

sg13g2_stdcell_typ_1p20V_25C Library

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

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

AND2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	X
0	x	0
1	0	0
1	1	1

Footprint

Cell Name	Area
sg13g2_and2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_1	0.00238	0.00230	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_1	117.08700	137.63200	177.26200

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.06342	0.32940	0.06480	0.33923	2.50740	0.30000	1.21319
	B->X (RR)	0.01860	0.00100	0.06847	0.32940	0.06480	0.34277	2.50740	0.30000	1.22116

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.05470	0.32940	0.06480	0.29752	2.50740	0.30000	1.01794
	B->X (FF)	0.01860	0.00100	0.05979	0.32940	0.06480	0.31146	2.50740	0.30000	1.05291

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	0.00631	0.32940	0.06480	0.00649	2.50740	0.30000	0.01280
	B	0.01860	0.00100	0.00767	0.32940	0.06480	0.00758	2.50740	0.30000	0.01220

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and2_1	A	0.01860	0.00100	0.00552	0.32940	0.06480	0.00582	2.50740	0.30000	0.01287
	B	0.01860	0.00100	0.00570	0.32940	0.06480	0.00596	2.50740	0.30000	0.01287

AND3



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	C	X
0	x	x	0
1	0	x	0
1	1	0	0
1	1	1	1

Footprint

Cell Name	Area
sg13g2_and3_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_1	0.00238	0.00227	0.00228	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_1	119.04700	146.63600	244.02000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.08644	0.32940	0.06480	0.37520	2.50740	0.30000	1.28647
	B->X (RR)	0.01860	0.00100	0.09584	0.32940	0.06480	0.38400	2.50740	0.30000	1.30328
	C->X (RR)	0.01860	0.00100	0.09996	0.32940	0.06480	0.38078	2.50740	0.30000	1.28164

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.05861	0.32940	0.06480	0.30675	2.50740	0.30000	1.03264
	B->X (FF)	0.01860	0.00100	0.06394	0.32940	0.06480	0.32042	2.50740	0.30000	1.06309
	C->X (FF)	0.01860	0.00100	0.06731	0.32940	0.06480	0.33114	2.50740	0.30000	1.09892

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	0.00723	0.32940	0.06480	0.00739	2.50740	0.30000	0.01282
	B	0.01860	0.00100	0.00855	0.32940	0.06480	0.00862	2.50740	0.30000	0.01344
	C	0.01860	0.00100	0.00985	0.32940	0.06480	0.00977	2.50740	0.30000	0.01390

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and3_1	A	0.01860	0.00100	0.00557	0.32940	0.06480	0.00570	2.50740	0.30000	0.01335
	B	0.01860	0.00100	0.00583	0.32940	0.06480	0.00597	2.50740	0.30000	0.01198
	C	0.01860	0.00100	0.00597	0.32940	0.06480	0.00620	2.50740	0.30000	0.01329

AND4



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	C	D	X
0	x	x	x	0
1	0	x	x	0
1	1	0	x	0
1	1	1	0	0
1	1	1	1	1

Footprint

Cell Name	Area
sg13g2_and4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_1	0.00205	0.00198	0.00229	0.00229	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_1	121.24000	151.90200	310.92300

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.11089	0.32940	0.06480	0.41070	2.50740	0.30000	1.35548
	B->X (RR)	0.01860	0.00100	0.12417	0.32940	0.06480	0.42159	2.50740	0.30000	1.37772
	C->X (RR)	0.01860	0.00100	0.13175	0.32940	0.06480	0.42292	2.50740	0.30000	1.36044
	D->X (RR)	0.01860	0.00100	0.13590	0.32940	0.06480	0.42256	2.50740	0.30000	1.33348

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.06195	0.32940	0.06480	0.31324	2.50740	0.30000	1.03869
	B->X (FF)	0.01860	0.00100	0.06725	0.32940	0.06480	0.32595	2.50740	0.30000	1.07212
	C->X (FF)	0.01860	0.00100	0.07100	0.32940	0.06480	0.33623	2.50740	0.30000	1.10058
	D->X (FF)	0.01860	0.00100	0.07363	0.32940	0.06480	0.34464	2.50740	0.30000	1.13177

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	0.00820	0.32940	0.06480	0.00822	2.50740	0.30000	0.01326
	B	0.01860	0.00100	0.00984	0.32940	0.06480	0.00969	2.50740	0.30000	0.01469
	C	0.01860	0.00100	0.01060	0.32940	0.06480	0.01038	2.50740	0.30000	0.01458
	D	0.01860	0.00100	0.01044	0.32940	0.06480	0.01023	2.50740	0.30000	0.01425

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_and4_1	A	0.01860	0.00100	0.00500	0.32940	0.06480	0.00508	2.50740	0.30000	0.01224
	B	0.01860	0.00100	0.00527	0.32940	0.06480	0.00530	2.50740	0.30000	0.01126
	C	0.01860	0.00100	0.00624	0.32940	0.06480	0.00635	2.50740	0.30000	0.01233
	D	0.01860	0.00100	0.00629	0.32940	0.06480	0.00637	2.50740	0.30000	0.01198

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00030	0.32940	-0.00030	2.50740	-0.00029

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00100	0.32940	0.00102	2.50740	0.00102

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(B * C * !D) + (B * !C)$	0.01860	-0.00030	0.32940	-0.00030	2.50740	-0.00029

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

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

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00052	0.32940	-0.00053	2.50740	-0.00053

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00083	0.32940	0.00085	2.50740	0.00085

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	-0.00052	0.32940	-0.00053	2.50740	-0.00053

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * C * !D) + (A * !C)$	0.01860	0.00083	0.32940	0.00085	2.50740	0.00085

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00002	0.32940	0.00003	2.50740	0.00003

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	0.00002	0.32940	0.00003	2.50740	0.00003

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * D) + (!A * D)$	0.01860	-0.00002	0.32940	-0.00001	2.50740	-0.00001

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00145	0.32940	0.00147	2.50740	0.00146

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	0.01860	0.00009	0.32940	0.00008	2.50740	0.00008

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	$(A * !B * C) + (!A * C)$	0.01860	0.00145	0.32940	0.00147	2.50740	0.00146

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_and4_1	(A * !B * C) + (!A * C)	0.01860	0.00009	0.32940	0.00008	2.50740	0.00008

A021



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT			OUTPUT
A1	A2	B1	X
0	x	0	0
x	x	1	1
1	0	0	0
1	1	x	1

Footprint

Cell Name	Area
sg13g2_a21o_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_1	0.00253	0.00263	0.00229	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_1	127.41400	158.31400	178.00700

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.07779	0.32940	0.06480	0.36989	2.50740	0.30000	1.29500
	A2->X (RR)	0.01860	0.00100	0.08212	0.32940	0.06480	0.36892	2.50740	0.30000	1.29717
	B1->X (RR)	0.01860	0.00100	0.05014	0.32940	0.06480	0.32967	2.50740	0.30000	1.20870

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.08993	0.32940	0.06480	0.33674	2.50740	0.30000	1.06430
	A2->X (FF)	0.01860	0.00100	0.09850	0.32940	0.06480	0.35173	2.50740	0.30000	1.09604
	B1->X (FF)	0.01860	0.00100	0.08811	0.32940	0.06480	0.34621	2.50740	0.30000	1.10800

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.05014	0.32940	0.06480	0.32967	2.50740	0.30000	1.20870
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.04704	0.32940	0.06480	0.31611	2.50740	0.30000	1.16371

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.08811	0.32940	0.06480	0.34621	2.50740	0.30000	1.10800
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.07800	0.32940	0.06480	0.32765	2.50740	0.30000	1.06718

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	0.00709	0.32940	0.06480	0.00717	2.50740	0.30000	0.01337
	A2	0.01860	0.00100	0.00845	0.32940	0.06480	0.00840	2.50740	0.30000	0.01364
	B1	0.01860	0.00100	0.00547	0.32940	0.06480	0.00545	2.50740	0.30000	0.01211

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	A1	0.01860	0.00100	0.00798	0.32940	0.06480	0.00798	2.50740	0.30000	0.01378
	A2	0.01860	0.00100	0.00799	0.32940	0.06480	0.00814	2.50740	0.30000	0.01308
	B1	0.01860	0.00100	0.00546	0.32940	0.06480	0.00588	2.50740	0.30000	0.01357

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00686	0.32940	0.06480	0.00704	2.50740	0.30000	0.01357
	B1	(!A1 * A2)	0.01860	0.00100	0.00547	0.32940	0.06480	0.00545	2.50740	0.30000	0.01211

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_a21o_1	B1	(A1 * !A2)	0.01860	0.00100	0.00558	0.32940	0.06480	0.00589	2.50740	0.30000	0.01272
	B1	(!A1 * A2)	0.01860	0.00100	0.00546	0.32940	0.06480	0.00588	2.50740	0.30000	0.01357

Passive power(pJ) for A1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	-0.00015	0.32940	-0.00013	2.50740	-0.00012

Passive power(pJ) for A1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00016	0.32940	0.00015	2.50740	0.00015

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00003	0.32940	-0.00012	2.50740	-0.00017
	(!A2 * B1)	0.01860	-0.00015	0.32940	-0.00013	2.50740	-0.00012

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A2 * B1)	0.01860	0.00041	0.32940	0.00041	2.50740	0.00040
	(!A2 * B1)	0.01860	0.00016	0.32940	0.00015	2.50740	0.00015

Passive power(pJ) for A2 rising :

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

Passive power(pJ) for A2 falling :

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

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00009	0.32940	-0.00007	2.50740	-0.00012
	(!A1 * B1)	0.01860	-0.00007	0.32940	-0.00007	2.50740	-0.00007

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * B1)	0.01860	0.00035	0.32940	0.00036	2.50740	0.00035
	(!A1 * B1)	0.01860	0.00010	0.32940	0.00010	2.50740	0.00010

Passive power(pJ) for B1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00051	0.32940	0.00053	2.50740	0.00054

Passive power(pJ) for B1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	0.01860	0.00070	0.32940	0.00070	2.50740	0.00071

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00051	0.32940	0.00053	2.50740	0.00054

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_a21o_1	(A1 * A2)	0.01860	0.00070	0.32940	0.00070	2.50740	0.00071

BTLx



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00562	0.01547	2.40000
sg13g2_ebufn_4	0.00292	0.00939	1.20000
sg13g2_ebufn_2	0.00248	0.00572	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	278.54000	689.88300	1153.55000
sg13g2_ebufn_4	180.47600	376.42700	598.53700
sg13g2_ebufn_2	138.43700	236.41300	331.23500

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	0.01883	0.06342	0.32940	0.53623	0.57683	2.50740	2.41783	2.23983
	TE_B->Z (RR)	0.01860	0.01883	0.06336	0.32940	0.53623	0.17182	2.50740	2.41783	0.40494
	TE_B->Z (FR)	0.01860	0.01883	0.03556	0.32940	0.53623	0.52656	2.50740	2.41783	2.66213
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01000	0.06505	0.32940	0.26820	0.57624	2.50740	1.20900	2.23542
	TE_B->Z (RR)	0.01860	0.01000	0.05036	0.32940	0.26820	0.13143	2.50740	1.20900	0.29284
	TE_B->Z (FR)	0.01860	0.01000	0.03562	0.32940	0.26820	0.52389	2.50740	1.20900	2.64970
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00557	0.05659	0.32940	0.13417	0.54191	2.50740	0.60457	2.14454
	TE_B->Z (RR)	0.01860	0.00557	0.04381	0.32940	0.13417	0.11111	2.50740	0.60457	0.24122
	TE_B->Z (FR)	0.01860	0.00557	0.03566	0.32940	0.13417	0.52299	2.50740	0.60457	2.64844

