

sg13g2_stdcell_fast_1p65V_m40C Library

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

INx
ITL
KEEPSTATE
MUX2x
MUX4
NAND2B1
NAND2B2
NAND2x
NAND3B1
NAND3
NAND4
NOR2Bx
NOR2x
NOR3x
NOR4x
NP_ANT
O21AI
OR2x
OR3x
OR4x
SDFRBPQx
SDFRBPx
SDFRRS
SGCLK
TIE0
TIE1

XNOR2_1
XOR2_1

A21OIx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a21oi_2	14.51520
sg13g2_a21oi_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_a21oi_2	0.00649	0.00690	0.00622	0.60000
sg13g2_a21oi_1	0.00335	0.00346	0.00317	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21oi_2	823.98500	2427.10000	3998.11000
sg13g2_a21oi_1	412.01000	1213.56000	1999.06000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1->Y (FR)	0.01860	0.00100	0.02134	0.32940	0.12960	0.26607	2.50740	0.60000	1.33799
	A2->Y (FR)	0.01860	0.00100	0.02591	0.32940	0.12960	0.27031	2.50740	0.60000	1.34657
	B1->Y (FR)	0.01860	0.00100	0.02162	0.32940	0.12960	0.30577	2.50740	0.60000	1.60525
sg13g2_a21oi_1	A1->Y (FR)	0.01860	0.00100	0.02332	0.32940	0.06480	0.26544	2.50740	0.30000	1.33275
	A2->Y (FR)	0.01860	0.00100	0.02773	0.32940	0.06480	0.27072	2.50740	0.30000	1.34737
	B1->Y (FR)	0.01860	0.00100	0.02342	0.32940	0.06480	0.30631	2.50740	0.30000	1.60716

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1->Y (RF)	0.01860	0.00100	0.02036	0.32940	0.12960	0.26744	2.50740	0.60000	1.39023
	A2->Y (RF)	0.01860	0.00100	0.02176	0.32940	0.12960	0.23649	2.50740	0.60000	1.19490
	B1->Y (RF)	0.01860	0.00100	0.01072	0.32940	0.12960	0.19205	2.50740	0.60000	1.03160
sg13g2_a21oi_1	A1->Y (RF)	0.01860	0.00100	0.02215	0.32940	0.06480	0.26740	2.50740	0.30000	1.38992
	A2->Y (RF)	0.01860	0.00100	0.02326	0.32940	0.06480	0.23619	2.50740	0.30000	1.19318
	B1->Y (RF)	0.01860	0.00100	0.01200	0.32940	0.06480	0.19263	2.50740	0.30000	1.03346

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02162	0.32940	0.12960	0.30577	2.50740	0.60000	1.60525
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01627	0.32940	0.12960	0.30131	2.50740	0.60000	1.60520
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01377	0.32940	0.12960	0.25447	2.50740	0.60000	1.36673
sg13g2_a21oi_1	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02342	0.32940	0.06480	0.30631	2.50740	0.30000	1.60716
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01823	0.32940	0.06480	0.29964	2.50740	0.30000	1.59500
	B1->Y (FR)	(!A1 * !A2)	0.01860	0.00100	0.01545	0.32940	0.06480	0.25387	2.50740	0.30000	1.36497

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01133	0.32940	0.12960	0.19337	2.50740	0.60000	1.02648
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01097	0.32940	0.12960	0.19163	2.50740	0.60000	1.02424
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01072	0.32940	0.12960	0.19205	2.50740	0.60000	1.03160
sg13g2_a21oi_1	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01261	0.32940	0.06480	0.19406	2.50740	0.30000	1.02898
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01224	0.32940	0.06480	0.19239	2.50740	0.30000	1.02688
	B1->Y (RF)	(!A1 * !A2)	0.01860	0.00100	0.01200	0.32940	0.06480	0.19263	2.50740	0.30000	1.03346

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1	0.01860	0.00100	0.01688	0.32940	0.12960	0.02314	2.50740	0.60000	0.09811
	A2	0.01860	0.00100	0.01805	0.32940	0.12960	0.02366	2.50740	0.60000	0.10282
	B1	0.01860	0.00100	0.00944	0.32940	0.12960	0.01863	2.50740	0.60000	0.10509
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00846	0.32940	0.06480	0.01152	2.50740	0.30000	0.04871
	A2	0.01860	0.00100	0.00895	0.32940	0.06480	0.01175	2.50740	0.30000	0.05145
	B1	0.01860	0.00100	0.00457	0.32940	0.06480	0.00912	2.50740	0.30000	0.05207

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	A1	0.01860	0.00100	0.00987	0.32940	0.12960	0.01636	2.50740	0.60000	0.08533
	A2	0.01860	0.00100	0.01698	0.32940	0.12960	0.02274	2.50740	0.60000	0.09608
	B1	0.01860	0.00100	0.00529	0.32940	0.12960	0.01512	2.50740	0.60000	0.10005
sg13g2_a21oi_1	A1	0.01860	0.00100	0.00552	0.32940	0.06480	0.00877	2.50740	0.30000	0.04358
	A2	0.01860	0.00100	0.00892	0.32940	0.06480	0.01181	2.50740	0.30000	0.04838
	B1	0.01860	0.00100	0.00319	0.32940	0.06480	0.00794	2.50740	0.30000	0.05014

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.00944	0.32940	0.12960	0.01863	2.50740	0.60000	0.10509
	B1	(!A1 * A2)	0.01860	0.00100	0.00809	0.32940	0.12960	0.01745	2.50740	0.60000	0.10387
	B1	(!A1 * !A2)	0.01860	0.00100	0.00826	0.32940	0.12960	0.01866	2.50740	0.60000	0.11271
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00457	0.32940	0.06480	0.00912	2.50740	0.30000	0.05207
	B1	(!A1 * A2)	0.01860	0.00100	0.00405	0.32940	0.06480	0.00875	2.50740	0.30000	0.05191
	B1	(!A1 * !A2)	0.01860	0.00100	0.00412	0.32940	0.06480	0.00932	2.50740	0.30000	0.05692

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21oi_2	B1	(A1 * !A2)	0.01860	0.00100	0.01257	0.32940	0.12960	0.02137	2.50740	0.60000	0.09744
	B1	(!A1 * A2)	0.01860	0.00100	0.00569	0.32940	0.12960	0.01461	2.50740	0.60000	0.09146
	B1	(!A1 * !A2)	0.01860	0.00100	0.00529	0.32940	0.12960	0.01512	2.50740	0.60000	0.10005
sg13g2_a21oi_1	B1	(A1 * !A2)	0.01860	0.00100	0.00685	0.32940	0.06480	0.01108	2.50740	0.30000	0.04905
	B1	(!A1 * A2)	0.01860	0.00100	0.00340	0.32940	0.06480	0.00776	2.50740	0.30000	0.04602
	B1	(!A1 * !A2)	0.01860	0.00100	0.00319	0.32940	0.06480	0.00794	2.50740	0.30000	0.05014

A221OI



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

Truth Table

INPUT					OUTPUT
A1	A2	B1	B2	C1	Y
0	x	0	x	0	1
0	x	x	x	1	0
0	x	1	0	0	1
x	x	1	1	x	0
1	0	0	x	0	1
1	0	x	x	1	0
1	0	1	0	0	1
1	1	x	x	x	0

Footprint

Cell Name	Area
sg13g2_a221oi_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	A1	A2	B1	B2	C1	Y
sg13g2_a221oi_1	0.00331	0.00342	0.00324	0.00341	0.00314	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a221oi_1	615.39500	2079.72000	3301.49000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1->Y (FR)	0.01860	0.00100	0.05076	0.32940	0.06480	0.35529	2.50740	0.30000	1.61108
	A2->Y (FR)	0.01860	0.00100	0.05683	0.32940	0.06480	0.36083	2.50740	0.30000	1.61792
	B1->Y (FR)	0.01860	0.00100	0.04559	0.32940	0.06480	0.37906	2.50740	0.30000	1.83355
	B2->Y (FR)	0.01860	0.00100	0.05167	0.32940	0.06480	0.38473	2.50740	0.30000	1.84021
	C1->Y (FR)	0.01860	0.00100	0.02454	0.32940	0.06480	0.34987	2.50740	0.30000	1.83010

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1->Y (RF)	0.01860	0.00100	0.02898	0.32940	0.06480	0.27986	2.50740	0.30000	1.40400
	A2->Y (RF)	0.01860	0.00100	0.02966	0.32940	0.06480	0.24779	2.50740	0.30000	1.20619
	B1->Y (RF)	0.01860	0.00100	0.02499	0.32940	0.06480	0.27034	2.50740	0.30000	1.38892
	B2->Y (RF)	0.01860	0.00100	0.02598	0.32940	0.06480	0.23933	2.50740	0.30000	1.19196
	C1->Y (RF)	0.01860	0.00100	0.01392	0.32940	0.06480	0.19391	2.50740	0.30000	1.02903

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05076	0.32940	0.06480	0.35529	2.50740	0.30000	1.61108
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.04349	0.32940	0.06480	0.34882	2.50740	0.30000	1.60740
	A1->Y (FR)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.04009	0.32940	0.06480	0.31340	2.50740	0.30000	1.46807
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.05683	0.32940	0.06480	0.36083	2.50740	0.30000	1.61792
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.04980	0.32940	0.06480	0.35457	2.50740	0.30000	1.61545
	A2->Y (FR)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.04527	0.32940	0.06480	0.31795	2.50740	0.30000	1.47488
	B1->Y (FR)	(A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.04559	0.32940	0.06480	0.37906	2.50740	0.30000	1.83355
	B1->Y (FR)	(!A1 * A2 * B2 * !C1)	0.01860	0.00100	0.03824	0.32940	0.06480	0.37200	2.50740	0.30000	1.83014
	B1->Y (FR)	(!A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.03266	0.32940	0.06480	0.32198	2.50740	0.30000	1.59199
	B2->Y (FR)	(A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.05167	0.32940	0.06480	0.38473	2.50740	0.30000	1.84021
	B2->Y (FR)	(!A1 * A2 * B1 * !C1)	0.01860	0.00100	0.04455	0.32940	0.06480	0.37791	2.50740	0.30000	1.83807
	B2->Y (FR)	(!A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.03779	0.32940	0.06480	0.32655	2.50740	0.30000	1.59969
	C1->Y (FR)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.02912	0.32940	0.06480	0.35391	2.50740	0.30000	1.82997
	C1->Y (FR)	(!A1 * A2 * !B1 * !B2)	0.01860	0.00100	0.02321	0.32940	0.06480	0.34793	2.50740	0.30000	1.82591
	C1->Y (FR)	(!A1 * !A2 * B1 * !B2)	0.01860	0.00100	0.03045	0.32940	0.06480	0.35448	2.50740	0.30000	1.82881
	C1->Y (FR)	(!A1 * !A2 * !B1 * B2)	0.01860	0.00100	0.02454	0.32940	0.06480	0.34987	2.50740	0.30000	1.83010
	C1->Y (FR)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.02104	0.32940	0.06480	0.30335	2.50740	0.30000	1.60462

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02875	0.32940	0.06480	0.28004	2.50740	0.30000	1.40004
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02773	0.32940	0.06480	0.27736	2.50740	0.30000	1.39769
	A1->Y (RF)	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02898	0.32940	0.06480	0.27986	2.50740	0.30000	1.40400
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02942	0.32940	0.06480	0.24808	2.50740	0.30000	1.20261
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02842	0.32940	0.06480	0.24567	2.50740	0.30000	1.20077
	A2->Y (RF)	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.02966	0.32940	0.06480	0.24779	2.50740	0.30000	1.20619
	B1->Y (RF)	(A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.02603	0.32940	0.06480	0.27297	2.50740	0.30000	1.38609
	B1->Y (RF)	(!A1 * A2 * B2 * !C1)	0.01860	0.00100	0.02529	0.32940	0.06480	0.27032	2.50740	0.30000	1.38391
	B1->Y (RF)	(!A1 * !A2 * B2 * !C1)	0.01860	0.00100	0.02499	0.32940	0.06480	0.27034	2.50740	0.30000	1.38892
	B2->Y (RF)	(A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.02694	0.32940	0.06480	0.24170	2.50740	0.30000	1.18958
	B2->Y (RF)	(!A1 * A2 * B1 * !C1)	0.01860	0.00100	0.02623	0.32940	0.06480	0.23927	2.50740	0.30000	1.18659
	B2->Y (RF)	(!A1 * !A2 * B1 * !C1)	0.01860	0.00100	0.02598	0.32940	0.06480	0.23933	2.50740	0.30000	1.19196
	C1->Y (RF)	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.01440	0.32940	0.06480	0.19549	2.50740	0.30000	1.02523
	C1->Y (RF)	(!A1 * A2 * !B1 * !B2)	0.01860	0.00100	0.01405	0.32940	0.06480	0.19385	2.50740	0.30000	1.02288
	C1->Y (RF)	(!A1 * !A2 * B1 * !B2)	0.01860	0.00100	0.01445	0.32940	0.06480	0.19548	2.50740	0.30000	1.02549
	C1->Y (RF)	(!A1 * !A2 * !B1 * B2)	0.01860	0.00100	0.01411	0.32940	0.06480	0.19383	2.50740	0.30000	1.02215
	C1->Y (RF)	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.01392	0.32940	0.06480	0.19391	2.50740	0.30000	1.02903

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1	0.01860	0.00100	0.01577	0.32940	0.06480	0.01727	2.50740	0.30000	0.05139
	A2	0.01860	0.00100	0.01604	0.32940	0.06480	0.01759	2.50740	0.30000	0.05322
	B1	0.01860	0.00100	0.01190	0.32940	0.06480	0.01401	2.50740	0.30000	0.04398
	B2	0.01860	0.00100	0.01210	0.32940	0.06480	0.01417	2.50740	0.30000	0.04493
	C1	0.01860	0.00100	0.00733	0.32940	0.06480	0.01143	2.50740	0.30000	0.05037

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a221oi_1	A1	0.01860	0.00100	0.00905	0.32940	0.06480	0.01129	2.50740	0.30000	0.04219
	A2	0.01860	0.00100	0.01241	0.32940	0.06480	0.01450	2.50740	0.30000	0.04694
	B1	0.01860	0.00100	0.00579	0.32940	0.06480	0.00852	2.50740	0.30000	0.03989
	B2	0.01860	0.00100	0.00925	0.32940	0.06480	0.01178	2.50740	0.30000	0.04429
	C1	0.01860	0.00100	0.00349	0.32940	0.06480	0.00768	2.50740	0.30000	0.04600

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01577	0.32940	0.06480	0.01727	2.50740	0.30000	0.05139
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01522	0.32940	0.06480	0.01691	2.50740	0.30000	0.05094
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01918	0.32940	0.06480	0.02079	2.50740	0.30000	0.05560
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01604	0.32940	0.06480	0.01759	2.50740	0.30000	0.05322
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01559	0.32940	0.06480	0.01722	2.50740	0.30000	0.05300
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01952	0.32940	0.06480	0.02100	2.50740	0.30000	0.05747
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.01190	0.32940	0.06480	0.01401	2.50740	0.30000	0.04398
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.01137	0.32940	0.06480	0.01363	2.50740	0.30000	0.04357
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.01134	0.32940	0.06480	0.01384	2.50740	0.30000	0.04705
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.01210	0.32940	0.06480	0.01417	2.50740	0.30000	0.04493
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.01163	0.32940	0.06480	0.01364	2.50740	0.30000	0.04512
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.01164	0.32940	0.06480	0.01395	2.50740	0.30000	0.04877
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00733	0.32940	0.06480	0.01143	2.50740	0.30000	0.05037
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00680	0.32940	0.06480	0.01106	2.50740	0.30000	0.05007
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00728	0.32940	0.06480	0.01137	2.50740	0.30000	0.05049
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00678	0.32940	0.06480	0.01108	2.50740	0.30000	0.04994
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00680	0.32940	0.06480	0.01141	2.50740	0.30000	0.05439

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last

sg13g2_a221oi_1	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01250	0.32940	0.06480	0.01474	2.50740	0.30000	0.04554
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00905	0.32940	0.06480	0.01129	2.50740	0.30000	0.04219
	A1	(A2 * !B1 * !B2 * !C1)	0.01860	0.00100	0.00732	0.32940	0.06480	0.00969	2.50740	0.30000	0.04209
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01586	0.32940	0.06480	0.01792	2.50740	0.30000	0.04991
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01241	0.32940	0.06480	0.01450	2.50740	0.30000	0.04694
	A2	(A1 * !B1 * !B2 * !C1)	0.01860	0.00100	0.01071	0.32940	0.06480	0.01282	2.50740	0.30000	0.04676
	B1	(A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00942	0.32940	0.06480	0.01198	2.50740	0.30000	0.04086
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00599	0.32940	0.06480	0.00852	2.50740	0.30000	0.03760
	B1	(!A1 * !A2 * !B2 * !C1)	0.01860	0.00100	0.00579	0.32940	0.06480	0.00852	2.50740	0.30000	0.03989
	B2	(A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.01287	0.32940	0.06480	0.01521	2.50740	0.30000	0.04505
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00943	0.32940	0.06480	0.01183	2.50740	0.30000	0.04146
	B2	(!A1 * !A2 * !B1 * !C1)	0.01860	0.00100	0.00925	0.32940	0.06480	0.01178	2.50740	0.30000	0.04429
	C1	(A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00705	0.32940	0.06480	0.01094	2.50740	0.30000	0.04547
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00361	0.32940	0.06480	0.00759	2.50740	0.30000	0.04188
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00710	0.32940	0.06480	0.01093	2.50740	0.30000	0.04561
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00366	0.32940	0.06480	0.00757	2.50740	0.30000	0.04214
	C1	(!A1 * !A2 * !B1 * !B2)	0.01860	0.00100	0.00349	0.32940	0.06480	0.00768	2.50740	0.30000	0.04600

A22OI



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

Truth Table

INPUT				OUTPUT
A1	A2	B1	B2	Y
0	x	0	x	1
0	x	1	0	1
x	x	1	1	0
1	0	0	x	1
1	0	1	0	1
1	1	x	x	0

Footprint

Cell Name	Area
sg13g2_a22oi_1	10.84860

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A1	A2	B1	B2	Y
sg13g2_a22oi_1	0.00344	0.00350	0.00337	0.00327	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a22oi_1	406.79700	1461.88000	2677.79000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (FR)	0.01860	0.00100	0.02657	0.32940	0.06480	0.26835	2.50740	0.30000	1.33527
	A2->Y (FR)	0.01860	0.00100	0.03054	0.32940	0.06480	0.27226	2.50740	0.30000	1.34358
	B1->Y (FR)	0.01860	0.00100	0.02961	0.32940	0.06480	0.31120	2.50740	0.30000	1.59845
	B2->Y (FR)	0.01860	0.00100	0.02065	0.32940	0.06480	0.30077	2.50740	0.30000	1.58104

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (RF)	0.01860	0.00100	0.02482	0.32940	0.06480	0.27071	2.50740	0.30000	1.39288
	A2->Y (RF)	0.01860	0.00100	0.02573	0.32940	0.06480	0.23921	2.50740	0.30000	1.19559
	B1->Y (RF)	0.01860	0.00100	0.02071	0.32940	0.06480	0.23409	2.50740	0.30000	1.18280
	B2->Y (RF)	0.01860	0.00100	0.01949	0.32940	0.06480	0.26493	2.50740	0.30000	1.38043

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (FR)	(A2 * B1)	0.01860	0.00100	0.02657	0.32940	0.06480	0.26835	2.50740	0.30000	1.33527
	A2->Y (FR)	(A1 * B1)	0.01860	0.00100	0.03054	0.32940	0.06480	0.27226	2.50740	0.30000	1.34358
	B1->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02961	0.32940	0.06480	0.31120	2.50740	0.30000	1.59845
	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02479	0.32940	0.06480	0.30447	2.50740	0.30000	1.58576
	B2->Y (FR)	(A1 * !A2)	0.01860	0.00100	0.02542	0.32940	0.06480	0.30490	2.50740	0.30000	1.58061
	B2->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.02065	0.32940	0.06480	0.30077	2.50740	0.30000	1.58104

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1->Y (RF)	(A2 * B1)	0.01860	0.00100	0.02482	0.32940	0.06480	0.27071	2.50740	0.30000	1.39288
	A2->Y (RF)	(A1 * B1)	0.01860	0.00100	0.02573	0.32940	0.06480	0.23921	2.50740	0.30000	1.19559
	B1->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.02071	0.32940	0.06480	0.23409	2.50740	0.30000	1.18280
	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.02020	0.32940	0.06480	0.23177	2.50740	0.30000	1.18270
	B2->Y (RF)	(A1 * !A2)	0.01860	0.00100	0.01949	0.32940	0.06480	0.26493	2.50740	0.30000	1.38043
	B2->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01890	0.32940	0.06480	0.26239	2.50740	0.30000	1.37797

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	0.01860	0.00100	0.00890	0.32940	0.06480	0.01166	2.50740	0.30000	0.04915
	A2	0.01860	0.00100	0.00924	0.32940	0.06480	0.01179	2.50740	0.30000	0.05158
	B1	0.01860	0.00100	0.00537	0.32940	0.06480	0.00910	2.50740	0.30000	0.04787
	B2	0.01860	0.00100	0.00510	0.32940	0.06480	0.00886	2.50740	0.30000	0.04574

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	0.01860	0.00100	0.00845	0.32940	0.06480	0.01152	2.50740	0.30000	0.04637
	A2	0.01860	0.00100	0.01181	0.32940	0.06480	0.01461	2.50740	0.30000	0.05047
	B1	0.01860	0.00100	0.01163	0.32940	0.06480	0.01489	2.50740	0.30000	0.04790
	B2	0.01860	0.00100	0.00833	0.32940	0.06480	0.01176	2.50740	0.30000	0.04419

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	(A2 * B1)	0.01860	0.00100	0.00890	0.32940	0.06480	0.01166	2.50740	0.30000	0.04915
	A2	(A1 * B1)	0.01860	0.00100	0.00924	0.32940	0.06480	0.01179	2.50740	0.30000	0.05158
	B1	(A1 * !A2)	0.01860	0.00100	0.00537	0.32940	0.06480	0.00910	2.50740	0.30000	0.04787
	B1	(!A1 * A2)	0.01860	0.00100	0.00503	0.32940	0.06480	0.00889	2.50740	0.30000	0.04774
	B2	(A1 * !A2)	0.01860	0.00100	0.00510	0.32940	0.06480	0.00886	2.50740	0.30000	0.04574
	B2	(!A1 * A2)	0.01860	0.00100	0.00466	0.32940	0.06480	0.00864	2.50740	0.30000	0.04548

