

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
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	0.00518	0.00559	0.00510	0.60000
sg13g2_a21oi_1	0.00271	0.00279	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	0.06196	0.32940	0.12960	0.77651	2.50740	0.60000	3.75646
	A2->Y (FR)	0.01860	0.00100	0.07393	0.32940	0.12960	0.78780	2.50740	0.60000	3.76369
	B1->Y (FR)	0.01860	0.00100	0.05850	0.32940	0.12960	0.78112	2.50740	0.60000	3.87182
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.06878	0.32940	0.06480	0.77626	2.50740	0.30000	3.74630
	A2->Y (FR)	0.01860	0.00100	0.08028	0.32940	0.06480	0.78923	2.50740	0.30000	3.76379
	B1->Y (FR)	0.01860	0.00100	0.06510	0.32940	0.06480	0.78250	2.50740	0.30000	3.87410

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	0.05193	0.32940	0.12960	0.63622	2.50740	0.60000	3.24427
	A2->Y (RF)	0.01860	0.00100	0.05931	0.32940	0.12960	0.64073	2.50740	0.60000	3.18738
	B1->Y (RF)	0.01860	0.00100	0.02600	0.32940	0.12960	0.43053	2.50740	0.60000	2.46495
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.05765	0.32940	0.06480	0.63732	2.50740	0.30000	3.24367
	A2->Y (RF)	0.01860	0.00100	0.06450	0.32940	0.06480	0.64118	2.50740	0.30000	3.18418
	B1->Y (RF)	0.01860	0.00100	0.02906	0.32940	0.06480	0.43142	2.50740	0.30000	2.46501

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	0.05850	0.32940	0.12960	0.78112	2.50740	0.60000	3.87182
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.04443	0.32940	0.12960	0.76699	2.50740	0.60000	3.86070
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.03588	0.32940	0.12960	0.61296	2.50740	0.60000	3.21617
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.06510	0.32940	0.06480	0.78250	2.50740	0.30000	3.87410
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.05139	0.32940	0.06480	0.76656	2.50740	0.30000	3.85570
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.04097	0.32940	0.06480	0.61365	2.50740	0.30000	3.21405

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	0.02600	0.32940	0.12960	0.43053	2.50740	0.60000	2.46495
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02578	0.32940	0.12960	0.42996	2.50740	0.60000	2.46345
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02556	0.32940	0.12960	0.42928	2.50740	0.60000	2.46116
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02906	0.32940	0.06480	0.43142	2.50740	0.30000	2.46501
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02883	0.32940	0.06480	0.43064	2.50740	0.30000	2.46117
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.02861	0.32940	0.06480	0.43120	2.50740	0.30000	2.46500

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	0.00582	0.32940	0.12960	0.00557	2.50740	0.60000	0.00487
	A2	0.01860	0.00100	0.00678	0.32940	0.12960	0.00651	2.50740	0.60000	0.00575
	B1	0.01860	0.00100	0.00427	0.32940	0.12960	0.00421	2.50740	0.60000	0.00365
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00297	0.32940	0.06480	0.00281	2.50740	0.30000	0.00231
	A2	0.01860	0.00100	0.00337	0.32940	0.06480	0.00323	2.50740	0.30000	0.00298
	B1	0.01860	0.00100	0.00222	0.32940	0.06480	0.00214	2.50740	0.30000	0.00187

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	0.00545	0.32940	0.12960	0.00491	2.50740	0.60000	0.00363
	A2	0.01860	0.00100	0.00751	0.32940	0.12960	0.00709	2.50740	0.60000	0.00531
	B1	0.01860	0.00100	0.00179	0.32940	0.12960	0.00181	2.50740	0.60000	0.00034
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00302	0.32940	0.06480	0.00274	2.50740	0.30000	0.00215
	A2	0.01860	0.00100	0.00397	0.32940	0.06480	0.00376	2.50740	0.30000	0.00279
	B1	0.01860	0.00100	0.00118	0.32940	0.06480	0.00109	2.50740	0.30000	0.00004

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	0.00503	0.32940	0.12960	0.00482	2.50740	0.60000	0.00385
	B1	(!A1 * A2)	0.01860	0.00100	0.00427	0.32940	0.12960	0.00428	2.50740	0.60000	0.00338
	B1	(!A1 * !A2)	0.01860	0.00100	0.00427	0.32940	0.12960	0.00421	2.50740	0.60000	0.00365
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00251	0.32940	0.06480	0.00238	2.50740	0.30000	0.00211
	B1	(!A1 * A2)	0.01860	0.00100	0.00222	0.32940	0.06480	0.00217	2.50740	0.30000	0.00180
	B1	(!A1 * !A2)	0.01860	0.00100	0.00222	0.32940	0.06480	0.00214	2.50740	0.30000	0.00187

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	0.00421	0.32940	0.12960	0.00423	2.50740	0.60000	0.00275
	B1	(!A1 * A2)	0.01860	0.00100	0.00179	0.32940	0.12960	0.00181	2.50740	0.60000	0.00034
	B1	(!A1 * !A2)	0.01860	0.00100	0.00171	0.32940	0.12960	0.00161	2.50740	0.60000	-0.00007
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00239	0.32940	0.06480	0.00231	2.50740	0.30000	0.00142
	B1	(!A1 * A2)	0.01860	0.00100	0.00118	0.32940	0.06480	0.00109	2.50740	0.30000	0.00004
	B1	(!A1 * !A2)	0.01860	0.00100	0.00114	0.32940	0.06480	0.00110	2.50740	0.30000	0.00033

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00062	0.32940	-0.00067	2.50740	-0.00066
sg13g2_a21oi_1	0.01860	-0.00031	0.32940	-0.00033	2.50740	-0.00033

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	0.00122	0.32940	0.00127	2.50740	0.00128
sg13g2_a21oi_1	0.01860	0.00055	0.32940	0.00058	2.50740	0.00058

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	-0.00021	2.50740	-0.00021
	(!A2 * !B1)	0.01860	-0.00062	0.32940	-0.00067	2.50740	-0.00066
sg13g2_a21oi_1	B1	0.01860	-0.00003	0.32940	-0.00003	2.50740	-0.00003
	(!A2 * !B1)	0.01860	-0.00031	0.32940	-0.00033	2.50740	-0.00033

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	0.00021	2.50740	0.00021
	(!A2 * !B1)	0.01860	0.00122	0.32940	0.00127	2.50740	0.00128
sg13g2_a21oi_1	B1	0.01860	0.00003	0.32940	0.00003	2.50740	0.00003
	(!A2 * !B1)	0.01860	0.00055	0.32940	0.00058	2.50740	0.00058

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00019	0.32940	-0.00021	2.50740	-0.00021
sg13g2_a21oi_1	0.01860	-0.00010	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	0.00075	0.32940	0.00056	2.50740	0.00049
sg13g2_a21oi_1	0.01860	0.00037	0.32940	0.00028	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	-0.00012	0.32940	-0.00014	2.50740	-0.00014
	(!A1 * !B1)	0.01860	-0.00019	0.32940	-0.00021	2.50740	-0.00021
sg13g2_a21oi_1	B1	0.01860	-0.00007	0.32940	-0.00007	2.50740	-0.00008
	(!A1 * !B1)	0.01860	-0.00010	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	0.00012	0.32940	0.00014	2.50740	0.00014
	(!A1 * !B1)	0.01860	0.00075	0.32940	0.00056	2.50740	0.00049
sg13g2_a21oi_1	B1	0.01860	0.00007	0.32940	0.00007	2.50740	0.00008
	(!A1 * !B1)	0.01860	0.00037	0.32940	0.00028	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	0.00062	0.32940	0.00065	2.50740	0.00065
sg13g2_a21oi_1	0.01860	0.00034	0.32940	0.00036	2.50740	0.00036

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21oi_2	0.01860	-0.00062	0.32940	-0.00065	2.50740	-0.00065
sg13g2_a21oi_1	0.01860	-0.00034	0.32940	-0.00036	2.50740	-0.00036

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	0.00062	0.32940	0.00065	2.50740	0.00065
sg13g2_a21oi_1	(A1 * A2)	0.01860	0.00034	0.32940	0.00036	2.50740	0.00036

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	-0.00062	0.32940	-0.00065	2.50740	-0.00065
sg13g2_a21oi_1	(A1 * A2)	0.01860	-0.00034	0.32940	-0.00036	2.50740	-0.00036

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	0.00277	0.00278	0.00261	0.00266	0.00244	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	0.16082	0.32940	0.12960	2.06001	2.50740	0.60000	9.19515
	A2->Y (FR)	0.01860	0.00100	0.17845	0.32940	0.12960	2.07656	2.50740	0.60000	9.20716
	B1->Y (FR)	0.01860	0.00100	0.14472	0.32940	0.12960	2.04519	2.50740	0.60000	9.33005
	B2->Y (FR)	0.01860	0.00100	0.16236	0.32940	0.12960	2.06066	2.50740	0.60000	9.34045
	C1->Y (FR)	0.01860	0.00100	0.10675	0.32940	0.12960	2.00735	2.50740	0.60000	9.35012

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	0.07746	0.32940	0.12960	1.11162	2.50740	0.60000	5.31184
	A2->Y (RF)	0.01860	0.00100	0.08399	0.32940	0.12960	1.11405	2.50740	0.60000	5.26347
	B1->Y (RF)	0.01860	0.00100	0.06755	0.32940	0.12960	1.09042	2.50740	0.60000	5.29024
	B2->Y (RF)	0.01860	0.00100	0.07435	0.32940	0.12960	1.09258	2.50740	0.60000	5.24050
	C1->Y (RF)	0.01860	0.00100	0.03345	0.32940	0.12960	0.67661	2.50740	0.60000	3.56547

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	0.16082	0.32940	0.12960	2.06001	2.50740	0.60000	9.19515
	A1->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.13979	0.32940	0.12960	2.03977	2.50740	0.60000	9.18434
	A1->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.12399	0.32940	0.12960	1.72221	2.50740	0.60000	7.82049
	A2->Y (FR)	(B1 * !B2)	0.01860	0.00100	0.17845	0.32940	0.12960	2.07656	2.50740	0.60000	9.20716
	A2->Y (FR)	(!B1 * B2)	0.01860	0.00100	0.15759	0.32940	0.12960	2.05684	2.50740	0.60000	9.19730
	A2->Y (FR)	(!B1 * !B2)	0.01860	0.00100	0.13841	0.32940	0.12960	1.73571	2.50740	0.60000	7.82813
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.14472	0.32940	0.12960	2.04519	2.50740	0.60000	9.33005
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.12366	0.32940	0.12960	2.02353	2.50740	0.60000	9.31441
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.10217	0.32940	0.12960	1.69914	2.50740	0.60000	7.89107
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.16236	0.32940	0.12960	2.06066	2.50740	0.60000	9.34045
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.14142	0.32940	0.12960	2.03923	2.50740	0.60000	9.32519
	B2->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.11653	0.32940	0.12960	1.71119	2.50740	0.60000	7.88974
	C1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.10675	0.32940	0.12960	2.00735	2.50740	0.60000	9.35012

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	0.07494	0.32940	0.12960	1.10906	2.50740	0.60000	5.31153
	A1->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.07423	0.32940	0.12960	1.10652	2.50740	0.60000	5.30604
	A1->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.07746	0.32940	0.12960	1.11162	2.50740	0.60000	5.31184
	A2->Y (RF)	(B1 * !B2)	0.01860	0.00100	0.08146	0.32940	0.12960	1.11145	2.50740	0.60000	5.26315
	A2->Y (RF)	(!B1 * B2)	0.01860	0.00100	0.08076	0.32940	0.12960	1.10918	2.50740	0.60000	5.25784
	A2->Y (RF)	(!B1 * !B2)	0.01860	0.00100	0.08399	0.32940	0.12960	1.11405	2.50740	0.60000	5.26347
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.06755	0.32940	0.12960	1.09042	2.50740	0.60000	5.29024
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.06695	0.32940	0.12960	1.08808	2.50740	0.60000	5.28492
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.06657	0.32940	0.12960	1.08634	2.50740	0.60000	5.28426
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.07435	0.32940	0.12960	1.09258	2.50740	0.60000	5.24050
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.07375	0.32940	0.12960	1.09025	2.50740	0.60000	5.23675
	B2->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.07339	0.32940	0.12960	1.08973	2.50740	0.60000	5.23918
	C1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.03345	0.32940	0.12960	0.67661	2.50740	0.60000	3.56547

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	0.00640	0.32940	0.12960	0.00615	2.50740	0.60000	0.00533
	A2	0.01860	0.00100	0.00655	0.32940	0.12960	0.00623	2.50740	0.60000	0.00545
	B1	0.01860	0.00100	0.00605	0.32940	0.12960	0.00583	2.50740	0.60000	0.00546
	B2	0.01860	0.00100	0.00623	0.32940	0.12960	0.00590	2.50740	0.60000	0.00532
	C1	0.01860	0.00100	0.00297	0.32940	0.12960	0.00271	2.50740	0.60000	0.00194

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	0.00434	0.32940	0.12960	0.00389	2.50740	0.60000	0.00264
	A2	0.01860	0.00100	0.00551	0.32940	0.12960	0.00507	2.50740	0.60000	0.00389
	B1	0.01860	0.00100	0.00163	0.32940	0.12960	0.00129	2.50740	0.60000	0.00016
	B2	0.01860	0.00100	0.00281	0.32940	0.12960	0.00248	2.50740	0.60000	0.00121
	C1	0.01860	0.00100	0.00249	0.32940	0.12960	0.00243	2.50740	0.60000	0.00011

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	0.00640	0.32940	0.12960	0.00615	2.50740	0.60000	0.00533
	A1	(!B1 * B2)	0.01860	0.00100	0.00614	0.32940	0.12960	0.00594	2.50740	0.60000	0.00556
	A1	(!B1 * !B2)	0.01860	0.00100	0.00750	0.32940	0.12960	0.00730	2.50740	0.60000	0.00670
	A2	(B1 * !B2)	0.01860	0.00100	0.00655	0.32940	0.12960	0.00623	2.50740	0.60000	0.00545
	A2	(!B1 * B2)	0.01860	0.00100	0.00632	0.32940	0.12960	0.00600	2.50740	0.60000	0.00548
	A2	(!B1 * !B2)	0.01860	0.00100	0.00766	0.32940	0.12960	0.00738	2.50740	0.60000	0.00687
	B1	(A1 * !A2)	0.01860	0.00100	0.00631	0.32940	0.12960	0.00606	2.50740	0.60000	0.00566
	B1	(!A1 * A2)	0.01860	0.00100	0.00605	0.32940	0.12960	0.00580	2.50740	0.60000	0.00540
	B1	(!A1 * !A2)	0.01860	0.00100	0.00605	0.32940	0.12960	0.00583	2.50740	0.60000	0.00546
	B2	(A1 * !A2)	0.01860	0.00100	0.00647	0.32940	0.12960	0.00613	2.50740	0.60000	0.00554
	B2	(!A1 * A2)	0.01860	0.00100	0.00623	0.32940	0.12960	0.00590	2.50740	0.60000	0.00532
	B2	(!A1 * !A2)	0.01860	0.00100	0.00623	0.32940	0.12960	0.00592	2.50740	0.60000	0.00499
	C1	(!A1 * A2)	0.01860	0.00100	0.00297	0.32940	0.12960	0.00271	2.50740	0.60000	0.00194

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	0.00556	0.32940	0.12960	0.00509	2.50740	0.60000	0.00385
	A1	(!B1 * B2)	0.01860	0.00100	0.00434	0.32940	0.12960	0.00389	2.50740	0.60000	0.00264
	A1	(!B1 * !B2)	0.01860	0.00100	0.00363	0.32940	0.12960	0.00319	2.50740	0.60000	0.00199
	A2	(B1 * !B2)	0.01860	0.00100	0.00673	0.32940	0.12960	0.00628	2.50740	0.60000	0.00500
	A2	(!B1 * B2)	0.01860	0.00100	0.00551	0.32940	0.12960	0.00507	2.50740	0.60000	0.00389
	A2	(!B1 * !B2)	0.01860	0.00100	0.00480	0.32940	0.12960	0.00439	2.50740	0.60000	0.00315
	B1	(A1 * !A2)	0.01860	0.00100	0.00284	0.32940	0.12960	0.00249	2.50740	0.60000	0.00123
	B1	(!A1 * A2)	0.01860	0.00100	0.00163	0.32940	0.12960	0.00129	2.50740	0.60000	0.00016
	B1	(!A1 * !A2)	0.01860	0.00100	0.00159	0.32940	0.12960	0.00119	2.50740	0.60000	0.00007
	B2	(A1 * !A2)	0.01860	0.00100	0.00402	0.32940	0.12960	0.00368	2.50740	0.60000	0.00229
	B2	(!A1 * A2)	0.01860	0.00100	0.00281	0.32940	0.12960	0.00248	2.50740	0.60000	0.00121
	B2	(!A1 * !A2)	0.01860	0.00100	0.00277	0.32940	0.12960	0.00240	2.50740	0.60000	0.00145
	C1	(!A1 * A2)	0.01860	0.00100	0.00249	0.32940	0.12960	0.00243	2.50740	0.60000	0.00011

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00008	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	0.00008	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	-0.00009	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	0.00009	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	-0.00009	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	0.00009	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	0.00122

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	-0.00005	0.32940	-0.00007	2.50740	-0.00007
	(A1 * A2 * !C1)	0.01860	0.00120	0.32940	0.00121	2.50740	0.00122