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	0.02953	0.08570	0.32940	0.54693	0.48568	2.50740	2.42853	1.73128
	TE_B->Z (RF)	0.01860	0.02953	0.03738	0.32940	0.54693	-0.18886	2.50740	2.42853	-1.87540
	TE_B->Z (FF)	0.01860	0.02953	0.09151	0.32940	0.54693	0.55530	2.50740	2.42853	2.02952
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01550	0.08794	0.32940	0.27370	0.48782	2.50740	1.21450	1.73520
	TE_B->Z (RF)	0.01860	0.01550	0.02858	0.32940	0.27370	-0.18813	2.50740	1.21450	-1.87455
	TE_B->Z (FF)	0.01860	0.01550	0.06896	0.32940	0.27370	0.50197	2.50740	1.21450	1.88483
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00841	0.06628	0.32940	0.13701	0.44026	2.50740	0.60741	1.61358
	TE_B->Z (RF)	0.01860	0.00841	0.02010	0.32940	0.13701	-0.20550	2.50740	0.60741	-1.89186
	TE_B->Z (FF)	0.01860	0.00841	0.05817	0.32940	0.13701	0.46460	2.50740	0.60741	1.78660

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	0.01883	0.03094	0.32940	0.53623	0.03934	2.50740	2.41783	0.03952
	TE_B	0.01860	0.01883	0.00585	0.32940	0.53623	0.00390	2.50740	2.41783	0.00161
sg13g2_ebufn_4	A	0.01860	0.01000	0.01556	0.32940	0.26820	0.01943	2.50740	1.20900	0.01773
	TE_B	0.01860	0.01000	0.00294	0.32940	0.26820	0.00187	2.50740	1.20900	-0.00105
sg13g2_ebufn_2	A	0.01860	0.00557	0.00814	0.32940	0.13417	0.00965	2.50740	0.60457	0.00879
	TE_B	0.01860	0.00557	0.00149	0.32940	0.13417	0.00104	2.50740	0.60457	-0.00018

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	0.02953	0.03391	0.32940	0.54693	0.03460	2.50740	2.42853	0.02603
	TE_B	0.01860	0.02953	0.00511	0.32940	0.54693	0.03971	2.50740	2.42853	0.17354
sg13g2_ebufn_4	A	0.01860	0.01550	0.01708	0.32940	0.27370	0.01738	2.50740	1.21450	0.01327
	TE_B	0.01860	0.01550	0.00263	0.32940	0.27370	0.02024	2.50740	1.21450	0.08890
sg13g2_ebufn_2	A	0.01860	0.00841	0.00853	0.32940	0.13701	0.00874	2.50740	0.60741	0.00791
	TE_B	0.01860	0.00841	0.00138	0.32940	0.13701	0.01032	2.50740	0.60741	0.04325

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.01103	0.32940	0.01141	2.50740	0.02843
sg13g2_ebufn_4	0.01860	0.00593	0.32940	0.00612	2.50740	0.01449
sg13g2_ebufn_2	0.01860	0.00349	0.32940	0.00377	2.50740	0.01134

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_ebufn_8	0.01860	0.00823	0.32940	0.00897	2.50740	0.02565
sg13g2_ebufn_4	0.01860	0.00433	0.32940	0.00466	2.50740	0.01291
sg13g2_ebufn_2	0.01860	0.00282	0.32940	0.00322	2.50740	0.01068

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	-0.00380	0.32940	-0.00491	2.50740	0.00168
sg13g2_ebufn_4	0.01860	-0.00085	0.32940	-0.00144	2.50740	0.00642
sg13g2_ebufn_2	0.01860	0.00011	0.32940	-0.00008	2.50740	0.00721

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	0.05082	0.32940	0.05177	2.50740	0.05889
sg13g2_ebufn_4	0.01860	0.02620	0.32940	0.02700	2.50740	0.03494
sg13g2_ebufn_2	0.01860	0.01374	0.32940	0.01430	2.50740	0.02169

BUx



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_buf_16	45.36000
sg13g2_buf_8	23.58720
sg13g2_buf_4	14.51520
sg13g2_buf_2	9.07200
sg13g2_buf_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01682	4.80000
sg13g2_buf_8	0.00840	2.40000
sg13g2_buf_4	0.00357	1.20000
sg13g2_buf_2	0.00247	0.60000
sg13g2_buf_1	0.00212	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	1191.03000	1385.39000	1579.74000
sg13g2_buf_8	595.51800	692.69300	789.86900
sg13g2_buf_4	291.92700	337.35500	382.78200
sg13g2_buf_2	160.48500	181.52500	202.56500
sg13g2_buf_1	106.65100	110.32100	113.99100

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	0.05422	0.32940	1.03680	0.35308	2.50740	4.80000	1.27405
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.05344	0.32940	0.51840	0.35147	2.50740	2.40000	1.27183
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.06775	0.32940	0.25920	0.38518	2.50740	1.20000	1.39372
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.05307	0.32940	0.12960	0.34562	2.50740	0.60000	1.25903
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.04728	0.32940	0.06480	0.32075	2.50740	0.30000	1.19320

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	0.06277	0.32940	1.03680	0.33203	2.50740	4.80000	1.09971
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.06187	0.32940	0.51840	0.33112	2.50740	2.40000	1.09964
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.06088	0.32940	0.25920	0.32720	2.50740	1.20000	1.06015
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.05935	0.32940	0.12960	0.31839	2.50740	0.60000	1.06010
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.05160	0.32940	0.06480	0.28963	2.50740	0.30000	0.98894

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	0.07533	0.32940	1.03680	0.07819	2.50740	4.80000	0.11985
sg13g2_buf_8	A	0.01860	0.00100	0.03647	0.32940	0.51840	0.03784	2.50740	2.40000	0.05855
sg13g2_buf_4	A	0.01860	0.00100	0.01762	0.32940	0.25920	0.01833	2.50740	1.20000	0.03112
sg13g2_buf_2	A	0.01860	0.00100	0.00951	0.32940	0.12960	0.00980	2.50740	0.60000	0.01572
sg13g2_buf_1	A	0.01860	0.00100	0.00554	0.32940	0.06480	0.00573	2.50740	0.30000	0.01176

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	0.07073	0.32940	1.03680	0.07547	2.50740	4.80000	0.13819
sg13g2_buf_8	A	0.01860	0.00100	0.03491	0.32940	0.51840	0.03722	2.50740	2.40000	0.06132
sg13g2_buf_4	A	0.01860	0.00100	0.01752	0.32940	0.25920	0.01861	2.50740	1.20000	0.03004
sg13g2_buf_2	A	0.01860	0.00100	0.00918	0.32940	0.12960	0.00980	2.50740	0.60000	0.01845
sg13g2_buf_1	A	0.01860	0.00100	0.00559	0.32940	0.06480	0.00595	2.50740	0.30000	0.01204

DECAP_x



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	395.59900	395.59900	395.59900
sg13g2_decap_8	791.19100	791.19100	791.19100

DFFRRx



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00135	0.00490	0.00273	0.60000	0.60000
sg13g2_dfrbp_1	0.00142	0.00543	0.00255	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	606.91700	685.69100	774.20100
sg13g2_dfrbp_1	459.16200	538.56200	621.78000

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	0.23479	0.32940	0.12960	0.50741	2.50740	0.60000	1.41875
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.18201	0.32940	0.06480	0.45768	2.50740	0.30000	1.34353

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	0.20090	0.32940	0.12960	0.44710	2.50740	0.60000	1.18725
	RESET_B->Q (FF)	0.01860	0.00100	0.27154	0.32940	0.12960	0.55295	2.50740	0.60000	1.45948
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.17205	0.32940	0.06480	0.41578	2.50740	0.30000	1.13808
	RESET_B->Q (FF)	0.01860	0.00100	0.23514	0.32940	0.06480	0.51325	2.50740	0.30000	1.40038

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	0.13219	0.32940	0.12960	0.44471	2.50740	0.60000	1.31668
	RESET_B->Q_N (FR)	0.01860	0.00100	0.20435	0.32940	0.12960	0.54915	2.50740	0.60000	1.58662
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.13022	0.32940	0.06480	0.43008	2.50740	0.30000	1.28433
	RESET_B->Q_N (FR)	0.01860	0.00100	0.19388	0.32940	0.06480	0.52563	2.50740	0.30000	1.54626

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	0.15105	0.32940	0.12960	0.46202	2.50740	0.60000	1.24303
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.13539	0.32940	0.06480	0.42105	2.50740	0.30000	1.18300

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	-0.04157	1.26300	1.26300	-0.18349	2.50740	2.50740	-0.24498
	setup	CLK (R)	0.01860	0.01860	0.11981	1.26300	1.26300	0.26444	2.50740	2.50740	0.32172
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.19698	2.50740	2.50740	-0.27154
	setup	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.26714	2.50740	2.50740	0.33943

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	-0.02201	1.26300	1.26300	-0.14031	2.50740	2.50740	-0.22432
	setup	CLK (R)	0.01860	0.01860	0.12226	1.26300	1.26300	0.25904	2.50740	2.50740	0.35123
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02201	1.26300	1.26300	-0.13762	2.50740	2.50740	-0.22137
	setup	CLK (R)	0.01860	0.01860	0.11492	1.26300	1.26300	0.25904	2.50740	2.50740	0.35714

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	0.12959	1.26300	1.26300	0.28603	2.50740	2.50740	0.39551
	removal	CLK (R)	0.01860	0.01860	-0.10270	1.26300	1.26300	-0.26714	2.50740	2.50740	-0.37484
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.12226	1.26300	1.26300	0.29412	2.50740	2.50740	0.41321
	removal	CLK (R)	0.01860	0.01860	-0.09292	1.26300	1.26300	-0.26714	2.50740	2.50740	-0.38370

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	0.03575	0.32940	0.12960	0.12953	2.50740	0.60000	0.48065
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02813	0.32940	0.06480	0.07470	2.50740	0.30000	0.25485

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	0.03616	0.32940	0.12960	0.13006	2.50740	0.60000	0.47697
	RESET_B	0.01860	0.00100	0.02768	0.32940	0.12960	0.12118	2.50740	0.60000	0.46224
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02751	0.32940	0.06480	0.07421	2.50740	0.30000	0.25319
	RESET_B	0.01860	0.00100	0.01904	0.32940	0.06480	0.06534	2.50740	0.30000	0.23809

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	0.03618	0.32940	0.12960	0.13056	2.50740	0.60000	0.48044
	RESET_B	0.01860	0.00100	0.02774	0.32940	0.12960	0.12183	2.50740	0.60000	0.46617
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02751	0.32940	0.06480	0.07451	2.50740	0.30000	0.25313
	RESET_B	0.01860	0.00100	0.01905	0.32940	0.06480	0.06571	2.50740	0.30000	0.24013

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	0.03576	0.32940	0.12960	0.12891	2.50740	0.60000	0.47524
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.02812	0.32940	0.06480	0.07442	2.50740	0.30000	0.25218

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00144	0.32940	0.00154	2.50740	0.00486
sg13g2_dfrbp_1	0.01860	0.00152	0.32940	0.00161	2.50740	0.00490

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.00136	0.32940	0.00147	2.50740	0.00479
sg13g2_dfrbp_1	0.01860	0.00148	0.32940	0.00158	2.50740	0.00491

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	0.00144	0.32940	0.00154	2.50740	0.00486
	(!CLK * RESET_B)	0.01860	0.01100	0.32940	0.01102	2.50740	0.01445
	(!CLK * !RESET_B)	0.01860	-0.00021	0.32940	-0.00022	2.50740	-0.00022
sg13g2_dfrbp_1	CLK	0.01860	0.00152	0.32940	0.00161	2.50740	0.00490
	(!CLK * RESET_B)	0.01860	0.00957	0.32940	0.00963	2.50740	0.01312
	(!CLK * !RESET_B)	0.01860	-0.00013	0.32940	-0.00014	2.50740	-0.00014

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	0.00136	0.32940	0.00147	2.50740	0.00479
	(!CLK * RESET_B)	0.01860	0.00881	0.32940	0.00879	2.50740	0.01244
	(!CLK * !RESET_B)	0.01860	0.00039	0.32940	0.00041	2.50740	0.00041
sg13g2_dfrbp_1	CLK	0.01860	0.00148	0.32940	0.00158	2.50740	0.00491
	(!CLK * RESET_B)	0.01860	0.00802	0.32940	0.00804	2.50740	0.01167
	(!CLK * !RESET_B)	0.01860	0.00034	0.32940	0.00036	2.50740	0.00036

