0.00009

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	0.00052	0.32940	0.00054	2.50740	0.00052
sg13g2_or4_1	$(!B * C) + (!B * !C * D)$	0.01860	0.00052	0.32940	0.00054	2.50740	0.00052

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00007	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	0.01860	0.00007	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_or4_2	0.01860	-0.00002	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	0.01860	-0.00002	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_or4_2	(!A * C) + (!A * !C * D)	0.01860	0.00007	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00007	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_or4_2	(!A * C) + (!A * !C * D)	0.01860	-0.00002	0.32940	0.00000	2.50740	0.00000
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00002	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_or4_2	0.01860	0.00041	0.32940	0.00041	2.50740	0.00042
sg13g2_or4_1	0.01860	0.00041	0.32940	0.00041	2.50740	0.00042

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	-0.00013	0.32940	-0.00013	2.50740	-0.00012
sg13g2_or4_1	0.01860	-0.00013	0.32940	-0.00013	2.50740	-0.00013

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	0.00041	0.32940	0.00041	2.50740	0.00042
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00041	0.32940	0.00041	2.50740	0.00042

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	-0.00013	0.32940	-0.00013	2.50740	-0.00012
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00013	0.32940	-0.00013	2.50740	-0.00013

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00103	0.32940	0.00103	2.50740	0.00104
sg13g2_or4_1	0.01860	0.00104	0.32940	0.00103	2.50740	0.00104

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00063	0.32940	0.00064	2.50740	0.00064
sg13g2_or4_1	0.01860	0.00062	0.32940	0.00064	2.50740	0.00064

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	0.00103	0.32940	0.00103	2.50740	0.00104
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00104	0.32940	0.00103	2.50740	0.00104

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	0.00063	0.32940	0.00064	2.50740	0.00064
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00062	0.32940	0.00064	2.50740	0.00064

SDFRRS



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	x	0	x	1	0
x	x	x	0	1	x	0	1
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	0.00188	0.00184	0.00334	0.00163	0.00493	0.00283	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	2507.44000	3657.71000	4660.45000

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	0.47651	0.32940	0.06480	0.88183	2.50740	0.30000	2.21804
	SET_B->Q (FR)	0.01860	0.00100	0.18804	0.32940	0.06480	0.61154	2.50740	0.30000	2.01212

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	0.39023	0.32940	0.06480	0.75860	2.50740	0.30000	1.96271
	RESET_B->Q (FF)	0.01860	0.00100	0.32107	0.32940	0.06480	0.70410	2.50740	0.30000	1.95471

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	0.47651	0.32940	0.06480	0.88183	2.50740	0.30000	2.21804

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	0.39023	0.32940	0.06480	0.75860	2.50740	0.30000	1.96271

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	0.32032	0.32940	0.06480	0.75823	2.50740	0.30000	2.11878
	RESET_B->Q_N (FR)	0.01860	0.00100	0.24949	0.32940	0.06480	0.71466	2.50740	0.30000	2.12427

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	0.39514	0.32940	0.06480	0.82409	2.50740	0.30000	2.01180
	SET_B->Q_N (FF)	0.01860	0.00100	0.12294	0.32940	0.06480	0.54373	2.50740	0.30000	1.83418

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	0.32032	0.32940	0.06480	0.75823	2.50740	0.30000	2.11878

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	0.39514	0.32940	0.06480	0.82409	2.50740	0.30000	2.01180

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	-0.15649	1.26300	1.26300	-0.37507	2.50740	2.50740	-0.50767
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.41825	2.50740	2.50740	0.55489

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	-0.16138	1.26300	1.26300	-0.23746	2.50740	2.50740	-0.28925
	setup	CLK (R)	0.01860	0.01860	0.25919	1.26300	1.26300	0.34539	2.50740	2.50740	0.44273

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	-0.19806	1.26300	1.26300	-0.46142	2.50740	2.50740	-0.63458
	setup	CLK (R)	0.01860	0.01860	0.25185	1.26300	1.26300	0.50190	2.50740	2.50740	0.68180

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	-0.21029	1.26300	1.26300	-0.28063	2.50740	2.50740	-0.34828
	setup	CLK (R)	0.01860	0.01860	0.30809	1.26300	1.26300	0.38856	2.50740	2.50740	0.49881

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	-0.17116	1.26300	1.26300	-0.41555	2.50740	2.50740	-0.56374
	setup	CLK (R)	0.01860	0.01860	0.22496	1.26300	1.26300	0.45872	2.50740	2.50740	0.61392

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	-0.16138	1.26300	1.26300	-0.19968	2.50740	2.50740	-0.23908
	setup	CLK (R)	0.01860	0.01860	0.25919	1.26300	1.26300	0.31031	2.50740	2.50740	0.39846