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	0.00005	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	0.00123	0.32940	0.00123	2.50740	0.00123

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	-0.00119	0.32940	-0.00119	2.50740	-0.00119

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	-0.00003	0.32940	-0.00005	2.50740	-0.00006
	(A1 * A2 * !C1)	0.01860	0.00123	0.32940	0.00123	2.50740	0.00123

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	0.00003	0.32940	0.00005	2.50740	0.00006
	(A1 * A2 * !C1)	0.01860	-0.00119	0.32940	-0.00119	2.50740	-0.00119

Passive power(pJ) for C1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00033	0.32940	0.00035	2.50740	0.00035

Passive power(pJ) for C1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a221oi_1	0.01860	0.00055	0.32940	0.00056	2.50740	0.00057

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	0.00033	0.32940	0.00035	2.50740	0.00035

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	0.00055	0.32940	0.00056	2.50740	0.00057

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	0	1
0	x	x	1	0
x	x	1	x	0
1	0	0	0	1
1	0	x	1	0
1	1	x	x	0

Footprint

Cell Name	Area
sg13g2_a22oi_1	10.84860

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A1	A2	B1	B2	Y
sg13g2_a22oi_1	0.00296	0.00289	0.00332	0.00339	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	0.07018	0.32940	0.06480	0.65958	2.50740	0.30000	3.26341
	A2->Y (FR)	0.01860	0.00100	0.07812	0.32940	0.06480	0.66844	2.50740	0.30000	3.27314
	B1->Y (FR)	0.01860	0.00100	0.05548	0.32940	0.06480	0.62728	2.50740	0.30000	3.22511
	B2->Y (FR)	0.01860	0.00100	0.04706	0.32940	0.06480	0.61826	2.50740	0.30000	3.21254

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	0.07361	0.32940	0.06480	0.65381	2.50740	0.30000	3.25970
	A2->Y (RF)	0.01860	0.00100	0.07993	0.32940	0.06480	0.65653	2.50740	0.30000	3.20283
	B1->Y (RF)	0.01860	0.00100	0.05634	0.32940	0.06480	0.62874	2.50740	0.30000	3.17226
	B2->Y (RF)	0.01860	0.00100	0.04883	0.32940	0.06480	0.62609	2.50740	0.30000	3.22971

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	0.00196	0.32940	0.06480	0.00179	2.50740	0.30000	0.00103
	A2	0.01860	0.00100	0.00257	0.32940	0.06480	0.00232	2.50740	0.30000	0.00161
	B1	0.01860	0.00100	0.00123	0.32940	0.06480	0.00099	2.50740	0.30000	0.00053
	B2	0.01860	0.00100	0.00102	0.32940	0.06480	0.00090	2.50740	0.30000	0.00027

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	-0.00102	0.32940	0.06480	-0.00105	2.50740	0.30000	-0.00103
	A2	0.01860	0.00100	-0.00031	0.32940	0.06480	-0.00102	2.50740	0.30000	-0.00161
	B1	0.01860	0.00100	-0.00090	0.32940	0.06480	-0.00099	2.50740	0.30000	-0.00053
	B2	0.01860	0.00100	-0.00091	0.32940	0.06480	-0.00090	2.50740	0.30000	-0.00027

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00417	0.32940	0.00393	2.50740	0.00663

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00335	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	0.00461	0.32940	0.00511	2.50740	0.00725

Passive power(pJ) for A2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00286	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	0.00434	0.32940	0.00466	2.50740	0.00703

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00122	0.32940	0.00123	2.50740	0.00125

Passive power(pJ) for B2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00313	0.32940	0.00358	2.50740	0.00672

Passive power(pJ) for B2 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a22oi_1	0.01860	0.00119	0.32940	0.00119	2.50740	0.00121

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	0.00240	0.00239	0.60000
sg13g2_and2_1	0.00240	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	0.12603	0.32940	0.12960	0.55850	2.50740	0.60000	1.97865
	B->X (RR)	0.01860	0.00100	0.13303	0.32940	0.12960	0.56228	2.50740	0.60000	1.99585
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.10118	0.32940	0.06480	0.50525	2.50740	0.30000	1.83731
	B->X (RR)	0.01860	0.00100	0.10849	0.32940	0.06480	0.51355	2.50740	0.30000	1.87325

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	0.10254	0.32940	0.12960	0.50142	2.50740	0.60000	1.75074
	B->X (FF)	0.01860	0.00100	0.10967	0.32940	0.12960	0.51449	2.50740	0.60000	1.79581
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.08327	0.32940	0.06480	0.45216	2.50740	0.30000	1.60796
	B->X (FF)	0.01860	0.00100	0.09058	0.32940	0.06480	0.46948	2.50740	0.30000	1.65828

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	0.00814	0.32940	0.12960	0.00803	2.50740	0.60000	0.00994
	B	0.01860	0.00100	0.00916	0.32940	0.12960	0.00912	2.50740	0.60000	0.01062
sg13g2_and2_1	A	0.01860	0.00100	0.00522	0.32940	0.06480	0.00510	2.50740	0.30000	0.00729
	B	0.01860	0.00100	0.00627	0.32940	0.06480	0.00613	2.50740	0.30000	0.00801

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	0.00729	0.32940	0.12960	0.00733	2.50740	0.60000	0.00809
	B	0.01860	0.00100	0.00739	0.32940	0.12960	0.00750	2.50740	0.60000	0.00951
sg13g2_and2_1	A	0.01860	0.00100	0.00459	0.32940	0.06480	0.00448	2.50740	0.30000	0.00649
	B	0.01860	0.00100	0.00470	0.32940	0.06480	0.00475	2.50740	0.30000	0.00649

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	0.00235	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	0.17680	0.32940	0.12960	0.62256	2.50740	0.60000	2.09012
	B->X (RR)	0.01860	0.00100	0.19060	0.32940	0.12960	0.63581	2.50740	0.60000	2.11952
	C->X (RR)	0.01860	0.00100	0.19679	0.32940	0.12960	0.63534	2.50740	0.60000	2.08807
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.14178	0.32940	0.06480	0.55657	2.50740	0.30000	1.93698
	B->X (RR)	0.01860	0.00100	0.15586	0.32940	0.06480	0.57188	2.50740	0.30000	1.97327
	C->X (RR)	0.01860	0.00100	0.16203	0.32940	0.06480	0.57355	2.50740	0.30000	1.95925

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	0.10821	0.32940	0.12960	0.51187	2.50740	0.60000	1.77807
	B->X (FF)	0.01860	0.00100	0.11589	0.32940	0.12960	0.52538	2.50740	0.60000	1.82123
	C->X (FF)	0.01860	0.00100	0.12122	0.32940	0.12960	0.53487	2.50740	0.60000	1.85589
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.08945	0.32940	0.06480	0.46495	2.50740	0.30000	1.64075
	B->X (FF)	0.01860	0.00100	0.09734	0.32940	0.06480	0.48085	2.50740	0.30000	1.68649
	C->X (FF)	0.01860	0.00100	0.10249	0.32940	0.06480	0.49236	2.50740	0.30000	1.72646

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	0.00936	0.32940	0.12960	0.00910	2.50740	0.60000	0.01024
	B	0.01860	0.00100	0.00999	0.32940	0.12960	0.00995	2.50740	0.60000	0.01066
	C	0.01860	0.00100	0.01096	0.32940	0.12960	0.01088	2.50740	0.60000	0.01108
sg13g2_and3_1	A	0.01860	0.00100	0.00633	0.32940	0.06480	0.00622	2.50740	0.30000	0.00847
	B	0.01860	0.00100	0.00700	0.32940	0.06480	0.00685	2.50740	0.30000	0.00801
	C	0.01860	0.00100	0.00796	0.32940	0.06480	0.00783	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_and3_2	A	0.01860	0.00100	0.00699	0.32940	0.12960	0.00688	2.50740	0.60000	0.00744
	B	0.01860	0.00100	0.00752	0.32940	0.12960	0.00770	2.50740	0.60000	0.00889
	C	0.01860	0.00100	0.00764	0.32940	0.12960	0.00776	2.50740	0.60000	0.00913
sg13g2_and3_1	A	0.01860	0.00100	0.00426	0.32940	0.06480	0.00404	2.50740	0.30000	0.00587
	B	0.01860	0.00100	0.00480	0.32940	0.06480	0.00470	2.50740	0.30000	0.00617
	C	0.01860	0.00100	0.00495	0.32940	0.06480	0.00488	2.50740	0.30000	0.00638

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	-0.00033	0.32940	-0.00040	2.50740	-0.00046
sg13g2_and3_1	0.01860	-0.00033	0.32940	-0.00040	2.50740	-0.00046

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and3_2	0.01860	0.00033	0.32940	0.00040	2.50740	0.00046
sg13g2_and3_1	0.01860	0.00033	0.32940	0.00040	2.50740	0.00046

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	0.00218	0.00217	0.00242	0.00238	0.60000
sg13g2_and4_1	0.00218	0.00217	0.00242	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	0.22950	0.32940	0.12960	0.68988	2.50740	0.60000	2.19601
	B->X (RR)	0.01860	0.00100	0.24920	0.32940	0.12960	0.71036	2.50740	0.60000	2.22369
	C->X (RR)	0.01860	0.00100	0.26059	0.32940	0.12960	0.71696	2.50740	0.60000	2.20215
	D->X (RR)	0.01860	0.00100	0.26704	0.32940	0.12960	0.72270	2.50740	0.60000	2.17903
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.18544	0.32940	0.06480	0.61048	2.50740	0.30000	2.03673
	B->X (RR)	0.01860	0.00100	0.20533	0.32940	0.06480	0.63139	2.50740	0.30000	2.07141
	C->X (RR)	0.01860	0.00100	0.21691	0.32940	0.06480	0.63899	2.50740	0.30000	2.05976
	D->X (RR)	0.01860	0.00100	0.22329	0.32940	0.06480	0.64528	2.50740	0.30000	2.04526

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	0.11304	0.32940	0.12960	0.51920	2.50740	0.60000	1.79716
	B->X (FF)	0.01860	0.00100	0.12051	0.32940	0.12960	0.53121	2.50740	0.60000	1.83456
	C->X (FF)	0.01860	0.00100	0.12626	0.32940	0.12960	0.54091	2.50740	0.60000	1.86694
	D->X (FF)	0.01860	0.00100	0.13065	0.32940	0.12960	0.54886	2.50740	0.60000	1.89433
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.09546	0.32940	0.06480	0.47454	2.50740	0.30000	1.66140
	B->X (FF)	0.01860	0.00100	0.10315	0.32940	0.06480	0.48888	2.50740	0.30000	1.70504
	C->X (FF)	0.01860	0.00100	0.10869	0.32940	0.06480	0.49985	2.50740	0.30000	1.74099
	D->X (FF)	0.01860	0.00100	0.11271	0.32940	0.06480	0.50947	2.50740	0.30000	1.78014

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	0.00983	0.32940	0.12960	0.00965	2.50740	0.60000	0.01061
	B	0.01860	0.00100	0.01113	0.32940	0.12960	0.01108	2.50740	0.60000	0.01120
	C	0.01860	0.00100	0.01171	0.32940	0.12960	0.01175	2.50740	0.60000	0.01159
	D	0.01860	0.00100	0.01174	0.32940	0.12960	0.01179	2.50740	0.60000	0.01227
sg13g2_and4_1	A	0.01860	0.00100	0.00673	0.32940	0.06480	0.00651	2.50740	0.30000	0.00840
	B	0.01860	0.00100	0.00804	0.32940	0.06480	0.00787	2.50740	0.30000	0.00881
	C	0.01860	0.00100	0.00865	0.32940	0.06480	0.00853	2.50740	0.30000	0.00893
	D	0.01860	0.00100	0.00865	0.32940	0.06480	0.00854	2.50740	0.30000	0.00883

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	0.00711	0.32940	0.12960	0.00711	2.50740	0.60000	0.00887
	B	0.01860	0.00100	0.00736	0.32940	0.12960	0.00739	2.50740	0.60000	0.00853
	C	0.01860	0.00100	0.00785	0.32940	0.12960	0.00799	2.50740	0.60000	0.00936
	D	0.01860	0.00100	0.00817	0.32940	0.12960	0.00824	2.50740	0.60000	0.00924
sg13g2_and4_1	A	0.01860	0.00100	0.00440	0.32940	0.06480	0.00423	2.50740	0.30000	0.00575
	B	0.01860	0.00100	0.00465	0.32940	0.06480	0.00451	2.50740	0.30000	0.00574
	C	0.01860	0.00100	0.00514	0.32940	0.06480	0.00499	2.50740	0.30000	0.00610
	D	0.01860	0.00100	0.00544	0.32940	0.06480	0.00539	2.50740	0.30000	0.00674

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	-0.00016	2.50740	-0.00015
sg13g2_and4_1	0.01860	-0.00015	0.32940	-0.00016	2.50740	-0.00015

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00055	0.32940	0.00058	2.50740	0.00058
sg13g2_and4_1	0.01860	0.00056	0.32940	0.00058	2.50740	0.00058

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	-0.00016	2.50740	-0.00015
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00015	0.32940	-0.00016	2.50740	-0.00015

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	0.00055	0.32940	0.00058	2.50740	0.00058
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	0.00056	0.32940	0.00058	2.50740	0.00058

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00034	0.32940	-0.00036	2.50740	-0.00036
sg13g2_and4_1	0.01860	-0.00034	0.32940	-0.00036	2.50740	-0.00036

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	0.00035	0.32940	0.00037	2.50740	0.00038
sg13g2_and4_1	0.01860	0.00036	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	-0.00034	0.32940	-0.00036	2.50740	-0.00036
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00034	0.32940	-0.00036	2.50740	-0.00036

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	0.00035	0.32940	0.00037	2.50740	0.00038
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00036	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	0.00093	2.50740	0.00093
sg13g2_and4_1	0.01860	0.00091	0.32940	0.00092	2.50740	0.00093

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_2	0.01860	-0.00011	0.32940	-0.00018	2.50740	-0.00020
sg13g2_and4_1	0.01860	-0.00011	0.32940	-0.00017	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	0.00093	2.50740	0.00093
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00091	0.32940	0.00092	2.50740	0.00093

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	-0.00011	0.32940	-0.00018	2.50740	-0.00020
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	-0.00011	0.32940	-0.00017	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	0.00266	0.00247	0.60000
sg13g2_a21o_1	0.00254	0.00258	0.00234	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	0.13284	0.32940	0.12960	0.56699	2.50740	0.60000	1.99615
	A2->X (RR)	0.01860	0.00100	0.13881	0.32940	0.12960	0.56900	2.50740	0.60000	2.00792
	B1->X (RR)	0.01860	0.00100	0.08150	0.32940	0.12960	0.50881	2.50740	0.60000	1.89587
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.12451	0.32940	0.06480	0.54273	2.50740	0.30000	1.94415
	A2->X (RR)	0.01860	0.00100	0.13074	0.32940	0.06480	0.54669	2.50740	0.30000	1.96814
	B1->X (RR)	0.01860	0.00100	0.07712	0.32940	0.06480	0.48725	2.50740	0.30000	1.84359

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	0.17537	0.32940	0.12960	0.57450	2.50740	0.60000	1.83118
	A2->X (FF)	0.01860	0.00100	0.18932	0.32940	0.12960	0.59483	2.50740	0.60000	1.87227
	B1->X (FF)	0.01860	0.00100	0.17510	0.32940	0.12960	0.58469	2.50740	0.60000	1.88895
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.13926	0.32940	0.06480	0.51252	2.50740	0.30000	1.68097
	A2->X (FF)	0.01860	0.00100	0.15155	0.32940	0.06480	0.53107	2.50740	0.30000	1.72786
	B1->X (FF)	0.01860	0.00100	0.13669	0.32940	0.06480	0.51621	2.50740	0.30000	1.71325

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	0.08150	0.32940	0.12960	0.50881	2.50740	0.60000	1.89587
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.07782	0.32940	0.12960	0.49580	2.50740	0.60000	1.84435
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.07712	0.32940	0.06480	0.48725	2.50740	0.30000	1.84359
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.07201	0.32940	0.06480	0.47333	2.50740	0.30000	1.78220

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	0.17510	0.32940	0.12960	0.58469	2.50740	0.60000	1.88895
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.15823	0.32940	0.12960	0.56427	2.50740	0.60000	1.83643
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.13669	0.32940	0.06480	0.51621	2.50740	0.30000	1.71325
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.12217	0.32940	0.06480	0.49479	2.50740	0.30000	1.65829

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	0.00882	0.32940	0.12960	0.00870	2.50740	0.60000	0.01072
	A2	0.01860	0.00100	0.00996	0.32940	0.12960	0.01002	2.50740	0.60000	0.01074
	B1	0.01860	0.00100	0.00760	0.32940	0.12960	0.00748	2.50740	0.60000	0.00968
sg13g2_a21o_1	A1	0.01860	0.00100	0.00590	0.32940	0.06480	0.00567	2.50740	0.30000	0.00783
	A2	0.01860	0.00100	0.00691	0.32940	0.06480	0.00676	2.50740	0.30000	0.00824
	B1	0.01860	0.00100	0.00468	0.32940	0.06480	0.00451	2.50740	0.30000	0.00661