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	0.00361	0.32940	0.00351	2.50740	0.00615
sg13g2_dfrbp_1	0.01860	0.00400	0.32940	0.00391	2.50740	0.00650

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	0.00904	0.32940	0.00860	2.50740	0.01290
sg13g2_dfrbp_1	0.01860	0.00789	0.32940	0.00743	2.50740	0.01180

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	0.00361	0.32940	0.00351	2.50740	0.00615
	(CLK * !D * !Q * Q_N)	0.01860	0.00107	0.32940	0.00103	2.50740	0.00103
	(!CLK * D * !Q * Q_N)	0.01860	0.01332	0.32940	0.01302	2.50740	0.01679
	(!CLK * !D * !Q * Q_N)	0.01860	0.00114	0.32940	0.00110	2.50740	0.00110
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00400	0.32940	0.00391	2.50740	0.00650
	(CLK * !D * !Q * Q_N)	0.01860	0.00146	0.32940	0.00142	2.50740	0.00142
	(!CLK * D * !Q * Q_N)	0.01860	0.01222	0.32940	0.01199	2.50740	0.01576
	(!CLK * !D * !Q * Q_N)	0.01860	0.00153	0.32940	0.00149	2.50740	0.00149

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	0.03624	0.32940	0.03562	2.50740	0.04445
	(CLK * !D * !Q * Q_N)	0.01860	-0.00055	0.32940	-0.00071	2.50740	-0.00078
	(!CLK * D * !Q * Q_N)	0.01860	0.00904	0.32940	0.00860	2.50740	0.01290
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00069	0.32940	-0.00079	2.50740	-0.00084
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.02623	0.32940	0.02568	2.50740	0.03441
	(CLK * !D * !Q * Q_N)	0.01860	-0.00092	0.32940	-0.00109	2.50740	-0.00116
	(!CLK * D * !Q * Q_N)	0.01860	0.00789	0.32940	0.00743	2.50740	0.01180
	(!CLK * !D * !Q * Q_N)	0.01860	-0.00100	0.32940	-0.00114	2.50740	-0.00119

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01028	0.32940	0.01036	2.50740	0.01912
sg13g2_dfrbp_1	0.01860	0.01004	0.32940	0.01011	2.50740	0.01832

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dfrbp_2	0.01860	0.01940	0.32940	0.01938	2.50740	0.02832
sg13g2_dfrbp_1	0.01860	0.01733	0.32940	0.01731	2.50740	0.02577

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	0.01028	0.32940	0.01036	2.50740	0.01912
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01079	0.32940	0.01087	2.50740	0.01961
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01012	0.32940	0.01020	2.50740	0.01894
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01081	0.32940	0.01089	2.50740	0.01961
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01033	0.32940	0.01037	2.50740	0.01866
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01003	0.32940	0.01011	2.50740	0.01833
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00987	0.32940	0.00993	2.50740	0.01817
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01004	0.32940	0.01011	2.50740	0.01832

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	0.01955	0.32940	0.01951	2.50740	0.02844
	(D * RESET_B * !Q * Q_N)	0.01860	0.01940	0.32940	0.01938	2.50740	0.02832
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01007	0.32940	0.01017	2.50740	0.01883
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00343	0.32940	0.04399	2.50740	0.05263
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01007	0.32940	0.01018	2.50740	0.01883
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01006	0.32940	0.01015	2.50740	0.01881
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01750	0.32940	0.01744	2.50740	0.02593
	(D * RESET_B * !Q * Q_N)	0.01860	0.01733	0.32940	0.01731	2.50740	0.02577
	(D * !RESET_B * !Q * Q_N)	0.01860	0.00953	0.32940	0.00968	2.50740	0.01786
	(!D * RESET_B * Q * !Q_N)	0.01860	0.00314	0.32940	0.03489	2.50740	0.04299
	(!D * RESET_B * !Q * Q_N)	0.01860	0.00953	0.32940	0.00968	2.50740	0.01787
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.00952	0.32940	0.00966	2.50740	0.01785

DLHQ



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00211	0.00215	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	339.70600	365.91500	417.21300

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	0.16905	0.32940	0.06480	0.43948	2.50740	0.30000	1.29203
	GATE->Q (RR)	0.01860	0.00100	0.14289	0.32940	0.06480	0.41451	2.50740	0.30000	1.24942

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	0.15017	0.32940	0.06480	0.38488	2.50740	0.30000	1.06325
	GATE->Q (RF)	0.01860	0.00100	0.15160	0.32940	0.06480	0.39013	2.50740	0.30000	1.06917

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	-0.09047	1.26300	1.26300	-0.22936	2.50740	2.50740	-0.28630
	setup	GATE (F)	0.01860	0.01860	0.10025	1.26300	1.26300	0.29142	2.50740	2.50740	0.38370

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	-0.03668	1.26300	1.26300	-0.00540	2.50740	2.50740	0.02361
	setup	GATE (F)	0.01860	0.01860	0.04890	1.26300	1.26300	0.01619	2.50740	2.50740	-0.01181

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	0.01402	0.32940	0.06480	0.01425	2.50740	0.30000	0.01442
	GATE	0.01860	0.00100	0.01185	0.32940	0.06480	0.01186	2.50740	0.30000	0.01213

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	0.01454	0.32940	0.06480	0.01488	2.50740	0.30000	0.01611
	GATE	0.01860	0.00100	0.01289	0.32940	0.06480	0.01343	2.50740	0.30000	0.01522

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00351	0.32940	0.00365	2.50740	0.00976

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00359	0.32940	0.00376	2.50740	0.00975

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	0.00361	0.32940	0.00367	2.50740	0.00976
	(!GATE * !Q)	0.01860	0.00351	0.32940	0.00365	2.50740	0.00976

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	0.00336	0.32940	0.00361	2.50740	0.00962
	(!GATE * !Q)	0.01860	0.00359	0.32940	0.00376	2.50740	0.00975

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00766	0.32940	0.00776	2.50740	0.01535

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhq_1	0.01860	0.00302	0.32940	0.01439	2.50740	0.02211

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	0.00766	0.32940	0.00776	2.50740	0.01535

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	0.00302	0.32940	0.01439	2.50740	0.02211

DLHRQ



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00195	0.00269	0.00206	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	350.18100	400.52200	438.96900

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	0.17649	0.32940	0.06480	0.45069	2.50740	0.30000	1.29921
	GATE->Q (RR)	0.01860	0.00100	0.15684	0.32940	0.06480	0.43340	2.50740	0.30000	1.26519

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	0.15668	0.32940	0.06480	0.39149	2.50740	0.30000	1.07039
	GATE->Q (RF)	0.01860	0.00100	0.15851	0.32940	0.06480	0.39942	2.50740	0.30000	1.08089
	RESET_B->Q (FF)	0.01860	0.00100	0.06215	0.32940	0.06480	0.31780	2.50740	0.30000	1.06915

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	-0.07580	1.26300	1.26300	-0.20777	2.50740	2.50740	-0.25678
	setup	GATE (F)	0.01860	0.01860	0.09781	1.26300	1.26300	0.27254	2.50740	2.50740	0.36009

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	-0.04157	1.26300	1.26300	-0.00540	2.50740	2.50740	0.02361
	setup	GATE (F)	0.01860	0.01860	0.05624	1.26300	1.26300	0.01619	2.50740	2.50740	-0.01181

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00734	1.26300	1.26300	-0.08095	2.50740	2.50740	-0.11511
	removal	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	0.11603	2.50740	2.50740	0.15348

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	0.00183	0.32940	0.06480	0.00133	2.50740	0.30000	0.00174
	GATE	0.01860	0.00100	0.01203	0.32940	0.06480	0.01206	2.50740	0.30000	0.01246

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	0.00602	0.32940	0.06480	-0.00133	2.50740	0.30000	-0.00174
	GATE	0.01860	0.00100	0.01172	0.32940	0.06480	0.01230	2.50740	0.30000	0.01307
	RESET_B	0.01860	0.00100	0.00671	0.32940	0.06480	0.00712	2.50740	0.30000	0.01517

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01568	0.32940	0.01653	2.50740	0.02246

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.01059	0.32940	0.02340	2.50740	0.02938

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	0.00332	0.32940	0.00345	2.50740	0.00954
	!RESET_B	0.01860	0.01568	0.32940	0.01653	2.50740	0.02246

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	0.00355	0.32940	0.00381	2.50740	0.00983
	!RESET_B	0.01860	0.01059	0.32940	0.02340	2.50740	0.02938

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	-0.00018	0.32940	-0.00015	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	0.00024	0.32940	0.00015	2.50740	0.00011

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	-0.00005	0.32940	-0.00008	2.50740	-0.00008
	(!D * !GATE * !Q)	0.01860	-0.00018	0.32940	-0.00015	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	0.00036	0.32940	0.00027	2.50740	0.00023
	(!D * !GATE * !Q)	0.01860	0.00024	0.32940	0.00015	2.50740	0.00011

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00790	0.32940	0.00799	2.50740	0.01556

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhrq_1	0.01860	0.00297	0.32940	0.01424	2.50740	0.02194

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	0.01041	0.32940	0.01033	2.50740	0.01839
	(!D * !RESET_B * !Q)	0.01860	0.00790	0.32940	0.00799	2.50740	0.01556

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	0.01127	0.32940	0.01146	2.50740	0.01964
	(!D * RESET_B * !Q)	0.01860	0.00297	0.32940	0.01424	2.50740	0.02194
	(!D * !RESET_B * !Q)	0.01860	0.00302	0.32940	0.01434	2.50740	0.02199

DLHR



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00197	0.00284	0.00213	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	461.78900	512.40300	562.21800

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	0.19114	0.32940	0.06480	0.47167	2.50740	0.30000	1.31897
	GATE->Q (RR)	0.01860	0.00100	0.17243	0.32940	0.06480	0.45641	2.50740	0.30000	1.29172

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	0.16321	0.32940	0.06480	0.40104	2.50740	0.30000	1.07390
	GATE->Q (RF)	0.01860	0.00100	0.16501	0.32940	0.06480	0.40942	2.50740	0.30000	1.08638
	RESET_B->Q (FF)	0.01860	0.00100	0.06758	0.32940	0.06480	0.33652	2.50740	0.30000	1.11142

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	0.19988	0.32940	0.06480	0.45997	2.50740	0.30000	1.26479
	GATE->Q_N (RR)	0.01860	0.00100	0.20189	0.32940	0.06480	0.46813	2.50740	0.30000	1.27793
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10415	0.32940	0.06480	0.38973	2.50740	0.30000	1.24574

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	0.23324	0.32940	0.06480	0.46235	2.50740	0.30000	1.17625
	GATE->Q_N (RF)	0.01860	0.00100	0.21429	0.32940	0.06480	0.44724	2.50740	0.30000	1.14885

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	-0.08314	1.26300	1.26300	-0.21317	2.50740	2.50740	-0.26269
	setup	GATE (F)	0.01860	0.01860	0.10759	1.26300	1.26300	0.27254	2.50740	2.50740	0.36009

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	-0.04157	1.26300	1.26300	-0.00540	2.50740	2.50740	0.02361
	setup	GATE (F)	0.01860	0.01860	0.06113	1.26300	1.26300	0.01889	2.50740	2.50740	-0.01181

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	0.00000	1.26300	1.26300	-0.03508	2.50740	2.50740	-0.05018
	removal	GATE (F)	0.01860	0.01860	0.01956	1.26300	1.26300	0.07555	2.50740	2.50740	0.09150

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	0.00484	0.32940	0.06480	0.00484	2.50740	0.30000	0.00562
	GATE	0.01860	0.00100	0.00982	0.32940	0.06480	0.01008	2.50740	0.30000	0.01081

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	0.00686	0.32940	0.06480	0.00080	2.50740	0.30000	0.00151
	GATE	0.01860	0.00100	0.00969	0.32940	0.06480	0.01006	2.50740	0.30000	0.01062
	RESET_B	0.01860	0.00100	0.00704	0.32940	0.06480	0.00729	2.50740	0.30000	0.01161