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a22oi_1	A1	(A2 * B1)	0.01860	0.00100	0.00845	0.32940	0.06480	0.01152	2.50740	0.30000	0.04637
	A2	(A1 * B1)	0.01860	0.00100	0.01181	0.32940	0.06480	0.01461	2.50740	0.30000	0.05047
	B1	(A1 * !A2)	0.01860	0.00100	0.01163	0.32940	0.06480	0.01489	2.50740	0.30000	0.04790
	B1	(!A1 * A2)	0.01860	0.00100	0.00820	0.32940	0.06480	0.01154	2.50740	0.30000	0.04541
	B2	(A1 * !A2)	0.01860	0.00100	0.00833	0.32940	0.06480	0.01176	2.50740	0.30000	0.04419
	B2	(!A1 * A2)	0.01860	0.00100	0.00491	0.32940	0.06480	0.00846	2.50740	0.30000	0.04079

AND2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and2_2	10.88640
sg13g2_and2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_and2_2	0.00284	0.00289	0.60000
sg13g2_and2_1	0.00287	0.00289	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and2_2	1611.43000	1783.96000	2156.85000
sg13g2_and2_1	881.88800	1184.62000	1427.23000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A->X (RR)	0.01860	0.00100	0.04252	0.32940	0.12960	0.19613	2.50740	0.60000	0.68357
	B->X (RR)	0.01860	0.00100	0.04344	0.32940	0.12960	0.18468	2.50740	0.60000	0.62365
sg13g2_and2_1	A->X (RR)	0.01860	0.00100	0.03415	0.32940	0.06480	0.17139	2.50740	0.30000	0.63690
	B->X (RR)	0.01860	0.00100	0.03531	0.32940	0.06480	0.16302	2.50740	0.30000	0.58244

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A->X (FF)	0.01860	0.00100	0.03568	0.32940	0.12960	0.16971	2.50740	0.60000	0.55091
	B->X (FF)	0.01860	0.00100	0.03821	0.32940	0.12960	0.17873	2.50740	0.60000	0.59701
sg13g2_and2_1	A->X (FF)	0.01860	0.00100	0.02916	0.32940	0.06480	0.14583	2.50740	0.30000	0.50363
	B->X (FF)	0.01860	0.00100	0.03194	0.32940	0.06480	0.15644	2.50740	0.30000	0.55392

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A	0.01860	0.00100	0.02223	0.32940	0.12960	0.02998	2.50740	0.60000	0.10769
	B	0.01860	0.00100	0.02510	0.32940	0.12960	0.03148	2.50740	0.60000	0.11062
sg13g2_and2_1	A	0.01860	0.00100	0.01267	0.32940	0.06480	0.02166	2.50740	0.30000	0.10065
	B	0.01860	0.00100	0.01557	0.32940	0.06480	0.02352	2.50740	0.30000	0.10366

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and2_2	A	0.01860	0.00100	0.01951	0.32940	0.12960	0.02846	2.50740	0.60000	0.10241
	B	0.01860	0.00100	0.01979	0.32940	0.12960	0.02891	2.50740	0.60000	0.10597
sg13g2_and2_1	A	0.01860	0.00100	0.01096	0.32940	0.06480	0.02051	2.50740	0.30000	0.09596
	B	0.01860	0.00100	0.01119	0.32940	0.06480	0.02093	2.50740	0.30000	0.09830

AND3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and3_2	12.70080
sg13g2_and3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_and3_2	0.00286	0.00285	0.00287	0.60000
sg13g2_and3_1	0.00286	0.00286	0.00288	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and3_2	1615.45000	2042.83000	2698.26000
sg13g2_and3_1	885.85700	1378.37000	2021.55000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A->X (RR)	0.01860	0.00100	0.05623	0.32940	0.12960	0.22583	2.50740	0.60000	0.78016
	B->X (RR)	0.01860	0.00100	0.06002	0.32940	0.12960	0.21822	2.50740	0.60000	0.73782
	C->X (RR)	0.01860	0.00100	0.06135	0.32940	0.12960	0.20389	2.50740	0.60000	0.66838
sg13g2_and3_1	A->X (RR)	0.01860	0.00100	0.04438	0.32940	0.06480	0.19600	2.50740	0.30000	0.72446
	B->X (RR)	0.01860	0.00100	0.04830	0.32940	0.06480	0.19096	2.50740	0.30000	0.68771
	C->X (RR)	0.01860	0.00100	0.04963	0.32940	0.06480	0.17932	2.50740	0.30000	0.62552

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A->X (FF)	0.01860	0.00100	0.03723	0.32940	0.12960	0.17137	2.50740	0.60000	0.51834
	B->X (FF)	0.01860	0.00100	0.03989	0.32940	0.12960	0.17967	2.50740	0.60000	0.55848
	C->X (FF)	0.01860	0.00100	0.04177	0.32940	0.12960	0.18733	2.50740	0.60000	0.60560
sg13g2_and3_1	A->X (FF)	0.01860	0.00100	0.03094	0.32940	0.06480	0.14749	2.50740	0.30000	0.46892
	B->X (FF)	0.01860	0.00100	0.03380	0.32940	0.06480	0.15751	2.50740	0.30000	0.51227
	C->X (FF)	0.01860	0.00100	0.03559	0.32940	0.06480	0.16586	2.50740	0.30000	0.56287

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A	0.01860	0.00100	0.02612	0.32940	0.12960	0.03072	2.50740	0.60000	0.10219
	B	0.01860	0.00100	0.02903	0.32940	0.12960	0.03249	2.50740	0.60000	0.10392
	C	0.01860	0.00100	0.03177	0.32940	0.12960	0.03458	2.50740	0.60000	0.11108
sg13g2_and3_1	A	0.01860	0.00100	0.01465	0.32940	0.06480	0.02222	2.50740	0.30000	0.09403
	B	0.01860	0.00100	0.01758	0.32940	0.06480	0.02393	2.50740	0.30000	0.09661
	C	0.01860	0.00100	0.02033	0.32940	0.06480	0.02614	2.50740	0.30000	0.10454

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and3_2	A	0.01860	0.00100	0.01984	0.32940	0.12960	0.02778	2.50740	0.60000	0.09561
	B	0.01860	0.00100	0.02032	0.32940	0.12960	0.02788	2.50740	0.60000	0.09698
	C	0.01860	0.00100	0.02067	0.32940	0.12960	0.02865	2.50740	0.60000	0.10347
sg13g2_and3_1	A	0.01860	0.00100	0.01130	0.32940	0.06480	0.01959	2.50740	0.30000	0.08785
	B	0.01860	0.00100	0.01166	0.32940	0.06480	0.02017	2.50740	0.30000	0.08997
	C	0.01860	0.00100	0.01188	0.32940	0.06480	0.02063	2.50740	0.30000	0.09633

AND4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_and4_2	16.32960
sg13g2_and4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_and4_2	0.00268	0.00283	0.00282	0.00284	0.60000
sg13g2_and4_1	0.00271	0.00285	0.00284	0.00286	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_and4_2	1619.66000	2202.62000	3239.66000
sg13g2_and4_1	890.10400	1505.63000	2625.91000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A->X (RR)	0.01860	0.00100	0.06988	0.32940	0.12960	0.25183	2.50740	0.60000	0.85646
	B->X (RR)	0.01860	0.00100	0.07637	0.32940	0.12960	0.24664	2.50740	0.60000	0.82567
	C->X (RR)	0.01860	0.00100	0.08018	0.32940	0.12960	0.23619	2.50740	0.60000	0.77269
	D->X (RR)	0.01860	0.00100	0.08173	0.32940	0.12960	0.22435	2.50740	0.60000	0.70544
sg13g2_and4_1	A->X (RR)	0.01860	0.00100	0.05451	0.32940	0.06480	0.21812	2.50740	0.30000	0.79890
	B->X (RR)	0.01860	0.00100	0.06101	0.32940	0.06480	0.21569	2.50740	0.30000	0.77302
	C->X (RR)	0.01860	0.00100	0.06486	0.32940	0.06480	0.20733	2.50740	0.30000	0.72598
	D->X (RR)	0.01860	0.00100	0.06644	0.32940	0.06480	0.19741	2.50740	0.30000	0.66329

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A->X (FF)	0.01860	0.00100	0.03835	0.32940	0.12960	0.17150	2.50740	0.60000	0.49086
	B->X (FF)	0.01860	0.00100	0.04115	0.32940	0.12960	0.17988	2.50740	0.60000	0.52622
	C->X (FF)	0.01860	0.00100	0.04321	0.32940	0.12960	0.18692	2.50740	0.60000	0.56554
	D->X (FF)	0.01860	0.00100	0.04456	0.32940	0.12960	0.19315	2.50740	0.60000	0.60805
sg13g2_and4_1	A->X (FF)	0.01860	0.00100	0.03235	0.32940	0.06480	0.14763	2.50740	0.30000	0.43840
	B->X (FF)	0.01860	0.00100	0.03532	0.32940	0.06480	0.15741	2.50740	0.30000	0.47765
	C->X (FF)	0.01860	0.00100	0.03730	0.32940	0.06480	0.16558	2.50740	0.30000	0.52027
	D->X (FF)	0.01860	0.00100	0.03849	0.32940	0.06480	0.17249	2.50740	0.30000	0.56691

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A	0.01860	0.00100	0.02952	0.32940	0.12960	0.03146	2.50740	0.60000	0.09681
	B	0.01860	0.00100	0.03275	0.32940	0.12960	0.03324	2.50740	0.60000	0.09873
	C	0.01860	0.00100	0.03538	0.32940	0.12960	0.03543	2.50740	0.60000	0.10545
	D	0.01860	0.00100	0.03830	0.32940	0.12960	0.03746	2.50740	0.60000	0.11239
sg13g2_and4_1	A	0.01860	0.00100	0.01633	0.32940	0.06480	0.02266	2.50740	0.30000	0.08830
	B	0.01860	0.00100	0.01956	0.32940	0.06480	0.02459	2.50740	0.30000	0.09113
	C	0.01860	0.00100	0.02231	0.32940	0.06480	0.02663	2.50740	0.30000	0.09761
	D	0.01860	0.00100	0.02508	0.32940	0.06480	0.02883	2.50740	0.30000	0.10436

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_and4_2	A	0.01860	0.00100	0.02059	0.32940	0.12960	0.02744	2.50740	0.60000	0.09059
	B	0.01860	0.00100	0.02095	0.32940	0.12960	0.02756	2.50740	0.60000	0.09176
	C	0.01860	0.00100	0.02146	0.32940	0.12960	0.02819	2.50740	0.60000	0.09643
	D	0.01860	0.00100	0.02189	0.32940	0.12960	0.02858	2.50740	0.60000	0.10193
sg13g2_and4_1	A	0.01860	0.00100	0.01194	0.32940	0.06480	0.01948	2.50740	0.30000	0.08317
	B	0.01860	0.00100	0.01217	0.32940	0.06480	0.01966	2.50740	0.30000	0.08439
	C	0.01860	0.00100	0.01250	0.32940	0.06480	0.02016	2.50740	0.30000	0.08890
	D	0.01860	0.00100	0.01278	0.32940	0.06480	0.02062	2.50740	0.30000	0.09506

A021x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_a21o_2	14.51520
sg13g2_a21o_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	X
sg13g2_a21o_2	0.00328	0.00332	0.00314	0.60000
sg13g2_a21o_1	0.00309	0.00321	0.00301	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_a21o_2	1463.09000	1989.32000	2488.16000
sg13g2_a21o_1	1094.54000	1428.39000	1866.58000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (RR)	0.01860	0.00100	0.04521	0.32940	0.12960	0.19929	2.50740	0.60000	0.66968
	A2->X (RR)	0.01860	0.00100	0.04584	0.32940	0.12960	0.18643	2.50740	0.60000	0.60595
	B1->X (RR)	0.01860	0.00100	0.02908	0.32940	0.12960	0.16073	2.50740	0.60000	0.52868
sg13g2_a21o_1	A1->X (RR)	0.01860	0.00100	0.04195	0.32940	0.06480	0.18921	2.50740	0.30000	0.68076
	A2->X (RR)	0.01860	0.00100	0.04270	0.32940	0.06480	0.17805	2.50740	0.30000	0.62100
	B1->X (RR)	0.01860	0.00100	0.02648	0.32940	0.06480	0.15082	2.50740	0.30000	0.53546

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (FF)	0.01860	0.00100	0.05461	0.32940	0.12960	0.18683	2.50740	0.60000	0.59996
	A2->X (FF)	0.01860	0.00100	0.05960	0.32940	0.12960	0.19692	2.50740	0.60000	0.64785
	B1->X (FF)	0.01860	0.00100	0.05571	0.32940	0.12960	0.21390	2.50740	0.60000	0.73469
sg13g2_a21o_1	A1->X (FF)	0.01860	0.00100	0.04336	0.32940	0.06480	0.15939	2.50740	0.30000	0.52235
	A2->X (FF)	0.01860	0.00100	0.04797	0.32940	0.06480	0.16946	2.50740	0.30000	0.57168
	B1->X (FF)	0.01860	0.00100	0.04379	0.32940	0.06480	0.18174	2.50740	0.30000	0.64904

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (RR)	!B1	0.01860	0.00100	0.04521	0.32940	0.12960	0.19929	2.50740	0.60000	0.66968
	A2->X (RR)	!B1	0.01860	0.00100	0.04584	0.32940	0.12960	0.18643	2.50740	0.60000	0.60595
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.03053	0.32940	0.12960	0.16611	2.50740	0.60000	0.51451
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02927	0.32940	0.12960	0.15881	2.50740	0.60000	0.49473
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.02908	0.32940	0.12960	0.16073	2.50740	0.60000	0.52868
sg13g2_a21o_1	A1->X (RR)	!B1	0.01860	0.00100	0.04195	0.32940	0.06480	0.18921	2.50740	0.30000	0.68076
	A2->X (RR)	!B1	0.01860	0.00100	0.04270	0.32940	0.06480	0.17805	2.50740	0.30000	0.62100
	B1->X (RR)	(A1 * !A2)	0.01860	0.00100	0.02825	0.32940	0.06480	0.15659	2.50740	0.30000	0.52171
	B1->X (RR)	(!A1 * A2)	0.01860	0.00100	0.02670	0.32940	0.06480	0.14793	2.50740	0.30000	0.50006
	B1->X (RR)	(!A1 * !A2)	0.01860	0.00100	0.02648	0.32940	0.06480	0.15082	2.50740	0.30000	0.53546

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1->X (FF)	!B1	0.01860	0.00100	0.05461	0.32940	0.12960	0.18683	2.50740	0.60000	0.59996
	A2->X (FF)	!B1	0.01860	0.00100	0.05960	0.32940	0.12960	0.19692	2.50740	0.60000	0.64785
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.05571	0.32940	0.12960	0.21390	2.50740	0.60000	0.73469
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.04977	0.32940	0.12960	0.20314	2.50740	0.60000	0.71623
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.04126	0.32940	0.12960	0.18516	2.50740	0.60000	0.65729
sg13g2_a21o_1	A1->X (FF)	!B1	0.01860	0.00100	0.04336	0.32940	0.06480	0.15939	2.50740	0.30000	0.52235
	A2->X (FF)	!B1	0.01860	0.00100	0.04797	0.32940	0.06480	0.16946	2.50740	0.30000	0.57168
	B1->X (FF)	(A1 * !A2)	0.01860	0.00100	0.04379	0.32940	0.06480	0.18174	2.50740	0.30000	0.64904
	B1->X (FF)	(!A1 * A2)	0.01860	0.00100	0.03854	0.32940	0.06480	0.17102	2.50740	0.30000	0.62905
	B1->X (FF)	(!A1 * !A2)	0.01860	0.00100	0.03292	0.32940	0.06480	0.15707	2.50740	0.30000	0.57533

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	0.01860	0.00100	0.02377	0.32940	0.12960	0.03148	2.50740	0.60000	0.11452
	A2	0.01860	0.00100	0.02705	0.32940	0.12960	0.03352	2.50740	0.60000	0.11811
	B1	0.01860	0.00100	0.02025	0.32940	0.12960	0.03079	2.50740	0.60000	0.12488
sg13g2_a21o_1	A1	0.01860	0.00100	0.01415	0.32940	0.06480	0.02223	2.50740	0.30000	0.09954
	A2	0.01860	0.00100	0.01716	0.32940	0.06480	0.02430	2.50740	0.30000	0.10395
	B1	0.01860	0.00100	0.01180	0.32940	0.06480	0.02218	2.50740	0.30000	0.11087

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	0.01860	0.00100	0.02717	0.32940	0.12960	0.03234	2.50740	0.60000	0.11273
	A2	0.01860	0.00100	0.02782	0.32940	0.12960	0.03271	2.50740	0.60000	0.11635
	B1	0.01860	0.00100	0.02311	0.32940	0.12960	0.03118	2.50740	0.60000	0.11524
sg13g2_a21o_1	A1	0.01860	0.00100	0.01651	0.32940	0.06480	0.02357	2.50740	0.30000	0.09932
	A2	0.01860	0.00100	0.01669	0.32940	0.06480	0.02385	2.50740	0.30000	0.10172
	B1	0.01860	0.00100	0.01246	0.32940	0.06480	0.02236	2.50740	0.30000	0.10032

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	!B1	0.01860	0.00100	0.02377	0.32940	0.12960	0.03148	2.50740	0.60000	0.11452
	A2	!B1	0.01860	0.00100	0.02705	0.32940	0.12960	0.03352	2.50740	0.60000	0.11811
	B1	(A1 * !A2)	0.01860	0.00100	0.02410	0.32940	0.12960	0.03386	2.50740	0.60000	0.12096
	B1	(!A1 * A2)	0.01860	0.00100	0.02045	0.32940	0.12960	0.03013	2.50740	0.60000	0.11668
	B1	(!A1 * !A2)	0.01860	0.00100	0.02025	0.32940	0.12960	0.03079	2.50740	0.60000	0.12488
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.01415	0.32940	0.06480	0.02223	2.50740	0.30000	0.09954
	A2	!B1	0.01860	0.00100	0.01716	0.32940	0.06480	0.02430	2.50740	0.30000	0.10395
	B1	(A1 * !A2)	0.01860	0.00100	0.01502	0.32940	0.06480	0.02437	2.50740	0.30000	0.10650
	B1	(!A1 * A2)	0.01860	0.00100	0.01200	0.32940	0.06480	0.02123	2.50740	0.30000	0.10326
	B1	(!A1 * !A2)	0.01860	0.00100	0.01180	0.32940	0.06480	0.02218	2.50740	0.30000	0.11087

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_a21o_2	A1	!B1	0.01860	0.00100	0.02717	0.32940	0.12960	0.03234	2.50740	0.60000	0.11273
	A2	!B1	0.01860	0.00100	0.02782	0.32940	0.12960	0.03271	2.50740	0.60000	0.11635
	B1	(A1 * !A2)	0.01860	0.00100	0.02404	0.32940	0.12960	0.03098	2.50740	0.60000	0.11402
	B1	(!A1 * A2)	0.01860	0.00100	0.02311	0.32940	0.12960	0.03118	2.50740	0.60000	0.11524
	B1	(!A1 * !A2)	0.01860	0.00100	0.02162	0.32940	0.12960	0.03196	2.50740	0.60000	0.12419
sg13g2_a21o_1	A1	!B1	0.01860	0.00100	0.01651	0.32940	0.06480	0.02357	2.50740	0.30000	0.09932
	A2	!B1	0.01860	0.00100	0.01669	0.32940	0.06480	0.02385	2.50740	0.30000	0.10172
	B1	(A1 * !A2)	0.01860	0.00100	0.01289	0.32940	0.06480	0.02214	2.50740	0.30000	0.09936
	B1	(!A1 * A2)	0.01860	0.00100	0.01246	0.32940	0.06480	0.02236	2.50740	0.30000	0.10032
	B1	(!A1 * !A2)	0.01860	0.00100	0.01229	0.32940	0.06480	0.02320	2.50740	0.30000	0.10747

BTLx



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_ebufn_8	45.36000
sg13g2_ebufn_4	27.21600
sg13g2_ebufn_2	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_ebufn_8	0.00655	0.01966	2.40000
sg13g2_ebufn_4	0.00334	0.01177	1.20000
sg13g2_ebufn_2	0.00298	0.00723	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_ebufn_8	1242.24000	6703.48000	13150.90000
sg13g2_ebufn_4	985.89900	3586.29000	6679.77000
sg13g2_ebufn_2	819.85600	2120.05000	3500.29000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A->Z (RR)	0.01860	0.02075	0.03955	0.32940	0.53815	0.27694	2.50740	2.41975	1.04355
	TE_B->Z (RR)	0.01860	0.02075	0.04152	0.32940	0.53815	0.10083	2.50740	2.41975	0.20980
	TE_B->Z (FR)	0.01860	0.02075	0.01853	0.32940	0.53815	0.25906	2.50740	2.41975	1.24438
sg13g2_ebufn_4	A->Z (RR)	0.01860	0.01100	0.04030	0.32940	0.26920	0.27659	2.50740	1.21000	1.03729
	TE_B->Z (RR)	0.01860	0.01100	0.03170	0.32940	0.26920	0.07501	2.50740	1.21000	0.14659
	TE_B->Z (FR)	0.01860	0.01100	0.01780	0.32940	0.26920	0.25719	2.50740	1.21000	1.24164
sg13g2_ebufn_2	A->Z (RR)	0.01860	0.00605	0.03372	0.32940	0.13465	0.25382	2.50740	0.60505	0.99319
	TE_B->Z (RR)	0.01860	0.00605	0.02662	0.32940	0.13465	0.06070	2.50740	0.60505	0.11891
	TE_B->Z (FR)	0.01860	0.00605	0.01793	0.32940	0.13465	0.25379	2.50740	0.60505	1.22953

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A->Z (FF)	0.01860	0.02970	0.04335	0.32940	0.54710	0.24552	2.50740	2.42870	0.88031
	TE_B->Z (RF)	0.01860	0.02970	0.01792	0.32940	0.54710	0.07661	2.50740	2.42870	0.47276
	TE_B->Z (FF)	0.01860	0.02970	0.04380	0.32940	0.54710	0.25246	2.50740	2.42870	0.88413
sg13g2_ebufn_4	A->Z (FF)	0.01860	0.01554	0.04425	0.32940	0.27374	0.24593	2.50740	1.21454	0.87757
	TE_B->Z (RF)	0.01860	0.01554	0.01644	0.32940	0.27374	0.07377	2.50740	1.21454	0.47032
	TE_B->Z (FF)	0.01860	0.01554	0.03376	0.32940	0.27374	0.22087	2.50740	1.21454	0.81540
sg13g2_ebufn_2	A->Z (FF)	0.01860	0.00840	0.03458	0.32940	0.13700	0.21797	2.50740	0.60740	0.81910
	TE_B->Z (RF)	0.01860	0.00840	0.01557	0.32940	0.13700	0.07331	2.50740	0.60740	0.46805
	TE_B->Z (FF)	0.01860	0.00840	0.02873	0.32940	0.13700	0.20073	2.50740	0.60740	0.76782