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	0.00944	0.32940	0.12960	0.00935	2.50740	0.60000	0.01020
	A2	0.01860	0.00100	0.00949	0.32940	0.12960	0.00975	2.50740	0.60000	0.00999
	B1	0.01860	0.00100	0.00751	0.32940	0.12960	0.00770	2.50740	0.60000	0.00932
sg13g2_a21o_1	A1	0.01860	0.00100	0.00647	0.32940	0.06480	0.00640	2.50740	0.30000	0.00718
	A2	0.01860	0.00100	0.00650	0.32940	0.06480	0.00655	2.50740	0.30000	0.00749
	B1	0.01860	0.00100	0.00454	0.32940	0.06480	0.00455	2.50740	0.30000	0.00650

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	0.00881	0.32940	0.12960	0.00889	2.50740	0.60000	0.01181
	B1	(!A1 * A2)	0.01860	0.00100	0.00760	0.32940	0.12960	0.00748	2.50740	0.60000	0.00968
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00573	0.32940	0.06480	0.00557	2.50740	0.30000	0.00824
	B1	(!A1 * A2)	0.01860	0.00100	0.00468	0.32940	0.06480	0.00451	2.50740	0.30000	0.00661

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	0.00770	0.32940	0.12960	0.00761	2.50740	0.60000	0.00956
	B1	(!A1 * A2)	0.01860	0.00100	0.00751	0.32940	0.12960	0.00770	2.50740	0.60000	0.00932
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00465	0.32940	0.06480	0.00457	2.50740	0.30000	0.00632
	B1	(!A1 * A2)	0.01860	0.00100	0.00454	0.32940	0.06480	0.00455	2.50740	0.30000	0.00650

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00007	0.32940	0.00009	2.50740	0.00010
sg13g2_a21o_1	0.01860	-0.00003	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	-0.00008	2.50740	-0.00008
sg13g2_a21o_1	0.01860	0.00003	0.32940	0.00003	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	0.00031	0.32940	0.00020	2.50740	0.00016
	(!A2 * B1)	0.01860	0.00007	0.32940	0.00009	2.50740	0.00010
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00021	0.32940	0.00009	2.50740	0.00005
	(!A2 * B1)	0.01860	-0.00003	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	-0.00006	0.32940	-0.00007	2.50740	-0.00007
	(!A2 * B1)	0.01860	-0.00007	0.32940	-0.00008	2.50740	-0.00008
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00004	0.32940	0.00003	2.50740	0.00003
	(!A2 * B1)	0.01860	0.00003	0.32940	0.00003	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	-0.00003	2.50740	-0.00003
sg13g2_a21o_1	0.01860	0.00000	0.32940	0.00001	2.50740	0.00001

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	0.00027	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	0.00024	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	-0.00002	2.50740	-0.00003
	(!A1 * B1)	0.01860	-0.00004	0.32940	-0.00003	2.50740	-0.00003
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00002	0.32940	0.00002	2.50740	0.00001
	(!A1 * B1)	0.01860	0.00000	0.32940	0.00001	2.50740	0.00001

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00037	0.32940	0.00040	2.50740	0.00041
sg13g2_a21o_1	0.01860	0.00030	0.32940	0.00033	2.50740	0.00033

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_2	0.01860	0.00045	0.32940	0.00044	2.50740	0.00045
sg13g2_a21o_1	0.01860	0.00052	0.32940	0.00052	2.50740	0.00053

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	0.00037	0.32940	0.00040	2.50740	0.00041
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00030	0.32940	0.00033	2.50740	0.00033

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	0.00045	0.32940	0.00044	2.50740	0.00045
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00052	0.32940	0.00052	2.50740	0.00053

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	0.00544	0.01490	2.40000
sg13g2_ebufn_4	0.00279	0.00905	1.20000
sg13g2_ebufn_2	0.00246	0.00560	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	0.01631	0.09599	0.32940	0.53371	0.85484	2.50740	2.41531	3.40765
	TE_B->Z (RR)	0.01860	0.01631	0.09514	0.32940	0.53371	0.22863	2.50740	2.41531	0.57624
	TE_B->Z (FR)	0.01860	0.01631	0.05035	0.32940	0.53371	0.76553	2.50740	2.41531	3.75376
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.00868	0.09969	0.32940	0.26688	0.85700	2.50740	1.20768	3.41416
	TE_B->Z (RR)	0.01860	0.00868	0.07572	0.32940	0.26688	0.18248	2.50740	1.20768	0.42217
	TE_B->Z (FR)	0.01860	0.00868	0.05116	0.32940	0.26688	0.76448	2.50740	1.20768	3.74869
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00488	0.08586	0.32940	0.13348	0.81354	2.50740	0.60388	3.28623
	TE_B->Z (RR)	0.01860	0.00488	0.06623	0.32940	0.13348	0.15989	2.50740	0.60388	0.35062
	TE_B->Z (FR)	0.01860	0.00488	0.05097	0.32940	0.13348	0.76028	2.50740	0.60388	3.73041

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	0.02944	0.13144	0.32940	0.54683	0.73063	2.50740	2.42844	2.74101
	TE_B->Z (RF)	0.01860	0.02944	0.06651	0.32940	0.54683	-0.15502	2.50740	2.42844	-1.84106
	TE_B->Z (FF)	0.01860	0.02944	0.14961	0.32940	0.54683	0.95473	2.50740	2.42844	3.70255
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01548	0.13573	0.32940	0.27368	0.73459	2.50740	1.21448	2.75166
	TE_B->Z (RF)	0.01860	0.01548	0.04941	0.32940	0.27368	-0.15307	2.50740	1.21448	-1.83904
	TE_B->Z (FF)	0.01860	0.01548	0.11304	0.32940	0.27368	0.88748	2.50740	1.21448	3.50164
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00842	0.10191	0.32940	0.13702	0.67881	2.50740	0.60742	2.58599
	TE_B->Z (RF)	0.01860	0.00842	0.03581	0.32940	0.13702	-0.17823	2.50740	0.60742	-1.86489
	TE_B->Z (FF)	0.01860	0.00842	0.09557	0.32940	0.13702	0.84142	2.50740	0.60742	3.37623

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	0.01631	0.00959	0.32940	0.53371	0.01536	2.50740	2.41531	0.01483
	TE_B	0.01860	0.01631	0.00835	0.32940	0.53371	0.00702	2.50740	2.41531	0.00481
sg13g2_ebufn_4	A	0.01860	0.00868	0.00488	0.32940	0.26688	0.00770	2.50740	1.20768	0.00661
	TE_B	0.01860	0.00868	0.00414	0.32940	0.26688	0.00343	2.50740	1.20768	0.00237
sg13g2_ebufn_2	A	0.01860	0.00488	0.00267	0.32940	0.13348	0.00393	2.50740	0.60388	0.00346
	TE_B	0.01860	0.00488	0.00206	0.32940	0.13348	0.00166	2.50740	0.60388	0.00112

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	0.02944	0.02617	0.32940	0.54683	0.02621	2.50740	2.42844	0.02175
	TE_B	0.01860	0.02944	0.00923	0.32940	0.54683	0.07453	2.50740	2.42844	0.31323
sg13g2_ebufn_4	A	0.01860	0.01548	0.01313	0.32940	0.27368	0.01297	2.50740	1.21448	0.01133
	TE_B	0.01860	0.01548	0.00470	0.32940	0.27368	0.03717	2.50740	1.21448	0.15657
sg13g2_ebufn_2	A	0.01860	0.00842	0.00655	0.32940	0.13702	0.00656	2.50740	0.60742	0.00526
	TE_B	0.01860	0.00842	0.00239	0.32940	0.13702	0.01863	2.50740	0.60742	0.07844

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.02315	0.32940	0.02278	2.50740	0.02893
sg13g2_ebufn_4	0.01860	0.01182	0.32940	0.01160	2.50740	0.01462
sg13g2_ebufn_2	0.01860	0.00643	0.32940	0.00628	2.50740	0.00907

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00811	0.32940	0.00791	2.50740	0.01364
sg13g2_ebufn_4	0.01860	0.00437	0.32940	0.00427	2.50740	0.00704
sg13g2_ebufn_2	0.01860	0.00282	0.32940	0.00275	2.50740	0.00536

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	-0.00235	0.32940	-0.00354	2.50740	-0.00153
sg13g2_ebufn_4	0.01860	-0.00019	0.32940	-0.00096	2.50740	0.00176
sg13g2_ebufn_2	0.01860	0.00053	0.32940	0.00006	2.50740	0.00267

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	0.03608	0.32940	0.03603	2.50740	0.03879
sg13g2_ebufn_4	0.01860	0.01883	0.32940	0.01886	2.50740	0.02174
sg13g2_ebufn_2	0.01860	0.01009	0.32940	0.01015	2.50740	0.01274

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	0.01604	4.80000
sg13g2_buf_8	0.00805	2.40000
sg13g2_buf_4	0.00349	1.20000
sg13g2_buf_2	0.00246	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	0.08171	0.32940	1.03680	0.51206	2.50740	4.80000	1.90972
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.08117	0.32940	0.51840	0.51044	2.50740	2.40000	1.90801
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.10567	0.32940	0.25920	0.55156	2.50740	1.20000	2.05475
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.08192	0.32940	0.12960	0.50614	2.50740	0.60000	1.89942
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.07275	0.32940	0.06480	0.47820	2.50740	0.30000	1.81106

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	0.09256	0.32940	1.03680	0.48980	2.50740	4.80000	1.70973
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.09192	0.32940	0.51840	0.48890	2.50740	2.40000	1.71048
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.09063	0.32940	0.25920	0.48562	2.50740	1.20000	1.68509
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.08929	0.32940	0.12960	0.47601	2.50740	0.60000	1.66907
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.07814	0.32940	0.06480	0.44315	2.50740	0.30000	1.57252

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	0.05875	0.32940	1.03680	0.05923	2.50740	4.80000	0.07786
sg13g2_buf_8	A	0.01860	0.00100	0.02899	0.32940	0.51840	0.02917	2.50740	2.40000	0.03971
sg13g2_buf_4	A	0.01860	0.00100	0.01402	0.32940	0.25920	0.01370	2.50740	1.20000	0.01715
sg13g2_buf_2	A	0.01860	0.00100	0.00766	0.32940	0.12960	0.00759	2.50740	0.60000	0.01006
sg13g2_buf_1	A	0.01860	0.00100	0.00463	0.32940	0.06480	0.00457	2.50740	0.30000	0.00644

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	0.05660	0.32940	1.03680	0.05879	2.50740	4.80000	0.07154
sg13g2_buf_8	A	0.01860	0.00100	0.02795	0.32940	0.51840	0.02896	2.50740	2.40000	0.03428
sg13g2_buf_4	A	0.01860	0.00100	0.01405	0.32940	0.25920	0.01465	2.50740	1.20000	0.01636
sg13g2_buf_2	A	0.01860	0.00100	0.00748	0.32940	0.12960	0.00761	2.50740	0.60000	0.00930
sg13g2_buf_1	A	0.01860	0.00100	0.00459	0.32940	0.06480	0.00461	2.50740	0.30000	0.00609

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	0.00154	0.00556	0.00267	0.60000	0.60000
sg13g2_dfrbp_1	0.00166	0.00611	0.00260	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	2762.66000	3213.97000	3740.78000
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	0.37473	0.32940	0.12960	0.77143	2.50740	0.60000	2.16841
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.30256	0.32940	0.06480	0.70833	2.50740	0.30000	2.08924

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	0.32651	0.32940	0.12960	0.69605	2.50740	0.60000	1.90082
	RESET_B->Q (FF)	0.01860	0.00100	0.44010	0.32940	0.12960	0.83474	2.50740	0.60000	2.27044
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.29198	0.32940	0.06480	0.66377	2.50740	0.30000	1.86720
	RESET_B->Q (FF)	0.01860	0.00100	0.38905	0.32940	0.06480	0.78352	2.50740	0.30000	2.19485

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	0.21695	0.32940	0.12960	0.67938	2.50740	0.60000	2.03619
	RESET_B->Q_N (FR)	0.01860	0.00100	0.33294	0.32940	0.12960	0.81534	2.50740	0.60000	2.40281
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.22335	0.32940	0.06480	0.67128	2.50740	0.30000	2.02722
	RESET_B->Q_N (FR)	0.01860	0.00100	0.32133	0.32940	0.06480	0.78767	2.50740	0.30000	2.35272

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	0.24193	0.32940	0.12960	0.70864	2.50740	0.60000	1.95527
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.22593	0.32940	0.06480	0.65963	2.50740	0.30000	1.89546

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	-0.07091	1.26300	1.26300	-0.26714	2.50740	2.50740	-0.37189
	setup	CLK (R)	0.01860	0.01860	0.21762	1.26300	1.26300	0.41555	2.50740	2.50740	0.53423
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.07825	1.26300	1.26300	-0.28333	2.50740	2.50740	-0.39255
	setup	CLK (R)	0.01860	0.01860	0.20784	1.26300	1.26300	0.41825	2.50740	2.50740	0.54604

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	-0.02934	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.26269
	setup	CLK (R)	0.01860	0.01860	0.20295	1.26300	1.26300	0.36158	2.50740	2.50740	0.48995
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02690	1.26300	1.26300	-0.15381	2.50740	2.50740	-0.24203
	setup	CLK (R)	0.01860	0.01860	0.19073	1.26300	1.26300	0.35079	2.50740	2.50740	0.47815

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	0.22740	1.26300	1.26300	0.43713	2.50740	2.50740	0.59916
	removal	CLK (R)	0.01860	0.01860	-0.17605	1.26300	1.26300	-0.39666	2.50740	2.50740	-0.54308
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.22007	1.26300	1.26300	0.43713	2.50740	2.50740	0.60802
	removal	CLK (R)	0.01860	0.01860	-0.16627	1.26300	1.26300	-0.38856	2.50740	2.50740	-0.54308

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	0.02937	0.32940	0.12960	0.10519	2.50740	0.60000	0.38331
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02428	0.32940	0.06480	0.06165	2.50740	0.30000	0.20154

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	0.02988	0.32940	0.12960	0.10551	2.50740	0.60000	0.38229
	RESET_B	0.01860	0.00100	0.02228	0.32940	0.12960	0.09795	2.50740	0.60000	0.37198
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02369	0.32940	0.06480	0.06102	2.50740	0.30000	0.20132
	RESET_B	0.01860	0.00100	0.01581	0.32940	0.06480	0.05317	2.50740	0.30000	0.19056

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	0.02989	0.32940	0.12960	0.10585	2.50740	0.60000	0.38359
	RESET_B	0.01860	0.00100	0.02232	0.32940	0.12960	0.09837	2.50740	0.60000	0.37376
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02368	0.32940	0.06480	0.06124	2.50740	0.30000	0.20176
	RESET_B	0.01860	0.00100	0.01582	0.32940	0.06480	0.05341	2.50740	0.30000	0.19158

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	0.02937	0.32940	0.12960	0.10473	2.50740	0.60000	0.38135
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02427	0.32940	0.06480	0.06146	2.50740	0.30000	0.20090

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00149	0.32940	0.00142	2.50740	0.00259
sg13g2_dfrbp_1	0.01860	0.00158	0.32940	0.00150	2.50740	0.00264

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00115	0.32940	0.00105	2.50740	0.00218
sg13g2_dfrbp_1	0.01860	0.00127	0.32940	0.00117	2.50740	0.00227

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	0.00149	0.32940	0.00142	2.50740	0.00259
	(!CLK * RESET_B)	0.01860	0.00959	0.32940	0.00943	2.50740	0.01055
	(!CLK * !RESET_B)	0.01860	0.00000	0.32940	-0.00001	2.50740	-0.00001
sg13g2_dfrbp_1	CLK	0.01860	0.00158	0.32940	0.00150	2.50740	0.00264
	(!CLK * RESET_B)	0.01860	0.00815	0.32940	0.00801	2.50740	0.00919
	(!CLK * !RESET_B)	0.01860	0.00010	0.32940	0.00009	2.50740	0.00009

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	0.00115	0.32940	0.00105	2.50740	0.00218
	(!CLK * RESET_B)	0.01860	0.00737	0.32940	0.00721	2.50740	0.00839
	(!CLK * !RESET_B)	0.01860	0.00000	0.32940	0.00001	2.50740	0.00001
sg13g2_dfrbp_1	CLK	0.01860	0.00127	0.32940	0.00117	2.50740	0.00227
	(!CLK * RESET_B)	0.01860	0.00683	0.32940	0.00667	2.50740	0.00785
	(!CLK * !RESET_B)	0.01860	-0.00001	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	0.00328	0.32940	0.00319	2.50740	0.00394
sg13g2_dfrbp_1	0.01860	0.00363	0.32940	0.00354	2.50740	0.00427

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	0.00725	0.32940	0.00683	2.50740	0.00790
sg13g2_dfrbp_1	0.01860	0.00642	0.32940	0.00601	2.50740	0.00711

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	0.00328	0.32940	0.00319	2.50740	0.00394
	(CLK * !D * !Q * Q_N)	0.01860	0.00139	0.32940	0.00138	2.50740	0.00137
	(!CLK * D * !Q * Q_N)	0.01860	0.01166	0.32940	0.01137	2.50740	0.01251
	(!CLK * !D * !Q * Q_N)	0.01860	0.00137	0.32940	0.00135	2.50740	0.00135
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00363	0.32940	0.00354	2.50740	0.00427
	(CLK * !D * !Q * Q_N)	0.01860	0.00174	0.32940	0.00173	2.50740	0.00172
	(!CLK * D * !Q * Q_N)	0.01860	0.01052	0.32940	0.01025	2.50740	0.01136
	(!CLK * !D * !Q * Q_N)	0.01860	0.00178	0.32940	0.00176	2.50740	0.00175