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	0.00687	0.32940	0.06480	0.00099	2.50740	0.30000	0.00090
	GATE	0.01860	0.00100	0.01349	0.32940	0.06480	0.01405	2.50740	0.30000	0.01821
	RESET_B	0.01860	0.00100	0.00705	0.32940	0.06480	0.00746	2.50740	0.30000	0.01117

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	0.00483	0.32940	0.06480	0.00473	2.50740	0.30000	0.00489
	GATE	0.01860	0.00100	0.00981	0.32940	0.06480	0.00994	2.50740	0.30000	0.01018

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01535	0.32940	0.01620	2.50740	0.02217

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.01034	0.32940	0.02309	2.50740	0.02913

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	0.00344	0.32940	0.00358	2.50740	0.00970
	!RESET_B	0.01860	0.01535	0.32940	0.01620	2.50740	0.02217

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	0.00349	0.32940	0.00375	2.50740	0.00982
	!RESET_B	0.01860	0.01034	0.32940	0.02309	2.50740	0.02913

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	-0.00030	0.32940	-0.00026	2.50740	-0.00022

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	0.00034	0.32940	0.00026	2.50740	0.00022

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	-0.00017	0.32940	-0.00021	2.50740	-0.00021
	(!D * !GATE * !Q)	0.01860	-0.00030	0.32940	-0.00026	2.50740	-0.00022

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	(D * !GATE * !Q)	0.01860	0.00046	0.32940	0.00038	2.50740	0.00034
	(!D * !GATE * !Q)	0.01860	0.00034	0.32940	0.00026	2.50740	0.00022

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00758	0.32940	0.00767	2.50740	0.01530

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dlhr_1	0.01860	0.00303	0.32940	0.01403	2.50740	0.02175

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	0.01010	0.32940	0.01003	2.50740	0.01810
	(!D * !RESET_B * !Q)	0.01860	0.00758	0.32940	0.00767	2.50740	0.01530

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	0.01157	0.32940	0.01176	2.50740	0.01998
	(!D * RESET_B * !Q)	0.01860	0.00303	0.32940	0.01403	2.50740	0.02175
	(!D * !RESET_B * !Q)	0.01860	0.00308	0.32940	0.01408	2.50740	0.02179

DLLRQ



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00194	0.00272	0.00206	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	345.28200	400.66800	446.43400

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	0.17620	0.32940	0.06480	0.44938	2.50740	0.30000	1.29717
	GATE_N->Q (FR)	0.01860	0.00100	0.19550	0.32940	0.06480	0.47697	2.50740	0.30000	1.32944
	RESET_B->Q (RR)	0.01860	0.00100	0.08212	0.32940	0.06480	0.35835	2.50740	0.30000	1.25431

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	0.15609	0.32940	0.06480	0.38879	2.50740	0.30000	1.06195
	GATE_N->Q (FF)	0.01860	0.00100	0.14774	0.32940	0.06480	0.39898	2.50740	0.30000	1.15408
	RESET_B->Q (FF)	0.01860	0.00100	0.06279	0.32940	0.06480	0.31747	2.50740	0.30000	1.06617

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	-0.07091	1.26300	1.26300	-0.08365	2.50740	2.50740	-0.11216
	setup	GATE_N (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.09984	2.50740	2.50740	0.12987

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	Min	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Max
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.08069	1.26300	1.26300	-0.22127	2.50740	2.50740	-0.28335
	setup	GATE_N (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.28063	2.50740	2.50740	0.38075

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	-0.02445	1.26300	1.26300	-0.08095	2.50740	2.50740	-0.08264
	removal	GATE_N (R)	0.01860	0.01860	0.04157	1.26300	1.26300	0.10254	2.50740	2.50740	0.10330

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	0.00633	0.32940	0.06480	0.00686	2.50740	0.30000	0.00708
	GATE_N	0.01860	0.00100	0.01747	0.32940	0.06480	0.00677	2.50740	0.30000	0.00683
	RESET_B	0.01860	0.00100	0.00982	0.32940	0.06480	0.00988	2.50740	0.30000	0.01595

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	0.01418	0.32940	0.06480	-0.00004	2.50740	0.30000	0.00144
	GATE_N	0.01860	0.00100	0.01606	0.32940	0.06480	0.00523	2.50740	0.30000	0.00623
	RESET_B	0.01860	0.00100	0.00683	0.32940	0.06480	0.00723	2.50740	0.30000	0.01531

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.01115	0.32940	0.01104	2.50740	0.01710

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllrq_1	0.01860	0.00250	0.32940	0.01720	2.50740	0.02325

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	0.00322	0.32940	0.00336	2.50740	0.00947
	!RESET_B	0.01860	0.01115	0.32940	0.01104	2.50740	0.01710

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	0.00347	0.32940	0.00372	2.50740	0.00977
	!RESET_B	0.01860	0.00250	0.32940	0.01720	2.50740	0.02325

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	-0.00012	0.32940	-0.00016	2.50740	-0.00016

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	0.00029	0.32940	0.00020	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_dllrq_1	(D * GATE_N * !Q)	0.01860	-0.00012	0.32940	-0.00016	2.50740	-0.00016
	(!D * GATE_N * !Q)	0.01860	-0.00012	0.32940	-0.00016	2.50740	-0.00016

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	0.00029	0.32940	0.00020	2.50740	0.00016
	(!D * GATE_N * !Q)	0.01860	0.00029	0.32940	0.00020	2.50740	0.00016

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	0.00711	0.32940	0.00720	2.50740	0.01480

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	0.00301	0.32940	0.01421	2.50740	0.02196

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	0.01252	0.32940	0.01253	2.50740	0.01983
	(!D * !RESET_B * !Q)	0.01860	0.00711	0.32940	0.00720	2.50740	0.01480

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	0.01109	0.32940	0.01124	2.50740	0.01876
	(!D * RESET_B * !Q)	0.01860	0.00301	0.32940	0.01421	2.50740	0.02196
	(!D * !RESET_B * !Q)	0.01860	0.00306	0.32940	0.01426	2.50740	0.02201

DLLR



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00198	0.00285	0.00214	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	456.78300	529.19000	592.96500

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	0.19336	0.32940	0.06480	0.47377	2.50740	0.30000	1.32123
	GATE_N->Q (FR)	0.01860	0.00100	0.21313	0.32940	0.06480	0.50287	2.50740	0.30000	1.35690

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	0.16501	0.32940	0.06480	0.40280	2.50740	0.30000	1.07567
	GATE_N->Q (FF)	0.01860	0.00100	0.15749	0.32940	0.06480	0.41508	2.50740	0.30000	1.17178
	RESET_B->Q (FF)	0.01860	0.00100	0.06754	0.32940	0.06480	0.34207	2.50740	0.30000	1.10336

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	0.20158	0.32940	0.06480	0.46155	2.50740	0.30000	1.26539
	GATE_N->Q_N (FR)	0.01860	0.00100	0.19424	0.32940	0.06480	0.47359	2.50740	0.30000	1.36117
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10496	0.32940	0.06480	0.39078	2.50740	0.30000	1.25483

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	0.23529	0.32940	0.06480	0.46440	2.50740	0.30000	1.17873
	GATE_N->Q_N (FF)	0.01860	0.00100	0.25478	0.32940	0.06480	0.49354	2.50740	0.30000	1.21555

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	-0.08069	1.26300	1.26300	-0.08905	2.50740	2.50740	-0.11806
	setup	GATE_N (R)	0.01860	0.01860	0.10025	1.26300	1.26300	0.10794	2.50740	2.50740	0.13577

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	-0.08314	1.26300	1.26300	-0.22396	2.50740	2.50740	-0.28630
	setup	GATE_N (R)	0.01860	0.01860	0.09781	1.26300	1.26300	0.28333	2.50740	2.50740	0.38665

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	-0.01223	1.26300	1.26300	-0.04317	2.50740	2.50740	-0.02361
	removal	GATE_N (R)	0.01860	0.01860	0.03668	1.26300	1.26300	0.06746	2.50740	2.50740	0.05018

Min Pulse Width (ns) for RESET_B:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

Min Pulse Width (ns) for GATE_N:

Cell Name	High	Low
sg13g2_dllr_1	-	3.3435

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_dllr_1	D	0.01860	0.00100	0.00948	0.32940	0.06480	0.05621	2.50740	0.30000	0.22703
	GATE_N	0.01860	0.00100	0.02128	0.32940	0.06480	0.06804	2.50740	0.30000	0.23883

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	0.01437	0.32940	0.06480	0.04604	2.50740	0.30000	0.21640
	GATE_N	0.01860	0.00100	0.01948	0.32940	0.06480	0.06577	2.50740	0.30000	0.23470
	RESET_B	0.01860	0.00100	0.02256	0.32940	0.06480	0.06848	2.50740	0.30000	0.24615

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	0.01440	0.32940	0.06480	0.04644	2.50740	0.30000	0.21562
	GATE_N	0.01860	0.00100	0.02744	0.32940	0.06480	0.07427	2.50740	0.30000	0.25317
	RESET_B	0.01860	0.00100	0.02256	0.32940	0.06480	0.06867	2.50740	0.30000	0.24438

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	0.00946	0.32940	0.06480	0.05593	2.50740	0.30000	0.22484
	GATE_N	0.01860	0.00100	0.02127	0.32940	0.06480	0.06768	2.50740	0.30000	0.23650

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01666	0.32940	0.01671	2.50740	0.02269

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_dllr_1	0.01860	0.01045	0.32940	0.02537	2.50740	0.03144

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	0.00344	0.32940	0.00358	2.50740	0.00970
	!RESET_B	0.01860	0.01666	0.32940	0.01671	2.50740	0.02269

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	0.00300	0.32940	0.00327	2.50740	0.00932
	!RESET_B	0.01860	0.01045	0.32940	0.02537	2.50740	0.03144

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	-0.00029	0.32940	-0.00031	2.50740	-0.00027

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	0.00040	0.32940	0.00031	2.50740	0.00027

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	0.00002	0.32940	-0.00002	2.50740	-0.00002
	(!D * GATE_N * !Q)	0.01860	-0.00029	0.32940	-0.00031	2.50740	-0.00027

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	0.00039	0.32940	0.00031	2.50740	0.00027
	(!D * GATE_N * !Q)	0.01860	0.00040	0.32940	0.00031	2.50740	0.00027

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	0.00208	0.32940	0.01439	2.50740	0.02193

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	0.00795	0.32940	0.00813	2.50740	0.01592

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	0.01268	0.32940	0.01270	2.50740	0.01998
	(!D * RESET_B * !Q)	0.01860	0.00199	0.32940	0.01430	2.50740	0.02184
	(!D * !RESET_B * !Q)	0.01860	0.00208	0.32940	0.01439	2.50740	0.02193

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	0.01145	0.32940	0.01163	2.50740	0.01911
	(!D * !RESET_B * !Q)	0.01860	0.00795	0.32940	0.00813	2.50740	0.01592

DLY1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd1_1	0.00129	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	176.86300	186.82000	196.77700

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	0.10900	0.32940	0.06480	0.37921	2.50740	0.30000	1.17718

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	0.12830	0.32940	0.06480	0.38636	2.50740	0.30000	1.17448

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	0.01213	0.32940	0.06480	0.01226	2.50740	0.30000	0.01653

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	0.01148	0.32940	0.06480	0.01178	2.50740	0.30000	0.01548

DLY2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00130	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd2_1	178.59800	188.57400	198.54900

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	0.15947	0.32940	0.06480	0.44109	2.50740	0.30000	1.28561

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	0.18205	0.32940	0.06480	0.46065	2.50740	0.30000	1.29551

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	0.01432	0.32940	0.06480	0.01441	2.50740	0.30000	0.01775

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	0.01376	0.32940	0.06480	0.01392	2.50740	0.30000	0.01803

DLY4



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00127	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	389.89200	399.85500	409.81900