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A	0.01860	0.02075	0.08645	0.32940	0.53815	0.09149	2.50740	2.41975	0.10428
	TE_B	0.01860	0.02075	0.01753	0.32940	0.53815	0.01576	2.50740	2.41975	0.01642
sg13g2_ebufn_4	A	0.01860	0.01100	0.04337	0.32940	0.26920	0.04513	2.50740	1.21000	0.04565
	TE_B	0.01860	0.01100	0.00920	0.32940	0.26920	0.00841	2.50740	1.21000	0.00895
sg13g2_ebufn_2	A	0.01860	0.00605	0.02260	0.32940	0.13465	0.02297	2.50740	0.60505	0.02132
	TE_B	0.01860	0.00605	0.00506	0.32940	0.13465	0.00473	2.50740	0.60505	0.00458

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_ebufn_8	A	0.01860	0.02970	0.07466	0.32940	0.54710	0.07478	2.50740	2.42870	0.06586
	TE_B	0.01860	0.02970	0.01265	0.32940	0.54710	0.01340	2.50740	2.42870	0.01560
sg13g2_ebufn_4	A	0.01860	0.01554	0.03735	0.32940	0.27374	0.03739	2.50740	1.21454	0.03461
	TE_B	0.01860	0.01554	0.00685	0.32940	0.27374	0.00699	2.50740	1.21454	0.00610
sg13g2_ebufn_2	A	0.01860	0.00840	0.01786	0.32940	0.13700	0.01870	2.50740	0.60740	0.01615
	TE_B	0.01860	0.00840	0.00377	0.32940	0.13700	0.00387	2.50740	0.60740	0.00273

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.01164	0.32940	0.03645	2.50740	0.26117
sg13g2_ebufn_4	0.01860	0.00649	0.32940	0.01874	2.50740	0.13207
sg13g2_ebufn_2	0.01860	0.00337	0.32940	0.01492	2.50740	0.11514

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.01435	0.32940	0.04009	2.50740	0.26181
sg13g2_ebufn_4	0.01860	0.00767	0.32940	0.02036	2.50740	0.13116
sg13g2_ebufn_2	0.01860	0.00478	0.32940	0.01661	2.50740	0.11413

Passive power(pJ) for TE_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	-0.00646	0.32940	0.00169	2.50740	0.10818
sg13g2_ebufn_4	0.01860	-0.00272	0.32940	0.00762	2.50740	0.11837
sg13g2_ebufn_2	0.01860	-0.00117	0.32940	0.00941	2.50740	0.10793

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_ebufn_8	0.01860	0.09776	0.32940	0.10918	2.50740	0.21454
sg13g2_ebufn_4	0.01860	0.05017	0.32940	0.06278	2.50740	0.17088
sg13g2_ebufn_2	0.01860	0.02568	0.32940	0.03743	2.50740	0.13307

BU_x



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_buf_16	45.36000
sg13g2_buf_8	23.58720
sg13g2_buf_4	14.51520
sg13g2_buf_1	7.25760
sg13g2_buf_2	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_buf_16	0.01937	4.80000
sg13g2_buf_8	0.00973	2.40000
sg13g2_buf_4	0.00420	1.20000
sg13g2_buf_1	0.00258	0.30000
sg13g2_buf_2	0.00297	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_buf_16	7714.52000	10319.40000	12924.20000
sg13g2_buf_8	3857.25000	5159.68000	6462.11000
sg13g2_buf_4	1614.29000	2412.17000	3210.05000
sg13g2_buf_1	711.83500	797.51300	883.19000
sg13g2_buf_2	1028.70000	1336.14000	1643.58000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A->X (RR)	0.01860	0.00100	0.03109	0.32940	1.03680	0.17545	2.50740	4.80000	0.61854
sg13g2_buf_8	A->X (RR)	0.01860	0.00100	0.03066	0.32940	0.51840	0.17428	2.50740	2.40000	0.61538
sg13g2_buf_4	A->X (RR)	0.01860	0.00100	0.03842	0.32940	0.25920	0.20014	2.50740	1.20000	0.73747
sg13g2_buf_1	A->X (RR)	0.01860	0.00100	0.02650	0.32940	0.06480	0.15483	2.50740	0.30000	0.57616
sg13g2_buf_2	A->X (RR)	0.01860	0.00100	0.03033	0.32940	0.12960	0.17083	2.50740	0.60000	0.61227

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A->X (FF)	0.01860	0.00100	0.03341	0.32940	1.03680	0.16826	2.50740	4.80000	0.57192
sg13g2_buf_8	A->X (FF)	0.01860	0.00100	0.03284	0.32940	0.51840	0.16729	2.50740	2.40000	0.57139
sg13g2_buf_4	A->X (FF)	0.01860	0.00100	0.03249	0.32940	0.25920	0.15897	2.50740	1.20000	0.48826
sg13g2_buf_1	A->X (FF)	0.01860	0.00100	0.02736	0.32940	0.06480	0.14289	2.50740	0.30000	0.51939
sg13g2_buf_2	A->X (FF)	0.01860	0.00100	0.03163	0.32940	0.12960	0.15939	2.50740	0.60000	0.54456

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A	0.01860	0.00100	0.15483	0.32940	1.03680	0.22881	2.50740	4.80000	0.88356
sg13g2_buf_8	A	0.01860	0.00100	0.07689	0.32940	0.51840	0.11372	2.50740	2.40000	0.44204
sg13g2_buf_4	A	0.01860	0.00100	0.03901	0.32940	0.25920	0.05263	2.50740	1.20000	0.18794
sg13g2_buf_1	A	0.01860	0.00100	0.01099	0.32940	0.06480	0.02065	2.50740	0.30000	0.10056
sg13g2_buf_2	A	0.01860	0.00100	0.01965	0.32940	0.12960	0.03063	2.50740	0.60000	0.12467

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_buf_16	A	0.01860	0.00100	0.15426	0.32940	1.03680	0.22914	2.50740	4.80000	0.86440
sg13g2_buf_8	A	0.01860	0.00100	0.07604	0.32940	0.51840	0.11490	2.50740	2.40000	0.42982
sg13g2_buf_4	A	0.01860	0.00100	0.03816	0.32940	0.25920	0.05336	2.50740	1.20000	0.18094
sg13g2_buf_1	A	0.01860	0.00100	0.01082	0.32940	0.06480	0.02085	2.50740	0.30000	0.09847
sg13g2_buf_2	A	0.01860	0.00100	0.01936	0.32940	0.12960	0.03090	2.50740	0.60000	0.12134

DECAP_x



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

Footprint

Cell Name	Area
sg13g2_decap_8	12.70080
sg13g2_decap_4	7.25760

Pin Capacitance Information Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_decap_8	11968.80000	11968.80000	11968.80000
sg13g2_decap_4	5984.41000	5984.41000	5984.41000

DFFRRx



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

Truth Table

INPUT			OUTPUT	
D	RESET_B	CLK	Q	Q_N
0	1	R	0	1
1	1	R	1	0
x	0	x	0	1
x	1	x	IQ	IQN

Footprint

Cell Name	Area
sg13g2_dfrbp_2	54.43200
sg13g2_dfrbp_1	52.61760

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	CLK	Q	Q_N
sg13g2_dfrbp_2	0.00172	0.00580	0.00320	0.60000	0.60000
sg13g2_dfrbp_1	0.00171	0.00575	0.00319	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbp_2	4783.49000	5625.06000	6226.84000
sg13g2_dfrbp_1	3869.43000	4742.33000	5364.35000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.11331	0.32940	0.12960	0.24482	2.50740	0.60000	0.65265
sg13g2_dfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.08909	0.32940	0.06480	0.22210	2.50740	0.30000	0.62209

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q (RF)	0.01860	0.00100	0.10210	0.32940	0.12960	0.22301	2.50740	0.60000	0.56131
	RESET_B->Q (FF)	0.01860	0.00100	0.13393	0.32940	0.12960	0.28369	2.50740	0.60000	0.74792
sg13g2_dfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.08372	0.32940	0.06480	0.20394	2.50740	0.30000	0.53854
	RESET_B->Q (FF)	0.01860	0.00100	0.11540	0.32940	0.06480	0.26452	2.50740	0.30000	0.72517

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	0.06901	0.32940	0.12960	0.21914	2.50740	0.60000	0.60116
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10149	0.32940	0.12960	0.27871	2.50740	0.60000	0.78723
sg13g2_dfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.06611	0.32940	0.06480	0.21130	2.50740	0.30000	0.59148
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09790	0.32940	0.06480	0.27068	2.50740	0.30000	0.77805

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	0.07510	0.32940	0.12960	0.22752	2.50740	0.60000	0.59349
sg13g2_dfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.06958	0.32940	0.06480	0.21586	2.50740	0.30000	0.57889

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.11063	2.50740	2.50740	-0.15643
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.12952	2.50740	2.50740	0.17414
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.15643
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.12952	2.50740	2.50740	0.17414

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.16529
	setup	CLK (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.13492	2.50740	2.50740	0.20070
sg13g2_dfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.16529
	setup	CLK (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.13492	2.50740	2.50740	0.20070

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.17809	2.50740	2.50740	0.28925
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.28630
sg13g2_dfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.17809	2.50740	2.50740	0.28925
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.06378	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.05417	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.06058	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.06058	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.08367	0.32940	0.12960	0.26678	2.50740	0.60000	1.03438
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06291	0.32940	0.06480	0.16312	2.50740	0.30000	0.61197

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.08112	0.32940	0.12960	0.26857	2.50740	0.60000	1.02891
	RESET_B	0.01860	0.00100	0.00104	0.32940	0.12960	0.17348	2.50740	0.60000	0.80820
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06257	0.32940	0.06480	0.16430	2.50740	0.30000	0.60667
	RESET_B	0.01860	0.00100	0.00148	0.32940	0.06480	0.08831	2.50740	0.30000	0.40494

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.08125	0.32940	0.12960	0.26871	2.50740	0.60000	1.03118
	RESET_B	0.01860	0.00100	0.00099	0.32940	0.12960	0.17383	2.50740	0.60000	0.80969
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06266	0.32940	0.06480	0.16439	2.50740	0.30000	0.60742
	RESET_B	0.01860	0.00100	0.00143	0.32940	0.06480	0.08838	2.50740	0.30000	0.40521

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00100	0.08376	0.32940	0.12960	0.26699	2.50740	0.60000	1.03213
sg13g2_dfrbp_1	CLK	0.01860	0.00100	0.06299	0.32940	0.06480	0.16315	2.50740	0.30000	0.61137

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00152	0.32940	0.00669	2.50740	0.05150
sg13g2_dfrbp_1	0.01860	0.00151	0.32940	0.00669	2.50740	0.05152

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.00191	0.32940	0.00728	2.50740	0.05194
sg13g2_dfrbp_1	0.01860	0.00190	0.32940	0.00727	2.50740	0.05193

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00152	0.32940	0.00669	2.50740	0.05150
	(!CLK * RESET_B)	0.01860	0.02198	0.32940	0.02779	2.50740	0.08227
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00010	2.50740	-0.00011
sg13g2_dfrbp_1	CLK	0.01860	0.00151	0.32940	0.00669	2.50740	0.05152
	(!CLK * RESET_B)	0.01860	0.02203	0.32940	0.02784	2.50740	0.08230
	(!CLK * !RESET_B)	0.01860	-0.00012	0.32940	-0.00011	2.50740	-0.00011

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	CLK	0.01860	0.00191	0.32940	0.00728	2.50740	0.05194
	(!CLK * RESET_B)	0.01860	0.01784	0.32940	0.02384	2.50740	0.07773
	(!CLK * !RESET_B)	0.01860	0.00036	0.32940	0.00036	2.50740	0.00036
sg13g2_dfrbp_1	CLK	0.01860	0.00190	0.32940	0.00727	2.50740	0.05193
	(!CLK * RESET_B)	0.01860	0.01774	0.32940	0.02380	2.50740	0.07768
	(!CLK * !RESET_B)	0.01860	0.00036	0.32940	0.00036	2.50740	0.00036

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.02379	0.32940	0.03021	2.50740	0.10168
sg13g2_dfrbp_1	0.01860	0.02370	0.32940	0.03017	2.50740	0.10169

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.07941	0.32940	0.09460	2.50740	0.21698
sg13g2_dfrbp_1	0.01860	0.06067	0.32940	0.07578	2.50740	0.19727

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.00306	0.32940	0.00737	2.50740	0.05220
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.02379	0.32940	0.03021	2.50740	0.10168
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.00298	0.32940	0.00731	2.50740	0.05202
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.02370	0.32940	0.03017	2.50740	0.10169
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(CLK * D * !Q * Q_N)	0.01860	0.07941	0.32940	0.09460	2.50740	0.21698
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.01648	0.32940	0.02306	2.50740	0.09528
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbp_1	(CLK * D * !Q * Q_N)	0.01860	0.06067	0.32940	0.07578	2.50740	0.19727
	(CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q * Q_N)	0.01860	0.01652	0.32940	0.02310	2.50740	0.09543
	(!CLK * !D * !Q * Q_N)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.01850	0.32940	0.03193	2.50740	0.15545
sg13g2_dfrbp_1	0.01860	0.01836	0.32940	0.03182	2.50740	0.15510

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	0.01860	0.03800	0.32940	0.05222	2.50740	0.17630
sg13g2_dfrbp_1	0.01860	0.03704	0.32940	0.05127	2.50740	0.17539

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.01850	0.32940	0.03193	2.50740	0.15545
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01952	0.32940	0.03289	2.50740	0.15627
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01807	0.32940	0.03151	2.50740	0.15525
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01956	0.32940	0.03292	2.50740	0.15627
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.01836	0.32940	0.03182	2.50740	0.15510
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01940	0.32940	0.03275	2.50740	0.15601
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01793	0.32940	0.03140	2.50740	0.15488
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01943	0.32940	0.03280	2.50740	0.15599

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbp_2	(D * RESET_B * Q * !Q_N)	0.01860	0.03800	0.32940	0.05222	2.50740	0.17630
	(D * RESET_B * !Q * Q_N)	0.01860	0.03981	0.32940	0.05397	2.50740	0.17805
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01998	0.32940	0.03366	2.50740	0.15310
	(!D * RESET_B * Q * !Q_N)	0.01860	0.10075	0.32940	0.11044	2.50740	0.22904
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01997	0.32940	0.03370	2.50740	0.15320
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01999	0.32940	0.03366	2.50740	0.15312
sg13g2_dfrbp_1	(D * RESET_B * Q * !Q_N)	0.01860	0.03704	0.32940	0.05127	2.50740	0.17539
	(D * RESET_B * !Q * Q_N)	0.01860	0.03973	0.32940	0.05397	2.50740	0.17812
	(D * !RESET_B * !Q * Q_N)	0.01860	0.01991	0.32940	0.03361	2.50740	0.15312
	(!D * RESET_B * Q * !Q_N)	0.01860	0.07795	0.32940	0.09055	2.50740	0.20929
	(!D * RESET_B * !Q * Q_N)	0.01860	0.01988	0.32940	0.03364	2.50740	0.15317
	(!D * !RESET_B * !Q * Q_N)	0.01860	0.01992	0.32940	0.03360	2.50740	0.15312

DFRBPQx



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

Truth Table

INPUT			OUTPUT
D	RESET_B	CLK	Q
0	1	R	0
1	1	R	1
x	0	x	0
x	1	x	IQ

Footprint

Cell Name	Area
sg13g2_dfrbpq_2	50.80320
sg13g2_dfrbpq_1	48.98880

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	CLK	Q
sg13g2_dfrbpq_2	0.00157	0.00571	0.00317	0.60000
sg13g2_dfrbpq_1	0.00156	0.00567	0.00316	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dfrbpq_2	4366.33000	4860.59000	5809.69000
sg13g2_dfrbpq_1	3660.85000	4360.10000	5104.20000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK->Q (RR)	0.01860	0.00100	0.08096	0.32940	0.12960	0.21977	2.50740	0.60000	0.61489
sg13g2_dfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.07505	0.32940	0.06480	0.21063	2.50740	0.30000	0.60528

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK->Q (RF)	0.01860	0.00100	0.08125	0.32940	0.12960	0.20653	2.50740	0.60000	0.54050
	RESET_B->Q (FF)	0.01860	0.00100	0.11107	0.32940	0.12960	0.26547	2.50740	0.60000	0.72536
sg13g2_dfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.07516	0.32940	0.06480	0.19662	2.50740	0.30000	0.52985
	RESET_B->Q (FF)	0.01860	0.00100	0.10548	0.32940	0.06480	0.25614	2.50740	0.30000	0.71555

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.03179	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.15643
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.12952	2.50740	2.50740	0.17414
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.02934	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.15643
	setup	CLK (R)	0.01860	0.01860	0.04890	1.26300	1.26300	0.12952	2.50740	2.50740	0.17414

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.16529
	setup	CLK (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.13492	2.50740	2.50740	0.20070
sg13g2_dfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.10524	2.50740	2.50740	-0.16529
	setup	CLK (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.13492	2.50740	2.50740	0.20070

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.17809	2.50740	2.50740	0.29220
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630
sg13g2_dfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.17809	2.50740	2.50740	0.29220
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.05417	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.05417	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.04456	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.04456	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_dfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00100	0.05751	0.32940	0.12960	0.07247	2.50740	0.60000	0.20121
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.05014	0.32940	0.06480	0.06514	2.50740	0.30000	0.19480

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00100	0.05890	0.32940	0.12960	0.07446	2.50740	0.60000	0.19683
	RESET_B	0.01860	0.00100	0.00018	0.32940	0.12960	0.00095	2.50740	0.60000	-0.00080
sg13g2_dfrbpq_1	CLK	0.01860	0.00100	0.05160	0.32940	0.06480	0.06683	2.50740	0.30000	0.18991
	RESET_B	0.01860	0.00100	0.00052	0.32940	0.06480	0.00124	2.50740	0.30000	-0.00069

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00152	0.32940	0.00669	2.50740	0.05153
sg13g2_dfrbpq_1	0.01860	0.00151	0.32940	0.00668	2.50740	0.05151

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.00191	0.32940	0.00728	2.50740	0.05193
sg13g2_dfrbpq_1	0.01860	0.00190	0.32940	0.00727	2.50740	0.05193

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00152	0.32940	0.00669	2.50740	0.05153
	(!CLK * RESET_B)	0.01860	0.02202	0.32940	0.02778	2.50740	0.08225
	(!CLK * !RESET_B)	0.01860	-0.00011	0.32940	-0.00010	2.50740	-0.00011
sg13g2_dfrbpq_1	CLK	0.01860	0.00151	0.32940	0.00668	2.50740	0.05151
	(!CLK * RESET_B)	0.01860	0.02208	0.32940	0.02782	2.50740	0.08230
	(!CLK * !RESET_B)	0.01860	-0.00012	0.32940	-0.00011	2.50740	-0.00011

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	CLK	0.01860	0.00191	0.32940	0.00728	2.50740	0.05193
	(!CLK * RESET_B)	0.01860	0.01781	0.32940	0.02384	2.50740	0.07773
	(!CLK * !RESET_B)	0.01860	0.00036	0.32940	0.00036	2.50740	0.00036
sg13g2_dfrbpq_1	CLK	0.01860	0.00190	0.32940	0.00727	2.50740	0.05193
	(!CLK * RESET_B)	0.01860	0.01773	0.32940	0.02380	2.50740	0.07768
	(!CLK * !RESET_B)	0.01860	0.00036	0.32940	0.00036	2.50740	0.00036

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.02372	0.32940	0.03019	2.50740	0.10164
sg13g2_dfrbpq_1	0.01860	0.02376	0.32940	0.03017	2.50740	0.10182

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.05763	0.32940	0.07244	2.50740	0.19263
sg13g2_dfrbpq_1	0.01860	0.05020	0.32940	0.06509	2.50740	0.18547

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(CLK * D * !Q)	0.01860	0.00304	0.32940	0.00736	2.50740	0.05218
	(CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q)	0.01860	0.02372	0.32940	0.03019	2.50740	0.10164
	(!CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.00298	0.32940	0.00730	2.50740	0.05204
	(CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q)	0.01860	0.02376	0.32940	0.03017	2.50740	0.10182
	(!CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(CLK * D * !Q)	0.01860	0.05763	0.32940	0.07244	2.50740	0.19263
	(CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q)	0.01860	0.01649	0.32940	0.02307	2.50740	0.09528
	(!CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
sg13g2_dfrbpq_1	(CLK * D * !Q)	0.01860	0.05020	0.32940	0.06509	2.50740	0.18547
	(CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000
	(!CLK * D * !Q)	0.01860	0.01653	0.32940	0.02310	2.50740	0.09543
	(!CLK * !D * !Q)	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.01844	0.32940	0.03194	2.50740	0.15559
sg13g2_dfrbpq_1	0.01860	0.01832	0.32940	0.03182	2.50740	0.15514

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	0.01860	0.03973	0.32940	0.05398	2.50740	0.17805
sg13g2_dfrbpq_1	0.01860	0.03976	0.32940	0.05398	2.50740	0.17810

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(D * RESET_B * Q)	0.01860	0.01844	0.32940	0.03194	2.50740	0.15559
	(D * !RESET_B * !Q)	0.01860	0.01948	0.32940	0.03289	2.50740	0.15629
	(!D * RESET_B * !Q)	0.01860	0.01802	0.32940	0.03152	2.50740	0.15510
	(!D * !RESET_B * !Q)	0.01860	0.01954	0.32940	0.03293	2.50740	0.15632
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.01832	0.32940	0.03182	2.50740	0.15514
	(D * !RESET_B * !Q)	0.01860	0.01936	0.32940	0.03278	2.50740	0.15589
	(!D * RESET_B * !Q)	0.01860	0.01790	0.32940	0.03137	2.50740	0.15463
	(!D * !RESET_B * !Q)	0.01860	0.01940	0.32940	0.03281	2.50740	0.15600