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	0.02913	0.32940	0.02846	2.50740	0.03108
	(CLK * !D * !Q * Q_N)	0.01860	-0.00087	0.32940	-0.00102	2.50740	-0.00108
	(!CLK * D * !Q * Q_N)	0.01860	0.00725	0.32940	0.00683	2.50740	0.00790
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00109	0.32940	-0.00121	2.50740	-0.00125
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.02166	0.32940	0.02099	2.50740	0.02354
	(CLK * !D * !Q * Q_N)	0.01860	-0.00121	0.32940	-0.00136	2.50740	-0.00142
	(!CLK * D * !Q * Q_N)	0.01860	0.00642	0.32940	0.00601	2.50740	0.00711
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00129	0.32940	-0.00142	2.50740	-0.00147

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00928	0.32940	0.00896	2.50740	0.01208
sg13g2_dfrbp_1	0.01860	0.00902	0.32940	0.00870	2.50740	0.01157

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	0.01630	2.50740	0.01934
sg13g2_dfrbp_1	0.01860	0.01550	0.32940	0.01510	2.50740	0.01780

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	0.00894	0.32940	0.00863	2.50740	0.01177
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00938	0.32940	0.00906	2.50740	0.01223
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00888	0.32940	0.00857	2.50740	0.01169
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00928	0.32940	0.00896	2.50740	0.01208
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.00927	0.32940	0.00891	2.50740	0.01184
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00902	0.32940	0.00870	2.50740	0.01157
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00892	0.32940	0.00857	2.50740	0.01146
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00890	0.32940	0.00858	2.50740	0.01144

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	0.01809	0.32940	0.01755	2.50740	0.02060
	(D * RESET_B * !Q * Q_N)	0.01860	0.01684	0.32940	0.01630	2.50740	0.01934
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00874	0.32940	0.00838	2.50740	0.01141
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00176	0.32940	0.03002	2.50740	0.03260
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00868	0.32940	0.00833	2.50740	0.01135
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00872	0.32940	0.00836	2.50740	0.01139
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01700	0.32940	0.01660	2.50740	0.01930
	(D * RESET_B * !Q * Q_N)	0.01860	0.01550	0.32940	0.01510	2.50740	0.01780
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00895	0.32940	0.00870	2.50740	0.01136
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00162	0.32940	0.02474	2.50740	0.02699
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00889	0.32940	0.00864	2.50740	0.01130
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00892	0.32940	0.00867	2.50740	0.01133

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	0.00214	0.00218	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	0.27054	0.32940	0.06480	0.67378	2.50740	0.30000	1.99462
	GATE->Q (RR)	0.01860	0.00100	0.23093	0.32940	0.06480	0.63359	2.50740	0.30000	1.94705

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	0.24077	0.32940	0.06480	0.60236	2.50740	0.30000	1.71530
	GATE->Q (RF)	0.01860	0.00100	0.24833	0.32940	0.06480	0.61393	2.50740	0.30000	1.74018

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	-0.14427	1.26300	1.26300	-0.33730	2.50740	2.50740	-0.43093
	setup	GATE (F)	0.01860	0.01860	0.16383	1.26300	1.26300	0.42095	2.50740	2.50740	0.56374

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	-0.03508	2.50740	2.50740	-0.00590
	setup	GATE (F)	0.01860	0.01860	0.08314	1.26300	1.26300	0.05397	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	0.01152	0.32940	0.06480	0.01170	2.50740	0.30000	0.01135
	GATE	0.01860	0.00100	0.00932	0.32940	0.06480	0.00935	2.50740	0.30000	0.00936

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	0.01193	0.32940	0.06480	0.01217	2.50740	0.30000	0.01180
	GATE	0.01860	0.00100	0.01020	0.32940	0.06480	0.01057	2.50740	0.30000	0.01033

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00275	0.32940	0.00260	2.50740	0.00484

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00307	0.32940	0.00293	2.50740	0.00498

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	0.00336	0.32940	0.00319	2.50740	0.00538
	(!GATE * !Q)	0.01860	0.00275	0.32940	0.00260	2.50740	0.00484

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	0.00285	0.32940	0.00276	2.50740	0.00486
	(!GATE * !Q)	0.01860	0.00307	0.32940	0.00293	2.50740	0.00498

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00717	0.32940	0.00690	2.50740	0.00970

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00156	0.32940	0.01215	2.50740	0.01481

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	0.00717	0.32940	0.00690	2.50740	0.00970

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	0.00156	0.32940	0.01215	2.50740	0.01481

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	0.00202	0.00273	0.00211	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	0.28800	0.32940	0.06480	0.69856	2.50740	0.30000	2.01712
	GATE->Q (RR)	0.01860	0.00100	0.25971	0.32940	0.06480	0.67196	2.50740	0.30000	1.98641

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	0.25589	0.32940	0.06480	0.62065	2.50740	0.30000	1.74096
	GATE->Q (RF)	0.01860	0.00100	0.26681	0.32940	0.06480	0.63851	2.50740	0.30000	1.78324
	RESET_B->Q (FF)	0.01860	0.00100	0.09668	0.32940	0.06480	0.48155	2.50740	0.30000	1.69846

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	-0.12226	1.26300	1.26300	-0.31031	2.50740	2.50740	-0.38960
	setup	GATE (F)	0.01860	0.01860	0.15894	1.26300	1.26300	0.39126	2.50740	2.50740	0.51652

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	-0.03238	2.50740	2.50740	-0.00295
	setup	GATE (F)	0.01860	0.01860	0.09536	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_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.01467	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.15643
	removal	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.17269	2.50740	2.50740	0.22727

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	0.00154	0.32940	0.06480	0.00065	2.50740	0.30000	0.00042
	GATE	0.01860	0.00100	0.00959	0.32940	0.06480	0.00962	2.50740	0.30000	0.00953

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	0.00553	0.32940	0.06480	-0.00065	2.50740	0.30000	-0.00042
	GATE	0.01860	0.00100	0.00958	0.32940	0.06480	0.00997	2.50740	0.30000	0.00972
	RESET_B	0.01860	0.00100	0.00589	0.32940	0.06480	0.00600	2.50740	0.30000	0.00830

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01276	0.32940	0.01372	2.50740	0.01601

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00853	0.32940	0.01986	2.50740	0.02194

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	0.00108	0.32940	0.00094	2.50740	0.00314
	!RESET_B	0.01860	0.01276	0.32940	0.01372	2.50740	0.01601

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	0.00376	0.32940	0.00368	2.50740	0.00575
	!RESET_B	0.01860	0.00853	0.32940	0.01986	2.50740	0.02194

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00013	0.32940	0.00011	2.50740	0.00011

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_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	0.00013	0.32940	0.00011	2.50740	0.00011
	(!D * !GATE * !Q)	0.01860	0.00013	0.32940	0.00011	2.50740	0.00011

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_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	0.00738	0.32940	0.00711	2.50740	0.00987

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00157	0.32940	0.01234	2.50740	0.01494

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	0.00967	0.32940	0.00924	2.50740	0.01210
	(!D * !RESET_B * !Q)	0.01860	0.00738	0.32940	0.00711	2.50740	0.00987

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	0.00950	0.32940	0.00909	2.50740	0.01196
	(!D * RESET_B * !Q)	0.01860	0.00157	0.32940	0.01234	2.50740	0.01494
	(!D * !RESET_B * !Q)	0.01860	0.00162	0.32940	0.01239	2.50740	0.01499

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	0.00196	0.00289	0.00214	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	0.31201	0.32940	0.06480	0.73407	2.50740	0.30000	2.04878
	GATE->Q (RR)	0.01860	0.00100	0.28504	0.32940	0.06480	0.70951	2.50740	0.30000	2.02462

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	0.26540	0.32940	0.06480	0.63546	2.50740	0.30000	1.74835
	GATE->Q (RF)	0.01860	0.00100	0.27654	0.32940	0.06480	0.65453	2.50740	0.30000	1.79338
	RESET_B->Q (FF)	0.01860	0.00100	0.10556	0.32940	0.06480	0.50326	2.50740	0.30000	1.75930

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	0.32590	0.32940	0.06480	0.71678	2.50740	0.30000	1.98192
	GATE->Q_N (RR)	0.01860	0.00100	0.33727	0.32940	0.06480	0.73576	2.50740	0.30000	2.02551
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16568	0.32940	0.06480	0.58090	2.50740	0.30000	1.93789

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	0.38001	0.32940	0.06480	0.73521	2.50740	0.30000	1.89639
	GATE->Q_N (RF)	0.01860	0.00100	0.35354	0.32940	0.06480	0.71075	2.50740	0.30000	1.87383

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	-0.13204	1.26300	1.26300	-0.31571	2.50740	2.50740	-0.39551
	setup	GATE (F)	0.01860	0.01860	0.17361	1.26300	1.26300	0.39396	2.50740	2.50740	0.52537

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	-0.03238	2.50740	2.50740	-0.00295
	setup	GATE (F)	0.01860	0.01860	0.10270	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	0.00245	1.26300	1.26300	-0.03778	2.50740	2.50740	-0.05903
	removal	GATE (F)	0.01860	0.01860	0.03423	1.26300	1.26300	0.11603	2.50740	2.50740	0.14463

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	0.00400	0.32940	0.06480	0.00376	2.50740	0.30000	0.00355
	GATE	0.01860	0.00100	0.00790	0.32940	0.06480	0.00813	2.50740	0.30000	0.00806

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	0.00593	0.32940	0.06480	0.00041	2.50740	0.30000	-0.00023
	GATE	0.01860	0.00100	0.00792	0.32940	0.06480	0.00814	2.50740	0.30000	0.00814
	RESET_B	0.01860	0.00100	0.00596	0.32940	0.06480	0.00598	2.50740	0.30000	0.00678

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	0.00593	0.32940	0.06480	0.00056	2.50740	0.30000	0.00023
	GATE	0.01860	0.00100	0.01147	0.32940	0.06480	0.01172	2.50740	0.30000	0.01313
	RESET_B	0.01860	0.00100	0.00596	0.32940	0.06480	0.00608	2.50740	0.30000	0.00750

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	0.00399	0.32940	0.06480	0.00366	2.50740	0.30000	0.00329
	GATE	0.01860	0.00100	0.00790	0.32940	0.06480	0.00803	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	0.01242	0.32940	0.01335	2.50740	0.01565

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00832	0.32940	0.01956	2.50740	0.02170

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	0.00275	0.32940	0.00261	2.50740	0.00483
	!RESET_B	0.01860	0.01242	0.32940	0.01335	2.50740	0.01565

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	0.00534	0.32940	0.00527	2.50740	0.00737
	!RESET_B	0.01860	0.00832	0.32940	0.01956	2.50740	0.02170

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	0.00005	0.32940	0.00002	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	0.00027	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	0.00005	0.32940	0.00002	2.50740	0.00001
	(!D * !GATE * !Q)	0.01860	0.00005	0.32940	0.00002	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	0.00027	0.32940	0.00019	2.50740	0.00016
	(!D * !GATE * !Q)	0.01860	0.00027	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	0.00711	0.32940	0.00685	2.50740	0.00962

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00160	0.32940	0.01213	2.50740	0.01475

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	0.00939	0.32940	0.00898	2.50740	0.01186
	(!D * !RESET_B * !Q)	0.01860	0.00711	0.32940	0.00685	2.50740	0.00962

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	0.00973	0.32940	0.00931	2.50740	0.01219
	(!D * RESET_B * !Q)	0.01860	0.00160	0.32940	0.01213	2.50740	0.01475
	(!D * !RESET_B * !Q)	0.01860	0.00165	0.32940	0.01217	2.50740	0.01479

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	0.00193	0.00272	0.00208	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	0.28651	0.32940	0.06480	0.69615	2.50740	0.30000	2.01263
	GATE_N->Q (FR)	0.01860	0.00100	0.32381	0.32940	0.06480	0.74396	2.50740	0.30000	2.07157
	RESET_B->Q (RR)	0.01860	0.00100	0.12753	0.32940	0.06480	0.53148	2.50740	0.30000	1.91124

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	0.25466	0.32940	0.06480	0.61717	2.50740	0.30000	1.73222
	GATE_N->Q (FF)	0.01860	0.00100	0.24377	0.32940	0.06480	0.62341	2.50740	0.30000	1.83957
	RESET_B->Q (FF)	0.01860	0.00100	0.09764	0.32940	0.06480	0.48108	2.50740	0.30000	1.69421

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	-0.12470	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.15938
	setup	GATE_N (R)	0.01860	0.01860	0.13204	1.26300	1.26300	0.15111	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_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.13204	1.26300	1.26300	-0.32650	2.50740	2.50740	-0.41026
	setup	GATE_N (R)	0.01860	0.01860	0.15405	1.26300	1.26300	0.39936	2.50740	2.50740	0.53128

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	-0.04157	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.15938
	removal	GATE_N (R)	0.01860	0.01860	0.07825	1.26300	1.26300	0.17539	2.50740	2.50740	0.19775

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	0.00468	0.32940	0.06480	0.00506	2.50740	0.30000	0.00509
	GATE_N	0.01860	0.00100	0.01582	0.32940	0.06480	0.00512	2.50740	0.30000	0.00500
	RESET_B	0.01860	0.00100	0.00625	0.32940	0.06480	0.00619	2.50740	0.30000	0.00808

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	0.01292	0.32940	0.06480	0.00028	2.50740	0.30000	-0.00009
	GATE_N	0.01860	0.00100	0.01496	0.32940	0.06480	0.00417	2.50740	0.30000	0.00417
	RESET_B	0.01860	0.00100	0.00496	0.32940	0.06480	0.00506	2.50740	0.30000	0.00735

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00954	0.32940	0.00923	2.50740	0.01142

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00123	0.32940	0.01396	2.50740	0.01611

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	0.00102	0.32940	0.00087	2.50740	0.00309
	!RESET_B	0.01860	0.00954	0.32940	0.00923	2.50740	0.01142

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	0.00476	0.32940	0.00468	2.50740	0.00678
	!RESET_B	0.01860	0.00123	0.32940	0.01396	2.50740	0.01611

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	0.00117	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	0.00118	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	0.00012	0.32940	0.00010	2.50740	0.00010
	(!D * GATE_N * !Q)	0.01860	0.00117	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	0.00009
	(!D * GATE_N * !Q)	0.01860	0.00126	0.32940	0.00118	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	0.00729	0.32940	0.00704	2.50740	0.00980

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	0.00157	0.32940	0.01226	2.50740	0.01489

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	0.01055	0.32940	0.01017	2.50740	0.01280
	(!D * !RESET_B * !Q)	0.01860	0.00729	0.32940	0.00704	2.50740	0.00980

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	0.01013	0.32940	0.00983	2.50740	0.01249
	(!D * RESET_B * !Q)	0.01860	0.00157	0.32940	0.01226	2.50740	0.01489
	(!D * !RESET_B * !Q)	0.01860	0.00162	0.32940	0.01231	2.50740	0.01494

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	0.00203	0.00285	0.00221	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	0.31497	0.32940	0.06480	0.73589	2.50740	0.30000	2.04991
	GATE_N->Q (FR)	0.01860	0.00100	0.35184	0.32940	0.06480	0.78490	2.50740	0.30000	2.11350

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	0.26855	0.32940	0.06480	0.63790	2.50740	0.30000	1.74979
	GATE_N->Q (FF)	0.01860	0.00100	0.25900	0.32940	0.06480	0.64707	2.50740	0.30000	1.86543
	RESET_B->Q (FF)	0.01860	0.00100	0.10561	0.32940	0.06480	0.51077	2.50740	0.30000	1.76543

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	0.32887	0.32940	0.06480	0.71904	2.50740	0.30000	1.98176
	GATE_N->Q_N (FR)	0.01860	0.00100	0.31950	0.32940	0.06480	0.72828	2.50740	0.30000	2.09751
	RESET_B->Q_N (FR)	0.01860	0.00100	0.16691	0.32940	0.06480	0.58294	2.50740	0.30000	1.94805

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	0.38265	0.32940	0.06480	0.73742	2.50740	0.30000	1.89782
	GATE_N->Q_N (FF)	0.01860	0.00100	0.41999	0.32940	0.06480	0.78643	2.50740	0.30000	1.96039

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	-0.13693	1.26300	1.26300	-0.13492	2.50740	2.50740	-0.16824
	setup	GATE_N (R)	0.01860	0.01860	0.14916	1.26300	1.26300	0.16190	2.50740	2.50740	0.19480

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	-0.13938	1.26300	1.26300	-0.32920	2.50740	2.50740	-0.41321
	setup	GATE_N (R)	0.01860	0.01860	0.16138	1.26300	1.26300	0.40206	2.50740	2.50740	0.53718

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	-0.02445	1.26300	1.26300	-0.07825	2.50740	2.50740	-0.07674
	removal	GATE_N (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.12952	2.50740	2.50740	0.12692

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	0.00757	0.32940	0.06480	0.04497	2.50740	0.30000	0.18172
	GATE_N	0.01860	0.00100	0.01765	0.32940	0.06480	0.05551	2.50740	0.30000	0.19265

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	0.01227	0.32940	0.06480	0.03771	2.50740	0.30000	0.17347
	GATE_N	0.01860	0.00100	0.01642	0.32940	0.06480	0.05388	2.50740	0.30000	0.19029
	RESET_B	0.01860	0.00100	0.01758	0.32940	0.06480	0.05457	2.50740	0.30000	0.19261