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	0.33578	0.32940	0.06480	0.64811	2.50740	0.30000	1.59358

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	0.34969	0.32940	0.06480	0.66606	2.50740	0.30000	1.60472

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	0.02055	0.32940	0.06480	0.02047	2.50740	0.30000	0.02323

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	0.02022	0.32940	0.06480	0.02013	2.50740	0.30000	0.02314

EINVIN_x



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00746	0.00869	1.20000
sg13g2_einvn_2	0.00373	0.00455	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	399.52800	477.25900	554.99000
sg13g2_einvn_2	201.55400	240.42400	279.29400

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	0.01012	0.02509	0.32940	0.26832	0.52911	2.50740	1.20912	2.81262
	TE_B->Z (RR)	0.01860	0.01012	0.04861	0.32940	0.26832	0.13021	2.50740	1.20912	0.29090
	TE_B->Z (FR)	0.01860	0.01012	0.03169	0.32940	0.26832	0.51892	2.50740	1.20912	2.63940
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00562	0.02665	0.32940	0.13422	0.52884	2.50740	0.60462	2.80968
	TE_B->Z (RR)	0.01860	0.00562	0.04763	0.32940	0.13422	0.12774	2.50740	0.60462	0.28705
	TE_B->Z (FR)	0.01860	0.00562	0.03317	0.32940	0.13422	0.51828	2.50740	0.60462	2.63934

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	0.01544	0.02275	0.32940	0.27364	0.43291	2.50740	1.21444	2.40286
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00840	0.02404	0.32940	0.13700	0.43307	2.50740	0.60740	2.40130

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	0.01012	0.00987	0.32940	0.26832	0.00991	2.50740	1.20912	0.01333
	TE_B	0.01860	0.01012	0.02166	0.32940	0.26832	0.01460	2.50740	1.20912	0.01095
sg13g2_einvn_2	A	0.01860	0.00562	0.00499	0.32940	0.13422	0.00495	2.50740	0.60462	0.00629
	TE_B	0.01860	0.00562	0.01076	0.32940	0.13422	0.00713	2.50740	0.60462	0.00568

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	0.01544	0.00901	0.32940	0.27364	0.01047	2.50740	1.21444	0.01157
sg13g2_einvn_2	A	0.01860	0.00840	0.00462	0.32940	0.13700	0.00522	2.50740	0.60740	0.00559

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	-0.00470	0.32940	-0.00503	2.50740	0.00286
sg13g2_einvn_2	0.01860	-0.00211	0.32940	-0.00230	2.50740	0.00186

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	0.00746	0.32940	0.01435	2.50740	0.02301
sg13g2_einvn_2	0.01860	0.00383	0.32940	0.00728	2.50740	0.01182

FILLx



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Footprint

Cell Name	Area
sg13g2_fill_1	1.81440
sg13g2_fill_2	3.62880
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

Pin Capacitance Information

Leakage Information

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

GCLK



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00222	0.00498	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	377.60000	387.84300	400.60900

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	0.07352	0.32940	0.06480	0.34802	2.50740	0.30000	1.22859

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	0.05987	0.32940	0.06480	0.31159	2.50740	0.30000	1.05042

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	-0.03557	1.26300	1.26300	-0.17000	2.50740	2.50740	-0.26252
	setup	CLK (R)	0.01860	0.01860	0.06080	1.26300	1.26300	0.22666	2.50740	2.50740	0.35993

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	-0.02032	1.26300	1.26300	-0.01349	2.50740	2.50740	-0.00659
	setup	CLK (R)	0.01860	0.01860	0.04941	1.26300	1.26300	0.05397	2.50740	2.50740	0.06320

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	0.00863	0.32940	0.06480	0.00872	2.50740	0.30000	0.01378

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	0.00518	0.32940	0.06480	0.00564	2.50740	0.30000	0.01300

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.01680	0.32940	0.01839	2.50740	0.02377

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00937	0.32940	0.02699	2.50740	0.03267

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	0.01680	0.32940	0.01839	2.50740	0.02377

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	0.00937	0.32940	0.02699	2.50740	0.03267

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00666	0.32940	0.00670	2.50740	0.01435

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_lgcp_1	0.01860	0.00781	0.32940	0.00797	2.50740	0.01564

IN_x



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.04548	4.80000
sg13g2_inv_8	0.02214	2.40000
sg13g2_inv_4	0.01108	1.20000
sg13g2_inv_2	0.00553	0.60000
sg13g2_inv_1	0.00278	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	696.58700	1007.55000	1318.51000
sg13g2_inv_8	348.29700	503.77600	659.25600
sg13g2_inv_4	174.14800	251.88800	329.62800
sg13g2_inv_2	87.07440	125.94400	164.81400
sg13g2_inv_1	43.53740	62.97180	82.40630

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	0.01708	0.32940	1.03680	0.35280	2.50740	4.80000	2.04355
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.01694	0.32940	0.51840	0.35224	2.50740	2.40000	2.04430
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.01734	0.32940	0.25920	0.35216	2.50740	1.20000	2.04358
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.01842	0.32940	0.12960	0.35158	2.50740	0.60000	2.03757
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.02076	0.32940	0.06480	0.35202	2.50740	0.30000	2.03807

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	0.01621	0.32940	1.03680	0.32221	2.50740	4.80000	1.90957
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.01610	0.32940	0.51840	0.32231	2.50740	2.40000	1.90849
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.01642	0.32940	0.25920	0.32233	2.50740	1.20000	1.90935
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.01733	0.32940	0.12960	0.32107	2.50740	0.60000	1.90386
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01945	0.32940	0.06480	0.32172	2.50740	0.30000	1.90175

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	0.02177	0.32940	1.03680	0.02429	2.50740	4.80000	0.03751
sg13g2_inv_8	A	0.01860	0.00100	0.01039	0.32940	0.51840	0.01162	2.50740	2.40000	0.01954
sg13g2_inv_4	A	0.01860	0.00100	0.00525	0.32940	0.25920	0.00592	2.50740	1.20000	0.00860
sg13g2_inv_2	A	0.01860	0.00100	0.00268	0.32940	0.12960	0.00294	2.50740	0.60000	0.00364
sg13g2_inv_1	A	0.01860	0.00100	0.00159	0.32940	0.06480	0.00162	2.50740	0.30000	0.00200

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	0.01800	0.32940	1.03680	0.01774	2.50740	4.80000	0.03229
sg13g2_inv_8	A	0.01860	0.00100	0.00855	0.32940	0.51840	0.00846	2.50740	2.40000	0.01244
sg13g2_inv_4	A	0.01860	0.00100	0.00434	0.32940	0.25920	0.00435	2.50740	1.20000	0.00702
sg13g2_inv_2	A	0.01860	0.00100	0.00225	0.32940	0.12960	0.00221	2.50740	0.60000	0.00405
sg13g2_inv_1	A	0.01860	0.00100	0.00148	0.32940	0.06480	0.00139	2.50740	0.30000	0.00194

ITL



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	TE_B	Z
0	0	1
1	0	0
-	1	HiZ

Footprint

Cell Name	Area
sg13g2_einvn_8	39.84120

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01484	0.01483	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	755.52000	911.00000	1066.48000

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	0.01920	0.02442	0.32940	0.53660	0.53098	2.50740	2.41820	2.82165
	TE_B->Z (RR)	0.01860	0.01920	0.06126	0.32940	0.53660	0.16980	2.50740	2.41820	0.40211
	TE_B->Z (FR)	0.01860	0.01920	0.03260	0.32940	0.53660	0.52188	2.50740	2.41820	2.64795

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	0.02978	0.02316	0.32940	0.54718	0.43404	2.50740	2.42878	2.40899

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	0.01920	0.01934	0.32940	0.53660	0.02024	2.50740	2.41820	0.03081
	TE_B	0.01860	0.01920	0.04493	0.32940	0.53660	0.03016	2.50740	2.41820	0.02587

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	0.02978	0.01743	0.32940	0.54718	0.02052	2.50740	2.42878	0.02190

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	-0.01151	0.32940	-0.01228	2.50740	-0.00553

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	0.01151	0.32940	0.02535	2.50740	0.03349

KEEPSTATE



*sg13g2_stdcell_typ_1p20V_25C Cell Library:
Process sg13g2_stdcell_typ_1p20V_25C,
Voltage 1.20, Temp 25.00*

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	37.36580	110.80200	184.23800

Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sighold	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

MUX2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT			OUTPUT
A0	A1	S	X
0	0	x	0
0	1	0	0
x	1	1	1
1	x	0	1
1	0	1	0

Footprint

Cell Name	Area
sg13g2_mux2_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_1	0.00189	0.00187	0.00489	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_1	220.22400	246.34200	274.31900

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.07091	0.32940	0.06480	0.35683	2.50740	0.30000	1.24768
	A1->X (RR)	0.01860	0.00100	0.05032	0.32940	0.06480	0.36147	2.50740	0.30000	1.26377
	S->X (-R)	0.01860	0.00100	0.07855	0.32940	0.06480	0.36185	2.50740	0.30000	1.25997

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.05787	0.32940	0.06480	0.36362	2.50740	0.30000	1.16630
	A1->X (FF)	0.01860	0.00100	0.09559	0.32940	0.06480	0.37037	2.50740	0.30000	1.18060
	S->X (-F)	0.01860	0.00100	0.10623	0.32940	0.06480	0.36199	2.50740	0.30000	1.13715

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.07855	0.32940	0.06480	0.36185	2.50740	0.30000	1.25997
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.11394	0.32940	0.06480	0.38513	2.50740	0.30000	1.19709

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.10623	0.32940	0.06480	0.36199	2.50740	0.30000	1.13715
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.13553	0.32940	0.06480	0.38561	2.50740	0.30000	1.11488

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	0.00974	0.32940	0.06480	0.00987	2.50740	0.30000	0.01646
	A1	0.01860	0.00100	0.00837	0.32940	0.06480	0.01246	2.50740	0.30000	0.01920
	S	0.01860	0.00100	0.00909	0.32940	0.06480	0.00959	2.50740	0.30000	0.01465

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	A0	0.01860	0.00100	0.00815	0.32940	0.06480	0.01267	2.50740	0.30000	0.01949
	A1	0.01860	0.00100	0.00971	0.32940	0.06480	0.01000	2.50740	0.30000	0.01746
	S	0.01860	0.00100	0.00871	0.32940	0.06480	0.00926	2.50740	0.30000	0.01456

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00938	0.32940	0.06480	0.00959	2.50740	0.30000	0.01007
	S	(!A0 * A1)	0.01860	0.00100	0.00909	0.32940	0.06480	0.00959	2.50740	0.30000	0.01465

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.00902	0.32940	0.06480	0.00945	2.50740	0.30000	0.01081
	S	(!A0 * A1)	0.01860	0.00100	0.00871	0.32940	0.06480	0.00926	2.50740	0.30000	0.01456

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00413	0.32940	0.00409	2.50740	0.01013

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux2_1	0.01860	0.00401	0.32940	0.00412	2.50740	0.01010

MUX4



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00259	0.00259	0.00260	0.00260	0.00764	0.00470	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	346.84500	464.98800	578.35700

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	0.13418	0.32940	0.06480	0.44119	2.50740	0.30000	1.44427
	A1->X (RR)	0.01860	0.00100	0.13022	0.32940	0.06480	0.43944	2.50740	0.30000	1.44299
	A2->X (RR)	0.01860	0.00100	0.13921	0.32940	0.06480	0.44900	2.50740	0.30000	1.46580
	A3->X (RR)	0.01860	0.00100	0.13581	0.32940	0.06480	0.44721	2.50740	0.30000	1.46467
	S0->X (-R)	0.01860	0.00100	0.11509	0.32940	0.06480	0.43343	2.50740	0.30000	1.42725
	S1->X (-R)	0.01860	0.00100	-0.00325	0.32940	0.06480	0.34815	2.50740	0.30000	1.23372