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dfrbpq_2	(D * RESET_B * Q)	0.01860	0.04846	0.32940	0.06266	2.50740	0.18672
	(D * RESET_B * !Q)	0.01860	0.03973	0.32940	0.05398	2.50740	0.17805
	(D * !RESET_B * !Q)	0.01860	0.01996	0.32940	0.03367	2.50740	0.15317
	(!D * RESET_B * Q)	0.01860	0.08675	0.32940	0.09953	2.50740	0.21804
	(!D * RESET_B * !Q)	0.01860	0.01994	0.32940	0.03370	2.50740	0.15326
	(!D * !RESET_B * !Q)	0.01860	0.01996	0.32940	0.03366	2.50740	0.15316
sg13g2_dfrbpq_1	(D * RESET_B * Q)	0.01860	0.04226	0.32940	0.05649	2.50740	0.18059
	(D * RESET_B * !Q)	0.01860	0.03976	0.32940	0.05398	2.50740	0.17810
	(D * !RESET_B * !Q)	0.01860	0.01990	0.32940	0.03361	2.50740	0.15313
	(!D * RESET_B * Q)	0.01860	0.07287	0.32940	0.08577	2.50740	0.20454
	(!D * RESET_B * !Q)	0.01860	0.01987	0.32940	0.03364	2.50740	0.15322
	(!D * !RESET_B * !Q)	0.01860	0.01990	0.32940	0.03361	2.50740	0.15313

DLHQ



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

Truth Table

INPUT		OUTPUT
D	GATE	Q
x	0	IQ
0	1	0
1	1	1

Footprint

Cell Name	Area
sg13g2_dlhq_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	D	GATE	Q
sg13g2_dlhq_1	0.00260	0.00266	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhq_1	2629.66000	3038.64000	3638.71000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D->Q (RR)	0.01860	0.00100	0.08437	0.32940	0.06480	0.20996	2.50740	0.30000	0.58881
	GATE->Q (RR)	0.01860	0.00100	0.07250	0.32940	0.06480	0.19649	2.50740	0.30000	0.52022

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D->Q (FF)	0.01860	0.00100	0.07620	0.32940	0.06480	0.18841	2.50740	0.30000	0.51932
	GATE->Q (RF)	0.01860	0.00100	0.07843	0.32940	0.06480	0.18909	2.50740	0.30000	0.45605

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.07016	2.50740	2.50740	-0.05903
	setup	GATE (F)	0.01860	0.01860	0.04890	1.26300	1.26300	0.08905	2.50740	2.50740	0.09445

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	hold	GATE (F)	0.01860	0.01860	-0.01712	1.26300	1.26300	0.02698	2.50740	2.50740	0.07084
	setup	GATE (F)	0.01860	0.01860	0.02201	1.26300	1.26300	-0.02429	2.50740	2.50740	-0.06493

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhq_1	min_pulse_width	GATE ()	0.01860	0.00000	0.03815	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D	0.01860	0.00100	0.03129	0.32940	0.06480	0.03197	2.50740	0.30000	0.03507
	GATE	0.01860	0.00100	0.02787	0.32940	0.06480	0.02919	2.50740	0.30000	0.03542

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhq_1	D	0.01860	0.00100	0.03098	0.32940	0.06480	0.03204	2.50740	0.30000	0.03457
	GATE	0.01860	0.00100	0.02983	0.32940	0.06480	0.03127	2.50740	0.30000	0.02946

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00511	0.32940	0.01438	2.50740	0.09801

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.00677	0.32940	0.01617	2.50740	0.09787

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00504	0.32940	0.01423	2.50740	0.09768
	(!GATE * !Q)	0.01860	0.00511	0.32940	0.01438	2.50740	0.09801

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!GATE * Q)	0.01860	0.00667	0.32940	0.01622	2.50740	0.09779
	(!GATE * !Q)	0.01860	0.00677	0.32940	0.01617	2.50740	0.09787

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.01301	0.32940	0.02460	2.50740	0.12754

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	0.01860	0.02901	0.32940	0.04131	2.50740	0.14365

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.01301	0.32940	0.02460	2.50740	0.12754

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhq_1	(!D * !Q)	0.01860	0.02901	0.32940	0.04131	2.50740	0.14365

DLHRQ



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

Truth Table

INPUT			OUTPUT
D	RESET_B	GATE	Q
x	0	x	0
x	1	0	IQ
0	1	1	0
1	1	1	1

Footprint

Cell Name	Area
sg13g2_dlhrq_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE	Q
sg13g2_dlhrq_1	0.00244	0.00332	0.00254	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhrq_1	2945.58000	3579.74000	4046.30000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D->Q (RR)	0.01860	0.00100	0.09030	0.32940	0.06480	0.21839	2.50740	0.30000	0.59323
	GATE->Q (RR)	0.01860	0.00100	0.08183	0.32940	0.06480	0.20944	2.50740	0.30000	0.53260

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D->Q (FF)	0.01860	0.00100	0.08025	0.32940	0.06480	0.19421	2.50740	0.30000	0.53143
	GATE->Q (RF)	0.01860	0.00100	0.08358	0.32940	0.06480	0.19754	2.50740	0.30000	0.47312
	RESET_B->Q (FF)	0.01860	0.00100	0.03368	0.32940	0.06480	0.16282	2.50740	0.30000	0.56528

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.04722
	setup	GATE (F)	0.01860	0.01860	0.04646	1.26300	1.26300	0.08095	2.50740	2.50740	0.08264

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	hold	GATE (F)	0.01860	0.01860	-0.01956	1.26300	1.26300	0.02698	2.50740	2.50740	0.06789
	setup	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	-0.02159	2.50740	2.50740	-0.06198

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	recovery	GATE (F)	0.01860	0.01860	-0.00734	1.26300	1.26300	-0.09444	2.50740	2.50740	-0.15643
	removal	GATE (F)	0.01860	0.01860	0.01467	1.26300	1.26300	0.09984	2.50740	2.50740	0.16529

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.08942	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhrq_1	min_pulse_width	GATE ()	0.01860	0.00000	0.04135	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D	0.01860	0.00100	0.00379	0.32940	0.06480	0.00429	2.50740	0.30000	0.00376
	GATE	0.01860	0.00100	0.02213	0.32940	0.06480	0.02243	2.50740	0.30000	0.02151

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhrq_1	D	0.01860	0.00100	-0.00379	0.32940	0.06480	-0.00429	2.50740	0.30000	-0.00376
	GATE	0.01860	0.00100	0.02201	0.32940	0.06480	0.02269	2.50740	0.30000	0.01328
	RESET_B	0.01860	0.00100	0.01485	0.32940	0.06480	0.02627	2.50740	0.30000	0.11850

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.03284	0.32940	0.04193	2.50740	0.12877

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.04577	0.32940	0.05740	2.50740	0.14270

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00034	0.32940	0.00964	2.50740	0.09323
	!RESET_B	0.01860	0.03284	0.32940	0.04193	2.50740	0.12877

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(!GATE * RESET_B * Q)	0.01860	0.00221	0.32940	0.01175	2.50740	0.09344
	!RESET_B	0.01860	0.04577	0.32940	0.05740	2.50740	0.14270

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

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

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

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

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.01981	0.32940	0.03189	2.50740	0.14207

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	0.01860	0.02945	0.32940	0.04178	2.50740	0.14344

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.01981	0.32940	0.03189	2.50740	0.14207
	(!D * !RESET_B * !Q)	0.01860	0.01377	0.32940	0.02517	2.50740	0.12769

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhrq_1	(D * !RESET_B * !Q)	0.01860	0.02328	0.32940	0.03639	2.50740	0.14390
	(!D * RESET_B * !Q)	0.01860	0.02945	0.32940	0.04178	2.50740	0.14344
	(!D * !RESET_B * !Q)	0.01860	0.02961	0.32940	0.04173	2.50740	0.14410

DLHR



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

Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE	Q	Q_N
x	0	x	0	1
x	1	0	IQ	IQN
0	1	1	0	1
1	1	1	1	0

Footprint

Cell Name	Area
sg13g2_dlhr_1	32.65920

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE	Q	Q_N
sg13g2_dlhr_1	0.00239	0.00351	0.00261	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlhr_1	3678.65000	4335.23000	4779.33000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q (RR)	0.01860	0.00100	0.09773	0.32940	0.06480	0.22974	2.50740	0.30000	0.60540
	GATE->Q (RR)	0.01860	0.00100	0.08960	0.32940	0.06480	0.22127	2.50740	0.30000	0.54663

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q (FF)	0.01860	0.00100	0.08308	0.32940	0.06480	0.19826	2.50740	0.30000	0.53148
	GATE->Q (RF)	0.01860	0.00100	0.08659	0.32940	0.06480	0.20212	2.50740	0.30000	0.47488
	RESET_B->Q (FF)	0.01860	0.00100	0.03648	0.32940	0.06480	0.17164	2.50740	0.30000	0.56817

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q_N (FR)	0.01860	0.00100	0.10095	0.32940	0.06480	0.22201	2.50740	0.30000	0.60114
	GATE->Q_N (RR)	0.01860	0.00100	0.10453	0.32940	0.06480	0.22589	2.50740	0.30000	0.54468
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05438	0.32940	0.06480	0.18939	2.50740	0.30000	0.58391

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D->Q_N (RF)	0.01860	0.00100	0.11808	0.32940	0.06480	0.22866	2.50740	0.30000	0.55806
	GATE->Q_N (RF)	0.01860	0.00100	0.10981	0.32940	0.06480	0.22022	2.50740	0.30000	0.49916

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.06476	2.50740	2.50740	-0.05313
	setup	GATE (F)	0.01860	0.01860	0.05135	1.26300	1.26300	0.08365	2.50740	2.50740	0.08559

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	hold	GATE (F)	0.01860	0.01860	-0.01956	1.26300	1.26300	0.02698	2.50740	2.50740	0.06789
	setup	GATE (F)	0.01860	0.01860	0.02445	1.26300	1.26300	-0.02159	2.50740	2.50740	-0.06198

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	recovery	GATE (F)	0.01860	0.01860	-0.00245	1.26300	1.26300	-0.06206	2.50740	2.50740	-0.10626
	removal	GATE (F)	0.01860	0.01860	0.00978	1.26300	1.26300	0.06746	2.50740	2.50740	0.11216

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.09262	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dlhr_1	min_pulse_width	GATE ()	0.01860	0.00000	0.04456	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.01031	0.32940	0.06480	0.01075	2.50740	0.30000	0.01064
	GATE	0.01860	0.00100	0.01936	0.32940	0.06480	0.01969	2.50740	0.30000	0.01932

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00295	0.32940	0.06480	0.00248	2.50740	0.30000	0.00110
	GATE	0.01860	0.00100	0.01918	0.32940	0.06480	0.01977	2.50740	0.30000	0.01472
	RESET_B	0.01860	0.00100	0.01530	0.32940	0.06480	0.02176	2.50740	0.30000	0.07367

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.00298	0.32940	0.06480	0.00254	2.50740	0.30000	0.00179
	GATE	0.01860	0.00100	0.02885	0.32940	0.06480	0.03554	2.50740	0.30000	0.08609
	RESET_B	0.01860	0.00100	0.01534	0.32940	0.06480	0.02173	2.50740	0.30000	0.07424

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlhr_1	D	0.01860	0.00100	0.01030	0.32940	0.06480	0.01070	2.50740	0.30000	0.01010
	GATE	0.01860	0.00100	0.01937	0.32940	0.06480	0.01966	2.50740	0.30000	0.01887

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.03221	0.32940	0.04145	2.50740	0.12827

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.04540	0.32940	0.05719	2.50740	0.14293

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00181	0.32940	0.01123	2.50740	0.09510
	!RESET_B	0.01860	0.03221	0.32940	0.04145	2.50740	0.12827

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(!GATE * RESET_B * Q)	0.01860	0.00358	0.32940	0.01322	2.50740	0.09512
	!RESET_B	0.01860	0.04540	0.32940	0.05719	2.50740	0.14293

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

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

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

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

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.01928	0.32940	0.03140	2.50740	0.14198

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	0.01860	0.02927	0.32940	0.04149	2.50740	0.14367

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.01928	0.32940	0.03140	2.50740	0.14198
	(!D * !RESET_B * !Q)	0.01860	0.01327	0.32940	0.02478	2.50740	0.12751

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dlhr_1	(D * !RESET_B * !Q)	0.01860	0.02386	0.32940	0.03703	2.50740	0.14500
	(!D * RESET_B * !Q)	0.01860	0.02927	0.32940	0.04149	2.50740	0.14367
	(!D * !RESET_B * !Q)	0.01860	0.02932	0.32940	0.04150	2.50740	0.14372

DLLRQ



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

Truth Table

INPUT			OUTPUT
D	RESET_B	GATE_N	Q
x	0	x	0
0	1	0	0
x	1	1	IQ
1	1	0	1

Footprint

Cell Name	Area
sg13g2_dllrq_1	29.03040

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	D	RESET_B	GATE_N	Q
sg13g2_dllrq_1	0.00235	0.00340	0.00250	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllrq_1	2945.41000	3579.71000	4046.29000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D->Q (RR)	0.01860	0.00100	0.08957	0.32940	0.06480	0.21727	2.50740	0.30000	0.59133
	GATE_N->Q (FR)	0.01860	0.00100	0.09901	0.32940	0.06480	0.23803	2.50740	0.30000	0.68138
	RESET_B->Q (RR)	0.01860	0.00100	0.04140	0.32940	0.06480	0.17226	2.50740	0.30000	0.60567

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D->Q (FF)	0.01860	0.00100	0.07966	0.32940	0.06480	0.19256	2.50740	0.30000	0.52737
	GATE_N->Q (FF)	0.01860	0.00100	0.07605	0.32940	0.06480	0.20539	2.50740	0.30000	0.61319
	RESET_B->Q (FF)	0.01860	0.00100	0.03390	0.32940	0.06480	0.16237	2.50740	0.30000	0.56505

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.03179	1.26300	1.26300	-0.05667	2.50740	2.50740	-0.08855
	setup	GATE_N (R)	0.01860	0.01860	0.03668	1.26300	1.26300	0.05936	2.50740	2.50740	0.09150

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	hold	GATE_N (R)	0.01860	0.01860	-0.03912	1.26300	1.26300	-0.14031	2.50740	2.50740	-0.20661
	setup	GATE_N (R)	0.01860	0.01860	0.04401	1.26300	1.26300	0.16190	2.50740	2.50740	0.24793

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01712	1.26300	1.26300	-0.02429	2.50740	2.50740	-0.00295
	removal	GATE_N (R)	0.01860	0.01860	0.02445	1.26300	1.26300	0.02968	2.50740	2.50740	0.00885

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.08942	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE_N falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllrq_1	min_pulse_width	GATE_N ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D	0.01860	0.00100	0.01560	0.32940	0.06480	0.01619	2.50740	0.30000	0.02007
	GATE_N	0.01860	0.00100	0.01373	0.32940	0.06480	0.01406	2.50740	0.30000	0.01193
	RESET_B	0.01860	0.00100	0.01946	0.32940	0.06480	0.02797	2.50740	0.30000	0.12257

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllrq_1	D	0.01860	0.00100	0.00323	0.32940	0.06480	0.00137	2.50740	0.30000	-0.00016
	GATE_N	0.01860	0.00100	0.01126	0.32940	0.06480	0.01280	2.50740	0.30000	0.01720
	RESET_B	0.01860	0.00100	0.01504	0.32940	0.06480	0.02651	2.50740	0.30000	0.11975

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.02075	0.32940	0.02998	2.50740	0.11286

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.03228	0.32940	0.04455	2.50740	0.13021

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00023	0.32940	0.00956	2.50740	0.09336
	!RESET_B	0.01860	0.02075	0.32940	0.02998	2.50740	0.11286

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(GATE_N * RESET_B * Q)	0.01860	0.00219	0.32940	0.01180	2.50740	0.09377
	!RESET_B	0.01860	0.03228	0.32940	0.04455	2.50740	0.13021

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

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

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

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

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.02289	0.32940	0.03406	2.50740	0.13605

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	0.01860	0.02950	0.32940	0.04178	2.50740	0.14346

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.02289	0.32940	0.03406	2.50740	0.13605
	(!D * !RESET_B * !Q)	0.01860	0.01227	0.32940	0.02378	2.50740	0.12658

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllrq_1	(D * !RESET_B * !Q)	0.01860	0.02381	0.32940	0.03599	2.50740	0.13680
	(!D * RESET_B * !Q)	0.01860	0.02946	0.32940	0.04180	2.50740	0.14537
	(!D * !RESET_B * !Q)	0.01860	0.02950	0.32940	0.04178	2.50740	0.14346

DLLR



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

Truth Table

INPUT			OUTPUT	
D	RESET_B	GATE_N	Q	Q_N
x	0	x	0	1
0	1	0	0	1
x	1	1	IQ	IQN
1	1	0	1	0

Footprint

Cell Name	Area
sg13g2_dllr_1	34.47360

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	D	RESET_B	GATE_N	Q	Q_N
sg13g2_dllr_1	0.00246	0.00347	0.00263	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dllr_1	3678.46000	4403.39000	4779.26000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q (RR)	0.01860	0.00100	0.09834	0.32940	0.06480	0.22987	2.50740	0.30000	0.60424
	GATE_N->Q (FR)	0.01860	0.00100	0.10783	0.32940	0.06480	0.25123	2.50740	0.30000	0.69521

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q (FF)	0.01860	0.00100	0.08414	0.32940	0.06480	0.19919	2.50740	0.30000	0.53367
	GATE_N->Q (FF)	0.01860	0.00100	0.08095	0.32940	0.06480	0.21324	2.50740	0.30000	0.62248
	RESET_B->Q (FF)	0.01860	0.00100	0.03636	0.32940	0.06480	0.17286	2.50740	0.30000	0.52528

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q_N (FR)	0.01860	0.00100	0.10185	0.32940	0.06480	0.22272	2.50740	0.30000	0.60236
	GATE_N->Q_N (FR)	0.01860	0.00100	0.09872	0.32940	0.06480	0.23671	2.50740	0.30000	0.69084
	RESET_B->Q_N (FR)	0.01860	0.00100	0.05446	0.32940	0.06480	0.19090	2.50740	0.30000	0.58689

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D->Q_N (RF)	0.01860	0.00100	0.11846	0.32940	0.06480	0.22885	2.50740	0.30000	0.55705
	GATE_N->Q_N (FF)	0.01860	0.00100	0.12781	0.32940	0.06480	0.25020	2.50740	0.30000	0.64817

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.05936	2.50740	2.50740	-0.09150
	setup	GATE_N (R)	0.01860	0.01860	0.04157	1.26300	1.26300	0.06476	2.50740	2.50740	0.09740

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	hold	GATE_N (R)	0.01860	0.01860	-0.04157	1.26300	1.26300	-0.14031	2.50740	2.50740	-0.20661
	setup	GATE_N (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.16460	2.50740	2.50740	0.25088

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	recovery	GATE_N (R)	0.01860	0.01860	-0.01223	1.26300	1.26300	0.00540	2.50740	2.50740	0.05018
	removal	GATE_N (R)	0.01860	0.01860	0.01956	1.26300	1.26300	0.00000	2.50740	2.50740	-0.04427

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.09262	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for GATE_N falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_dllr_1	min_pulse_width	GATE_N ()	0.01860	0.00000	0.05417	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.02154	0.32940	0.06480	0.10935	2.50740	0.30000	0.42888
	GATE_N	0.01860	0.00100	0.03751	0.32940	0.06480	0.12519	2.50740	0.30000	0.44410

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.00700	0.32940	0.06480	0.08868	2.50740	0.30000	0.40595
	GATE_N	0.01860	0.00100	0.03396	0.32940	0.06480	0.12290	2.50740	0.30000	0.44802
	RESET_B	0.01860	0.00100	0.04719	0.32940	0.06480	0.14571	2.50740	0.30000	0.54164

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.00710	0.32940	0.06480	0.08878	2.50740	0.30000	0.40761
	GATE_N	0.01860	0.00100	0.05822	0.32940	0.06480	0.15921	2.50740	0.30000	0.58580
	RESET_B	0.01860	0.00100	0.04724	0.32940	0.06480	0.14563	2.50740	0.30000	0.54242

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dllr_1	D	0.01860	0.00100	0.02151	0.32940	0.06480	0.10926	2.50740	0.30000	0.42791
	GATE_N	0.01860	0.00100	0.03754	0.32940	0.06480	0.12513	2.50740	0.30000	0.44338

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.03344	0.32940	0.04265	2.50740	0.12951

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.04546	0.32940	0.06152	2.50740	0.14698

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00192	0.32940	0.01130	2.50740	0.09481
	!RESET_B	0.01860	0.03344	0.32940	0.04265	2.50740	0.12951

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(GATE_N * RESET_B * Q)	0.01860	0.00464	0.32940	0.01425	2.50740	0.09600
	!RESET_B	0.01860	0.04546	0.32940	0.06152	2.50740	0.14698

Passive power(pJ) for RESET_B rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

Passive power(pJ) for RESET_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.00000	0.32940	0.00000	2.50740	0.00000

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

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

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

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

Passive power(pJ) for GATE_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.02673	0.32940	0.03907	2.50740	0.14305

Passive power(pJ) for GATE_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	0.01860	0.02413	0.32940	0.03627	2.50740	0.13684

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.02310	0.32940	0.03423	2.50740	0.13605
	(!D * RESET_B * !Q)	0.01860	0.02673	0.32940	0.03907	2.50740	0.14305
	(!D * !RESET_B * !Q)	0.01860	0.02678	0.32940	0.03899	2.50740	0.14313

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_dllr_1	(D * !RESET_B * !Q)	0.01860	0.02413	0.32940	0.03627	2.50740	0.13684
	(!D * !RESET_B * !Q)	0.01860	0.01617	0.32940	0.02842	2.50740	0.13033

DLY1



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd1_1	14.51520

Pin Capacitance Information

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

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd1_1	1089.91000	1219.16000	1348.41000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A->X (RR)	0.01860	0.00100	0.05676	0.32940	0.06480	0.17426	2.50740	0.30000	0.45854

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A->X (FF)	0.01860	0.00100	0.06520	0.32940	0.06480	0.19844	2.50740	0.30000	0.64328

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.02450	0.32940	0.06480	0.03131	2.50740	0.30000	0.08675

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd1_1	A	0.01860	0.00100	0.02349	0.32940	0.06480	0.03070	2.50740	0.30000	0.08506

DLY2



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd2_1	0.00168	0.30000

Leakage Information

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

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A->X (RR)	0.01860	0.00100	0.08673	0.32940	0.06480	0.21438	2.50740	0.30000	0.52947

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A->X (FF)	0.01860	0.00100	0.09591	0.32940	0.06480	0.24286	2.50740	0.30000	0.70115

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.02987	0.32940	0.06480	0.03569	2.50740	0.30000	0.08767

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd2_1	A	0.01860	0.00100	0.02920	0.32940	0.06480	0.03510	2.50740	0.30000	0.08705