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	0.11003	1.26300	1.26300	0.21317	2.50740	2.50740	0.27449
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.20661

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	0.03668	1.26300	1.26300	0.14301	2.50740	2.50740	0.53718
	removal	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.14301	2.50740	2.50740	0.17414
	hold	RESET_B (R)	0.01860	0.01860	-0.12470	1.26300	1.26300	-0.30491	2.50740	2.50740	-0.38960
	setup	RESET_B (R)	0.01860	0.01860	0.15894	1.26300	1.26300	0.35349	2.50740	2.50740	0.46930

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	0.01313	0.32940	0.06480	0.01331	2.50740	0.30000	0.01466
	SET_B	0.01860	0.00100	0.02476	0.32940	0.06480	0.06184	2.50740	0.30000	0.20186

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	0.01310	0.32940	0.06480	0.01319	2.50740	0.30000	0.01443
	RESET_B	0.01860	0.00100	0.02769	0.32940	0.06480	0.06522	2.50740	0.30000	0.20281

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	0.01313	0.32940	0.06480	0.01331	2.50740	0.30000	0.01466

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	0.01310	0.32940	0.06480	0.01319	2.50740	0.30000	0.01443

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	0.01310	0.32940	0.06480	0.01318	2.50740	0.30000	0.01438
	RESET_B	0.01860	0.00100	0.02770	0.32940	0.06480	0.06525	2.50740	0.30000	0.20303

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	0.01314	0.32940	0.06480	0.01342	2.50740	0.30000	0.01460
	SET_B	0.01860	0.00100	0.02475	0.32940	0.06480	0.06173	2.50740	0.30000	0.20131

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	0.01310	0.32940	0.06480	0.01318	2.50740	0.30000	0.01438

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	0.01314	0.32940	0.06480	0.01342	2.50740	0.30000	0.01460

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00012	0.32940	-0.00030	2.50740	0.00068

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00415	0.32940	0.00397	2.50740	0.00492

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	0.00894	0.32940	0.00874	2.50740	0.00978
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	-0.00012	0.32940	-0.00030	2.50740	0.00068

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	0.00894	0.32940	0.00871	2.50740	0.00977
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00415	0.32940	0.00397	2.50740	0.00492

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00483	0.32940	0.00473	2.50740	0.00525

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00148	0.32940	-0.00156	2.50740	-0.00109

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	0.01014	0.32940	0.01002	2.50740	0.01061
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00483	0.32940	0.00473	2.50740	0.00525

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	0.01157	0.32940	0.01137	2.50740	0.01195
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	-0.00148	0.32940	-0.00156	2.50740	-0.00109

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00888	0.32940	0.00816	2.50740	0.00962

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01179	0.32940	0.01166	2.50740	0.01301

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	0.01183	0.32940	0.01168	2.50740	0.01313
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.00888	0.32940	0.00816	2.50740	0.00962
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01052	0.32940	0.01026	2.50740	0.01288
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00512	0.32940	0.00490	2.50740	0.00739

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	0.01179	0.32940	0.01166	2.50740	0.01301
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01021	0.32940	0.01476	2.50740	0.01647
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00353	0.32940	0.01311	2.50740	0.02092
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	-0.00289	0.32940	-0.00312	2.50740	-0.00100

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00974	0.32940	0.00927	2.50740	0.01210

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00934	0.32940	0.00903	2.50740	0.01183

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	0.00994	0.32940	0.00950	2.50740	0.01235
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01017	0.32940	0.00974	2.50740	0.01252
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00975	0.32940	0.00927	2.50740	0.01211
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00583	0.32940	0.00541	2.50740	0.00827
	(!RESET_B * !Q * Q_N)	0.01860	0.00231	0.32940	0.00185	2.50740	0.00469
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00974	0.32940	0.00927	2.50740	0.01210

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	0.00889	0.32940	0.00856	2.50740	0.01134
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01609	0.32940	0.01566	2.50740	0.01842
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00430	0.32940	0.00402	2.50740	0.00704
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01730	0.32940	0.01702	2.50740	0.02005
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00934	0.32940	0.00903	2.50740	0.01183
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00889	0.32940	0.00856	2.50740	0.01134
	(!RESET_B * !Q * Q_N)	0.01860	0.00083	0.32940	0.00052	2.50740	0.00331
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00898	0.32940	0.00867	2.50740	0.01146

SGCLK



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00187	0.00225	0.00465	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	1673.78000	2008.86000	2370.63000

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	0.11424	0.32940	0.06480	0.51607	2.50740	0.30000	1.84675

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	0.09153	0.32940	0.06480	0.46777	2.50740	0.30000	1.64086