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	0.15816	0.32940	0.06480	0.44014	2.50740	0.30000	1.25938
	A1->X (FF)	0.01860	0.00100	0.16059	0.32940	0.06480	0.43925	2.50740	0.30000	1.25947
	A2->X (FF)	0.01860	0.00100	0.16852	0.32940	0.06480	0.45329	2.50740	0.30000	1.28623
	A3->X (FF)	0.01860	0.00100	0.16900	0.32940	0.06480	0.45235	2.50740	0.30000	1.28481
	S0->X (-F)	0.01860	0.00100	0.14338	0.32940	0.06480	0.43775	2.50740	0.30000	1.27992
	S1->X (-F)	0.01860	0.00100	0.03951	0.32940	0.06480	0.34600	2.50740	0.30000	1.09480

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	0.11509	0.32940	0.06480	0.43343	2.50740	0.30000	1.42725
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.10869	0.32940	0.06480	0.41944	2.50740	0.30000	1.39533
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.16869	0.32940	0.06480	0.46605	2.50740	0.30000	1.33244
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.16359	0.32940	0.06480	0.45899	2.50740	0.30000	1.32102
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	-0.00673	0.32940	0.06480	0.34200	2.50740	0.30000	1.23330
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00325	0.32940	0.06480	0.34815	2.50740	0.30000	1.23372
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	-0.00686	0.32940	0.06480	0.36548	2.50740	0.30000	1.16709
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00423	0.32940	0.06480	0.36697	2.50740	0.30000	1.16742

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	0.14338	0.32940	0.06480	0.43775	2.50740	0.30000	1.27992
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.13065	0.32940	0.06480	0.41972	2.50740	0.30000	1.24175
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.18510	0.32940	0.06480	0.46929	2.50740	0.30000	1.24979
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.17530	0.32940	0.06480	0.45612	2.50740	0.30000	1.23165
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.03951	0.32940	0.06480	0.34600	2.50740	0.30000	1.09480
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	-0.00819	0.32940	0.06480	0.33780	2.50740	0.30000	1.09414
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.00107	0.32940	0.06480	0.36524	2.50740	0.30000	1.08713
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	-0.00828	0.32940	0.06480	0.36178	2.50740	0.30000	1.08694

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	0.01175	0.32940	0.06480	0.01170	2.50740	0.30000	0.01598
	A1	0.01860	0.00100	0.01133	0.32940	0.06480	0.01121	2.50740	0.30000	0.01571
	A2	0.01860	0.00100	0.01199	0.32940	0.06480	0.01180	2.50740	0.30000	0.01612
	A3	0.01860	0.00100	0.01508	0.32940	0.06480	0.01484	2.50740	0.30000	0.01917
	S0	0.01860	0.00100	0.00579	0.32940	0.06480	-0.00129	2.50740	0.30000	0.01213
	S1	0.01860	0.00100	0.01026	0.32940	0.06480	0.02989	2.50740	0.30000	0.03579

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	0.01623	0.32940	0.06480	0.01638	2.50740	0.30000	0.02097
	A1	0.01860	0.00100	0.01190	0.32940	0.06480	0.01184	2.50740	0.30000	0.01665
	A2	0.01860	0.00100	0.01703	0.32940	0.06480	0.01717	2.50740	0.30000	0.02093
	A3	0.01860	0.00100	0.01581	0.32940	0.06480	0.01584	2.50740	0.30000	0.01971
	S0	0.01860	0.00100	0.01197	0.32940	0.06480	0.00905	2.50740	0.30000	0.00973
	S1	0.01860	0.00100	0.01146	0.32940	0.06480	0.02399	2.50740	0.30000	0.02927

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	0.01674	0.32940	0.06480	0.01052	2.50740	0.30000	0.00457
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01671	0.32940	0.06480	0.01060	2.50740	0.30000	0.00458
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00579	0.32940	0.06480	-0.00129	2.50740	0.30000	0.01213
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00587	0.32940	0.06480	-0.00141	2.50740	0.30000	0.01206
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.00892	0.32940	0.06480	0.03282	2.50740	0.30000	0.03752
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01026	0.32940	0.06480	0.02989	2.50740	0.30000	0.03579
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.00864	0.32940	0.06480	0.02473	2.50740	0.30000	0.03232
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00962	0.32940	0.06480	0.02276	2.50740	0.30000	0.02930

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	0.01197	0.32940	0.06480	0.00905	2.50740	0.30000	0.00973
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.01166	0.32940	0.06480	0.00971	2.50740	0.30000	0.01000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.00898	0.32940	0.06480	0.00359	2.50740	0.30000	0.00994
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.00899	0.32940	0.06480	0.00370	2.50740	0.30000	0.01004
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01146	0.32940	0.06480	0.02399	2.50740	0.30000	0.02927
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01041	0.32940	0.06480	0.03332	2.50740	0.30000	0.03950
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01026	0.32940	0.06480	0.01838	2.50740	0.30000	0.02550
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.00953	0.32940	0.06480	0.02593	2.50740	0.30000	0.03505

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00953	0.32940	0.01743	2.50740	0.02469

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00621	0.32940	0.01258	2.50740	0.02644

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	0.00926	0.32940	0.01625	2.50740	0.02374
	(A0 * A1 * !S1)	0.01860	0.00953	0.32940	0.01743	2.50740	0.02469
	(!A2 * !A3 * S1)	0.01860	0.00954	0.32940	0.01651	2.50740	0.02411
	(!A0 * !A1 * !S1)	0.01860	0.01012	0.32940	0.01805	2.50740	0.02539

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	0.00570	0.32940	0.01074	2.50740	0.02487
	(A0 * A1 * !S1)	0.01860	0.00621	0.32940	0.01258	2.50740	0.02644
	(!A2 * !A3 * S1)	0.01860	0.00552	0.32940	0.01047	2.50740	0.02454
	(!A0 * !A1 * !S1)	0.01860	0.01059	0.32940	0.01841	2.50740	0.02547

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00402	0.32940	0.00437	2.50740	0.01198

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_mux4_1	0.01860	0.00409	0.32940	0.00465	2.50740	0.01222

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	0.00402	0.32940	0.00437	2.50740	0.01198
	(A0 * A2 * !S0)	0.01860	0.00401	0.32940	0.00435	2.50740	0.01197
	(!A1 * !A3 * S0)	0.01860	0.00409	0.32940	0.00457	2.50740	0.01216
	(!A0 * !A2 * !S0)	0.01860	0.00410	0.32940	0.00457	2.50740	0.01215

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	0.00410	0.32940	0.00466	2.50740	0.01224
	(A0 * A2 * !S0)	0.01860	0.00409	0.32940	0.00465	2.50740	0.01222
	(!A1 * !A3 * S0)	0.01860	0.00412	0.32940	0.00456	2.50740	0.01213
	(!A0 * !A2 * !S0)	0.01860	0.00412	0.32940	0.00456	2.50740	0.01212

NAND2B1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp
25.00*

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	0.00221	0.00296	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	74.96040	128.61100	196.40200

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	0.04968	0.32940	0.06480	0.32343	2.50740	0.30000	1.19668
	B->Y (FR)	0.01860	0.00100	0.02553	0.32940	0.06480	0.35831	2.50740	0.30000	2.04733

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	0.06150	0.32940	0.06480	0.41225	2.50740	0.30000	1.53105
	B->Y (RF)	0.01860	0.00100	0.03740	0.32940	0.06480	0.42653	2.50740	0.30000	2.27984

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	0.00192	0.32940	0.06480	0.00195	2.50740	0.30000	0.00145
	B	0.01860	0.00100	0.00196	0.32940	0.06480	0.00181	2.50740	0.30000	0.00208

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	0.00422	0.32940	0.06480	0.00436	2.50740	0.30000	0.00398
	B	0.01860	0.00100	0.00415	0.32940	0.06480	0.00405	2.50740	0.30000	0.00421

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	0.00402	0.32940	0.00427	2.50740	0.01043

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	0.00207	0.32940	0.00232	2.50740	0.00838

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	0.00402	0.32940	0.00427	2.50740	0.01043

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	0.00207	0.32940	0.00232	2.50740	0.00838

NAND2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	Y
0	x	1
1	0	1
1	1	0

Footprint

Cell Name	Area
sg13g2_nand2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_1	0.00275	0.00282	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_1	43.37260	92.00020	164.81400

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.02253	0.32940	0.06480	0.35395	2.50740	0.30000	2.04268
	B->Y (FR)	0.01860	0.00100	0.02583	0.32940	0.06480	0.35722	2.50740	0.30000	2.04809

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.02885	0.32940	0.06480	0.43057	2.50740	0.30000	2.39054
	B->Y (RF)	0.01860	0.00100	0.03347	0.32940	0.06480	0.42361	2.50740	0.30000	2.27662

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	0.00174	0.32940	0.06480	0.00178	2.50740	0.30000	0.00224
	B	0.01860	0.00100	0.00185	0.32940	0.06480	0.00166	2.50740	0.30000	0.00229

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nand2_1	A	0.01860	0.00100	0.00222	0.32940	0.06480	0.00217	2.50740	0.30000	0.00288
	B	0.01860	0.00100	0.00395	0.32940	0.06480	0.00387	2.50740	0.30000	0.00399

NAND3B1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp
25.00*

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	0.00212	0.00283	0.00285	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	76.93210	134.57500	278.80700

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	0.05224	0.32940	0.06480	0.32392	2.50740	0.30000	1.19189
	B->Y (FR)	0.01860	0.00100	0.02844	0.32940	0.06480	0.36066	2.50740	0.30000	2.04900
	C->Y (FR)	0.01860	0.00100	0.03089	0.32940	0.06480	0.36407	2.50740	0.30000	2.05511

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	0.07464	0.32940	0.06480	0.54143	2.50740	0.30000	2.09564
	B->Y (RF)	0.01860	0.00100	0.05603	0.32940	0.06480	0.55748	2.50740	0.30000	2.81089
	C->Y (RF)	0.01860	0.00100	0.06141	0.32940	0.06480	0.55013	2.50740	0.30000	2.67495

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	0.00205	0.32940	0.06480	0.00206	2.50740	0.30000	0.00150
	B	0.01860	0.00100	0.00225	0.32940	0.06480	0.00204	2.50740	0.30000	0.00211
	C	0.01860	0.00100	0.00255	0.32940	0.06480	0.00224	2.50740	0.30000	0.00249

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	0.00598	0.32940	0.06480	0.00601	2.50740	0.30000	0.00532
	B	0.01860	0.00100	0.00533	0.32940	0.06480	0.00515	2.50740	0.30000	0.00541
	C	0.01860	0.00100	0.00705	0.32940	0.06480	0.00689	2.50740	0.30000	0.00703

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	0.00394	0.32940	0.00419	2.50740	0.01038

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	0.00156	0.32940	0.00182	2.50740	0.00789

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	0.00394	0.32940	0.00419	2.50740	0.01038

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	0.00156	0.32940	0.00182	2.50740	0.00789

NOR2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	Y
0	0	1
x	1	0
1	x	0

Footprint

Cell Name	Area
sg13g2_nor2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_1	0.00285	0.00274	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_1	65.67830	82.91300	103.59100

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.04167	0.32940	0.06480	0.52133	2.50740	0.30000	2.64458
	B->Y (FR)	0.01860	0.00100	0.03502	0.32940	0.06480	0.53241	2.50740	0.30000	2.80589

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.02368	0.32940	0.06480	0.32652	2.50740	0.30000	1.90674
	B->Y (RF)	0.01860	0.00100	0.02097	0.32940	0.06480	0.32270	2.50740	0.30000	1.90237

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	0.00441	0.32940	0.06480	0.00426	2.50740	0.30000	0.00446
	B	0.01860	0.00100	0.00223	0.32940	0.06480	0.00219	2.50740	0.30000	0.00271

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor2_1	A	0.01860	0.00100	0.00186	0.32940	0.06480	0.00144	2.50740	0.30000	0.00171
	B	0.01860	0.00100	0.00169	0.32940	0.06480	0.00151	2.50740	0.30000	0.00190

NOR3



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	C	Y
0	0	0	1
0	x	1	0
x	1	x	0
1	x	x	0