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	0.01230	0.32940	0.06480	0.03801	2.50740	0.30000	0.17479
	GATE_N	0.01860	0.00100	0.02323	0.32940	0.06480	0.06069	2.50740	0.30000	0.20053
	RESET_B	0.01860	0.00100	0.01864	0.32940	0.06480	0.05581	2.50740	0.30000	0.19517

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	0.00756	0.32940	0.06480	0.04476	2.50740	0.30000	0.18119
	GATE_N	0.01860	0.00100	0.01764	0.32940	0.06480	0.05532	2.50740	0.30000	0.19148

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01380	0.32940	0.01404	2.50740	0.01636

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.00841	0.32940	0.02039	2.50740	0.02259

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	0.00280	0.32940	0.00264	2.50740	0.00487
	!RESET_B	0.01860	0.01380	0.32940	0.01404	2.50740	0.01636

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	0.00267	0.32940	0.00260	2.50740	0.00470
	!RESET_B	0.01860	0.00841	0.32940	0.02039	2.50740	0.02259

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	0.00002	0.32940	-0.00000	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	0.00136	0.32940	0.00128	2.50740	0.00125

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	0.00220	0.32940	0.00218	2.50740	0.00217
	(!D * GATE_N * !Q)	0.01860	0.00002	0.32940	-0.00000	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	0.00022	2.50740	0.00019
	(!D * GATE_N * !Q)	0.01860	0.00136	0.32940	0.00128	2.50740	0.00125

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	0.01059	0.32940	0.01020	2.50740	0.01284

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	0.00681	0.32940	0.00654	2.50740	0.00925

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	0.01059	0.32940	0.01020	2.50740	0.01284
	(!D * RESET_B * !Q)	0.01860	0.00141	0.32940	0.01242	2.50740	0.01524
	(!D * !RESET_B * !Q)	0.01860	0.00252	0.32940	0.01353	2.50740	0.01634

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	0.01033	0.32940	0.01003	2.50740	0.01269
	(!D * !RESET_B * !Q)	0.01860	0.00681	0.32940	0.00654	2.50740	0.00925

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	0.00139	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	0.17810	0.32940	0.06480	0.58452	2.50740	0.30000	1.87921

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	0.20967	0.32940	0.06480	0.59474	2.50740	0.30000	1.85149

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	0.01005	0.32940	0.06480	0.00996	2.50740	0.30000	0.01152

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	0.00959	2.50740	0.30000	0.01053

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	0.00140	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	0.25531	0.32940	0.06480	0.67241	2.50740	0.30000	2.01904

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	0.29181	0.32940	0.06480	0.69670	2.50740	0.30000	2.02044

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	0.01171	0.32940	0.06480	0.01164	2.50740	0.30000	0.01261

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	0.01130	0.32940	0.06480	0.01131	2.50740	0.30000	0.01211

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	0.53595	0.32940	0.06480	0.98823	2.50740	0.30000	2.46241

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	0.56869	0.32940	0.06480	1.01156	2.50740	0.30000	2.47255

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	0.01634	0.32940	0.06480	0.01630	2.50740	0.30000	0.01708

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	0.01613	0.32940	0.06480	0.01604	2.50740	0.30000	0.01633

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	0.00861	1.20000
sg13g2_einvn_2	0.00390	0.00459	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	0.00882	0.03456	0.32940	0.26702	0.75697	2.50740	1.20782	3.85031
	TE_B->Z (RR)	0.01860	0.00882	0.07351	0.32940	0.26702	0.18103	2.50740	1.20782	0.42047
	TE_B->Z (FR)	0.01860	0.00882	0.04452	0.32940	0.26702	0.75854	2.50740	1.20782	3.73600
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00492	0.03678	0.32940	0.13352	0.75657	2.50740	0.60392	3.84360
	TE_B->Z (RR)	0.01860	0.00492	0.07260	0.32940	0.13352	0.18079	2.50740	0.60392	0.42901
	TE_B->Z (FR)	0.01860	0.00492	0.04704	0.32940	0.13352	0.75905	2.50740	0.60392	3.73354

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	0.01551	0.03364	0.32940	0.27371	0.61878	2.50740	1.21451	3.23658
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00843	0.03572	0.32940	0.13703	0.61904	2.50740	0.60743	3.23693

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	0.00882	0.00754	0.32940	0.26702	0.00713	2.50740	1.20782	0.00701
	TE_B	0.01860	0.00882	0.01828	0.32940	0.26702	0.01108	2.50740	1.20782	0.00965
sg13g2_einvn_2	A	0.01860	0.00492	0.00373	0.32940	0.13352	0.00351	2.50740	0.60392	0.00304
	TE_B	0.01860	0.00492	0.00911	0.32940	0.13352	0.00541	2.50740	0.60392	0.00477

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	0.01551	0.00751	0.32940	0.27371	0.00841	2.50740	1.21451	0.00589
sg13g2_einvn_2	A	0.01860	0.00843	0.00390	0.32940	0.13703	0.00426	2.50740	0.60743	0.00293

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	-0.00484	0.32940	-0.00865	2.50740	-0.00587
sg13g2_einvn_2	0.01860	-0.00243	0.32940	-0.00380	2.50740	-0.00240

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	0.00484	0.32940	0.01138	2.50740	0.01459
sg13g2_einvn_2	0.01860	0.00243	0.32940	0.00577	2.50740	0.00732

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	0.00223	0.00459	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	0.11149	0.32940	0.06480	0.51323	2.50740	0.30000	1.86617

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	0.08944	0.32940	0.06480	0.46681	2.50740	0.30000	1.65120

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	-0.06063	1.26300	1.26300	-0.22666	2.50740	2.50740	-0.33863
	setup	CLK (R)	0.01860	0.01860	0.09431	1.26300	1.26300	0.32110	2.50740	2.50740	0.45737

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	-0.02906	1.26300	1.26300	-0.01619	2.50740	2.50740	-0.00623
	setup	CLK (R)	0.01860	0.01860	0.07114	1.26300	1.26300	0.07825	2.50740	2.50740	0.08295

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	0.00807	0.32940	0.06480	0.00804	2.50740	0.30000	0.00995

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	0.00651	2.50740	0.30000	0.00849

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01459	0.32940	0.01560	2.50740	0.01742

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00755	0.32940	0.02070	2.50740	0.02403

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	0.01459	0.32940	0.01560	2.50740	0.01742

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	0.00755	0.32940	0.02070	2.50740	0.02403

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00436	0.32940	0.00406	2.50740	0.00684

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00511	0.32940	0.00480	2.50740	0.00748

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	0.04353	4.80000
sg13g2_inv_8	0.02121	2.40000
sg13g2_inv_4	0.01061	1.20000
sg13g2_inv_2	0.00532	0.60000
sg13g2_inv_1	0.00273	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	0.02226	0.32940	1.03680	0.46698	2.50740	4.80000	2.62641
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.02214	0.32940	0.51840	0.46505	2.50740	2.40000	2.62484
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.02264	0.32940	0.25920	0.46478	2.50740	1.20000	2.62426
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.02401	0.32940	0.12960	0.46425	2.50740	0.60000	2.62159
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02809	0.32940	0.06480	0.46630	2.50740	0.30000	2.62262

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	0.02132	0.32940	1.03680	0.42843	2.50740	4.80000	2.45666
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.02123	0.32940	0.51840	0.42817	2.50740	2.40000	2.46064
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.02165	0.32940	0.25920	0.42796	2.50740	1.20000	2.45711
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.02279	0.32940	0.12960	0.42658	2.50740	0.60000	2.46193
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.02635	0.32940	0.06480	0.42769	2.50740	0.30000	2.45186

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	0.01796	0.32940	1.03680	0.01877	2.50740	4.80000	0.01471
sg13g2_inv_8	A	0.01860	0.00100	0.00858	0.32940	0.51840	0.00836	2.50740	2.40000	0.00763
sg13g2_inv_4	A	0.01860	0.00100	0.00434	0.32940	0.25920	0.00414	2.50740	1.20000	0.00398
sg13g2_inv_2	A	0.01860	0.00100	0.00221	0.32940	0.12960	0.00206	2.50740	0.60000	0.00171
sg13g2_inv_1	A	0.01860	0.00100	0.00132	0.32940	0.06480	0.00121	2.50740	0.30000	0.00101

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	0.01609	0.32940	1.03680	0.01743	2.50740	4.80000	-0.00312
sg13g2_inv_8	A	0.01860	0.00100	0.00770	0.32940	0.51840	0.00824	2.50740	2.40000	-0.00002
sg13g2_inv_4	A	0.01860	0.00100	0.00391	0.32940	0.25920	0.00412	2.50740	1.20000	-0.00096
sg13g2_inv_2	A	0.01860	0.00100	0.00204	0.32940	0.12960	0.00208	2.50740	0.60000	0.00117
sg13g2_inv_1	A	0.01860	0.00100	0.00138	0.32940	0.06480	0.00131	2.50740	0.30000	0.00003

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	0.01465	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	0.01660	0.03344	0.32940	0.53400	0.75775	2.50740	2.41560	3.85535
	TE_B->Z (RR)	0.01860	0.01660	0.09277	0.32940	0.53400	0.22688	2.50740	2.41560	0.57351
	TE_B->Z (FR)	0.01860	0.01660	0.04504	0.32940	0.53400	0.76155	2.50740	2.41560	3.74217

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	0.02979	0.03500	0.32940	0.54719	0.62003	2.50740	2.42879	3.24335

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	0.01660	0.01511	0.32940	0.53400	0.01434	2.50740	2.41560	0.01485
	TE_B	0.01860	0.01660	0.03649	0.32940	0.53400	0.02313	2.50740	2.41560	0.02062

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	0.02979	0.01453	0.32940	0.54719	0.01677	2.50740	2.42879	0.01176

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	-0.00795	0.32940	-0.01999	2.50740	-0.01992

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	0.00795	0.32940	0.01999	2.50740	0.02287

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	0.00202	0.00211	0.00465	0.60000
sg13g2_mux2_1	0.00199	0.00209	0.00465	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	0.14048	0.32940	0.12960	0.57350	2.50740	0.60000	2.00877
	A1->X (RR)	0.01860	0.00100	0.07531	0.32940	0.12960	0.57301	2.50740	0.60000	2.02477
	S->X (-R)	0.01860	0.00100	0.14355	0.32940	0.12960	0.57600	2.50740	0.60000	2.02968
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.11456	0.32940	0.06480	0.52776	2.50740	0.30000	1.89594
	A1->X (RR)	0.01860	0.00100	0.07726	0.32940	0.06480	0.53435	2.50740	0.30000	1.92031
	S->X (-R)	0.01860	0.00100	0.12493	0.32940	0.06480	0.53790	2.50740	0.30000	1.92670

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	0.08506	0.32940	0.12960	0.60041	2.50740	0.60000	1.92930
	A1->X (FF)	0.01860	0.00100	0.18117	0.32940	0.12960	0.61030	2.50740	0.60000	1.94534
	S->X (-F)	0.01860	0.00100	0.19602	0.32940	0.12960	0.60384	2.50740	0.60000	1.89946
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.08518	0.32940	0.06480	0.54073	2.50740	0.30000	1.79571
	A1->X (FF)	0.01860	0.00100	0.15292	0.32940	0.06480	0.55063	2.50740	0.30000	1.81400
	S->X (-F)	0.01860	0.00100	0.16498	0.32940	0.06480	0.54633	2.50740	0.30000	1.77634

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	0.14355	0.32940	0.12960	0.57600	2.50740	0.60000	2.02968
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.20121	0.32940	0.12960	0.62185	2.50740	0.60000	1.90115
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.12493	0.32940	0.06480	0.53790	2.50740	0.30000	1.92670
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.18228	0.32940	0.06480	0.58873	2.50740	0.30000	1.86386

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	0.19602	0.32940	0.12960	0.60384	2.50740	0.60000	1.89946
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.24644	0.32940	0.12960	0.65345	2.50740	0.60000	1.83263
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.16498	0.32940	0.06480	0.54633	2.50740	0.30000	1.77634
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.21529	0.32940	0.06480	0.59867	2.50740	0.30000	1.77602

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	0.01002	0.32940	0.12960	0.00987	2.50740	0.60000	0.01245
	A1	0.01860	0.00100	0.00911	0.32940	0.12960	0.01402	2.50740	0.60000	0.01652
	S	0.01860	0.00100	0.01042	0.32940	0.12960	0.01082	2.50740	0.60000	0.01196
sg13g2_mux2_1	A0	0.01860	0.00100	0.00789	0.32940	0.06480	0.00778	2.50740	0.30000	0.01052
	A1	0.01860	0.00100	0.00661	0.32940	0.06480	0.00988	2.50740	0.30000	0.01233
	S	0.01860	0.00100	0.00761	0.32940	0.06480	0.00783	2.50740	0.30000	0.00941

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	0.00854	0.32940	0.12960	0.01425	2.50740	0.60000	0.01579
	A1	0.01860	0.00100	0.01066	0.32940	0.12960	0.01079	2.50740	0.60000	0.01255
	S	0.01860	0.00100	0.00987	0.32940	0.12960	0.01056	2.50740	0.60000	0.01125
sg13g2_mux2_1	A0	0.01860	0.00100	0.00608	0.32940	0.06480	0.00977	2.50740	0.30000	0.01248
	A1	0.01860	0.00100	0.00779	0.32940	0.06480	0.00779	2.50740	0.30000	0.01002
	S	0.01860	0.00100	0.00712	0.32940	0.06480	0.00757	2.50740	0.30000	0.00878

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	0.01042	0.32940	0.12960	0.01085	2.50740	0.60000	0.01117
	S	(!A0 * A1)	0.01860	0.00100	0.01042	0.32940	0.12960	0.01082	2.50740	0.60000	0.01196
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00758	0.32940	0.06480	0.00779	2.50740	0.30000	0.00792
	S	(!A0 * A1)	0.01860	0.00100	0.00761	0.32940	0.06480	0.00783	2.50740	0.30000	0.00941

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	0.01063	0.32940	0.12960	0.01111	2.50740	0.60000	0.01048
	S	(!A0 * A1)	0.01860	0.00100	0.00987	0.32940	0.12960	0.01056	2.50740	0.60000	0.01125
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00784	0.32940	0.06480	0.00804	2.50740	0.30000	0.00754
	S	(!A0 * A1)	0.01860	0.00100	0.00712	0.32940	0.06480	0.00757	2.50740	0.30000	0.00878

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00309	0.32940	0.00293	2.50740	0.00512
sg13g2_mux2_1	0.01860	0.00309	0.32940	0.00293	2.50740	0.00512

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_2	0.01860	0.00335	0.32940	0.00314	2.50740	0.00519
sg13g2_mux2_1	0.01860	0.00335	0.32940	0.00313	2.50740	0.00520

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	0.00257	0.00255	0.00256	0.00265	0.00790	0.00475	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	0.21726	0.32940	0.06480	0.65335	2.50740	0.30000	2.18473
	A1->X (RR)	0.01860	0.00100	0.21081	0.32940	0.06480	0.64989	2.50740	0.30000	2.17924
	A2->X (RR)	0.01860	0.00100	0.22767	0.32940	0.06480	0.66704	2.50740	0.30000	2.21829
	A3->X (RR)	0.01860	0.00100	0.22174	0.32940	0.06480	0.66377	2.50740	0.30000	2.21408
	S0->X (-R)	0.01860	0.00100	0.19343	0.32940	0.06480	0.63859	2.50740	0.30000	2.15691
	S1->X (-R)	0.01860	0.00100	0.10915	0.32940	0.06480	0.53051	2.50740	0.30000	1.86854

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	0.24802	0.32940	0.06480	0.66039	2.50740	0.30000	1.96369
	A1->X (FF)	0.01860	0.00100	0.24765	0.32940	0.06480	0.66026	2.50740	0.30000	1.96325
	A2->X (FF)	0.01860	0.00100	0.26595	0.32940	0.06480	0.68245	2.50740	0.30000	2.00864
	A3->X (FF)	0.01860	0.00100	0.26478	0.32940	0.06480	0.68176	2.50740	0.30000	2.00603
	S0->X (-F)	0.01860	0.00100	0.23260	0.32940	0.06480	0.65427	2.50740	0.30000	1.98114
	S1->X (-F)	0.01860	0.00100	0.16441	0.32940	0.06480	0.56885	2.50740	0.30000	1.71954

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	0.19343	0.32940	0.06480	0.63859	2.50740	0.30000	2.15691
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.17945	0.32940	0.06480	0.61879	2.50740	0.30000	2.10149
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.28114	0.32940	0.06480	0.72173	2.50740	0.30000	2.07355
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.27075	0.32940	0.06480	0.70820	2.50740	0.30000	2.05455
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.10944	0.32940	0.06480	0.53056	2.50740	0.30000	1.86853
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.10915	0.32940	0.06480	0.53051	2.50740	0.30000	1.86854
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.14909	0.32940	0.06480	0.56608	2.50740	0.30000	1.81716
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.14856	0.32940	0.06480	0.56594	2.50740	0.30000	1.81711