DLY4



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

Truth Table

INPUT	OUTPUT
A	X
0	0
1	1

Footprint

Cell Name	Area
sg13g2_dlygate4sd3_1	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	X
sg13g2_dlygate4sd3_1	0.00168	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_dlygate4sd3_1	3719.05000	3848.28000	3977.51000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A->X (RR)	0.01860	0.00100	0.18787	0.32940	0.06480	0.33729	2.50740	0.30000	0.71018

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A->X (FF)	0.01860	0.00100	0.19020	0.32940	0.06480	0.36513	2.50740	0.30000	0.86724

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.04503	0.32940	0.06480	0.04843	2.50740	0.30000	0.09691

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_dlygate4sd3_1	A	0.01860	0.00100	0.04473	0.32940	0.06480	0.04778	2.50740	0.30000	0.09677

EINVIN_x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_einvn_4	23.58720
sg13g2_einvn_2	16.32960

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_4	0.00853	0.01022	1.20000
sg13g2_einvn_2	0.00437	0.00548	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_4	4387.32000	5429.26000	6471.20000
sg13g2_einvn_2	2203.90000	2724.86000	3245.83000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A->Z (FR)	0.01860	0.01095	0.01357	0.32940	0.26915	0.29796	2.50740	1.20995	1.58022
	TE_B->Z (RR)	0.01860	0.01095	0.03077	0.32940	0.26915	0.07399	2.50740	1.20995	0.14730
	TE_B->Z (FR)	0.01860	0.01095	0.01712	0.32940	0.26915	0.25462	2.50740	1.20995	1.23700
sg13g2_einvn_2	A->Z (FR)	0.01860	0.00608	0.01468	0.32940	0.13468	0.29752	2.50740	0.60508	1.57779
	TE_B->Z (RR)	0.01860	0.00608	0.02937	0.32940	0.13468	0.06963	2.50740	0.60508	0.13919
	TE_B->Z (FR)	0.01860	0.00608	0.01753	0.32940	0.13468	0.25441	2.50740	0.60508	1.23790

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A->Z (RF)	0.01860	0.01556	0.01247	0.32940	0.27376	0.26230	2.50740	1.21456	1.39128
sg13g2_einvn_2	A->Z (RF)	0.01860	0.00843	0.01347	0.32940	0.13703	0.26246	2.50740	0.60743	1.39093

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A	0.01860	0.01095	0.01067	0.32940	0.26915	0.02734	2.50740	1.20995	0.17292
	TE_B	0.01860	0.01095	0.03416	0.32940	0.26915	0.03260	2.50740	1.20995	0.03283
sg13g2_einvn_2	A	0.01860	0.00608	0.00531	0.32940	0.13468	0.01364	2.50740	0.60508	0.08664
	TE_B	0.01860	0.00608	0.01687	0.32940	0.13468	0.01618	2.50740	0.60508	0.01599

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_4	A	0.01860	0.01556	0.00984	0.32940	0.27376	0.02521	2.50740	1.21456	0.15388
sg13g2_einvn_2	A	0.01860	0.00843	0.00514	0.32940	0.13703	0.01290	2.50740	0.60743	0.07703

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_4	0.01860	-0.02536	0.32940	-0.03851	2.50740	0.07058
sg13g2_einvn_2	0.01860	-0.01278	0.32940	-0.01897	2.50740	0.04338

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_4	0.01860	0.02536	0.32940	0.03851	2.50740	0.14872
sg13g2_einvn_2	0.01860	0.01278	0.32940	0.02008	2.50740	0.08174

FILLx



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

Footprint

Cell Name	Area
sg13g2_fill_2	3.62880
sg13g2_fill_1	1.81440
sg13g2_fill_4	7.25760
sg13g2_fill_8	14.51520

Pin Capacitance Information

Leakage Information

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

GCLK



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

Truth Table

INPUT		OUTPUT
GATE	CLK	GCLK
x	0	0
x	1	GCLK

Footprint

Cell Name	Area
sg13g2_lgcp_1	27.21600

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	GATE	CLK	GCLK
sg13g2_lgcp_1	0.00264	0.00561	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_lgcp_1	3343.12000	3484.21000	3697.54000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.03673	0.32940	0.06480	0.16317	2.50740	0.30000	0.58290

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.03179	0.32940	0.06480	0.15636	2.50740	0.30000	0.55780

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01585	1.26300	1.26300	-0.12337	2.50740	2.50740	-0.22279
	setup	CLK (R)	0.01860	0.01860	0.03866	1.26300	1.26300	0.15555	2.50740	2.50740	0.26050

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	hold	CLK (R)	0.01860	0.01860	-0.00637	1.26300	1.26300	-0.00354	2.50740	2.50740	0.00263
	setup	CLK (R)	0.01860	0.01860	0.02068	1.26300	1.26300	0.03685	2.50740	2.50740	0.04601

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.10864	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_lgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.02238	0.32940	0.06480	0.02991	2.50740	0.30000	0.11067

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_lgcp_1	CLK	0.01860	0.00100	0.01448	0.32940	0.06480	0.02452	2.50740	0.30000	0.10232

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.03666	0.32940	0.04543	2.50740	0.13446

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.03949	0.32940	0.06282	2.50740	0.14965

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	!CLK	0.01860	0.03666	0.32940	0.04543	2.50740	0.13446

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	!CLK	0.01860	0.03949	0.32940	0.06282	2.50740	0.14965

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.00843	0.32940	0.01986	2.50740	0.12150

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_lgcp_1	0.01860	0.01273	0.32940	0.02481	2.50740	0.12665

IN_x



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

Truth Table

INPUT	OUTPUT
A	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_1	5.44320
sg13g2_inv_2	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	A	Y
sg13g2_inv_16	0.04778	4.80000
sg13g2_inv_8	0.02487	2.40000
sg13g2_inv_4	0.01243	1.20000
sg13g2_inv_1	0.00317	0.30000
sg13g2_inv_2	0.00628	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_inv_16	3337.25000	7505.02000	11672.80000
sg13g2_inv_8	1668.63000	3752.56000	5836.48000
sg13g2_inv_4	834.31400	1876.25000	2918.19000
sg13g2_inv_1	208.57800	469.12100	729.66500
sg13g2_inv_2	417.16900	938.15000	1459.13000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A->Y (FR)	0.01860	0.00100	0.01177	0.32940	1.03680	0.20754	2.50740	4.80000	1.11972
sg13g2_inv_8	A->Y (FR)	0.01860	0.00100	0.00860	0.32940	0.51840	0.20344	2.50740	2.40000	1.11224
sg13g2_inv_4	A->Y (FR)	0.01860	0.00100	0.00876	0.32940	0.25920	0.20311	2.50740	1.20000	1.11221
sg13g2_inv_1	A->Y (FR)	0.01860	0.00100	0.01113	0.32940	0.06480	0.20293	2.50740	0.30000	1.10947
sg13g2_inv_2	A->Y (FR)	0.01860	0.00100	0.00954	0.32940	0.12960	0.20266	2.50740	0.60000	1.10943

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A->Y (RF)	0.01860	0.00100	0.01180	0.32940	1.03680	0.19630	2.50740	4.80000	1.04786
sg13g2_inv_8	A->Y (RF)	0.01860	0.00100	0.00846	0.32940	0.51840	0.19265	2.50740	2.40000	1.04517
sg13g2_inv_4	A->Y (RF)	0.01860	0.00100	0.00859	0.32940	0.25920	0.19247	2.50740	1.20000	1.04427
sg13g2_inv_1	A->Y (RF)	0.01860	0.00100	0.01078	0.32940	0.06480	0.19127	2.50740	0.30000	1.03737
sg13g2_inv_2	A->Y (RF)	0.01860	0.00100	0.00929	0.32940	0.12960	0.19106	2.50740	0.60000	1.03708

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A	0.01860	0.00100	0.04839	0.32940	1.03680	0.14601	2.50740	4.80000	1.00119
sg13g2_inv_8	A	0.01860	0.00100	0.02255	0.32940	0.51840	0.07119	2.50740	2.40000	0.49655
sg13g2_inv_4	A	0.01860	0.00100	0.01123	0.32940	0.25920	0.03543	2.50740	1.20000	0.24930
sg13g2_inv_1	A	0.01860	0.00100	0.00302	0.32940	0.06480	0.00911	2.50740	0.30000	0.06302
sg13g2_inv_2	A	0.01860	0.00100	0.00559	0.32940	0.12960	0.01778	2.50740	0.60000	0.12563

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_inv_16	A	0.01860	0.00100	0.04086	0.32940	1.03680	0.12441	2.50740	4.80000	0.88113
sg13g2_inv_8	A	0.01860	0.00100	0.01841	0.32940	0.51840	0.06100	2.50740	2.40000	0.44433
sg13g2_inv_4	A	0.01860	0.00100	0.00920	0.32940	0.25920	0.03066	2.50740	1.20000	0.21890
sg13g2_inv_1	A	0.01860	0.00100	0.00286	0.32940	0.06480	0.00814	2.50740	0.30000	0.05624
sg13g2_inv_2	A	0.01860	0.00100	0.00474	0.32940	0.12960	0.01571	2.50740	0.60000	0.11203

ITL



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_einvn_8	39.91680

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	TE_B	Z
sg13g2_einvn_8	0.01687	0.01738	2.40000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_einvn_8	8566.03000	10649.90000	12733.80000

Delay Information

Delay(ns) to Z rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A->Z (FR)	0.01860	0.02082	0.01315	0.32940	0.53822	0.29946	2.50740	2.41982	1.58746
	TE_B->Z (RR)	0.01860	0.02082	0.04085	0.32940	0.53822	0.10046	2.50740	2.41982	0.20753
	TE_B->Z (FR)	0.01860	0.02082	0.01813	0.32940	0.53822	0.25688	2.50740	2.41982	1.24181

Delay(ns) to Z falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A->Z (RF)	0.01860	0.02998	0.01213	0.32940	0.54738	0.26421	2.50740	2.42898	1.40093

Power Information

Internal switching power(pJ) to Z rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A	0.01860	0.02082	0.02134	0.32940	0.53822	0.05510	2.50740	2.41982	0.34310
	TE_B	0.01860	0.02082	0.07052	0.32940	0.53822	0.06720	2.50740	2.41982	0.06726

Internal switching power(pJ) to Z falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_einvn_8	A	0.01860	0.02998	0.01929	0.32940	0.54738	0.05048	2.50740	2.42898	0.30675

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
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)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_8	0.01860	-0.04498	0.32940	-0.05811	2.50740	0.00735

Passive power(pJ) for TE_B falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_einvn_8	0.01860	0.04498	0.32940	0.05811	2.50740	0.16695

KEEPSTATE



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

Truth Table

INPUT	OUTPUT
SH	SH
x	-

Footprint

Cell Name	Area
sg13g2_sighold	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	SH	SH
sg13g2_sighold	0.02917	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sighold	397.86700	1643.61000	2889.35000

Passive Power Information

Passive power(pJ) for SH rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sighold	0.01860	0.01063	0.32940	0.03280	2.50740	0.20081

Passive power(pJ) for SH falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sighold	0.01860	0.00844	0.32940	0.03095	2.50740	0.23189

MUX2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_mux2_2	19.95840
sg13g2_mux2_1	18.14400

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A0	A1	S	X
sg13g2_mux2_2	0.00311	0.00321	0.00584	0.60000
sg13g2_mux2_1	0.00314	0.00324	0.00585	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux2_2	2161.16000	2771.10000	3144.87000
sg13g2_mux2_1	1907.10000	2302.07000	2933.21000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0->X (RR)	0.01860	0.00100	0.04415	0.32940	0.12960	0.19843	2.50740	0.60000	0.63022
	A1->X (RR)	0.01860	0.00100	0.04434	0.32940	0.12960	0.19964	2.50740	0.60000	0.63236
	S->X (-R)	0.01860	0.00100	0.04694	0.32940	0.12960	0.18904	2.50740	0.60000	0.61318
sg13g2_mux2_1	A0->X (RR)	0.01860	0.00100	0.03774	0.32940	0.06480	0.17740	2.50740	0.30000	0.58653
	A1->X (RR)	0.01860	0.00100	0.03800	0.32940	0.06480	0.17901	2.50740	0.30000	0.58962
	S->X (-R)	0.01860	0.00100	0.04066	0.32940	0.06480	0.17110	2.50740	0.30000	0.57657

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0->X (FF)	0.01860	0.00100	0.05661	0.32940	0.12960	0.21738	2.50740	0.60000	0.70525
	A1->X (FF)	0.01860	0.00100	0.05638	0.32940	0.12960	0.21751	2.50740	0.60000	0.70907
	S->X (-F)	0.01860	0.00100	0.06103	0.32940	0.12960	0.20085	2.50740	0.60000	0.65798
sg13g2_mux2_1	A0->X (FF)	0.01860	0.00100	0.04634	0.32940	0.06480	0.19177	2.50740	0.30000	0.65934
	A1->X (FF)	0.01860	0.00100	0.04615	0.32940	0.06480	0.19177	2.50740	0.30000	0.66370
	S->X (-F)	0.01860	0.00100	0.05101	0.32940	0.06480	0.17845	2.50740	0.30000	0.61956

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.04694	0.32940	0.12960	0.18904	2.50740	0.60000	0.61318
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.06330	0.32940	0.12960	0.19478	2.50740	0.60000	0.57745
sg13g2_mux2_1	S->X (RR)	(!A0 * A1)	0.01860	0.00100	0.04066	0.32940	0.06480	0.17110	2.50740	0.30000	0.57657
	S->X (FR)	(A0 * !A1)	0.01860	0.00100	0.05705	0.32940	0.06480	0.18343	2.50740	0.30000	0.56292

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.06103	0.32940	0.12960	0.20085	2.50740	0.60000	0.65798
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.07609	0.32940	0.12960	0.20255	2.50740	0.60000	0.53929
sg13g2_mux2_1	S->X (FF)	(!A0 * A1)	0.01860	0.00100	0.05101	0.32940	0.06480	0.17845	2.50740	0.30000	0.61956
	S->X (RF)	(A0 * !A1)	0.01860	0.00100	0.06607	0.32940	0.06480	0.18588	2.50740	0.30000	0.52096

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0	0.01860	0.00100	0.02717	0.32940	0.12960	0.03456	2.50740	0.60000	0.11491
	A1	0.01860	0.00100	0.02746	0.32940	0.12960	0.03485	2.50740	0.60000	0.11512
	S	0.01860	0.00100	0.03236	0.32940	0.12960	0.03917	2.50740	0.60000	0.12311
sg13g2_mux2_1	A0	0.01860	0.00100	0.01747	0.32940	0.06480	0.02600	2.50740	0.30000	0.10617
	A1	0.01860	0.00100	0.01767	0.32940	0.06480	0.02629	2.50740	0.30000	0.10597
	S	0.01860	0.00100	0.02298	0.32940	0.06480	0.03095	2.50740	0.30000	0.11501

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	A0	0.01860	0.00100	0.02921	0.32940	0.12960	0.03494	2.50740	0.60000	0.11187
	A1	0.01860	0.00100	0.02904	0.32940	0.12960	0.03484	2.50740	0.60000	0.11322
	S	0.01860	0.00100	0.02978	0.32940	0.12960	0.03492	2.50740	0.60000	0.11729
sg13g2_mux2_1	A0	0.01860	0.00100	0.01780	0.32940	0.06480	0.02669	2.50740	0.30000	0.10352
	A1	0.01860	0.00100	0.01766	0.32940	0.06480	0.02652	2.50740	0.30000	0.10535
	S	0.01860	0.00100	0.01895	0.32940	0.06480	0.02696	2.50740	0.30000	0.10949

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S	(A0 * !A1)	0.01860	0.00100	0.02897	0.32940	0.12960	0.02851	2.50740	0.60000	0.02954
	S	(!A0 * A1)	0.01860	0.00100	0.03236	0.32940	0.12960	0.03917	2.50740	0.60000	0.12311
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.01953	0.32940	0.06480	0.01985	2.50740	0.30000	0.02206
	S	(!A0 * A1)	0.01860	0.00100	0.02298	0.32940	0.06480	0.03095	2.50740	0.30000	0.11501

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux2_2	S	(A0 * !A1)	0.01860	0.00100	0.03488	0.32940	0.12960	0.03290	2.50740	0.60000	0.03444
	S	(!A0 * A1)	0.01860	0.00100	0.02978	0.32940	0.12960	0.03492	2.50740	0.60000	0.11729
sg13g2_mux2_1	S	(A0 * !A1)	0.01860	0.00100	0.02396	0.32940	0.06480	0.02437	2.50740	0.30000	0.02744
	S	(!A0 * A1)	0.01860	0.00100	0.01895	0.32940	0.06480	0.02696	2.50740	0.30000	0.10949

Passive power(pJ) for S rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00267	0.32940	0.01168	2.50740	0.09447
sg13g2_mux2_1	0.01860	0.00267	0.32940	0.01169	2.50740	0.09428

Passive power(pJ) for S falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	0.01860	0.00678	0.32940	0.01617	2.50740	0.09774
sg13g2_mux2_1	0.01860	0.00677	0.32940	0.01617	2.50740	0.09773

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	(A0 * A1)	0.01860	0.00267	0.32940	0.01168	2.50740	0.09447
	(!A0 * !A1)	0.01860	0.00209	0.32940	0.01118	2.50740	0.09321
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00267	0.32940	0.01169	2.50740	0.09428
	(!A0 * !A1)	0.01860	0.00209	0.32940	0.01120	2.50740	0.09335

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux2_2	(A0 * A1)	0.01860	0.00648	0.32940	0.01579	2.50740	0.09636
	(!A0 * !A1)	0.01860	0.00678	0.32940	0.01617	2.50740	0.09774
sg13g2_mux2_1	(A0 * A1)	0.01860	0.00648	0.32940	0.01578	2.50740	0.09635
	(!A0 * !A1)	0.01860	0.00677	0.32940	0.01617	2.50740	0.09773

MUX4



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

Truth Table

INPUT						OUTPUT
A0	A1	A2	A3	S0	S1	X
0	0	0	0	x	x	0
0	x	0	1	0	x	0
x	0	x	1	1	0	0
x	x	x	1	1	1	1
0	0	1	x	x	0	0
0	x	1	x	0	1	1
0	x	1	0	1	1	0
0	1	0	x	0	x	0
0	1	x	x	1	0	1
0	1	x	0	1	1	0
0	1	1	x	0	0	0
1	0	0	x	0	0	1
1	x	0	0	x	1	0
1	0	x	0	1	x	0
1	x	0	1	0	1	0
1	x	1	x	0	x	1
1	1	0	x	x	0	1
1	1	1	x	1	0	1
1	1	1	0	1	1	0

Footprint

Cell Name	Area
sg13g2_mux4_1	38.10240

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)
	A0	A1	A2	A3	S0	S1	X
sg13g2_mux4_1	0.00320	0.00318	0.00320	0.00326	0.00917	0.00556	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_mux4_1	2333.77000	3933.00000	5424.72000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0->X (RR)	0.01860	0.00100	0.06542	0.32940	0.06480	0.21495	2.50740	0.30000	0.68607
	A1->X (RR)	0.01860	0.00100	0.06412	0.32940	0.06480	0.21419	2.50740	0.30000	0.68451
	A2->X (RR)	0.01860	0.00100	0.06711	0.32940	0.06480	0.21969	2.50740	0.30000	0.69532
	A3->X (RR)	0.01860	0.00100	0.06625	0.32940	0.06480	0.21904	2.50740	0.30000	0.69474
	S0->X (-R)	0.01860	0.00100	0.05886	0.32940	0.06480	0.22122	2.50740	0.30000	0.69882
	S1->X (-R)	0.01860	0.00100	0.03571	0.32940	0.06480	0.17806	2.50740	0.30000	0.61203

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0->X (FF)	0.01860	0.00100	0.07177	0.32940	0.06480	0.21034	2.50740	0.30000	0.63638
	A1->X (FF)	0.01860	0.00100	0.07260	0.32940	0.06480	0.21094	2.50740	0.30000	0.63674
	A2->X (FF)	0.01860	0.00100	0.07552	0.32940	0.06480	0.21669	2.50740	0.30000	0.64679
	A3->X (FF)	0.01860	0.00100	0.07621	0.32940	0.06480	0.21657	2.50740	0.30000	0.64632
	S0->X (-F)	0.01860	0.00100	0.06638	0.32940	0.06480	0.22192	2.50740	0.30000	0.67772
	S1->X (-F)	0.01860	0.00100	0.04035	0.32940	0.06480	0.17671	2.50740	0.30000	0.61323

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0->X (RR)	(!A2 * A3 * S1)	0.01860	0.00100	0.05886	0.32940	0.06480	0.22122	2.50740	0.30000	0.69882
	S0->X (RR)	(!A0 * A1 * !S1)	0.01860	0.00100	0.05589	0.32940	0.06480	0.21380	2.50740	0.30000	0.68434
	S0->X (FR)	(A2 * !A3 * S1)	0.01860	0.00100	0.08374	0.32940	0.06480	0.22908	2.50740	0.30000	0.64072
	S0->X (FR)	(A0 * !A1 * !S1)	0.01860	0.00100	0.08179	0.32940	0.06480	0.22519	2.50740	0.30000	0.63584
	S1->X (RR)	(!A1 * A3 * S0)	0.01860	0.00100	0.03574	0.32940	0.06480	0.17810	2.50740	0.30000	0.61137
	S1->X (RR)	(!A0 * A2 * !S0)	0.01860	0.00100	0.03571	0.32940	0.06480	0.17806	2.50740	0.30000	0.61203
	S1->X (FR)	(A1 * !A3 * S0)	0.01860	0.00100	0.04619	0.32940	0.06480	0.18006	2.50740	0.30000	0.57540
	S1->X (FR)	(A0 * !A2 * !S0)	0.01860	0.00100	0.04611	0.32940	0.06480	0.17982	2.50740	0.30000	0.57541

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0->X (FF)	(!A2 * A3 * S1)	0.01860	0.00100	0.06638	0.32940	0.06480	0.22192	2.50740	0.30000	0.67772
	S0->X (FF)	(!A0 * A1 * !S1)	0.01860	0.00100	0.06104	0.32940	0.06480	0.21305	2.50740	0.30000	0.66233
	S0->X (RF)	(A2 * !A3 * S1)	0.01860	0.00100	0.08970	0.32940	0.06480	0.23064	2.50740	0.30000	0.60877
	S0->X (RF)	(A0 * !A1 * !S1)	0.01860	0.00100	0.08538	0.32940	0.06480	0.22507	2.50740	0.30000	0.60110
	S1->X (FF)	(!A1 * A3 * S0)	0.01860	0.00100	0.04035	0.32940	0.06480	0.17671	2.50740	0.30000	0.61323
	S1->X (FF)	(!A0 * A2 * !S0)	0.01860	0.00100	0.04027	0.32940	0.06480	0.17656	2.50740	0.30000	0.61284
	S1->X (RF)	(A1 * !A3 * S0)	0.01860	0.00100	0.04923	0.32940	0.06480	0.18116	2.50740	0.30000	0.54409
	S1->X (RF)	(A0 * !A2 * !S0)	0.01860	0.00100	0.04933	0.32940	0.06480	0.18102	2.50740	0.30000	0.54367