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	-0.06605	1.26300	1.26300	-0.27523	2.50740	2.50740	-0.38163
	setup	CLK (R)	0.01860	0.01860	0.10151	1.26300	1.26300	0.36968	2.50740	2.50740	0.50906

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	-0.10942	1.26300	1.26300	-0.22127	2.50740	2.50740	-0.29435
	setup	CLK (R)	0.01860	0.01860	0.17738	1.26300	1.26300	0.28603	2.50740	2.50740	0.36906

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	-0.07380	1.26300	1.26300	-0.30491	2.50740	2.50740	-0.42705
	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	-0.11533	1.26300	1.26300	-0.20508	2.50740	2.50740	-0.27499
	setup	CLK (R)	0.01860	0.01860	0.18353	1.26300	1.26300	0.26444	2.50740	2.50740	0.34662

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	0.00839	0.32940	0.06480	0.00851	2.50740	0.30000	0.00960

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	0.00758	0.32940	0.06480	0.00777	2.50740	0.30000	0.00960

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01506	0.32940	0.01546	2.50740	0.01720

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01017	0.32940	0.02256	2.50740	0.02493

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	0.01506	0.32940	0.01546	2.50740	0.01720

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	0.01017	0.32940	0.02256	2.50740	0.02493

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00523	0.32940	0.00504	2.50740	0.00670

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00994	0.32940	0.02204	2.50740	0.02368

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00442	0.32940	0.00410	2.50740	0.00667

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00305	0.32940	0.00278	2.50740	0.00538

TIE0



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	12.60110	12.60110	12.60110

TIE1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	14.33910	14.33910	14.33910

XNOR2_1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp
125.00*

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	0.00511	0.00474	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	279.17200	857.22800	1222.57000

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	0.11278	0.32940	0.06480	0.51525	2.50740	0.30000	1.84585
	A->Y (FR)	0.01860	0.00100	0.07896	0.32940	0.06480	0.79535	2.50740	0.30000	3.79897
	B->Y (RR)	0.01860	0.00100	0.10565	0.32940	0.06480	0.50414	2.50740	0.30000	1.81463
	B->Y (FR)	0.01860	0.00100	0.07070	0.32940	0.06480	0.80415	2.50740	0.30000	3.97772

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	0.10651	0.32940	0.06480	0.67294	2.50740	0.30000	2.55193
	A->Y (RF)	0.01860	0.00100	0.07065	0.32940	0.06480	0.66651	2.50740	0.30000	3.32367
	B->Y (FF)	0.01860	0.00100	0.10884	0.32940	0.06480	0.65796	2.50740	0.30000	2.51609
	B->Y (RF)	0.01860	0.00100	0.06047	0.32940	0.06480	0.65418	2.50740	0.30000	3.30441

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	0.00620	0.32940	0.06480	0.00619	2.50740	0.30000	0.00745
	B	0.01860	0.00100	0.00628	0.32940	0.06480	0.00602	2.50740	0.30000	0.00783

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	0.00544	0.32940	0.06480	0.00553	2.50740	0.30000	0.00699
	B	0.01860	0.00100	0.00612	0.32940	0.06480	0.00509	2.50740	0.30000	0.00660

XOR2_1



*sg13g2_stdcell_slow_1p08V_125C Cell Library: Process
sg13g2_stdcell_slow_1p08V_125C, Voltage 1.08, Temp 125.00*

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	0.00535	0.00487	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	674.43500	861.63400	1243.37000

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	0.10938	0.32940	0.06480	0.82294	2.50740	0.30000	3.28630
	A->X (FR)	0.01860	0.00100	0.08697	0.32940	0.06480	0.80694	2.50740	0.30000	3.81706
	B->X (RR)	0.01860	0.00100	0.11418	0.32940	0.06480	0.80676	2.50740	0.30000	3.23275
	B->X (FR)	0.01860	0.00100	0.07574	0.32940	0.06480	0.79410	2.50740	0.30000	3.79966

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	0.13381	0.32940	0.06480	0.50038	2.50740	0.30000	1.63823
	A->X (RF)	0.01860	0.00100	0.06669	0.32940	0.06480	0.66212	2.50740	0.30000	3.31192
	B->X (FF)	0.01860	0.00100	0.12505	0.32940	0.06480	0.49352	2.50740	0.30000	1.62619
	B->X (RF)	0.01860	0.00100	0.05896	0.32940	0.06480	0.66775	2.50740	0.30000	3.42862

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	0.00567	0.32940	0.06480	0.00562	2.50740	0.30000	0.00779
	B	0.01860	0.00100	0.00609	0.32940	0.06480	0.00511	2.50740	0.30000	0.00732

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	0.00667	0.32940	0.06480	0.00678	2.50740	0.30000	0.00781
	B	0.01860	0.00100	0.00624	0.32940	0.06480	0.00606	2.50740	0.30000	0.00752