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	0.23260	0.32940	0.06480	0.65427	2.50740	0.30000	1.98114
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.21137	0.32940	0.06480	0.62674	2.50740	0.30000	1.91963
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.29929	0.32940	0.06480	0.73385	2.50740	0.30000	1.97598
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.28255	0.32940	0.06480	0.71044	2.50740	0.30000	1.94665
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.13407	0.32940	0.06480	0.52928	2.50740	0.30000	1.69144
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.13392	0.32940	0.06480	0.52925	2.50740	0.30000	1.69098
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.16394	0.32940	0.06480	0.56853	2.50740	0.30000	1.71949
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.16441	0.32940	0.06480	0.56885	2.50740	0.30000	1.71954

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	0.00990	0.32940	0.06480	0.00983	2.50740	0.30000	0.01094
	A1	0.01860	0.00100	0.00949	0.32940	0.06480	0.00939	2.50740	0.30000	0.01064
	A2	0.01860	0.00100	0.01015	0.32940	0.06480	0.01007	2.50740	0.30000	0.01124
	A3	0.01860	0.00100	0.01004	0.32940	0.06480	0.00995	2.50740	0.30000	0.01084
	S0	0.01860	0.00100	0.00925	0.32940	0.06480	0.00932	2.50740	0.30000	0.00907
	S1	0.01860	0.00100	0.00619	0.32940	0.06480	0.00678	2.50740	0.30000	0.00848

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	0.00916	0.32940	0.06480	0.00924	2.50740	0.30000	0.00987
	A1	0.01860	0.00100	0.01422	0.32940	0.06480	0.01436	2.50740	0.30000	0.01497
	A2	0.01860	0.00100	0.01512	0.32940	0.06480	0.01528	2.50740	0.30000	0.01567
	A3	0.01860	0.00100	0.01433	0.32940	0.06480	0.01443	2.50740	0.30000	0.01491
	S0	0.01860	0.00100	0.00701	0.32940	0.06480	0.00694	2.50740	0.30000	0.00841
	S1	0.01860	0.00100	0.00404	0.32940	0.06480	0.00417	2.50740	0.30000	0.00564

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	0.00926	0.32940	0.06480	0.00935	2.50740	0.30000	0.00915
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00925	0.32940	0.06480	0.00932	2.50740	0.30000	0.00907
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00658	0.32940	0.06480	0.00658	2.50740	0.30000	0.00883
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00697	0.32940	0.06480	0.01414	2.50740	0.30000	0.01379
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00619	0.32940	0.06480	0.00678	2.50740	0.30000	0.00848
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00624	0.32940	0.06480	0.00685	2.50740	0.30000	0.00854
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00346	0.32940	0.06480	0.00338	2.50740	0.30000	0.00566
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00346	0.32940	0.06480	0.00339	2.50740	0.30000	0.00566

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	0.01022	0.32940	0.06480	0.01665	2.50740	0.30000	0.01382
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.00964	0.32940	0.06480	0.01698	2.50740	0.30000	0.01391
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00701	0.32940	0.06480	0.00694	2.50740	0.30000	0.00841
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00619	0.32940	0.06480	0.00626	2.50740	0.30000	0.00787
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00629	0.32940	0.06480	0.00699	2.50740	0.30000	0.00862
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.00637	0.32940	0.06480	0.00708	2.50740	0.30000	0.00868
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00382	0.32940	0.06480	0.00392	2.50740	0.30000	0.00557
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00404	0.32940	0.06480	0.00417	2.50740	0.30000	0.00564

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00726	0.32940	0.00683	2.50740	0.01201

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.01036	0.32940	0.00995	2.50740	0.01223

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	0.00636	0.32940	0.00604	2.50740	0.01137
	(A0 * A1 * !S1)	0.01860	0.00707	0.32940	0.01405	2.50740	0.01667
	(!A2 * !A3 * S1)	0.01860	0.00646	0.32940	0.00614	2.50740	0.01144
	(!A0 * !A1 * !S1)	0.01860	0.00726	0.32940	0.00683	2.50740	0.01201

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	0.00993	0.32940	0.00942	2.50740	0.01173
	(A0 * A1 * !S1)	0.01860	0.01036	0.32940	0.00995	2.50740	0.01223
	(!A2 * !A3 * S1)	0.01860	0.00983	0.32940	0.00934	2.50740	0.01159
	(!A0 * !A1 * !S1)	0.01860	0.00769	0.32940	0.01459	2.50740	0.01708

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00327	0.32940	0.00322	2.50740	0.00609

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00321	0.32940	0.00313	2.50740	0.00586

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	0.00258	0.32940	0.00247	2.50740	0.00533
	(A0 * A2 * !S0)	0.01860	0.00258	0.32940	0.00247	2.50740	0.00533
	(!A1 * !A3 * S0)	0.01860	0.00327	0.32940	0.00322	2.50740	0.00609
	(!A0 * !A2 * !S0)	0.01860	0.00331	0.32940	0.00327	2.50740	0.00612

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	0.00249	2.50740	0.00519
	(A0 * A2 * !S0)	0.01860	0.00245	0.32940	0.00249	2.50740	0.00519
	(!A1 * !A3 * S0)	0.01860	0.00321	0.32940	0.00313	2.50740	0.00586
	(!A0 * !A2 * !S0)	0.01860	0.00324	0.32940	0.00317	2.50740	0.00589

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	0.00216	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	0.07590	0.32940	0.06480	0.48074	2.50740	0.30000	1.81439
	B->Y (FR)	0.01860	0.00100	0.03477	0.32940	0.06480	0.47387	2.50740	0.30000	2.63393

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	0.09335	0.32940	0.06480	0.64701	2.50740	0.30000	2.47508
	B->Y (RF)	0.01860	0.00100	0.05545	0.32940	0.06480	0.62638	2.50740	0.30000	3.16889

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	0.00164	0.32940	0.06480	0.00170	2.50740	0.30000	0.00130
	B	0.01860	0.00100	0.00149	0.32940	0.06480	0.00119	2.50740	0.30000	0.00101

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	0.00343	2.50740	0.30000	0.00258
	B	0.01860	0.00100	0.00346	0.32940	0.06480	0.00338	2.50740	0.30000	0.00247

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	0.00314	0.32940	0.00303	2.50740	0.00529

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	0.00187	0.32940	0.00177	2.50740	0.00389

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	0.00314	0.32940	0.00303	2.50740	0.00529

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	0.00187	0.32940	0.00177	2.50740	0.00389

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	0.00512	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	0.10049	0.32940	0.12960	0.52866	2.50740	0.60000	1.95211
	B->Y (FR)	0.01860	0.00100	0.02568	0.32940	0.12960	0.46655	2.50740	0.60000	2.62587

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	0.12947	0.32940	0.12960	0.73120	2.50740	0.60000	2.75362
	B->Y (RF)	0.01860	0.00100	0.04125	0.32940	0.12960	0.63756	2.50740	0.60000	3.30265

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	0.00308	0.32940	0.12960	0.00295	2.50740	0.60000	0.00275
	B	0.01860	0.00100	0.00368	0.32940	0.12960	0.00336	2.50740	0.60000	0.00301

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	0.00705	0.32940	0.12960	0.00729	2.50740	0.60000	0.00674
	B	0.01860	0.00100	0.00552	0.32940	0.12960	0.00541	2.50740	0.60000	0.00403

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	0.00524	0.32940	0.00502	2.50740	0.00687

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	0.00459	0.32940	0.00444	2.50740	0.00627

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	0.00524	0.32940	0.00502	2.50740	0.00687

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	0.00459	0.32940	0.00444	2.50740	0.00627

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	0.00527	0.00535	0.60000
sg13g2_nand2_1	0.00279	0.00283	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	0.02760	0.32940	0.12960	0.46831	2.50740	0.60000	2.62755
	B->Y (FR)	0.01860	0.00100	0.03316	0.32940	0.12960	0.47442	2.50740	0.60000	2.63632
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.03092	0.32940	0.06480	0.46847	2.50740	0.30000	2.62659
	B->Y (FR)	0.01860	0.00100	0.03564	0.32940	0.06480	0.47350	2.50740	0.30000	2.63081

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	0.03905	0.32940	0.12960	0.63686	2.50740	0.60000	3.30032
	B->Y (RF)	0.01860	0.00100	0.04800	0.32940	0.12960	0.64118	2.50740	0.60000	3.25092
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.04314	0.32940	0.06480	0.61930	2.50740	0.30000	3.23128
	B->Y (RF)	0.01860	0.00100	0.04991	0.32940	0.06480	0.62088	2.50740	0.30000	3.16941

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	0.00249	0.32940	0.12960	0.00229	2.50740	0.60000	0.00175
	B	0.01860	0.00100	0.00334	0.32940	0.12960	0.00272	2.50740	0.60000	0.00248
sg13g2_nand2_1	A	0.01860	0.00100	0.00141	0.32940	0.06480	0.00124	2.50740	0.30000	0.00100
	B	0.01860	0.00100	0.00151	0.32940	0.06480	0.00120	2.50740	0.30000	0.00086

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	0.00378	0.32940	0.12960	0.00375	2.50740	0.60000	0.00226
	B	0.01860	0.00100	0.00631	0.32940	0.12960	0.00618	2.50740	0.60000	0.00480
sg13g2_nand2_1	A	0.01860	0.00100	0.00204	0.32940	0.06480	0.00194	2.50740	0.30000	0.00161
	B	0.01860	0.00100	0.00332	0.32940	0.06480	0.00319	2.50740	0.30000	0.00255

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	0.00209	0.00282	0.00282	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	0.08077	0.32940	0.06480	0.48329	2.50740	0.30000	1.81024
	B->Y (FR)	0.01860	0.00100	0.04016	0.32940	0.06480	0.47903	2.50740	0.30000	2.64027
	C->Y (FR)	0.01860	0.00100	0.04372	0.32940	0.06480	0.48399	2.50740	0.30000	2.64346

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	0.11668	0.32940	0.06480	0.86477	2.50740	0.30000	3.41677
	B->Y (RF)	0.01860	0.00100	0.08773	0.32940	0.06480	0.84830	2.50740	0.30000	4.06286
	C->Y (RF)	0.01860	0.00100	0.09594	0.32940	0.06480	0.84965	2.50740	0.30000	3.95862

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	0.00178	0.32940	0.06480	0.00179	2.50740	0.30000	0.00127
	B	0.01860	0.00100	0.00184	0.32940	0.06480	0.00153	2.50740	0.30000	0.00141
	C	0.01860	0.00100	0.00213	0.32940	0.06480	0.00173	2.50740	0.30000	0.00149

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	0.00457	2.50740	0.30000	0.00403
	B	0.01860	0.00100	0.00449	0.32940	0.06480	0.00437	2.50740	0.30000	0.00367
	C	0.01860	0.00100	0.00576	0.32940	0.06480	0.00565	2.50740	0.30000	0.00511

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	0.00318	0.32940	0.00305	2.50740	0.00532

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	0.00175	0.32940	0.00165	2.50740	0.00377

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	0.00318	0.32940	0.00305	2.50740	0.00532

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	0.00175	0.32940	0.00165	2.50740	0.00377

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	0.00265	0.00275	0.00271	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	38.61280	251.52000	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	0.03564	0.32940	0.06480	0.47317	2.50740	0.30000	2.63428
	B->Y (FR)	0.01860	0.00100	0.04097	0.32940	0.06480	0.47904	2.50740	0.30000	2.63812
	C->Y (FR)	0.01860	0.00100	0.04379	0.32940	0.06480	0.48394	2.50740	0.30000	2.64338

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	0.06811	0.32940	0.06480	0.82913	2.50740	0.30000	4.07175
	B->Y (RF)	0.01860	0.00100	0.08175	0.32940	0.06480	0.84131	2.50740	0.30000	4.06450
	C->Y (RF)	0.01860	0.00100	0.08829	0.32940	0.06480	0.84037	2.50740	0.30000	3.95455

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	0.00168	0.32940	0.06480	0.00150	2.50740	0.30000	0.00141
	B	0.01860	0.00100	0.00185	0.32940	0.06480	0.00153	2.50740	0.30000	0.00128
	C	0.01860	0.00100	0.00214	0.32940	0.06480	0.00175	2.50740	0.30000	0.00146

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	0.00305	0.32940	0.06480	0.00293	2.50740	0.30000	0.00244
	B	0.01860	0.00100	0.00435	0.32940	0.06480	0.00417	2.50740	0.30000	0.00371
	C	0.01860	0.00100	0.00543	0.32940	0.06480	0.00529	2.50740	0.30000	0.00495

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	0.00263	0.00272	0.00272	0.00271	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	39.16620	184.39200	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	0.03739	0.32940	0.06480	0.47511	2.50740	0.30000	2.63191
	B->Y (FR)	0.01860	0.00100	0.04310	0.32940	0.06480	0.48153	2.50740	0.30000	2.63854
	C->Y (FR)	0.01860	0.00100	0.04630	0.32940	0.06480	0.48666	2.50740	0.30000	2.64492
	D->Y (FR)	0.01860	0.00100	0.04733	0.32940	0.06480	0.49140	2.50740	0.30000	2.65028

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	0.08968	0.32940	0.06480	1.04053	2.50740	0.30000	4.94861
	B->Y (RF)	0.01860	0.00100	0.11134	0.32940	0.06480	1.06239	2.50740	0.30000	4.96845
	C->Y (RF)	0.01860	0.00100	0.12371	0.32940	0.06480	1.06968	2.50740	0.30000	4.88012
	D->Y (RF)	0.01860	0.00100	0.12963	0.32940	0.06480	1.07322	2.50740	0.30000	4.79624

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	0.00159	0.32940	0.06480	0.00143	2.50740	0.30000	0.00101
	B	0.01860	0.00100	0.00183	0.32940	0.06480	0.00155	2.50740	0.30000	0.00114
	C	0.01860	0.00100	0.00210	0.32940	0.06480	0.00171	2.50740	0.30000	0.00132
	D	0.01860	0.00100	0.00229	0.32940	0.06480	0.00191	2.50740	0.30000	0.00150

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	0.00365	0.32940	0.06480	0.00354	2.50740	0.30000	0.00314
	B	0.01860	0.00100	0.00495	0.32940	0.06480	0.00477	2.50740	0.30000	0.00432
	C	0.01860	0.00100	0.00605	0.32940	0.06480	0.00590	2.50740	0.30000	0.00537
	D	0.01860	0.00100	0.00713	0.32940	0.06480	0.00698	2.50740	0.30000	0.00657

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	0.00538	0.00253	0.60000
sg13g2_nor2b_1	0.00278	0.00213	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	0.04442	0.32940	0.12960	0.76546	2.50740	0.60000	3.84763
	B_N->Y (RR)	0.01860	0.00100	0.11667	0.32940	0.12960	0.83991	2.50740	0.60000	3.33892
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.05205	0.32940	0.06480	0.76774	2.50740	0.30000	3.85559
	B_N->Y (RR)	0.01860	0.00100	0.10633	0.32940	0.06480	0.80939	2.50740	0.30000	3.24941

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	0.02611	0.32940	0.12960	0.43930	2.50740	0.60000	2.49891
	B_N->Y (FF)	0.01860	0.00100	0.10333	0.32940	0.12960	0.49352	2.50740	0.60000	1.71480
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.02868	0.32940	0.06480	0.43012	2.50740	0.30000	2.45468
	B_N->Y (FF)	0.01860	0.00100	0.08690	0.32940	0.06480	0.45073	2.50740	0.30000	1.58057

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	0.00356	0.32940	0.12960	0.00358	2.50740	0.60000	0.00260
	B_N	0.01860	0.00100	0.00735	0.32940	0.12960	0.00736	2.50740	0.60000	0.00678
sg13g2_nor2b_1	A	0.01860	0.00100	0.00181	0.32940	0.06480	0.00177	2.50740	0.30000	0.00151
	B_N	0.01860	0.00100	0.00379	0.32940	0.06480	0.00372	2.50740	0.30000	0.00354

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	0.00246	0.32940	0.12960	0.00243	2.50740	0.60000	-0.00011
	B_N	0.01860	0.00100	0.00352	0.32940	0.12960	0.00327	2.50740	0.60000	0.00224
sg13g2_nor2b_1	A	0.01860	0.00100	0.00158	0.32940	0.06480	0.00151	2.50740	0.30000	0.00019
	B_N	0.01860	0.00100	0.00193	0.32940	0.06480	0.00181	2.50740	0.30000	0.00143

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	0.00495	0.32940	0.00478	2.50740	0.00727
sg13g2_nor2b_1	0.01860	0.00292	0.32940	0.00281	2.50740	0.00503

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	0.00497	0.32940	0.00478	2.50740	0.00695
sg13g2_nor2b_1	0.01860	0.00298	0.32940	0.00286	2.50740	0.00487

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	0.00495	0.32940	0.00478	2.50740	0.00727
sg13g2_nor2b_1	A	0.01860	0.00292	0.32940	0.00281	2.50740	0.00503

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	0.00497	0.32940	0.00478	2.50740	0.00695
sg13g2_nor2b_1	A	0.01860	0.00298	0.32940	0.00286	2.50740	0.00487

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	0.00543	0.00531	0.30000
sg13g2_nor2_1	0.00284	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	0.05700	0.32940	0.06480	0.47308	2.50740	0.30000	2.37925
	B->Y (FR)	0.01860	0.00100	0.04504	0.32940	0.06480	0.47163	2.50740	0.30000	2.50133
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.06106	0.32940	0.06480	0.76438	2.50740	0.30000	3.73183
	B->Y (FR)	0.01860	0.00100	0.05223	0.32940	0.06480	0.76718	2.50740	0.30000	3.84549