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0	0.01860	0.00100	0.03673	0.32940	0.06480	0.04215	2.50740	0.30000	0.11987
	A1	0.01860	0.00100	0.03704	0.32940	0.06480	0.04245	2.50740	0.30000	0.12017
	A2	0.01860	0.00100	0.02479	0.32940	0.06480	0.03021	2.50740	0.30000	0.10759
	A3	0.01860	0.00100	0.03738	0.32940	0.06480	0.04268	2.50740	0.30000	0.12003
	S0	0.01860	0.00100	0.02316	0.32940	0.06480	0.02964	2.50740	0.30000	0.10303
	S1	0.01860	0.00100	0.01717	0.32940	0.06480	0.02201	2.50740	0.30000	0.06969

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	A0	0.01860	0.00100	0.02739	0.32940	0.06480	0.03249	2.50740	0.30000	0.10926
	A1	0.01860	0.00100	0.02534	0.32940	0.06480	0.03043	2.50740	0.30000	0.10735
	A2	0.01860	0.00100	0.03867	0.32940	0.06480	0.04358	2.50740	0.30000	0.11998
	A3	0.01860	0.00100	0.02937	0.32940	0.06480	0.03432	2.50740	0.30000	0.11043
	S0	0.01860	0.00100	0.02220	0.32940	0.06480	0.02896	2.50740	0.30000	0.10089
	S1	0.01860	0.00100	0.01928	0.32940	0.06480	0.02341	2.50740	0.30000	0.07269

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.03046	0.32940	0.06480	0.02002	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.03035	0.32940	0.06480	0.01994	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02324	0.32940	0.06480	0.03007	2.50740	0.30000	0.10310
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.02316	0.32940	0.06480	0.02964	2.50740	0.30000	0.10303
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01850	0.32940	0.06480	0.02341	2.50740	0.30000	0.07244
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.01717	0.32940	0.06480	0.02201	2.50740	0.30000	0.06969
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01160	0.32940	0.06480	0.01836	2.50740	0.30000	0.07877
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01158	0.32940	0.06480	0.01833	2.50740	0.30000	0.07957

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_mux4_1	S0	(A2 * !A3 * S1)	0.01860	0.00100	0.04819	0.32940	0.06480	0.03926	2.50740	0.30000	0.00000
	S0	(A0 * !A1 * !S1)	0.01860	0.00100	0.04829	0.32940	0.06480	0.03976	2.50740	0.30000	0.00000
	S0	(!A2 * A3 * S1)	0.01860	0.00100	0.02220	0.32940	0.06480	0.02896	2.50740	0.30000	0.10089
	S0	(!A0 * A1 * !S1)	0.01860	0.00100	0.02275	0.32940	0.06480	0.02966	2.50740	0.30000	0.10207
	S1	(A1 * !A3 * S0)	0.01860	0.00100	0.01928	0.32940	0.06480	0.02341	2.50740	0.30000	0.07269
	S1	(A0 * !A2 * !S0)	0.01860	0.00100	0.02064	0.32940	0.06480	0.02463	2.50740	0.30000	0.07327
	S1	(!A1 * A3 * S0)	0.01860	0.00100	0.01126	0.32940	0.06480	0.01842	2.50740	0.30000	0.07651
	S1	(!A0 * A2 * !S0)	0.01860	0.00100	0.01263	0.32940	0.06480	0.01979	2.50740	0.30000	0.07787

Passive power(pJ) for S0 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01006	0.32940	0.02998	2.50740	0.20439

Passive power(pJ) for S0 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.01804	0.32940	0.03868	2.50740	0.20925

Passive power(pJ) for S0 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.00700	0.32940	0.02683	2.50740	0.20104
	(A0 * A1 * !S1)	0.01860	0.00796	0.32940	0.02716	2.50740	0.20176
	(!A2 * !A3 * S1)	0.01860	0.01006	0.32940	0.02998	2.50740	0.20439
	(!A0 * !A1 * !S1)	0.01860	0.01157	0.32940	0.03094	2.50740	0.20488

Passive power(pJ) for S0 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A2 * A3 * S1)	0.01860	0.01909	0.32940	0.03993	2.50740	0.21062
	(A0 * A1 * !S1)	0.01860	0.02221	0.32940	0.04277	2.50740	0.21355
	(!A2 * !A3 * S1)	0.01860	0.01804	0.32940	0.03868	2.50740	0.20925
	(!A0 * !A1 * !S1)	0.01860	0.01233	0.32940	0.03277	2.50740	0.20471

Passive power(pJ) for S1 rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00601	0.32940	0.01790	2.50740	0.11723

Passive power(pJ) for S1 falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	0.01860	0.00711	0.32940	0.01914	2.50740	0.11849

Passive power(pJ) for S1 rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00326	0.32940	0.01503	2.50740	0.11406
	(A0 * A2 * !S0)	0.01860	0.00326	0.32940	0.01500	2.50740	0.11400
	(!A1 * !A3 * S0)	0.01860	0.00601	0.32940	0.01788	2.50740	0.11792
	(!A0 * !A2 * !S0)	0.01860	0.00601	0.32940	0.01790	2.50740	0.11723

Passive power(pJ) for S1 falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_mux4_1	(A1 * A3 * S0)	0.01860	0.00787	0.32940	0.02018	2.50740	0.11962
	(A0 * A2 * !S0)	0.01860	0.00785	0.32940	0.02017	2.50740	0.11952
	(!A1 * !A3 * S0)	0.01860	0.00710	0.32940	0.01918	2.50740	0.11729
	(!A0 * !A2 * !S0)	0.01860	0.00711	0.32940	0.01914	2.50740	0.11849

NAND2B1



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

Truth Table

INPUT		OUTPUT
A_N	B	Y
x	0	1
0	1	0
1	1	1

Footprint

Cell Name	Area
sg13g2_nand2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_1	0.00256	0.00338	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_1	357.05500	1055.55000	1612.73000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N->Y (RR)	0.01860	0.00100	0.02767	0.32940	0.06480	0.15615	2.50740	0.30000	0.58250
	B->Y (FR)	0.01860	0.00100	0.01462	0.32940	0.06480	0.20656	2.50740	0.30000	1.10596

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N->Y (FF)	0.01860	0.00100	0.03237	0.32940	0.06480	0.20114	2.50740	0.30000	0.78134
	B->Y (RF)	0.01860	0.00100	0.01899	0.32940	0.06480	0.23214	2.50740	0.30000	1.20078

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00555	0.32940	0.06480	0.00586	2.50740	0.30000	0.00381
	B	0.01860	0.00100	0.00373	0.32940	0.06480	0.00880	2.50740	0.30000	0.05702

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_1	A_N	0.01860	0.00100	0.00843	0.32940	0.06480	0.00877	2.50740	0.30000	0.00584
	B	0.01860	0.00100	0.00772	0.32940	0.06480	0.01161	2.50740	0.30000	0.05301

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	0.01860	0.00599	0.32940	0.01557	2.50740	0.09975

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	0.01860	0.00372	0.32940	0.01339	2.50740	0.09542

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	!B	0.01860	0.00599	0.32940	0.01557	2.50740	0.09975

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_1	!B	0.01860	0.00372	0.32940	0.01339	2.50740	0.09542

NAND2B2



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

Truth Table

INPUT		OUTPUT
A_N	B	Y
x	0	1
0	1	0
1	1	1

Footprint

Cell Name	Area
sg13g2_nand2b_2	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A_N	B	Y
sg13g2_nand2b_2	0.00249	0.00619	0.60000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2b_2	909.38600	1748.12000	2981.51000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N->Y (RR)	0.01860	0.00100	0.03635	0.32940	0.12960	0.17812	2.50740	0.60000	0.62269
	B->Y (FR)	0.01860	0.00100	0.01100	0.32940	0.12960	0.20265	2.50740	0.60000	1.09291

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N->Y (FF)	0.01860	0.00100	0.04183	0.32940	0.12960	0.23264	2.50740	0.60000	0.84288
	B->Y (RF)	0.01860	0.00100	0.01505	0.32940	0.12960	0.26953	2.50740	0.60000	1.43613

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N	0.01860	0.00100	0.00962	0.32940	0.12960	0.01059	2.50740	0.60000	0.00976
	B	0.01860	0.00100	0.00594	0.32940	0.12960	0.01589	2.50740	0.60000	0.10391

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2b_2	A_N	0.01860	0.00100	0.01633	0.32940	0.12960	0.01788	2.50740	0.60000	0.01776
	B	0.01860	0.00100	0.00792	0.32940	0.12960	0.01650	2.50740	0.60000	0.09447

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	0.01860	0.01074	0.32940	0.01862	2.50740	0.10064

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	0.01860	0.01165	0.32940	0.02020	2.50740	0.10025

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	!B	0.01860	0.01074	0.32940	0.01862	2.50740	0.10064

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand2b_2	!B	0.01860	0.01165	0.32940	0.02020	2.50740	0.10025

NAND2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand2_2	10.88640
sg13g2_nand2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nand2_2	0.00617	0.00641	0.60000
sg13g2_nand2_1	0.00317	0.00333	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand2_2	406.14500	1419.69000	2827.91000
sg13g2_nand2_1	203.38100	727.05000	1459.05000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A->Y (FR)	0.01860	0.00100	0.01112	0.32940	0.12960	0.20302	2.50740	0.60000	1.09385
	B->Y (FR)	0.01860	0.00100	0.01382	0.32940	0.12960	0.20641	2.50740	0.60000	1.10287
sg13g2_nand2_1	A->Y (FR)	0.01860	0.00100	0.01244	0.32940	0.06480	0.20295	2.50740	0.30000	1.09372
	B->Y (FR)	0.01860	0.00100	0.01491	0.32940	0.06480	0.20615	2.50740	0.30000	1.10246

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A->Y (RF)	0.01860	0.00100	0.01520	0.32940	0.12960	0.26943	2.50740	0.60000	1.43465
	B->Y (RF)	0.01860	0.00100	0.01736	0.32940	0.12960	0.23845	2.50740	0.60000	1.23463
sg13g2_nand2_1	A->Y (RF)	0.01860	0.00100	0.01647	0.32940	0.06480	0.26134	2.50740	0.30000	1.39330
	B->Y (RF)	0.01860	0.00100	0.01810	0.32940	0.06480	0.23073	2.50740	0.30000	1.19694

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A	0.01860	0.00100	0.00601	0.32940	0.12960	0.01594	2.50740	0.60000	0.10339
	B	0.01860	0.00100	0.00712	0.32940	0.12960	0.01694	2.50740	0.60000	0.10906
sg13g2_nand2_1	A	0.01860	0.00100	0.00324	0.32940	0.06480	0.00840	2.50740	0.30000	0.05360
	B	0.01860	0.00100	0.00350	0.32940	0.06480	0.00861	2.50740	0.30000	0.05637

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand2_2	A	0.01860	0.00100	0.00793	0.32940	0.12960	0.01628	2.50740	0.60000	0.09382
	B	0.01860	0.00100	0.01458	0.32940	0.12960	0.02212	2.50740	0.60000	0.10205
sg13g2_nand2_1	A	0.01860	0.00100	0.00417	0.32940	0.06480	0.00852	2.50740	0.30000	0.04854
	B	0.01860	0.00100	0.00765	0.32940	0.06480	0.01157	2.50740	0.30000	0.05356

NAND3B1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand3b_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A_N	B	C	Y
sg13g2_nand3b_1	0.00254	0.00331	0.00335	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3b_1	360.82300	1221.35000	2342.13000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N->Y (RR)	0.01860	0.00100	0.02900	0.32940	0.06480	0.15652	2.50740	0.30000	0.58049
	B->Y (FR)	0.01860	0.00100	0.01632	0.32940	0.06480	0.20731	2.50740	0.30000	1.09419
	C->Y (FR)	0.01860	0.00100	0.01771	0.32940	0.06480	0.20978	2.50740	0.30000	1.09978

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N->Y (FF)	0.01860	0.00100	0.03859	0.32940	0.06480	0.26204	2.50740	0.30000	1.04621
	B->Y (RF)	0.01860	0.00100	0.02822	0.32940	0.06480	0.30468	2.50740	0.30000	1.54775
	C->Y (RF)	0.01860	0.00100	0.02985	0.32940	0.06480	0.27689	2.50740	0.30000	1.34616

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.00586	0.32940	0.06480	0.00604	2.50740	0.30000	0.00394
	B	0.01860	0.00100	0.00414	0.32940	0.06480	0.00845	2.50740	0.30000	0.04934
	C	0.01860	0.00100	0.00441	0.32940	0.06480	0.00862	2.50740	0.30000	0.05198

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3b_1	A_N	0.01860	0.00100	0.01065	0.32940	0.06480	0.01087	2.50740	0.30000	0.00888
	B	0.01860	0.00100	0.00987	0.32940	0.06480	0.01276	2.50740	0.30000	0.04802
	C	0.01860	0.00100	0.01307	0.32940	0.06480	0.01576	2.50740	0.30000	0.05514

Passive power(pJ) for A_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	0.01860	0.00597	0.32940	0.01565	2.50740	0.09980

Passive power(pJ) for A_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	0.01860	0.00371	0.32940	0.01339	2.50740	0.09541

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00597	0.32940	0.01565	2.50740	0.09980

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nand3b_1	(B * !C) + (!B)	0.01860	0.00371	0.32940	0.01339	2.50740	0.09541

NAND3



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nand3_1	0.00317	0.00335	0.00334	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand3_1	207.22000	892.91400	2188.55000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A->Y (FR)	0.01860	0.00100	0.01417	0.32940	0.06480	0.20389	2.50740	0.30000	1.08613
	B->Y (FR)	0.01860	0.00100	0.01660	0.32940	0.06480	0.20717	2.50740	0.30000	1.09401
	C->Y (FR)	0.01860	0.00100	0.01778	0.32940	0.06480	0.20967	2.50740	0.30000	1.09976

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A->Y (RF)	0.01860	0.00100	0.02317	0.32940	0.06480	0.32603	2.50740	0.30000	1.70651
	B->Y (RF)	0.01860	0.00100	0.02717	0.32940	0.06480	0.30332	2.50740	0.30000	1.54537
	C->Y (RF)	0.01860	0.00100	0.02861	0.32940	0.06480	0.27518	2.50740	0.30000	1.34473

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A	0.01860	0.00100	0.00356	0.32940	0.06480	0.00793	2.50740	0.30000	0.04695
	B	0.01860	0.00100	0.00382	0.32940	0.06480	0.00813	2.50740	0.30000	0.04922
	C	0.01860	0.00100	0.00416	0.32940	0.06480	0.00840	2.50740	0.30000	0.05184

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand3_1	A	0.01860	0.00100	0.00632	0.32940	0.06480	0.00984	2.50740	0.30000	0.04513
	B	0.01860	0.00100	0.00991	0.32940	0.06480	0.01283	2.50740	0.30000	0.04842
	C	0.01860	0.00100	0.01304	0.32940	0.06480	0.01589	2.50740	0.30000	0.05570

NAND4



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nand4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nand4_1	0.00316	0.00335	0.00338	0.00337	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nand4_1	211.54200	1017.94000	2918.23000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A->Y (FR)	0.01860	0.00100	0.01518	0.32940	0.06480	0.20449	2.50740	0.30000	1.07915
	B->Y (FR)	0.01860	0.00100	0.01762	0.32940	0.06480	0.20758	2.50740	0.30000	1.08479
	C->Y (FR)	0.01860	0.00100	0.01894	0.32940	0.06480	0.21052	2.50740	0.30000	1.09265
	D->Y (FR)	0.01860	0.00100	0.01943	0.32940	0.06480	0.21280	2.50740	0.30000	1.09834

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A->Y (RF)	0.01860	0.00100	0.02903	0.32940	0.06480	0.38766	2.50740	0.30000	1.99952
	B->Y (RF)	0.01860	0.00100	0.03550	0.32940	0.06480	0.37043	2.50740	0.30000	1.86000
	C->Y (RF)	0.01860	0.00100	0.03937	0.32940	0.06480	0.34869	2.50740	0.30000	1.68421
	D->Y (RF)	0.01860	0.00100	0.04090	0.32940	0.06480	0.32961	2.50740	0.30000	1.52465

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A	0.01860	0.00100	0.00373	0.32940	0.06480	0.00766	2.50740	0.30000	0.04241
	B	0.01860	0.00100	0.00404	0.32940	0.06480	0.00773	2.50740	0.30000	0.04375
	C	0.01860	0.00100	0.00441	0.32940	0.06480	0.00801	2.50740	0.30000	0.04588
	D	0.01860	0.00100	0.00471	0.32940	0.06480	0.00833	2.50740	0.30000	0.04809

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nand4_1	A	0.01860	0.00100	0.00771	0.32940	0.06480	0.01079	2.50740	0.30000	0.04239
	B	0.01860	0.00100	0.01135	0.32940	0.06480	0.01364	2.50740	0.30000	0.04482
	C	0.01860	0.00100	0.01458	0.32940	0.06480	0.01661	2.50740	0.30000	0.05028
	D	0.01860	0.00100	0.01770	0.32940	0.06480	0.01962	2.50740	0.30000	0.05694

NOR2Bx



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

Truth Table

INPUT		OUTPUT
A	B_N	Y
x	0	0
0	1	1
1	1	0

Footprint

Cell Name	Area
sg13g2_nor2b_2	12.70080
sg13g2_nor2b_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B_N	Y
sg13g2_nor2b_2	0.00625	0.00303	0.60000
sg13g2_nor2b_1	0.00322	0.00258	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2b_2	1443.41000	2040.13000	2771.74000
sg13g2_nor2b_1	862.05400	1172.43000	1492.48000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A->Y (FR)	0.01860	0.00100	0.01615	0.32940	0.12960	0.29840	2.50740	0.60000	1.58767
	B_N->Y (RR)	0.01860	0.00100	0.04037	0.32940	0.12960	0.26118	2.50740	0.60000	0.98568
sg13g2_nor2b_1	A->Y (FR)	0.01860	0.00100	0.01842	0.32940	0.06480	0.29923	2.50740	0.30000	1.59242
	B_N->Y (RR)	0.01860	0.00100	0.03655	0.32940	0.06480	0.24531	2.50740	0.30000	0.94673

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A->Y (RF)	0.01860	0.00100	0.01111	0.32940	0.12960	0.19720	2.50740	0.60000	1.05606
	B_N->Y (FF)	0.01860	0.00100	0.03614	0.32940	0.12960	0.16450	2.50740	0.60000	0.55842
sg13g2_nor2b_1	A->Y (RF)	0.01860	0.00100	0.01208	0.32940	0.06480	0.19151	2.50740	0.30000	1.02262
	B_N->Y (FF)	0.01860	0.00100	0.03072	0.32940	0.06480	0.14601	2.50740	0.30000	0.52342

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A	0.01860	0.00100	0.00790	0.32940	0.12960	0.01727	2.50740	0.60000	0.10128
	B_N	0.01860	0.00100	0.01887	0.32940	0.12960	0.01964	2.50740	0.60000	0.01842
sg13g2_nor2b_1	A	0.01860	0.00100	0.00390	0.32940	0.06480	0.00858	2.50740	0.30000	0.05189
	B_N	0.01860	0.00100	0.01044	0.32940	0.06480	0.01067	2.50740	0.30000	0.00861

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2b_2	A	0.01860	0.00100	0.00561	0.32940	0.12960	0.01436	2.50740	0.60000	0.08829
	B_N	0.01860	0.00100	0.00878	0.32940	0.12960	0.00955	2.50740	0.60000	0.00539
sg13g2_nor2b_1	A	0.01860	0.00100	0.00346	0.32940	0.06480	0.00783	2.50740	0.30000	0.04656
	B_N	0.01860	0.00100	0.00479	0.32940	0.06480	0.00494	2.50740	0.30000	0.00119

Passive power(pJ) for B_N rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	0.01860	0.01197	0.32940	0.02191	2.50740	0.11974
sg13g2_nor2b_1	0.01860	0.00607	0.32940	0.01529	2.50740	0.09879

Passive power(pJ) for B_N falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	0.01860	0.01170	0.32940	0.02193	2.50740	0.11768
sg13g2_nor2b_1	0.01860	0.00673	0.32940	0.01607	2.50740	0.09765

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	A	0.01860	0.01197	0.32940	0.02191	2.50740	0.11974
sg13g2_nor2b_1	A	0.01860	0.00607	0.32940	0.01529	2.50740	0.09879

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_nor2b_2	A	0.01860	0.01170	0.32940	0.02193	2.50740	0.11768
sg13g2_nor2b_1	A	0.01860	0.00673	0.32940	0.01607	2.50740	0.09765

NOR2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor2_2	10.88640
sg13g2_nor2_1	7.25760

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_nor2_2	0.00655	0.00625	0.30000
sg13g2_nor2_1	0.00340	0.00321	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor2_2	834.31100	1688.02000	2677.82000
sg13g2_nor2_1	417.17700	843.99600	1338.86000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A->Y (FR)	0.01860	0.00100	0.01972	0.32940	0.06480	0.16761	2.50740	0.30000	0.85550
	B->Y (FR)	0.01860	0.00100	0.01637	0.32940	0.06480	0.19491	2.50740	0.30000	1.04137
sg13g2_nor2_1	A->Y (FR)	0.01860	0.00100	0.02088	0.32940	0.06480	0.26303	2.50740	0.30000	1.34457
	B->Y (FR)	0.01860	0.00100	0.01847	0.32940	0.06480	0.29895	2.50740	0.30000	1.59059

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A->Y (RF)	0.01860	0.00100	0.01352	0.32940	0.06480	0.13239	2.50740	0.30000	0.67471
	B->Y (RF)	0.01860	0.00100	0.01090	0.32940	0.06480	0.12743	2.50740	0.30000	0.65710
sg13g2_nor2_1	A->Y (RF)	0.01860	0.00100	0.01439	0.32940	0.06480	0.19469	2.50740	0.30000	1.03251
	B->Y (RF)	0.01860	0.00100	0.01213	0.32940	0.06480	0.19143	2.50740	0.30000	1.02209