Footprint

Cell Name	Area
sg13g2_nor3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_1	0.00283	0.00278	0.00270	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_1	67.12490	92.83740	130.61200

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.07476	0.32940	0.06480	0.72408	2.50740	0.30000	3.35163
	B->Y (FR)	0.01860	0.00100	0.06970	0.32940	0.06480	0.73427	2.50740	0.30000	3.51915
	C->Y (FR)	0.01860	0.00100	0.05388	0.32940	0.06480	0.72809	2.50740	0.30000	3.61294

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.02639	0.32940	0.06480	0.33211	2.50740	0.30000	1.91503
	B->Y (RF)	0.01860	0.00100	0.02611	0.32940	0.06480	0.32933	2.50740	0.30000	1.91319
	C->Y (RF)	0.01860	0.00100	0.02293	0.32940	0.06480	0.32596	2.50740	0.30000	1.90765

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	0.00735	0.32940	0.06480	0.00718	2.50740	0.30000	0.00747
	B	0.01860	0.00100	0.00549	0.32940	0.06480	0.00533	2.50740	0.30000	0.00539
	C	0.01860	0.00100	0.00333	0.32940	0.06480	0.00328	2.50740	0.30000	0.00393

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor3_1	A	0.01860	0.00100	0.00239	0.32940	0.06480	0.00193	2.50740	0.30000	0.00205
	B	0.01860	0.00100	0.00218	0.32940	0.06480	0.00171	2.50740	0.30000	0.00178
	C	0.01860	0.00100	0.00183	0.32940	0.06480	0.00171	2.50740	0.30000	0.00169

NOR4



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	C	D	Y
0	0	0	0	1
0	0	x	1	0
0	x	1	x	0
x	1	x	x	0
1	x	x	x	0

Footprint

Cell Name	Area
sg13g2_nor4_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_1	0.00282	0.00276	0.00239	0.00247	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_1	69.49890	99.76270	174.14900

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.11590	0.32940	0.06480	0.94884	2.50740	0.30000	4.14686
	B->Y (FR)	0.01860	0.00100	0.11126	0.32940	0.06480	0.95178	2.50740	0.30000	4.26986
	C->Y (FR)	0.01860	0.00100	0.09744	0.32940	0.06480	0.94645	2.50740	0.30000	4.40053
	D->Y (FR)	0.01860	0.00100	0.07037	0.32940	0.06480	0.92720	2.50740	0.30000	4.44925

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.02734	0.32940	0.06480	0.33658	2.50740	0.30000	1.92354
	B->Y (RF)	0.01860	0.00100	0.02829	0.32940	0.06480	0.33574	2.50740	0.30000	1.92068
	C->Y (RF)	0.01860	0.00100	0.02747	0.32940	0.06480	0.33160	2.50740	0.30000	1.91694
	D->Y (RF)	0.01860	0.00100	0.02398	0.32940	0.06480	0.32688	2.50740	0.30000	1.90898

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	0.00955	0.32940	0.06480	0.00936	2.50740	0.30000	0.00932
	B	0.01860	0.00100	0.00785	0.32940	0.06480	0.00766	2.50740	0.30000	0.00753
	C	0.01860	0.00100	0.00632	0.32940	0.06480	0.00610	2.50740	0.30000	0.00605
	D	0.01860	0.00100	0.00397	0.32940	0.06480	0.00392	2.50740	0.30000	0.00438

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_nor4_1	A	0.01860	0.00100	0.00301	0.32940	0.06480	0.00269	2.50740	0.30000	0.00291
	B	0.01860	0.00100	0.00291	0.32940	0.06480	0.00261	2.50740	0.30000	0.00229
	C	0.01860	0.00100	0.00163	0.32940	0.06480	0.00133	2.50740	0.30000	0.00143
	D	0.01860	0.00100	0.00091	0.32940	0.06480	0.00077	2.50740	0.30000	0.00072

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00003	0.32940	-0.00019	2.50740	-0.00023

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00023	0.32940	0.00025	2.50740	0.00025

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00003	0.32940	-0.00019	2.50740	-0.00023

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!B * C) + (!B * !C * D)	0.01860	0.00023	0.32940	0.00025	2.50740	0.00025

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00006	0.32940	-0.00013	2.50740	-0.00013

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00011	0.32940	0.00013	2.50740	0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00006	0.32940	-0.00013	2.50740	-0.00013

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	(!A * C) + (!A * !C * D)	0.01860	0.00011	0.32940	0.00013	2.50740	0.00013

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00077	0.32940	0.00078	2.50740	0.00078

Passive power(pJ) for C falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00021	0.32940	-0.00021	2.50740	-0.00021

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	0.00077	0.32940	0.00078	2.50740	0.00078

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00021	0.32940	-0.00021	2.50740	-0.00021

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	0.00101	0.32940	0.00102	2.50740	0.00102

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	0.01860	-0.00002	0.32940	-0.00002	2.50740	-0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00101	0.32940	0.00102	2.50740	0.00102

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_nor4_1	$(A * !C) + (!A * B * !C)$	0.01860	-0.00002	0.32940	-0.00002	2.50740	-0.00000

NP_ANT



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00109

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	4.31998	4.31998	4.31998

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	-0.00031	0.32940	-0.00032	2.50740	-0.00032

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_antennanp	0.01860	0.00031	0.32940	0.00032	2.50740	0.00032

OR2



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
x	1	1
1	x	1

Footprint

Cell Name	Area
sg13g2_or2_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_1	0.00214	0.00210	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_1	90.36340	114.88700	145.58000

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_or2_1	A->X (RR)	0.01860	0.00100	0.05337	0.32940	0.06480	0.33731	2.50740	0.30000	1.22548
	B->X (RR)	0.01860	0.00100	0.04941	0.32940	0.06480	0.32478	2.50740	0.30000	1.18501

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.09059	0.32940	0.06480	0.33809	2.50740	0.30000	1.08256
	B->X (FF)	0.01860	0.00100	0.08433	0.32940	0.06480	0.34048	2.50740	0.30000	1.09621

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	0.00574	0.32940	0.06480	0.00577	2.50740	0.30000	0.01055
	B	0.01860	0.00100	0.00576	0.32940	0.06480	0.00588	2.50740	0.30000	0.01096

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or2_1	A	0.01860	0.00100	0.00749	0.32940	0.06480	0.00763	2.50740	0.30000	0.01214
	B	0.01860	0.00100	0.00590	0.32940	0.06480	0.00623	2.50740	0.30000	0.01202

OR3



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT			OUTPUT
A	B	C	X
0	0	0	0
0	x	1	1
x	1	x	1
1	x	x	1

Footprint

Cell Name	Area
sg13g2_or3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_1	0.00236	0.00232	0.00225	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_1	93.69210	121.94600	187.08200

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.06149	0.32940	0.06480	0.36168	2.50740	0.30000	1.30921
	B->X (RR)	0.01860	0.00100	0.05871	0.32940	0.06480	0.34998	2.50740	0.30000	1.26394
	C->X (RR)	0.01860	0.00100	0.05343	0.32940	0.06480	0.33546	2.50740	0.30000	1.21798

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.13030	0.32940	0.06480	0.38383	2.50740	0.30000	1.11192
	B->X (FF)	0.01860	0.00100	0.12477	0.32940	0.06480	0.38621	2.50740	0.30000	1.15187
	C->X (FF)	0.01860	0.00100	0.11025	0.32940	0.06480	0.37732	2.50740	0.30000	1.14236

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	0.00621	0.32940	0.06480	0.00622	2.50740	0.30000	0.01182
	B	0.01860	0.00100	0.00597	0.32940	0.06480	0.00587	2.50740	0.30000	0.01086
	C	0.01860	0.00100	0.00583	0.32940	0.06480	0.00579	2.50740	0.30000	0.01070

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or3_1	A	0.01860	0.00100	0.01052	0.32940	0.06480	0.01050	2.50740	0.30000	0.01487
	B	0.01860	0.00100	0.00887	0.32940	0.06480	0.00884	2.50740	0.30000	0.01306
	C	0.01860	0.00100	0.00702	0.32940	0.06480	0.00724	2.50740	0.30000	0.01186

OR4



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT				OUTPUT
A	B	C	D	X
0	0	0	0	0
0	0	x	1	1
0	x	1	x	1
x	1	x	x	1
1	x	x	x	1

Footprint

Cell Name	Area
sg13g2_or4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_1	0.00237	0.00235	0.00196	0.00205	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_1	96.01010	124.10500	221.97400

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.06415	0.32940	0.06480	0.37359	2.50740	0.30000	1.34319
	B->X (RR)	0.01860	0.00100	0.06336	0.32940	0.06480	0.36540	2.50740	0.30000	1.30518
	C->X (RR)	0.01860	0.00100	0.06002	0.32940	0.06480	0.35384	2.50740	0.30000	1.26272
	D->X (RR)	0.01860	0.00100	0.05449	0.32940	0.06480	0.33895	2.50740	0.30000	1.21696

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.18145	0.32940	0.06480	0.44879	2.50740	0.30000	1.17809
	B->X (FF)	0.01860	0.00100	0.17604	0.32940	0.06480	0.44778	2.50740	0.30000	1.21457
	C->X (FF)	0.01860	0.00100	0.16211	0.32940	0.06480	0.43976	2.50740	0.30000	1.24101
	D->X (FF)	0.01860	0.00100	0.13770	0.32940	0.06480	0.42072	2.50740	0.30000	1.22613

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	0.00715	0.32940	0.06480	0.00711	2.50740	0.30000	0.01303
	B	0.01860	0.00100	0.00683	0.32940	0.06480	0.00676	2.50740	0.30000	0.01158
	C	0.01860	0.00100	0.00551	0.32940	0.06480	0.00542	2.50740	0.30000	0.00981
	D	0.01860	0.00100	0.00510	0.32940	0.06480	0.00506	2.50740	0.30000	0.01011

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	Min	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Max
sg13g2_or4_1	A	0.01860	0.00100	0.01034	0.32940	0.06480	0.01015	2.50740	0.30000	0.01320
	B	0.01860	0.00100	0.01049	0.32940	0.06480	0.01029	2.50740	0.30000	0.01308
	C	0.01860	0.00100	0.00938	0.32940	0.06480	0.00935	2.50740	0.30000	0.01312
	D	0.01860	0.00100	0.00693	0.32940	0.06480	0.00704	2.50740	0.30000	0.01154

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00048	0.32940	-0.00049	2.50740	-0.00049

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00217	0.32940	0.00221	2.50740	0.00218

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	-0.00048	0.32940	-0.00049	2.50740	-0.00049

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!B * C) + (!B * !C * D)	0.01860	0.00217	0.32940	0.00221	2.50740	0.00218

Passive power(pJ) for B rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	-0.00039	0.32940	-0.00040	2.50740	-0.00040

Passive power(pJ) for B falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00039	0.32940	0.00040	2.50740	0.00040

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	-0.00039	0.32940	-0.00040	2.50740	-0.00040

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	(!A * C) + (!A * !C * D)	0.01860	0.00039	0.32940	0.00040	2.50740	0.00040

Passive power(pJ) for C rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00057	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_or4_1	0.01860	-0.00016	0.32940	-0.00016	2.50740	-0.00016

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_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_or4_1	$(A * !D) + (!A * B * !D)$	0.01860	-0.00016	0.32940	-0.00016	2.50740	-0.00016

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00076	0.32940	0.00078	2.50740	0.00077

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	0.01860	0.00044	0.32940	0.00044	2.50740	0.00046

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00076	0.32940	0.00078	2.50740	0.00077

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

Cell Name	When	Power(pJ)					
		Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_or4_1	$(A * !C) + (!A * B * !C)$	0.01860	0.00044	0.32940	0.00044	2.50740	0.00046

SDFRRS



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00167	0.00184	0.00322	0.00157	0.00483	0.00291	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	681.93200	827.40700	928.98300

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	0.27892	0.32940	0.06480	0.55319	2.50740	0.30000	1.41908
	SET_B->Q (FR)	0.01860	0.00100	0.11658	0.32940	0.06480	0.41171	2.50740	0.30000	1.31954