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	0.03085	0.32940	0.06480	0.31590	2.50740	0.30000	1.81069
	B->Y (RF)	0.01860	0.00100	0.02578	0.32940	0.06480	0.31005	2.50740	0.30000	1.80567
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.03320	0.32940	0.06480	0.43618	2.50740	0.30000	2.46354
	B->Y (RF)	0.01860	0.00100	0.02877	0.32940	0.06480	0.43011	2.50740	0.30000	2.45461

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	0.00691	0.32940	0.06480	0.00669	2.50740	0.30000	0.00658
	B	0.01860	0.00100	0.00364	0.32940	0.06480	0.00360	2.50740	0.30000	0.00353
sg13g2_nor2_1	A	0.01860	0.00100	0.00341	0.32940	0.06480	0.00329	2.50740	0.30000	0.00303
	B	0.01860	0.00100	0.00181	0.32940	0.06480	0.00177	2.50740	0.30000	0.00132

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	0.00355	0.32940	0.06480	0.00295	2.50740	0.30000	0.00334
	B	0.01860	0.00100	0.00241	0.32940	0.06480	0.00244	2.50740	0.30000	0.00305
sg13g2_nor2_1	A	0.01860	0.00100	0.00175	0.32940	0.06480	0.00151	2.50740	0.30000	0.00035
	B	0.01860	0.00100	0.00158	0.32940	0.06480	0.00151	2.50740	0.30000	0.00017

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	0.00539	0.00538	0.00529	0.60000
sg13g2_nor3_1	0.00285	0.00286	0.00277	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	0.10448	0.32940	0.12960	1.10441	2.50740	0.60000	4.99275
	B->Y (FR)	0.01860	0.00100	0.09748	0.32940	0.12960	1.10501	2.50740	0.60000	5.13924
	C->Y (FR)	0.01860	0.00100	0.07068	0.32940	0.12960	1.08167	2.50740	0.60000	5.18159
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.11472	0.32940	0.06480	1.10280	2.50740	0.30000	4.98296
	B->Y (FR)	0.01860	0.00100	0.10811	0.32940	0.06480	1.10359	2.50740	0.30000	5.12639
	C->Y (FR)	0.01860	0.00100	0.08569	0.32940	0.06480	1.08559	2.50740	0.30000	5.17361

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	0.03456	0.32940	0.12960	0.44516	2.50740	0.60000	2.47455
	B->Y (RF)	0.01860	0.00100	0.03418	0.32940	0.12960	0.44005	2.50740	0.60000	2.46816
	C->Y (RF)	0.01860	0.00100	0.02852	0.32940	0.12960	0.43275	2.50740	0.60000	2.46143
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.03706	0.32940	0.06480	0.43330	2.50740	0.30000	2.42626
	B->Y (RF)	0.01860	0.00100	0.03639	0.32940	0.06480	0.42936	2.50740	0.30000	2.42102
	C->Y (RF)	0.01860	0.00100	0.03149	0.32940	0.06480	0.42392	2.50740	0.30000	2.41477

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	0.01116	0.32940	0.12960	0.01097	2.50740	0.60000	0.01051
	B	0.01860	0.00100	0.00840	0.32940	0.12960	0.00818	2.50740	0.60000	0.00775
	C	0.01860	0.00100	0.00519	0.32940	0.12960	0.00510	2.50740	0.60000	0.00462
sg13g2_nor3_1	A	0.01860	0.00100	0.00577	0.32940	0.06480	0.00564	2.50740	0.30000	0.00530
	B	0.01860	0.00100	0.00439	0.32940	0.06480	0.00424	2.50740	0.30000	0.00388
	C	0.01860	0.00100	0.00285	0.32940	0.06480	0.00276	2.50740	0.30000	0.00242

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	0.00437	0.32940	0.12960	0.00379	2.50740	0.60000	0.00149
	B	0.01860	0.00100	0.00386	0.32940	0.12960	0.00344	2.50740	0.60000	0.00116
	C	0.01860	0.00100	0.00263	0.32940	0.12960	0.00272	2.50740	0.60000	0.00067
sg13g2_nor3_1	A	0.01860	0.00100	0.00224	0.32940	0.06480	0.00189	2.50740	0.30000	0.00101
	B	0.01860	0.00100	0.00205	0.32940	0.06480	0.00177	2.50740	0.30000	0.00069
	C	0.01860	0.00100	0.00169	0.32940	0.06480	0.00167	2.50740	0.30000	0.00052

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	0.00538	0.00531	0.00472	0.00485	0.60000
sg13g2_nor4_1	0.00281	0.00281	0.00249	0.00253	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	0.16838	0.32940	0.12960	1.46878	2.50740	0.60000	6.35218
	B->Y (FR)	0.01860	0.00100	0.16208	0.32940	0.12960	1.46504	2.50740	0.60000	6.45312
	C->Y (FR)	0.01860	0.00100	0.14032	0.32940	0.12960	1.44392	2.50740	0.60000	6.54844
	D->Y (FR)	0.01860	0.00100	0.09685	0.32940	0.12960	1.40361	2.50740	0.60000	6.55354
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.17662	0.32940	0.06480	1.46118	2.50740	0.30000	6.32517
	B->Y (FR)	0.01860	0.00100	0.17082	0.32940	0.06480	1.45798	2.50740	0.30000	6.42938
	C->Y (FR)	0.01860	0.00100	0.15099	0.32940	0.06480	1.43949	2.50740	0.30000	6.52805
	D->Y (FR)	0.01860	0.00100	0.11121	0.32940	0.06480	1.40191	2.50740	0.30000	6.53198

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	0.03646	0.32940	0.12960	0.45034	2.50740	0.60000	2.48424
	B->Y (RF)	0.01860	0.00100	0.03787	0.32940	0.12960	0.44751	2.50740	0.60000	2.47911
	C->Y (RF)	0.01860	0.00100	0.03657	0.32940	0.12960	0.44166	2.50740	0.60000	2.47416
	D->Y (RF)	0.01860	0.00100	0.03083	0.32940	0.12960	0.43464	2.50740	0.60000	2.46418
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.03971	0.32940	0.06480	0.45003	2.50740	0.30000	2.48192
	B->Y (RF)	0.01860	0.00100	0.04095	0.32940	0.06480	0.44792	2.50740	0.30000	2.48034
	C->Y (RF)	0.01860	0.00100	0.03932	0.32940	0.06480	0.44218	2.50740	0.30000	2.47950
	D->Y (RF)	0.01860	0.00100	0.03366	0.32940	0.06480	0.43568	2.50740	0.30000	2.46764

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	0.01491	0.32940	0.12960	0.01462	2.50740	0.60000	0.01451
	B	0.01860	0.00100	0.01235	0.32940	0.12960	0.01209	2.50740	0.60000	0.01157
	C	0.01860	0.00100	0.00995	0.32940	0.12960	0.00962	2.50740	0.60000	0.00908
	D	0.01860	0.00100	0.00555	0.32940	0.12960	0.00536	2.50740	0.60000	0.00522
sg13g2_nor4_1	A	0.01860	0.00100	0.00742	0.32940	0.06480	0.00726	2.50740	0.30000	0.00710
	B	0.01860	0.00100	0.00614	0.32940	0.06480	0.00599	2.50740	0.30000	0.00584
	C	0.01860	0.00100	0.00506	0.32940	0.06480	0.00490	2.50740	0.30000	0.00462
	D	0.01860	0.00100	0.00300	0.32940	0.06480	0.00286	2.50740	0.30000	0.00268

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	0.00529	0.32940	0.12960	0.00456	2.50740	0.60000	0.00270
	B	0.01860	0.00100	0.00476	0.32940	0.12960	0.00426	2.50740	0.60000	0.00216
	C	0.01860	0.00100	0.00302	0.32940	0.12960	0.00252	2.50740	0.60000	0.00061
	D	0.01860	0.00100	0.00046	0.32940	0.12960	0.00047	2.50740	0.60000	-0.00149
sg13g2_nor4_1	A	0.01860	0.00100	0.00261	0.32940	0.06480	0.00225	2.50740	0.30000	0.00119
	B	0.01860	0.00100	0.00243	0.32940	0.06480	0.00217	2.50740	0.30000	0.00114
	C	0.01860	0.00100	0.00161	0.32940	0.06480	0.00133	2.50740	0.30000	0.00075
	D	0.01860	0.00100	0.00046	0.32940	0.06480	0.00040	2.50740	0.30000	-0.00058

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00014	0.32940	-0.00009	2.50740	-0.00017
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	0.00028	2.50740	0.00028
sg13g2_nor4_1	0.01860	0.00006	0.32940	0.00007	2.50740	0.00007

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	0.00014	0.32940	-0.00009	2.50740	-0.00017
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	0.00028	2.50740	0.00028
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00006	0.32940	0.00007	2.50740	0.00007

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	-0.00006	2.50740	-0.00013
sg13g2_nor4_1	0.01860	0.00019	0.32940	0.00006	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	0.00020
sg13g2_nor4_1	0.01860	-0.00000	0.32940	0.00001	2.50740	0.00001

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	-0.00006	2.50740	-0.00013
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00019	0.32940	0.00006	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	0.00020
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00000	0.32940	0.00001	2.50740	0.00001

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	0.00090	2.50740	0.00091
sg13g2_nor4_1	0.01860	0.00057	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	-0.00014	2.50740	-0.00014
sg13g2_nor4_1	0.01860	-0.00026	0.32940	-0.00026	2.50740	-0.00026

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	0.00090	2.50740	0.00091
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00057	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	-0.00014	2.50740	-0.00014
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00026	0.32940	-0.00026	2.50740	-0.00026

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00226	0.32940	0.00228	2.50740	0.00228
sg13g2_nor4_1	0.01860	0.00124	0.32940	0.00125	2.50740	0.00125

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_2	0.01860	0.00108	0.32940	0.00110	2.50740	0.00113
sg13g2_nor4_1	0.01860	0.00026	0.32940	0.00026	2.50740	0.00028

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	0.00226	0.32940	0.00228	2.50740	0.00228
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00124	0.32940	0.00125	2.50740	0.00125

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	0.00108	0.32940	0.00110	2.50740	0.00113
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00026	0.32940	0.00026	2.50740	0.00028

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	0.00121

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	3.56276	3.56276	3.56276

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	-0.00020	0.32940	-0.00020	2.50740	-0.00020

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00020	0.32940	0.00020	2.50740	0.00020

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	0.00311	0.00315	0.00291	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	0.09665	0.32940	0.06480	0.90039	2.50740	0.30000	4.19923
	A2->Y (FR)	0.01860	0.00100	0.08568	0.32940	0.06480	0.89992	2.50740	0.30000	4.33980
	B1->Y (FR)	0.01860	0.00100	0.03627	0.32940	0.06480	0.52714	2.50740	0.30000	2.86858

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	0.06881	0.32940	0.06480	0.64438	2.50740	0.30000	3.15651
	A2->Y (RF)	0.01860	0.00100	0.05758	0.32940	0.06480	0.63110	2.50740	0.30000	3.13963
	B1->Y (RF)	0.01860	0.00100	0.05765	0.32940	0.06480	0.64015	2.50740	0.30000	3.23243

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	0.03627	0.32940	0.06480	0.52714	2.50740	0.30000	2.86858
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.03554	0.32940	0.06480	0.52574	2.50740	0.30000	2.86070

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	0.05765	0.32940	0.06480	0.64015	2.50740	0.30000	3.23243
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.04407	0.32940	0.06480	0.62211	2.50740	0.30000	3.20915

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	0.00372	0.32940	0.06480	0.00361	2.50740	0.30000	0.00335
	A2	0.01860	0.00100	0.00204	0.32940	0.06480	0.00193	2.50740	0.30000	0.00177
	B1	0.01860	0.00100	0.00102	0.32940	0.06480	0.00095	2.50740	0.30000	0.00026

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	0.00402	0.32940	0.06480	0.00376	2.50740	0.30000	0.00312
	A2	0.01860	0.00100	0.00372	0.32940	0.06480	0.00373	2.50740	0.30000	0.00309
	B1	0.01860	0.00100	0.00187	0.32940	0.06480	0.00182	2.50740	0.30000	0.00134

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	0.00270	0.32940	0.06480	0.00263	2.50740	0.30000	0.00220
	B1	(!A1 * A2)	0.01860	0.00100	0.00102	0.32940	0.06480	0.00095	2.50740	0.30000	0.00026

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	0.00231	0.32940	0.06480	0.00216	2.50740	0.30000	0.00167
	B1	(!A1 * A2)	0.01860	0.00100	0.00187	0.32940	0.06480	0.00182	2.50740	0.30000	0.00134

Passive power(pJ) for A1 rising :

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

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	0.00030	2.50740	0.00026

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	-0.00016	0.32940	-0.00017	2.50740	-0.00017

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	0.00030	2.50740	0.00026

Passive power(pJ) for A2 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_o21ai_1	0.01860	-0.00011	0.32940	-0.00013	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	0.00034	0.32940	0.00025	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	-0.00011	0.32940	-0.00013	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	0.00034	0.32940	0.00025	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	0.00018	2.50740	0.00019

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	0.00049	2.50740	0.00050

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	0.00018	2.50740	0.00019

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	0.00049	2.50740	0.00050

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	0.00216	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	0.09930	0.32940	0.12960	0.53842	2.50740	0.60000	1.99874
	B->X (RR)	0.01860	0.00100	0.09281	0.32940	0.12960	0.52616	2.50740	0.60000	1.95289
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.08266	0.32940	0.06480	0.49839	2.50740	0.30000	1.87497
	B->X (RR)	0.01860	0.00100	0.07598	0.32940	0.06480	0.48286	2.50740	0.30000	1.81614

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	0.18247	0.32940	0.12960	0.58579	2.50740	0.60000	1.85785
	B->X (FF)	0.01860	0.00100	0.17371	0.32940	0.12960	0.58571	2.50740	0.60000	1.87750
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.14086	0.32940	0.06480	0.51426	2.50740	0.30000	1.69638
	B->X (FF)	0.01860	0.00100	0.13164	0.32940	0.06480	0.50956	2.50740	0.30000	1.69359

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	0.00789	0.32940	0.12960	0.00787	2.50740	0.60000	0.00920
	B	0.01860	0.00100	0.00772	0.32940	0.12960	0.00772	2.50740	0.60000	0.00933
sg13g2_or2_1	A	0.01860	0.00100	0.00493	0.32940	0.06480	0.00476	2.50740	0.30000	0.00682
	B	0.01860	0.00100	0.00472	0.32940	0.06480	0.00457	2.50740	0.30000	0.00641

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	0.00887	0.32940	0.12960	0.00880	2.50740	0.60000	0.00962
	B	0.01860	0.00100	0.00777	0.32940	0.12960	0.00776	2.50740	0.60000	0.00897
sg13g2_or2_1	A	0.01860	0.00100	0.00591	0.32940	0.06480	0.00592	2.50740	0.30000	0.00675
	B	0.01860	0.00100	0.00483	0.32940	0.06480	0.00481	2.50740	0.30000	0.00630

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	0.00241	0.00236	0.00226	0.60000
sg13g2_or3_1	0.00241	0.00236	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	0.11316	0.32940	0.12960	0.56338	2.50740	0.60000	2.08539
	B->X (RR)	0.01860	0.00100	0.10759	0.32940	0.12960	0.55226	2.50740	0.60000	2.04300
	C->X (RR)	0.01860	0.00100	0.09935	0.32940	0.12960	0.53916	2.50740	0.60000	1.99524
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.09685	0.32940	0.06480	0.52775	2.50740	0.30000	1.97453
	B->X (RR)	0.01860	0.00100	0.09181	0.32940	0.06480	0.51481	2.50740	0.30000	1.92400
	C->X (RR)	0.01860	0.00100	0.08342	0.32940	0.06480	0.49743	2.50740	0.30000	1.86692

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	0.25496	0.32940	0.12960	0.67311	2.50740	0.60000	1.91048
	B->X (FF)	0.01860	0.00100	0.24745	0.32940	0.12960	0.67045	2.50740	0.60000	1.95901
	C->X (FF)	0.01860	0.00100	0.22775	0.32940	0.12960	0.65371	2.50740	0.60000	1.95747
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.20395	0.32940	0.06480	0.58786	2.50740	0.30000	1.76557
	B->X (FF)	0.01860	0.00100	0.19646	0.32940	0.06480	0.58379	2.50740	0.30000	1.78771
	C->X (FF)	0.01860	0.00100	0.17617	0.32940	0.06480	0.56584	2.50740	0.30000	1.77115

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	0.00821	0.32940	0.12960	0.00818	2.50740	0.60000	0.00979
	B	0.01860	0.00100	0.00793	0.32940	0.12960	0.00789	2.50740	0.60000	0.00957
	C	0.01860	0.00100	0.00777	0.32940	0.12960	0.00785	2.50740	0.60000	0.00931
sg13g2_or3_1	A	0.01860	0.00100	0.00525	0.32940	0.06480	0.00507	2.50740	0.30000	0.00667
	B	0.01860	0.00100	0.00498	0.32940	0.06480	0.00478	2.50740	0.30000	0.00660
	C	0.01860	0.00100	0.00480	0.32940	0.06480	0.00457	2.50740	0.30000	0.00666