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A	0.01860	0.00100	0.01667	0.32940	0.06480	0.02742	2.50740	0.30000	0.14292
	B	0.01860	0.00100	0.00805	0.32940	0.06480	0.02132	2.50740	0.30000	0.13274
sg13g2_nor2_1	A	0.01860	0.00100	0.00824	0.32940	0.06480	0.01214	2.50740	0.30000	0.05690
	B	0.01860	0.00100	0.00393	0.32940	0.06480	0.00868	2.50740	0.30000	0.05176

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor2_2	A	0.01860	0.00100	0.00715	0.32940	0.06480	0.01874	2.50740	0.30000	0.13117
	B	0.01860	0.00100	0.00559	0.32940	0.06480	0.01711	2.50740	0.30000	0.11966
sg13g2_nor2_1	A	0.01860	0.00100	0.00358	0.32940	0.06480	0.00781	2.50740	0.30000	0.04981
	B	0.01860	0.00100	0.00346	0.32940	0.06480	0.00777	2.50740	0.30000	0.04647

NOR3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor3_2	16.32960
sg13g2_nor3_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	Y
sg13g2_nor3_2	0.00651	0.00644	0.00616	0.60000
sg13g2_nor3_1	0.00339	0.00337	0.00320	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor3_2	1251.47000	2285.10000	3978.85000
sg13g2_nor3_1	628.42800	1191.34000	2091.07000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A->Y (FR)	0.01860	0.00100	0.03345	0.32940	0.12960	0.33916	2.50740	0.60000	1.61223
	B->Y (FR)	0.01860	0.00100	0.03132	0.32940	0.12960	0.36737	2.50740	0.60000	1.83885
	C->Y (FR)	0.01860	0.00100	0.02320	0.32940	0.12960	0.39041	2.50740	0.60000	2.03413
sg13g2_nor3_1	A->Y (FR)	0.01860	0.00100	0.03639	0.32940	0.06480	0.33827	2.50740	0.30000	1.61291
	B->Y (FR)	0.01860	0.00100	0.03408	0.32940	0.06480	0.36596	2.50740	0.30000	1.83230
	C->Y (FR)	0.01860	0.00100	0.02684	0.32940	0.06480	0.38945	2.50740	0.30000	2.02360

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A->Y (RF)	0.01860	0.00100	0.01551	0.32940	0.12960	0.19853	2.50740	0.60000	1.03115
	B->Y (RF)	0.01860	0.00100	0.01512	0.32940	0.12960	0.19603	2.50740	0.60000	1.02355
	C->Y (RF)	0.01860	0.00100	0.01236	0.32940	0.12960	0.19246	2.50740	0.60000	1.01525
sg13g2_nor3_1	A->Y (RF)	0.01860	0.00100	0.01632	0.32940	0.06480	0.19348	2.50740	0.30000	1.00153
	B->Y (RF)	0.01860	0.00100	0.01586	0.32940	0.06480	0.19141	2.50740	0.30000	0.99684
	C->Y (RF)	0.01860	0.00100	0.01350	0.32940	0.06480	0.18815	2.50740	0.30000	0.98867

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A	0.01860	0.00100	0.02796	0.32940	0.12960	0.03323	2.50740	0.60000	0.11575
	B	0.01860	0.00100	0.01993	0.32940	0.12960	0.02559	2.50740	0.60000	0.09670
	C	0.01860	0.00100	0.01118	0.32940	0.12960	0.01931	2.50740	0.60000	0.09266
sg13g2_nor3_1	A	0.01860	0.00100	0.01430	0.32940	0.06480	0.01702	2.50740	0.30000	0.06048
	B	0.01860	0.00100	0.01030	0.32940	0.06480	0.01330	2.50740	0.30000	0.05046
	C	0.01860	0.00100	0.00597	0.32940	0.06480	0.01012	2.50740	0.30000	0.04794

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor3_2	A	0.01860	0.00100	0.00883	0.32940	0.12960	0.01547	2.50740	0.60000	0.08978
	B	0.01860	0.00100	0.00829	0.32940	0.12960	0.01525	2.50740	0.60000	0.08338
	C	0.01860	0.00100	0.00641	0.32940	0.12960	0.01406	2.50740	0.60000	0.07881
sg13g2_nor3_1	A	0.01860	0.00100	0.00482	0.32940	0.06480	0.00825	2.50740	0.30000	0.04650
	B	0.01860	0.00100	0.00447	0.32940	0.06480	0.00795	2.50740	0.30000	0.04327
	C	0.01860	0.00100	0.00389	0.32940	0.06480	0.00770	2.50740	0.30000	0.04100

NOR4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_nor4_2	21.77280
sg13g2_nor4_1	10.88640

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	Y
sg13g2_nor4_2	0.00653	0.00643	0.00636	0.00613	0.60000
sg13g2_nor4_1	0.00337	0.00336	0.00331	0.00313	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_nor4_2	1430.14000	3050.10000	5284.78000
sg13g2_nor4_1	715.10200	1525.04000	2642.37000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A->Y (FR)	0.01860	0.00100	0.05176	0.32940	0.12960	0.42937	2.50740	0.60000	1.93531
	B->Y (FR)	0.01860	0.00100	0.04976	0.32940	0.12960	0.44694	2.50740	0.60000	2.09932
	C->Y (FR)	0.01860	0.00100	0.04263	0.32940	0.12960	0.46522	2.50740	0.60000	2.28577
	D->Y (FR)	0.01860	0.00100	0.02972	0.32940	0.12960	0.47916	2.50740	0.60000	2.44547
sg13g2_nor4_1	A->Y (FR)	0.01860	0.00100	0.05378	0.32940	0.06480	0.42509	2.50740	0.30000	1.92137
	B->Y (FR)	0.01860	0.00100	0.05169	0.32940	0.06480	0.44207	2.50740	0.30000	2.08056
	C->Y (FR)	0.01860	0.00100	0.04526	0.32940	0.06480	0.46144	2.50740	0.30000	2.26609
	D->Y (FR)	0.01860	0.00100	0.03328	0.32940	0.06480	0.47567	2.50740	0.30000	2.42559

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A->Y (RF)	0.01860	0.00100	0.01652	0.32940	0.12960	0.20175	2.50740	0.60000	1.03021
	B->Y (RF)	0.01860	0.00100	0.01689	0.32940	0.12960	0.19987	2.50740	0.60000	1.02500
	C->Y (RF)	0.01860	0.00100	0.01614	0.32940	0.12960	0.19672	2.50740	0.60000	1.01708
	D->Y (RF)	0.01860	0.00100	0.01351	0.32940	0.12960	0.19274	2.50740	0.60000	1.00748
sg13g2_nor4_1	A->Y (RF)	0.01860	0.00100	0.01755	0.32940	0.06480	0.20147	2.50740	0.30000	1.02935
	B->Y (RF)	0.01860	0.00100	0.01786	0.32940	0.06480	0.20009	2.50740	0.30000	1.02646
	C->Y (RF)	0.01860	0.00100	0.01709	0.32940	0.06480	0.19701	2.50740	0.30000	1.01947
	D->Y (RF)	0.01860	0.00100	0.01460	0.32940	0.06480	0.19371	2.50740	0.30000	1.01189

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A	0.01860	0.00100	0.03874	0.32940	0.12960	0.04169	2.50740	0.60000	0.11836
	B	0.01860	0.00100	0.03095	0.32940	0.12960	0.03401	2.50740	0.60000	0.10132
	C	0.01860	0.00100	0.02305	0.32940	0.12960	0.02706	2.50740	0.60000	0.08899
	D	0.01860	0.00100	0.01422	0.32940	0.12960	0.02095	2.50740	0.60000	0.08517
sg13g2_nor4_1	A	0.01860	0.00100	0.01912	0.32940	0.06480	0.02064	2.50740	0.30000	0.05927
	B	0.01860	0.00100	0.01516	0.32940	0.06480	0.01685	2.50740	0.30000	0.05064
	C	0.01860	0.00100	0.01125	0.32940	0.06480	0.01330	2.50740	0.30000	0.04407
	D	0.01860	0.00100	0.00692	0.32940	0.06480	0.01036	2.50740	0.30000	0.04244

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_nor4_2	A	0.01860	0.00100	0.01108	0.32940	0.12960	0.01628	2.50740	0.60000	0.08344
	B	0.01860	0.00100	0.01057	0.32940	0.12960	0.01598	2.50740	0.60000	0.07869
	C	0.01860	0.00100	0.00884	0.32940	0.12960	0.01482	2.50740	0.60000	0.07272
	D	0.01860	0.00100	0.00682	0.32940	0.12960	0.01381	2.50740	0.60000	0.06971
sg13g2_nor4_1	A	0.01860	0.00100	0.00559	0.32940	0.06480	0.00822	2.50740	0.30000	0.04201
	B	0.01860	0.00100	0.00538	0.32940	0.06480	0.00807	2.50740	0.30000	0.03929
	C	0.01860	0.00100	0.00482	0.32940	0.06480	0.00768	2.50740	0.30000	0.03728
	D	0.01860	0.00100	0.00408	0.32940	0.06480	0.00735	2.50740	0.30000	0.03504

NP_ANT



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

Truth Table

INPUT
A
x

Footprint

Cell Name	Area
sg13g2_antennanp	5.44320

Pin Capacitance Information

Cell Name	Pin Cap(pf)
	A
sg13g2_antennanp	0.00103

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_antennanp	8.16736	8.16743	8.16750

Passive Power Information

Passive power(pJ) for A rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_antennanp	0.01860	-0.00044	0.32940	-0.00045	2.50740	-0.00045

Passive power(pJ) for A falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_antennanp	0.01860	0.00044	0.32940	0.00045	2.50740	0.00045

O21AI



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_o21ai_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A1	A2	B1	Y
sg13g2_o21ai_1	0.00383	0.00373	0.00354	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_o21ai_1	444.84200	1609.38000	2871.41000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1->Y (FR)	0.01860	0.00100	0.03443	0.32940	0.06480	0.31873	2.50740	0.30000	1.57925
	A2->Y (FR)	0.01860	0.00100	0.03074	0.32940	0.06480	0.35779	2.50740	0.30000	1.86040
	B1->Y (FR)	0.01860	0.00100	0.01486	0.32940	0.06480	0.23732	2.50740	0.30000	1.29035

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1->Y (RF)	0.01860	0.00100	0.02511	0.32940	0.06480	0.23466	2.50740	0.30000	1.15321
	A2->Y (RF)	0.01860	0.00100	0.02081	0.32940	0.06480	0.22910	2.50740	0.30000	1.14138
	B1->Y (RF)	0.01860	0.00100	0.01689	0.32940	0.06480	0.26056	2.50740	0.30000	1.36784

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1->Y (FR)	(!A1 * A2)	0.01860	0.00100	0.01486	0.32940	0.06480	0.23732	2.50740	0.30000	1.29035

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1->Y (RF)	(!A1 * A2)	0.01860	0.00100	0.01689	0.32940	0.06480	0.26056	2.50740	0.30000	1.36784

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1	0.01860	0.00100	0.00991	0.32940	0.06480	0.01259	2.50740	0.30000	0.05105
	A2	0.01860	0.00100	0.00487	0.32940	0.06480	0.00833	2.50740	0.30000	0.04367
	B1	0.01860	0.00100	0.00332	0.32940	0.06480	0.00803	2.50740	0.30000	0.04993

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	A1	0.01860	0.00100	0.00907	0.32940	0.06480	0.01168	2.50740	0.30000	0.04561
	A2	0.01860	0.00100	0.00857	0.32940	0.06480	0.01181	2.50740	0.30000	0.04356
	B1	0.01860	0.00100	0.00429	0.32940	0.06480	0.00845	2.50740	0.30000	0.04608

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1	(!A1 * A2)	0.01860	0.00100	0.00332	0.32940	0.06480	0.00803	2.50740	0.30000	0.04993

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_o21ai_1	B1	(!A1 * A2)	0.01860	0.00100	0.00429	0.32940	0.06480	0.00845	2.50740	0.30000	0.04608

OR2x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or2_2	10.88640
sg13g2_or2_1	9.07200

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_or2_2	0.00277	0.00257	0.60000
sg13g2_or2_1	0.00280	0.00262	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or2_2	904.59000	1261.60000	1766.34000
sg13g2_or2_1	696.07500	922.84200	1113.96000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A->X (RR)	0.01860	0.00100	0.03597	0.32940	0.12960	0.18311	2.50740	0.60000	0.61165
	B->X (RR)	0.01860	0.00100	0.03380	0.32940	0.12960	0.17411	2.50740	0.60000	0.55269
sg13g2_or2_1	A->X (RR)	0.01860	0.00100	0.03037	0.32940	0.06480	0.16259	2.50740	0.30000	0.56869
	B->X (RR)	0.01860	0.00100	0.02795	0.32940	0.06480	0.15186	2.50740	0.30000	0.50359

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A->X (FF)	0.01860	0.00100	0.05649	0.32940	0.12960	0.19330	2.50740	0.60000	0.62736
	B->X (FF)	0.01860	0.00100	0.05438	0.32940	0.12960	0.20992	2.50740	0.60000	0.70390
sg13g2_or2_1	A->X (FF)	0.01860	0.00100	0.04342	0.32940	0.06480	0.16542	2.50740	0.30000	0.58010
	B->X (FF)	0.01860	0.00100	0.04117	0.32940	0.06480	0.17747	2.50740	0.30000	0.64842

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A	0.01860	0.00100	0.02056	0.32940	0.12960	0.02799	2.50740	0.60000	0.09972
	B	0.01860	0.00100	0.02025	0.32940	0.12960	0.02766	2.50740	0.60000	0.09558
sg13g2_or2_1	A	0.01860	0.00100	0.01177	0.32940	0.06480	0.01986	2.50740	0.30000	0.09164
	B	0.01860	0.00100	0.01150	0.32940	0.06480	0.01934	2.50740	0.30000	0.08817

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or2_2	A	0.01860	0.00100	0.02664	0.32940	0.12960	0.03047	2.50740	0.60000	0.09796
	B	0.01860	0.00100	0.02356	0.32940	0.12960	0.02841	2.50740	0.60000	0.09489
sg13g2_or2_1	A	0.01860	0.00100	0.01515	0.32940	0.06480	0.02213	2.50740	0.30000	0.09085
	B	0.01860	0.00100	0.01206	0.32940	0.06480	0.02025	2.50740	0.30000	0.08749

OR3x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or3_2	14.51520
sg13g2_or3_1	12.70080

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	A	B	C	X
sg13g2_or3_2	0.00294	0.00287	0.00272	0.60000
sg13g2_or3_1	0.00296	0.00289	0.00276	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or3_2	911.98700	1393.40000	2004.66000
sg13g2_or3_1	703.36200	1119.57000	1554.24000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A->X (RR)	0.01860	0.00100	0.04005	0.32940	0.12960	0.19574	2.50740	0.60000	0.65668
	B->X (RR)	0.01860	0.00100	0.03849	0.32940	0.12960	0.18820	2.50740	0.60000	0.59915
	C->X (RR)	0.01860	0.00100	0.03553	0.32940	0.12960	0.17847	2.50740	0.60000	0.55024
sg13g2_or3_1	A->X (RR)	0.01860	0.00100	0.03464	0.32940	0.06480	0.17679	2.50740	0.30000	0.61670
	B->X (RR)	0.01860	0.00100	0.03322	0.32940	0.06480	0.16814	2.50740	0.30000	0.55327
	C->X (RR)	0.01860	0.00100	0.03005	0.32940	0.06480	0.15687	2.50740	0.30000	0.50021

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A->X (FF)	0.01860	0.00100	0.07679	0.32940	0.12960	0.20680	2.50740	0.60000	0.62696
	B->X (FF)	0.01860	0.00100	0.07482	0.32940	0.12960	0.22333	2.50740	0.60000	0.70742
	C->X (FF)	0.01860	0.00100	0.06788	0.32940	0.12960	0.23118	2.50740	0.60000	0.75309
sg13g2_or3_1	A->X (FF)	0.01860	0.00100	0.06043	0.32940	0.06480	0.17833	2.50740	0.30000	0.58452
	B->X (FF)	0.01860	0.00100	0.05844	0.32940	0.06480	0.19203	2.50740	0.30000	0.65746
	C->X (FF)	0.01860	0.00100	0.05139	0.32940	0.06480	0.19714	2.50740	0.30000	0.69488

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A	0.01860	0.00100	0.02157	0.32940	0.12960	0.02857	2.50740	0.60000	0.10536
	B	0.01860	0.00100	0.02121	0.32940	0.12960	0.02807	2.50740	0.60000	0.09672
	C	0.01860	0.00100	0.02060	0.32940	0.12960	0.02749	2.50740	0.60000	0.09434
sg13g2_or3_1	A	0.01860	0.00100	0.01249	0.32940	0.06480	0.02005	2.50740	0.30000	0.09686
	B	0.01860	0.00100	0.01228	0.32940	0.06480	0.01949	2.50740	0.30000	0.08802
	C	0.01860	0.00100	0.01176	0.32940	0.06480	0.01910	2.50740	0.30000	0.08627

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or3_2	A	0.01860	0.00100	0.03528	0.32940	0.12960	0.03528	2.50740	0.60000	0.10754
	B	0.01860	0.00100	0.03190	0.32940	0.12960	0.03244	2.50740	0.60000	0.09811
	C	0.01860	0.00100	0.02803	0.32940	0.12960	0.03008	2.50740	0.60000	0.09496
sg13g2_or3_1	A	0.01860	0.00100	0.02213	0.32940	0.06480	0.02699	2.50740	0.30000	0.09996
	B	0.01860	0.00100	0.01864	0.32940	0.06480	0.02417	2.50740	0.30000	0.09056
	C	0.01860	0.00100	0.01480	0.32940	0.06480	0.02195	2.50740	0.30000	0.08716

OR4x



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_or4_2	16.32960
sg13g2_or4_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)				Max Cap(pf)
	A	B	C	D	X
sg13g2_or4_2	0.00293	0.00284	0.00282	0.00271	0.60000
sg13g2_or4_1	0.00296	0.00286	0.00284	0.00275	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_or4_2	915.57300	1555.91000	2202.08000
sg13g2_or4_1	707.01100	1314.75000	1993.47000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A->X (RR)	0.01860	0.00100	0.04184	0.32940	0.12960	0.20138	2.50740	0.60000	0.65141
	B->X (RR)	0.01860	0.00100	0.04122	0.32940	0.12960	0.19562	2.50740	0.60000	0.60270
	C->X (RR)	0.01860	0.00100	0.03919	0.32940	0.12960	0.18754	2.50740	0.60000	0.55542
	D->X (RR)	0.01860	0.00100	0.03608	0.32940	0.12960	0.17828	2.50740	0.60000	0.51537
sg13g2_or4_1	A->X (RR)	0.01860	0.00100	0.03633	0.32940	0.06480	0.18280	2.50740	0.30000	0.61378
	B->X (RR)	0.01860	0.00100	0.03595	0.32940	0.06480	0.17650	2.50740	0.30000	0.55983
	C->X (RR)	0.01860	0.00100	0.03406	0.32940	0.06480	0.16763	2.50740	0.30000	0.50808
	D->X (RR)	0.01860	0.00100	0.03073	0.32940	0.06480	0.15651	2.50740	0.30000	0.46269

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A->X (FF)	0.01860	0.00100	0.10590	0.32940	0.12960	0.23695	2.50740	0.60000	0.67976
	B->X (FF)	0.01860	0.00100	0.10379	0.32940	0.12960	0.24870	2.50740	0.60000	0.75261
	C->X (FF)	0.01860	0.00100	0.09668	0.32940	0.12960	0.25944	2.50740	0.60000	0.80766
	D->X (FF)	0.01860	0.00100	0.08490	0.32940	0.12960	0.26289	2.50740	0.60000	0.83842
sg13g2_or4_1	A->X (FF)	0.01860	0.00100	0.08383	0.32940	0.06480	0.20328	2.50740	0.30000	0.63351
	B->X (FF)	0.01860	0.00100	0.08175	0.32940	0.06480	0.21383	2.50740	0.30000	0.70277
	C->X (FF)	0.01860	0.00100	0.07461	0.32940	0.06480	0.22161	2.50740	0.30000	0.74895
	D->X (FF)	0.01860	0.00100	0.06269	0.32940	0.06480	0.22216	2.50740	0.30000	0.77259

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A	0.01860	0.00100	0.02290	0.32940	0.12960	0.02872	2.50740	0.60000	0.10235
	B	0.01860	0.00100	0.02244	0.32940	0.12960	0.02818	2.50740	0.60000	0.09396
	C	0.01860	0.00100	0.02141	0.32940	0.12960	0.02713	2.50740	0.60000	0.08684
	D	0.01860	0.00100	0.02071	0.32940	0.12960	0.02691	2.50740	0.60000	0.08633
sg13g2_or4_1	A	0.01860	0.00100	0.01367	0.32940	0.06480	0.02003	2.50740	0.30000	0.09358
	B	0.01860	0.00100	0.01335	0.32940	0.06480	0.01949	2.50740	0.30000	0.08508
	C	0.01860	0.00100	0.01249	0.32940	0.06480	0.01858	2.50740	0.30000	0.07820
	D	0.01860	0.00100	0.01189	0.32940	0.06480	0.01821	2.50740	0.30000	0.07738

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_or4_2	A	0.01860	0.00100	0.04329	0.32940	0.12960	0.03818	2.50740	0.60000	0.10700
	B	0.01860	0.00100	0.03985	0.32940	0.12960	0.03501	2.50740	0.60000	0.09813
	C	0.01860	0.00100	0.03636	0.32940	0.12960	0.03288	2.50740	0.60000	0.09076
	D	0.01860	0.00100	0.03245	0.32940	0.12960	0.03049	2.50740	0.60000	0.08827
sg13g2_or4_1	A	0.01860	0.00100	0.02724	0.32940	0.06480	0.02929	2.50740	0.30000	0.09935
	B	0.01860	0.00100	0.02387	0.32940	0.06480	0.02646	2.50740	0.30000	0.09085
	C	0.01860	0.00100	0.02041	0.32940	0.06480	0.02396	2.50740	0.30000	0.08282
	D	0.01860	0.00100	0.01648	0.32940	0.06480	0.02183	2.50740	0.30000	0.08039

SDFRBPQ_x



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

Truth Table

INPUT					OUTPUT
D	SCD	SCE	RESET_B	CLK	Q
0	0	x	1	R	0
0	1	0	1	R	0
x	1	1	1	R	1
1	x	0	1	R	1
1	0	1	1	R	0
x	x	x	0	x	0
x	x	x	1	x	IQ