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	0.23199	0.32940	0.06480	0.47564	2.50740	0.30000	1.23181
	RESET_B->Q (FF)	0.01860	0.00100	0.19500	0.32940	0.06480	0.45536	2.50740	0.30000	1.23825

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	0.27892	0.32940	0.06480	0.55319	2.50740	0.30000	1.41908

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	0.23199	0.32940	0.06480	0.47564	2.50740	0.30000	1.23181

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	0.18980	0.32940	0.06480	0.48623	2.50740	0.30000	1.37838
	RESET_B->Q_N (FR)	0.01860	0.00100	0.15176	0.32940	0.06480	0.47317	2.50740	0.30000	1.39581

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	0.23022	0.32940	0.06480	0.51170	2.50740	0.30000	1.25029
	SET_B->Q_N (FF)	0.01860	0.00100	0.07731	0.32940	0.06480	0.36589	2.50740	0.30000	1.17616

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	0.18980	0.32940	0.06480	0.48623	2.50740	0.30000	1.37838

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	0.23022	0.32940	0.06480	0.51170	2.50740	0.30000	1.25029

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	-0.08558	1.26300	1.26300	-0.26444	2.50740	2.50740	-0.36009
	setup	CLK (R)	0.01860	0.01860	0.12959	1.26300	1.26300	0.29412	2.50740	2.50740	0.38665

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	-0.09781	1.26300	1.26300	-0.17809	2.50740	2.50740	-0.21841
	setup	CLK (R)	0.01860	0.01860	0.17605	1.26300	1.26300	0.27793	2.50740	2.50740	0.35123

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	-0.11003	1.26300	1.26300	-0.32650	2.50740	2.50740	-0.44273
	setup	CLK (R)	0.01860	0.01860	0.15649	1.26300	1.26300	0.35079	2.50740	2.50740	0.47520

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	-0.12959	1.26300	1.26300	-0.20777	2.50740	2.50740	-0.25678
	setup	CLK (R)	0.01860	0.01860	0.21029	1.26300	1.26300	0.30491	2.50740	2.50740	0.38370

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	-0.08558	1.26300	1.26300	-0.27793	2.50740	2.50740	-0.38370
	setup	CLK (R)	0.01860	0.01860	0.13938	1.26300	1.26300	0.32650	2.50740	2.50740	0.43683

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	-0.09781	1.26300	1.26300	-0.14301	2.50740	2.50740	-0.17119
	setup	CLK (R)	0.01860	0.01860	0.17605	1.26300	1.26300	0.24285	2.50740	2.50740	0.31286

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	0.08069	1.26300	1.26300	0.15651	2.50740	2.50740	0.19185
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.15053

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	0.03912	1.26300	1.26300	0.24015	2.50740	2.50740	0.59621
	removal	CLK (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.08635	2.50740	2.50740	0.09740
	hold	RESET_B (R)	0.01860	0.01860	-0.07580	1.26300	1.26300	-0.21317	2.50740	2.50740	-0.28630
	setup	RESET_B (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.25634	2.50740	2.50740	0.35714

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	0.01515	0.32940	0.06480	0.01566	2.50740	0.30000	0.02175
	SET_B	0.01860	0.00100	0.02928	0.32940	0.06480	0.07527	2.50740	0.30000	0.25717

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	0.01524	0.32940	0.06480	0.01546	2.50740	0.30000	0.01982
	RESET_B	0.01860	0.00100	0.03357	0.32940	0.06480	0.07965	2.50740	0.30000	0.25236

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	0.01515	0.32940	0.06480	0.01566	2.50740	0.30000	0.02175

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	0.01524	0.32940	0.06480	0.01546	2.50740	0.30000	0.01982

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	0.01525	0.32940	0.06480	0.01558	2.50740	0.30000	0.02162
	RESET_B	0.01860	0.00100	0.03358	0.32940	0.06480	0.07992	2.50740	0.30000	0.25649

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	0.01515	0.32940	0.06480	0.01552	2.50740	0.30000	0.02001
	SET_B	0.01860	0.00100	0.02926	0.32940	0.06480	0.07496	2.50740	0.30000	0.25527

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	0.01525	0.32940	0.06480	0.01558	2.50740	0.30000	0.02162

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	0.01515	0.32940	0.06480	0.01552	2.50740	0.30000	0.02001

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00452	0.32940	0.00444	2.50740	0.00764

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00429	0.32940	0.00422	2.50740	0.00743

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	0.01026	0.32940	0.01008	2.50740	0.01368
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00452	0.32940	0.00444	2.50740	0.00764

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	0.01093	0.32940	0.01077	2.50740	0.01440
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00429	0.32940	0.00422	2.50740	0.00743

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00613	0.32940	0.00606	2.50740	0.00839

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.00661	0.32940	0.00651	2.50740	0.00895

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	0.01185	0.32940	0.01167	2.50740	0.01442
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00613	0.32940	0.00606	2.50740	0.00839

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	0.01532	0.32940	0.01478	2.50740	0.01763
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00661	0.32940	0.00651	2.50740	0.00895

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01201	0.32940	0.01210	2.50740	0.02042

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01361	0.32940	0.01374	2.50740	0.01805

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	0.01344	0.32940	0.01350	2.50740	0.01804
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01675	0.32940	0.01602	2.50740	0.02052
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01201	0.32940	0.01210	2.50740	0.02042
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00630	0.32940	0.00649	2.50740	0.01436

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	0.01361	0.32940	0.01374	2.50740	0.01805
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.01475	0.32940	0.02133	2.50740	0.02571
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.00310	0.32940	0.02235	2.50740	0.03201
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00599	0.32940	0.00617	2.50740	0.01340

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01043	0.32940	0.01048	2.50740	0.01939

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_sdfbbp_1	0.01860	0.01222	0.32940	0.01247	2.50740	0.02152

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	0.01038	0.32940	0.01049	2.50740	0.01930
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01416	0.32940	0.01427	2.50740	0.02295
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01043	0.32940	0.01048	2.50740	0.01939
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.01037	0.32940	0.01048	2.50740	0.01929
	(!RESET_B * !Q * Q_N)	0.01860	0.00985	0.32940	0.00992	2.50740	0.01883
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01043	0.32940	0.01048	2.50740	0.01939

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	0.00928	0.32940	0.00938	2.50740	0.01816
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01715	0.32940	0.01720	2.50740	0.02616
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.01222	0.32940	0.01247	2.50740	0.02152
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01895	0.32940	0.01916	2.50740	0.02831
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.00948	0.32940	0.00968	2.50740	0.01845
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.00928	0.32940	0.00938	2.50740	0.01816
	(!RESET_B * !Q * Q_N)	0.01860	0.00811	0.32940	0.00832	2.50740	0.01709
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.00944	0.32940	0.00964	2.50740	0.01841

SGCLK



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	0.00176	0.00217	0.00475	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	344.73700	415.97300	460.29400

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	0.07333	0.32940	0.06480	0.34786	2.50740	0.30000	1.22846

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	0.05997	0.32940	0.06480	0.31161	2.50740	0.30000	1.05040

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	-0.03669	1.26300	1.26300	-0.19428	2.50740	2.50740	-0.27896
	setup	CLK (R)	0.01860	0.01860	0.05923	1.26300	1.26300	0.27793	2.50740	2.50740	0.41319

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	-0.06594	1.26300	1.26300	-0.16730	2.50740	2.50740	-0.23084
	setup	CLK (R)	0.01860	0.01860	0.10924	1.26300	1.26300	0.21587	2.50740	2.50740	0.35703

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	-0.04070	1.26300	1.26300	-0.21857	2.50740	2.50740	-0.31283
	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	-0.07210	1.26300	1.26300	-0.14571	2.50740	2.50740	-0.20041
	setup	CLK (R)	0.01860	0.01860	0.11425	1.26300	1.26300	0.19428	2.50740	2.50740	0.29530

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	0.00855	0.32940	0.06480	0.00859	2.50740	0.30000	0.01378

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	0.00525	0.32940	0.06480	0.00571	2.50740	0.30000	0.01304

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01697	0.32940	0.01791	2.50740	0.02364

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00984	0.32940	0.02844	2.50740	0.03431

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	0.01697	0.32940	0.01791	2.50740	0.02364

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	0.00984	0.32940	0.02844	2.50740	0.03431

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00969	0.32940	0.00967	2.50740	0.01528

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.01155	0.32940	0.02776	2.50740	0.03253

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00692	0.32940	0.00696	2.50740	0.01466

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	Min	Slew(ns)	Mid	Slew(ns)	Max
sg13g2_slgcp_1	0.01860	0.00726	0.32940	0.00744	2.50740	0.01515

TIE0



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	57.83940	57.83940	57.83940

TIE1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

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	58.05660	58.05660	58.05660

XNOR2_1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp
25.00*

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	0.00527	0.00458	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	120.27200	194.74900	225.78800

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	0.07100	0.32940	0.06480	0.34606	2.50740	0.30000	1.22311
	A->Y (FR)	0.01860	0.00100	0.05330	0.32940	0.06480	0.53566	2.50740	0.30000	2.65803
	B->Y (RR)	0.01860	0.00100	0.06541	0.32940	0.06480	0.34063	2.50740	0.30000	1.21515
	B->Y (FR)	0.01860	0.00100	0.04670	0.32940	0.06480	0.54619	2.50740	0.30000	2.81860

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	0.06955	0.32940	0.06480	0.43453	2.50740	0.30000	1.59392
	A->Y (RF)	0.01860	0.00100	0.04640	0.32940	0.06480	0.44122	2.50740	0.30000	2.30083
	B->Y (FF)	0.01860	0.00100	0.07036	0.32940	0.06480	0.42268	2.50740	0.30000	1.57297
	B->Y (RF)	0.01860	0.00100	0.03933	0.32940	0.06480	0.43237	2.50740	0.30000	2.28713

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	0.00756	0.32940	0.06480	0.00763	2.50740	0.30000	0.01230
	B	0.01860	0.00100	0.00744	0.32940	0.06480	0.00743	2.50740	0.30000	0.01327

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	0.00696	0.32940	0.06480	0.00729	2.50740	0.30000	0.01268
	B	0.01860	0.00100	0.00759	0.32940	0.06480	0.00664	2.50740	0.30000	0.01240

XOR2_1



*sg13g2_stdcell_typ_1p20V_25C Cell Library: Process
sg13g2_stdcell_typ_1p20V_25C, Voltage 1.20, Temp 25.00*

Truth Table

INPUT		OUTPUT
A	B	X
0	0	0
0	1	1
1	0	1
1	1	0

Footprint

Cell Name	Area
sg13g2_xor2_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00540	0.00468	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	174.84400	184.84200	194.61300

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	0.06943	0.32940	0.06480	0.54326	2.50740	0.30000	2.14401
	A->X (FR)	0.01860	0.00100	0.05875	0.32940	0.06480	0.54273	2.50740	0.30000	2.67394
	B->X (RR)	0.01860	0.00100	0.07294	0.32940	0.06480	0.52935	2.50740	0.30000	2.09523
	B->X (FR)	0.01860	0.00100	0.05054	0.32940	0.06480	0.53339	2.50740	0.30000	2.66005

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	0.08637	0.32940	0.06480	0.32702	2.50740	0.30000	1.04186
	A->X (RF)	0.01860	0.00100	0.04334	0.32940	0.06480	0.43638	2.50740	0.30000	2.29080
	B->X (FF)	0.01860	0.00100	0.07958	0.32940	0.06480	0.32588	2.50740	0.30000	1.04812
	B->X (RF)	0.01860	0.00100	0.03788	0.32940	0.06480	0.44264	2.50740	0.30000	2.40020

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	0.00662	0.32940	0.06480	0.00677	2.50740	0.30000	0.01221
	B	0.01860	0.00100	0.00709	0.32940	0.06480	0.00608	2.50740	0.30000	0.01131

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	0.00856	0.32940	0.06480	0.00863	2.50740	0.30000	0.01418
	B	0.01860	0.00100	0.00788	0.32940	0.06480	0.00798	2.50740	0.30000	0.01533