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	0.01136	0.32940	0.12960	0.01156	2.50740	0.60000	0.01074
	B	0.01860	0.00100	0.01017	0.32940	0.12960	0.01028	2.50740	0.60000	0.01051
	C	0.01860	0.00100	0.00890	0.32940	0.12960	0.00886	2.50740	0.60000	0.00962
sg13g2_or3_1	A	0.01860	0.00100	0.00834	0.32940	0.06480	0.00838	2.50740	0.30000	0.00892
	B	0.01860	0.00100	0.00713	0.32940	0.06480	0.00710	2.50740	0.30000	0.00766
	C	0.01860	0.00100	0.00581	0.32940	0.06480	0.00580	2.50740	0.30000	0.00706

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	0.00234	0.00204	0.00208	0.60000
sg13g2_or4_1	0.00239	0.00234	0.00204	0.00208	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	0.11802	0.32940	0.12960	0.57408	2.50740	0.60000	2.12668
	B->X (RR)	0.01860	0.00100	0.11548	0.32940	0.12960	0.56661	2.50740	0.60000	2.09073
	C->X (RR)	0.01860	0.00100	0.10917	0.32940	0.12960	0.55517	2.50740	0.60000	2.03983
	D->X (RR)	0.01860	0.00100	0.10042	0.32940	0.12960	0.53998	2.50740	0.60000	1.99806
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.10145	0.32940	0.06480	0.54117	2.50740	0.30000	2.02272
	B->X (RR)	0.01860	0.00100	0.09954	0.32940	0.06480	0.53205	2.50740	0.30000	1.98067
	C->X (RR)	0.01860	0.00100	0.09358	0.32940	0.06480	0.51890	2.50740	0.30000	1.93003
	D->X (RR)	0.01860	0.00100	0.08487	0.32940	0.06480	0.50139	2.50740	0.30000	1.87324

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	0.35014	0.32940	0.12960	0.79789	2.50740	0.60000	2.02828
	B->X (FF)	0.01860	0.00100	0.34335	0.32940	0.12960	0.79113	2.50740	0.60000	2.07072
	C->X (FF)	0.01860	0.00100	0.32349	0.32940	0.12960	0.77258	2.50740	0.60000	2.09614
	D->X (FF)	0.01860	0.00100	0.28877	0.32940	0.12960	0.73928	2.50740	0.60000	2.07919
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.28290	0.32940	0.06480	0.68971	2.50740	0.30000	1.87352
	B->X (FF)	0.01860	0.00100	0.27613	0.32940	0.06480	0.68283	2.50740	0.30000	1.89773
	C->X (FF)	0.01860	0.00100	0.25618	0.32940	0.06480	0.66331	2.50740	0.30000	1.90840
	D->X (FF)	0.01860	0.00100	0.22081	0.32940	0.06480	0.62865	2.50740	0.30000	1.87622

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	0.00858	0.32940	0.12960	0.00849	2.50740	0.60000	0.01003
	B	0.01860	0.00100	0.00829	0.32940	0.12960	0.00832	2.50740	0.60000	0.00997
	C	0.01860	0.00100	0.00759	0.32940	0.12960	0.00755	2.50740	0.60000	0.00802
	D	0.01860	0.00100	0.00675	0.32940	0.12960	0.00654	2.50740	0.60000	0.00830
sg13g2_or4_1	A	0.01860	0.00100	0.00561	0.32940	0.06480	0.00551	2.50740	0.30000	0.00710
	B	0.01860	0.00100	0.00533	0.32940	0.06480	0.00520	2.50740	0.30000	0.00671
	C	0.01860	0.00100	0.00463	0.32940	0.06480	0.00445	2.50740	0.30000	0.00617
	D	0.01860	0.00100	0.00376	0.32940	0.06480	0.00356	2.50740	0.30000	0.00542

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	0.01247	0.32940	0.12960	0.01247	2.50740	0.60000	0.01115
	B	0.01860	0.00100	0.01185	0.32940	0.12960	0.01180	2.50740	0.60000	0.01076
	C	0.01860	0.00100	0.01077	0.32940	0.12960	0.01072	2.50740	0.60000	0.01018
	D	0.01860	0.00100	0.00871	0.32940	0.12960	0.00865	2.50740	0.60000	0.00847
sg13g2_or4_1	A	0.01860	0.00100	0.00923	0.32940	0.06480	0.00931	2.50740	0.30000	0.00953
	B	0.01860	0.00100	0.00859	0.32940	0.06480	0.00866	2.50740	0.30000	0.00901
	C	0.01860	0.00100	0.00750	0.32940	0.06480	0.00751	2.50740	0.30000	0.00828
	D	0.01860	0.00100	0.00544	0.32940	0.06480	0.00535	2.50740	0.30000	0.00700

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00005	0.32940	-0.00005	2.50740	-0.00008
sg13g2_or4_1	0.01860	0.00005	0.32940	-0.00005	2.50740	-0.00008

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	0.00051	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	0.00005	0.32940	-0.00005	2.50740	-0.00008
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00005	0.32940	-0.00005	2.50740	-0.00008

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	0.00051	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	0.00040	0.32940	0.00042	2.50740	0.00042
sg13g2_or4_1	0.01860	0.00040	0.32940	0.00042	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	-0.00013
sg13g2_or4_1	0.01860	-0.00013	0.32940	-0.00014	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	0.00040	0.32940	0.00042	2.50740	0.00042
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00040	0.32940	0.00042	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	-0.00013
sg13g2_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00013	0.32940	-0.00014	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	0.00102	0.32940	0.00105	2.50740	0.00105
sg13g2_or4_1	0.01860	0.00103	0.32940	0.00105	2.50740	0.00105

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_2	0.01860	0.00062	0.32940	0.00060	2.50740	0.00062
sg13g2_or4_1	0.01860	0.00061	0.32940	0.00060	2.50740	0.00062

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	0.00102	0.32940	0.00105	2.50740	0.00105
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00103	0.32940	0.00105	2.50740	0.00105

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	0.00062	0.32940	0.00060	2.50740	0.00062
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00061	0.32940	0.00060	2.50740	0.00062

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	0	0	x	0	0
x	x	x	0	1	x	0	1
x	x	x	1	0	x	1	0
x	x	x	1	1	x	IQ	IQN

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00188	0.00184	0.00337	0.00163	0.00494	0.00284	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	2642.51000	3706.54000	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	0.47392	0.32940	0.06480	0.88199	2.50740	0.30000	2.24610
	SET_B->Q (FR)	0.01860	0.00100	0.18708	0.32940	0.06480	0.61012	2.50740	0.30000	2.03334

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	0.38798	0.32940	0.06480	0.75807	2.50740	0.30000	1.98696
	RESET_B->Q (FF)	0.01860	0.00100	0.31974	0.32940	0.06480	0.70235	2.50740	0.30000	1.97646

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	0.47392	0.32940	0.06480	0.88199	2.50740	0.30000	2.24610

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	0.38798	0.32940	0.06480	0.75807	2.50740	0.30000	1.98696

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	0.31804	0.32940	0.06480	0.75769	2.50740	0.30000	2.14688
	RESET_B->Q_N (FR)	0.01860	0.00100	0.24820	0.32940	0.06480	0.71273	2.50740	0.30000	2.15015

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	0.39257	0.32940	0.06480	0.82430	2.50740	0.30000	2.04096
	SET_B->Q_N (FF)	0.01860	0.00100	0.12192	0.32940	0.06480	0.54119	2.50740	0.30000	1.86000

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	0.31804	0.32940	0.06480	0.75769	2.50740	0.30000	2.14688

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	0.39257	0.32940	0.06480	0.82430	2.50740	0.30000	2.04096

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	-0.14916	1.26300	1.26300	-0.37507	2.50740	2.50740	-0.51062
	setup	CLK (R)	0.01860	0.01860	0.22251	1.26300	1.26300	0.42364	2.50740	2.50740	0.56965

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	-0.15405	1.26300	1.26300	-0.23206	2.50740	2.50740	-0.28630
	setup	CLK (R)	0.01860	0.01860	0.28609	1.26300	1.26300	0.36428	2.50740	2.50740	0.46634

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	-0.18828	1.26300	1.26300	-0.46412	2.50740	2.50740	-0.63753
	setup	CLK (R)	0.01860	0.01860	0.26408	1.26300	1.26300	0.50459	2.50740	2.50740	0.68771

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	-0.20051	1.26300	1.26300	-0.28063	2.50740	2.50740	-0.34828
	setup	CLK (R)	0.01860	0.01860	0.33744	1.26300	1.26300	0.40745	2.50740	2.50740	0.52537

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	-0.16138	1.26300	1.26300	-0.41555	2.50740	2.50740	-0.57260
	setup	CLK (R)	0.01860	0.01860	0.23718	1.26300	1.26300	0.46682	2.50740	2.50740	0.62868

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	-0.15405	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.23317
	setup	CLK (R)	0.01860	0.01860	0.28609	1.26300	1.26300	0.32920	2.50740	2.50740	0.42207

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	0.12470	1.26300	1.26300	0.21857	2.50740	2.50740	0.28630
	removal	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.15920	2.50740	2.50740	-0.20956

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	0.06358	1.26300	1.26300	0.15920	2.50740	2.50740	0.61097
	removal	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.14301	2.50740	2.50740	0.17709
	hold	RESET_B (R)	0.01860	0.01860	-0.12470	1.26300	1.26300	-0.31301	2.50740	2.50740	-0.40141
	setup	RESET_B (R)	0.01860	0.01860	0.15894	1.26300	1.26300	0.38047	2.50740	2.50740	0.49881

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	0.01308	0.32940	0.06480	0.01331	2.50740	0.30000	0.01483
	SET_B	0.01860	0.00100	0.02469	0.32940	0.06480	0.06163	2.50740	0.30000	0.20190

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	0.01292	0.32940	0.06480	0.01289	2.50740	0.30000	0.01397
	RESET_B	0.01860	0.00100	0.02766	0.32940	0.06480	0.06492	2.50740	0.30000	0.20255

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	0.01308	0.32940	0.06480	0.01331	2.50740	0.30000	0.01483

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	0.01292	0.32940	0.06480	0.01289	2.50740	0.30000	0.01397

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	0.01293	0.32940	0.06480	0.01299	2.50740	0.30000	0.01482
	RESET_B	0.01860	0.00100	0.02768	0.32940	0.06480	0.06511	2.50740	0.30000	0.20343

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	0.01309	0.32940	0.06480	0.01319	2.50740	0.30000	0.01435
	SET_B	0.01860	0.00100	0.02469	0.32940	0.06480	0.06135	2.50740	0.30000	0.20121

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	0.01293	0.32940	0.06480	0.01299	2.50740	0.30000	0.01482

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	0.01309	0.32940	0.06480	0.01319	2.50740	0.30000	0.01435

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00063	0.32940	-0.00084	2.50740	0.00025

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00410	0.32940	0.00393	2.50740	0.00496

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	0.00892	0.32940	0.00866	2.50740	0.00986
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	-0.00063	0.32940	-0.00084	2.50740	0.00025

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	0.00889	0.32940	0.00867	2.50740	0.00982
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00410	0.32940	0.00393	2.50740	0.00496

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00432	0.32940	0.00418	2.50740	0.00482

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	-0.00198	0.32940	-0.00208	2.50740	-0.00150

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	0.01012	0.32940	0.00998	2.50740	0.01064
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00432	0.32940	0.00418	2.50740	0.00482

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	0.01176	0.32940	0.01135	2.50740	0.01203
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	-0.00198	0.32940	-0.00208	2.50740	-0.00150

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00847	0.32940	0.00770	2.50740	0.00921

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00038	0.32940	0.00601	2.50740	0.02066

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	0.01132	0.32940	0.01121	2.50740	0.01273
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.00847	0.32940	0.00770	2.50740	0.00921
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01048	0.32940	0.01021	2.50740	0.01308
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00460	0.32940	0.00434	2.50740	0.00712

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	0.01178	0.32940	0.01169	2.50740	0.01305
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.00887	0.32940	0.01402	2.50740	0.01605
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00038	0.32940	0.00601	2.50740	0.02066
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	-0.00342	0.32940	-0.00360	2.50740	-0.00136

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00958	0.32940	0.00920	2.50740	0.01233

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00928	0.32940	0.00899	2.50740	0.01193

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	0.00984	0.32940	0.00955	2.50740	0.01265
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00958	0.32940	0.00920	2.50740	0.01233
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00964	0.32940	0.00929	2.50740	0.01240
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00984	0.32940	0.00955	2.50740	0.01265
	(!RESET_B * !Q * Q_N)	0.01860	0.00171	0.32940	0.00136	2.50740	0.00447
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00963	0.32940	0.00928	2.50740	0.01239

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	0.00883	0.32940	0.00851	2.50740	0.01147
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01604	0.32940	0.01560	2.50740	0.01856
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.00375	0.32940	0.00344	2.50740	0.00670
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01725	0.32940	0.01694	2.50740	0.02020
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00928	0.32940	0.00899	2.50740	0.01193
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00883	0.32940	0.00851	2.50740	0.01147
	(!RESET_B * !Q * Q_N)	0.01860	0.00026	0.32940	-0.00001	2.50740	0.00292
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00891	0.32940	0.00863	2.50740	0.01156

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	0.00192	0.00226	0.00466	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	0.11286	0.32940	0.06480	0.51588	2.50740	0.30000	1.87779

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	0.09070	0.32940	0.06480	0.46901	2.50740	0.30000	1.65907

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	-0.06567	1.26300	1.26300	-0.28333	2.50740	2.50740	-0.39779
	setup	CLK (R)	0.01860	0.01860	0.10150	1.26300	1.26300	0.38856	2.50740	2.50740	0.57540

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	-0.29835
	setup	CLK (R)	0.01860	0.01860	0.17900	1.26300	1.26300	0.28873	2.50740	2.50740	0.39178

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	-0.07329	1.26300	1.26300	-0.31571	2.50740	2.50740	-0.44168
	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	-0.11790	1.26300	1.26300	-0.20508	2.50740	2.50740	-0.27499
	setup	CLK (R)	0.01860	0.01860	0.18659	1.26300	1.26300	0.26714	2.50740	2.50740	0.36418

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	0.00835	0.32940	0.06480	0.00832	2.50740	0.30000	0.01035

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	0.00756	0.32940	0.06480	0.00766	2.50740	0.30000	0.00968

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01514	0.32940	0.01538	2.50740	0.01735

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00644	0.32940	0.02081	2.50740	0.02499

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	0.01514	0.32940	0.01538	2.50740	0.01735

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	0.00644	0.32940	0.02081	2.50740	0.02499

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00521	0.32940	0.00499	2.50740	0.00692

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00845	0.32940	0.02040	2.50740	0.02374

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00439	0.32940	0.00409	2.50740	0.00692

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00303	0.32940	0.00274	2.50740	0.00548

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	0.00512	0.00475	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	0.11117	0.32940	0.06480	0.51459	2.50740	0.30000	1.87394
	A->Y (FR)	0.01860	0.00100	0.07861	0.32940	0.06480	0.78652	2.50740	0.30000	3.75442
	B->Y (RR)	0.01860	0.00100	0.10403	0.32940	0.06480	0.50490	2.50740	0.30000	1.83733
	B->Y (FR)	0.01860	0.00100	0.07024	0.32940	0.06480	0.78747	2.50740	0.30000	3.87277

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	0.10570	0.32940	0.06480	0.67380	2.50740	0.30000	2.56701
	A->Y (RF)	0.01860	0.00100	0.06901	0.32940	0.06480	0.64647	2.50740	0.30000	3.20008
	B->Y (FF)	0.01860	0.00100	0.10798	0.32940	0.06480	0.65901	2.50740	0.30000	2.52394
	B->Y (RF)	0.01860	0.00100	0.05875	0.32940	0.06480	0.63400	2.50740	0.30000	3.18094

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	0.00617	0.32940	0.06480	0.00599	2.50740	0.30000	0.00797
	B	0.01860	0.00100	0.00625	0.32940	0.06480	0.00584	2.50740	0.30000	0.00804

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	0.00543	0.32940	0.06480	0.00548	2.50740	0.30000	0.00698
	B	0.01860	0.00100	0.00610	0.32940	0.06480	0.00501	2.50740	0.30000	0.00643

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	0.00536	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	0.10723	0.32940	0.06480	0.82417	2.50740	0.30000	3.31453
	A->X (FR)	0.01860	0.00100	0.08640	0.32940	0.06480	0.79774	2.50740	0.30000	3.76908
	B->X (RR)	0.01860	0.00100	0.11229	0.32940	0.06480	0.80741	2.50740	0.30000	3.25019
	B->X (FR)	0.01860	0.00100	0.07508	0.32940	0.06480	0.78445	2.50740	0.30000	3.75551

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	0.13342	0.32940	0.06480	0.49969	2.50740	0.30000	1.64859
	A->X (RF)	0.01860	0.00100	0.06506	0.32940	0.06480	0.64237	2.50740	0.30000	3.18565
	B->X (FF)	0.01860	0.00100	0.12484	0.32940	0.06480	0.49343	2.50740	0.30000	1.64214
	B->X (RF)	0.01860	0.00100	0.05720	0.32940	0.06480	0.63748	2.50740	0.30000	3.24371

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	0.00564	0.32940	0.06480	0.00559	2.50740	0.30000	0.00741
	B	0.01860	0.00100	0.00607	0.32940	0.06480	0.00505	2.50740	0.30000	0.00692

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	0.00666	0.32940	0.06480	0.00660	2.50740	0.30000	0.00751
	B	0.01860	0.00100	0.00616	0.32940	0.06480	0.00585	2.50740	0.30000	0.00781