Footprint

Cell Name	Area
sg13g2_sdfrbpq_2	72.57600
sg13g2_sdfrbpq_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)
	D	SCD	SCE	RESET_B	CLK	Q
sg13g2_sdfrbpq_2	0.00312	0.00325	0.00558	0.00560	0.00334	0.60000
sg13g2_sdfrbpq_1	0.00312	0.00325	0.00558	0.00560	0.00334	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbpq_2	5849.79000	6854.64000	7927.38000
sg13g2_sdfrbpq_1	5573.05000	6339.69000	7197.92000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RR)	0.01860	0.00100	0.09775	0.32940	0.12960	0.24417	2.50740	0.60000	0.62940
sg13g2_sdfrbpq_1	CLK->Q (RR)	0.01860	0.00100	0.08441	0.32940	0.06480	0.22361	2.50740	0.30000	0.60747

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RF)	0.01860	0.00100	0.10024	0.32940	0.12960	0.23418	2.50740	0.60000	0.56667
	RESET_B->Q (FF)	0.01860	0.00100	0.06085	0.32940	0.12960	0.23624	2.50740	0.60000	0.71247
sg13g2_sdfrbpq_1	CLK->Q (RF)	0.01860	0.00100	0.08747	0.32940	0.06480	0.21467	2.50740	0.30000	0.54839
	RESET_B->Q (FF)	0.01860	0.00100	0.04849	0.32940	0.06480	0.20711	2.50740	0.30000	0.66023

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RR)	SCE	0.01860	0.00100	0.09774	0.32940	0.12960	0.24416	2.50740	0.60000	0.62934
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.09775	0.32940	0.12960	0.24417	2.50740	0.60000	0.62940
sg13g2_sdfrbpq_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.08440	0.32940	0.06480	0.22359	2.50740	0.30000	0.60713
	CLK->Q (RR)	!SCE	0.01860	0.00100	0.08441	0.32940	0.06480	0.22361	2.50740	0.30000	0.60747

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK->Q (RF)	SCE	0.01860	0.00100	0.10025	0.32940	0.12960	0.23403	2.50740	0.60000	0.56664
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.10024	0.32940	0.12960	0.23418	2.50740	0.60000	0.56667
sg13g2_sdfrbpq_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.08744	0.32940	0.06480	0.21451	2.50740	0.30000	0.54831
	CLK->Q (RF)	!SCE	0.01860	0.00100	0.08747	0.32940	0.06480	0.21467	2.50740	0.30000	0.54839

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.13872
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.15053
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.13872
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.15053

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.16824
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14841	2.50740	2.50740	0.20070
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.16824
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14841	2.50740	2.50740	0.20070

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.15053
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.15053

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.17119
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14841	2.50740	2.50740	0.20070
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.17119
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14841	2.50740	2.50740	0.20070

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.12692
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.12682	2.50740	2.50740	0.13872
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.12692
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.12682	2.50740	2.50740	0.13872

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.12692
	setup	CLK (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.12143	2.50740	2.50740	0.15643
sg13g2_sdfrbpq_1	hold	CLK (R)	0.01860	0.01860	-0.07091	1.26300	1.26300	-0.09714	2.50740	2.50740	-0.12692
	setup	CLK (R)	0.01860	0.01860	0.09292	1.26300	1.26300	0.12143	2.50740	2.50740	0.15643

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.25095	2.50740	2.50740	0.56669
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630
sg13g2_sdfrbpq_1	recovery	CLK (R)	0.01860	0.01860	0.05135	1.26300	1.26300	0.21317	2.50740	2.50740	0.41026
	removal	CLK (R)	0.01860	0.01860	-0.04401	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	RESET_B ()	0.01860	0.00000	0.06699	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.04135	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbpq_2	min_pulse_width	CLK ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbpq_1	min_pulse_width	CLK ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	0.01860	0.00100	0.05384	0.32940	0.12960	0.06511	2.50740	0.60000	0.19346
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.04151	0.32940	0.06480	0.05607	2.50740	0.30000	0.18446

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	0.01860	0.00100	0.05756	0.32940	0.12960	0.06887	2.50740	0.60000	0.19188
	RESET_B	0.01860	0.00100	0.05261	0.32940	0.12960	0.06003	2.50740	0.60000	0.16643
sg13g2_sdfrbpq_1	CLK	0.01860	0.00100	0.04591	0.32940	0.06480	0.06039	2.50740	0.30000	0.18343
	RESET_B	0.01860	0.00100	0.04043	0.32940	0.06480	0.05127	2.50740	0.30000	0.15678

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	SCE	0.01860	0.00100	0.05384	0.32940	0.12960	0.06511	2.50740	0.60000	0.19346
	CLK	!SCE	0.01860	0.00100	0.03714	0.32940	0.12960	0.03470	2.50740	0.60000	0.03994
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.04151	0.32940	0.06480	0.05607	2.50740	0.30000	0.18446
	CLK	!SCE	0.01860	0.00100	0.02495	0.32940	0.06480	0.02573	2.50740	0.30000	0.03073

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbpq_2	CLK	SCE	0.01860	0.00100	0.05756	0.32940	0.12960	0.06887	2.50740	0.60000	0.19188
	CLK	!SCE	0.01860	0.00100	0.03889	0.32940	0.12960	0.03681	2.50740	0.60000	0.03560
sg13g2_sdfrbpq_1	CLK	SCE	0.01860	0.00100	0.04591	0.32940	0.06480	0.06039	2.50740	0.30000	0.18343
	CLK	!SCE	0.01860	0.00100	0.02729	0.32940	0.06480	0.02817	2.50740	0.30000	0.02753

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.05117	0.32940	0.06073	2.50740	0.15208
sg13g2_sdfrbpq_1	0.01860	0.03827	0.32940	0.04783	2.50740	0.13919

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.04966	0.32940	0.06105	2.50740	0.15229
sg13g2_sdfrbpq_1	0.01860	0.04443	0.32940	0.05583	2.50740	0.14708

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * !SCE)	0.01860	0.05117	0.32940	0.06073	2.50740	0.15208
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.03827	0.32940	0.04783	2.50740	0.13919

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * !SCE)	0.01860	0.04966	0.32940	0.06105	2.50740	0.15229
sg13g2_sdfrbpq_1	(!CLK * RESET_B * !SCE)	0.01860	0.04443	0.32940	0.05583	2.50740	0.14708

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.05145	0.32940	0.06095	2.50740	0.15236
sg13g2_sdfrbpq_1	0.01860	0.03854	0.32940	0.04802	2.50740	0.13944

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.04987	0.32940	0.06139	2.50740	0.15305
sg13g2_sdfrbpq_1	0.01860	0.04464	0.32940	0.05617	2.50740	0.14783

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * SCE)	0.01860	0.05145	0.32940	0.06095	2.50740	0.15236
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.03854	0.32940	0.04802	2.50740	0.13944

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * RESET_B * SCE)	0.01860	0.04987	0.32940	0.06139	2.50740	0.15305
sg13g2_sdfrbpq_1	(!CLK * RESET_B * SCE)	0.01860	0.04464	0.32940	0.05617	2.50740	0.14783

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.04551	0.32940	0.06366	2.50740	0.24099
sg13g2_sdfrbpq_1	0.01860	0.04553	0.32940	0.06371	2.50740	0.24111

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.07259	0.32940	0.10278	2.50740	0.27634
sg13g2_sdfrbpq_1	0.01860	0.07052	0.32940	0.10069	2.50740	0.27429

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.04581	0.32940	0.05501	2.50740	0.14258
	(!CLK * !D * RESET_B * SCD)	0.01860	0.04551	0.32940	0.06366	2.50740	0.24099
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.04366	0.32940	0.05288	2.50740	0.14042
	(!CLK * !D * RESET_B * SCD)	0.01860	0.04553	0.32940	0.06371	2.50740	0.24111

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.04995	0.32940	0.05958	2.50740	0.14546
	(!CLK * !D * RESET_B * SCD)	0.01860	0.07259	0.32940	0.10278	2.50740	0.27634
sg13g2_sdfrbpq_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.04999	0.32940	0.05961	2.50740	0.14551
	(!CLK * !D * RESET_B * SCD)	0.01860	0.07052	0.32940	0.10069	2.50740	0.27429

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.01799	0.32940	0.03154	2.50740	0.15511
sg13g2_sdfrbpq_1	0.01860	0.01796	0.32940	0.03154	2.50740	0.15508

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	0.01860	0.02060	0.32940	0.03439	2.50740	0.15373
sg13g2_sdfrbpq_1	0.01860	0.02017	0.32940	0.03394	2.50740	0.15335

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(RESET_B * SCD * SCE * Q)	0.01860	0.01840	0.32940	0.03195	2.50740	0.15564
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01799	0.32940	0.03154	2.50740	0.15511
	(D * RESET_B * !SCE * Q)	0.01860	0.01839	0.32940	0.03195	2.50740	0.15564
	(!RESET_B * !Q)	0.01860	0.01718	0.32940	0.03067	2.50740	0.15402
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01799	0.32940	0.03154	2.50740	0.15511
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.01839	0.32940	0.03195	2.50740	0.15559
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01798	0.32940	0.03154	2.50740	0.15507
	(D * RESET_B * !SCE * Q)	0.01860	0.01839	0.32940	0.03195	2.50740	0.15559
	(!RESET_B * !Q)	0.01860	0.01502	0.32940	0.02852	2.50740	0.15185
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01796	0.32940	0.03154	2.50740	0.15508

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbpq_2	(RESET_B * SCD * SCE * Q)	0.01860	0.02060	0.32940	0.03439	2.50740	0.15373
	(RESET_B * SCD * SCE * !Q)	0.01860	0.03974	0.32940	0.05400	2.50740	0.17808
	(RESET_B * !SCD * SCE * Q)	0.01860	0.03768	0.32940	0.05214	2.50740	0.17368
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.01990	0.32940	0.03366	2.50740	0.15324
	(D * RESET_B * !SCE * Q)	0.01860	0.02057	0.32940	0.03439	2.50740	0.15373
	(!RESET_B * !Q)	0.01860	0.01468	0.32940	0.02840	2.50740	0.14777
	(!D * RESET_B * !SCE * !Q)	0.01860	0.01991	0.32940	0.03366	2.50740	0.15324
sg13g2_sdfrbpq_1	(RESET_B * SCD * SCE * Q)	0.01860	0.01978	0.32940	0.03359	2.50740	0.15318
	(RESET_B * SCD * SCE * !Q)	0.01860	0.03998	0.32940	0.05421	2.50740	0.17823
	(RESET_B * !SCD * SCE * Q)	0.01860	0.03691	0.32940	0.05138	2.50740	0.17308
	(RESET_B * !SCD * SCE * !Q)	0.01860	0.02017	0.32940	0.03394	2.50740	0.15335
	(D * RESET_B * !SCE * Q)	0.01860	0.01978	0.32940	0.03359	2.50740	0.15318
	(!RESET_B * !Q)	0.01860	0.01253	0.32940	0.02625	2.50740	0.14562
	(!D * RESET_B * !SCE * !Q)	0.01860	0.02017	0.32940	0.03394	2.50740	0.15335

SDFRBP_x



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

Truth Table

INPUT					OUTPUT	
D	SCD	SCE	RESET_B	CLK	Q	Q_N
0	0	x	1	R	0	1
0	1	0	1	R	0	1
x	1	1	1	R	1	0
1	x	0	1	R	1	0
1	0	1	1	R	0	1
x	x	x	0	x	0	1
x	x	x	1	x	IQ	IQN

Footprint

Cell Name	Area
sg13g2_sdfrbp_2	72.57600
sg13g2_sdfrbp_1	68.94720

Pin Capacitance Information

Cell Name	Pin Cap(pf)					Max Cap(pf)	
	D	SCD	SCE	RESET_B	CLK	Q	Q_N
sg13g2_sdfrbp_2	0.00312	0.00325	0.00558	0.00556	0.00334	0.60000	0.60000
sg13g2_sdfrbp_1	0.00312	0.00325	0.00558	0.00562	0.00334	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfrbp_2	6904.25000	8043.80000	8529.03000
sg13g2_sdfrbp_1	5966.12000	7105.73000	7590.98000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RR)	0.01860	0.00100	0.11333	0.32940	0.12960	0.24475	2.50740	0.60000	0.65239
sg13g2_sdfrbp_1	CLK->Q (RR)	0.01860	0.00100	0.08965	0.32940	0.06480	0.22367	2.50740	0.30000	0.62693

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RF)	0.01860	0.00100	0.10208	0.32940	0.12960	0.22289	2.50740	0.60000	0.56115
	RESET_B->Q (FF)	0.01860	0.00100	0.13431	0.32940	0.12960	0.28498	2.50740	0.60000	0.75147
sg13g2_sdfrbp_1	CLK->Q (RF)	0.01860	0.00100	0.08389	0.32940	0.06480	0.20414	2.50740	0.30000	0.53867
	RESET_B->Q (FF)	0.01860	0.00100	0.11552	0.32940	0.06480	0.26526	2.50740	0.30000	0.72816

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RR)	SCE	0.01860	0.00100	0.11333	0.32940	0.12960	0.24475	2.50740	0.60000	0.65239
sg13g2_sdfrbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.08965	0.32940	0.06480	0.22367	2.50740	0.30000	0.62693

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q (RF)	SCE	0.01860	0.00100	0.10208	0.32940	0.12960	0.22289	2.50740	0.60000	0.56115
sg13g2_sdfrbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.08389	0.32940	0.06480	0.20414	2.50740	0.30000	0.53867

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RR)	0.01860	0.00100	0.06902	0.32940	0.12960	0.21897	2.50740	0.60000	0.60084
	RESET_B->Q_N (FR)	0.01860	0.00100	0.10195	0.32940	0.12960	0.27985	2.50740	0.60000	0.79079
sg13g2_sdfrbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.06519	0.32940	0.06480	0.20952	2.50740	0.30000	0.58959
	RESET_B->Q_N (FR)	0.01860	0.00100	0.09709	0.32940	0.06480	0.26941	2.50740	0.30000	0.77897

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RF)	0.01860	0.00100	0.07511	0.32940	0.12960	0.22752	2.50740	0.60000	0.59355
sg13g2_sdfrbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.06814	0.32940	0.06480	0.21331	2.50740	0.30000	0.57569

Delay(ns) to Q_N rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.06902	0.32940	0.12960	0.21897	2.50740	0.60000	0.60084
sg13g2_sdfrbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.06519	0.32940	0.06480	0.20952	2.50740	0.30000	0.58959

Delay(ns) to Q_N falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.07511	0.32940	0.12960	0.22752	2.50740	0.60000	0.59355
sg13g2_sdfrbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.06814	0.32940	0.06480	0.21331	2.50740	0.30000	0.57569

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.14758
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.13762	2.50740	2.50740	0.14758

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.17709
	setup	CLK (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.15111	2.50740	2.50740	0.20070
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.12952	2.50740	2.50740	-0.17709
	setup	CLK (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.15111	2.50740	2.50740	0.20070

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.14758
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.12682	2.50740	2.50740	-0.13577
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.14031	2.50740	2.50740	0.14758

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06358	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.18299
	setup	CLK (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.15111	2.50740	2.50740	0.20366
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06358	1.26300	1.26300	-0.13222	2.50740	2.50740	-0.18299
	setup	CLK (R)	0.01860	0.01860	0.09047	1.26300	1.26300	0.15111	2.50740	2.50740	0.20366

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.12397
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.12682	2.50740	2.50740	0.13577
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.11333	2.50740	2.50740	-0.12397
	setup	CLK (R)	0.01860	0.01860	0.08803	1.26300	1.26300	0.12412	2.50740	2.50740	0.13577

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	hold	CLK (R)	0.01860	0.01860	-0.06602	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.13872
	setup	CLK (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.12412	2.50740	2.50740	0.15938
sg13g2_sdfrbp_1	hold	CLK (R)	0.01860	0.01860	-0.06847	1.26300	1.26300	-0.10254	2.50740	2.50740	-0.13872
	setup	CLK (R)	0.01860	0.01860	0.09536	1.26300	1.26300	0.12412	2.50740	2.50740	0.15938

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	recovery	CLK (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.17809	2.50740	2.50740	0.28925
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17539	2.50740	2.50740	-0.28630
sg13g2_sdfrbp_1	recovery	CLK (R)	0.01860	0.01860	0.05379	1.26300	1.26300	0.17809	2.50740	2.50740	0.28925
	removal	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.28630

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	min_pulse_width	RESET_B 0	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbp_1	min_pulse_width	RESET_B 0	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfrbp_2	min_pulse_width	CLK ()	0.01860	0.00000	0.06378	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818
sg13g2_sdfrbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.05096	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.08367	0.32940	0.12960	0.26699	2.50740	0.60000	1.03459
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.06237	0.32940	0.06480	0.16273	2.50740	0.30000	0.61232

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.08323	0.32940	0.12960	0.27061	2.50740	0.60000	1.03194
	RESET_B	0.01860	0.00100	0.08563	0.32940	0.12960	0.34275	2.50740	0.60000	1.35098
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.06389	0.32940	0.06480	0.16550	2.50740	0.30000	0.60833
	RESET_B	0.01860	0.00100	0.08905	0.32940	0.06480	0.22862	2.50740	0.30000	0.79287

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.08367	0.32940	0.12960	0.26699	2.50740	0.60000	1.03459
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.06237	0.32940	0.06480	0.16273	2.50740	0.30000	0.61232

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.08323	0.32940	0.12960	0.27061	2.50740	0.60000	1.03194
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.06389	0.32940	0.06480	0.16550	2.50740	0.30000	0.60833

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.08329	0.32940	0.12960	0.27075	2.50740	0.60000	1.03385
	RESET_B	0.01860	0.00100	0.08532	0.32940	0.12960	0.30762	2.50740	0.60000	1.18874
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.06382	0.32940	0.06480	0.16557	2.50740	0.30000	0.60916
	RESET_B	0.01860	0.00100	0.08872	0.32940	0.06480	0.21109	2.50740	0.30000	0.71174

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	0.01860	0.00100	0.08512	0.32940	0.12960	0.26825	2.50740	0.60000	1.03431
sg13g2_sdfrbp_1	CLK	0.01860	0.00100	0.06246	0.32940	0.06480	0.16266	2.50740	0.30000	0.61137

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.08329	0.32940	0.12960	0.27075	2.50740	0.60000	1.03385
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.06382	0.32940	0.06480	0.16557	2.50740	0.30000	0.60916

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfrbp_2	CLK	SCE	0.01860	0.00100	0.08512	0.32940	0.12960	0.26825	2.50740	0.60000	1.03431
sg13g2_sdfrbp_1	CLK	SCE	0.01860	0.00100	0.06246	0.32940	0.06480	0.16266	2.50740	0.30000	0.61137

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.03768	0.32940	0.04719	2.50740	0.13858
sg13g2_sdfrbp_1	0.01860	0.03776	0.32940	0.04722	2.50740	0.13860

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.04102	0.32940	0.05243	2.50740	0.14364
sg13g2_sdfrbp_1	0.01860	0.04101	0.32940	0.05242	2.50740	0.14364

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * !SCE)	0.01860	0.03768	0.32940	0.04719	2.50740	0.13858
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.03776	0.32940	0.04722	2.50740	0.13860

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * !SCE)	0.01860	0.04102	0.32940	0.05243	2.50740	0.14364
sg13g2_sdfrbp_1	(!CLK * RESET_B * !SCE)	0.01860	0.04101	0.32940	0.05242	2.50740	0.14364

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.03852	0.32940	0.04800	2.50740	0.13942
sg13g2_sdfrbp_1	0.01860	0.03854	0.32940	0.04803	2.50740	0.13944

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.03517	0.32940	0.04670	2.50740	0.13836
sg13g2_sdfrbp_1	0.01860	0.03517	0.32940	0.04669	2.50740	0.13836

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * SCE)	0.01860	0.03852	0.32940	0.04800	2.50740	0.13942
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.03854	0.32940	0.04803	2.50740	0.13944

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * RESET_B * SCE)	0.01860	0.03517	0.32940	0.04670	2.50740	0.13836
sg13g2_sdfrbp_1	(!CLK * RESET_B * SCE)	0.01860	0.03517	0.32940	0.04669	2.50740	0.13836

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.04548	0.32940	0.06366	2.50740	0.24098
sg13g2_sdfrbp_1	0.01860	0.04554	0.32940	0.06370	2.50740	0.24108

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.06676	0.32940	0.09692	2.50740	0.27047
sg13g2_sdfrbp_1	0.01860	0.06673	0.32940	0.09694	2.50740	0.27053

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.03994	0.32940	0.04914	2.50740	0.13671
	(!CLK * !D * RESET_B * SCD)	0.01860	0.04548	0.32940	0.06366	2.50740	0.24098
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.03994	0.32940	0.04914	2.50740	0.13675
	(!CLK * !D * RESET_B * SCD)	0.01860	0.04554	0.32940	0.06370	2.50740	0.24108

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(!CLK * D * RESET_B * !SCD)	0.01860	0.04993	0.32940	0.05958	2.50740	0.14546
	(!CLK * !D * RESET_B * SCD)	0.01860	0.06676	0.32940	0.09692	2.50740	0.27047
sg13g2_sdfrbp_1	(!CLK * D * RESET_B * !SCD)	0.01860	0.04998	0.32940	0.05961	2.50740	0.14550
	(!CLK * !D * RESET_B * SCD)	0.01860	0.06673	0.32940	0.09694	2.50740	0.27053

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.01805	0.32940	0.03151	2.50740	0.15527
sg13g2_sdfrbp_1	0.01860	0.01804	0.32940	0.03148	2.50740	0.15506

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	0.01860	0.02023	0.32940	0.03395	2.50740	0.15338
sg13g2_sdfrbp_1	0.01860	0.02021	0.32940	0.03395	2.50740	0.15340

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01850	0.32940	0.03193	2.50740	0.15546
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01805	0.32940	0.03151	2.50740	0.15527
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01850	0.32940	0.03193	2.50740	0.15546
	(!RESET_B * !Q * Q_N)	0.01860	0.01139	0.32940	0.02474	2.50740	0.14810
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01807	0.32940	0.03151	2.50740	0.15527
sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01846	0.32940	0.03193	2.50740	0.15555
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.01804	0.32940	0.03148	2.50740	0.15506
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01847	0.32940	0.03193	2.50740	0.15555
	(!RESET_B * !Q * Q_N)	0.01860	0.01136	0.32940	0.02474	2.50740	0.14812
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.01804	0.32940	0.03148	2.50740	0.15506

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfrbp_2	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01986	0.32940	0.03358	2.50740	0.15311
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.03998	0.32940	0.05420	2.50740	0.17826
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.03696	0.32940	0.05136	2.50740	0.17303
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.02023	0.32940	0.03395	2.50740	0.15338
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01987	0.32940	0.03358	2.50740	0.15311
	(!RESET_B * !Q * Q_N)	0.01860	0.00885	0.32940	0.02255	2.50740	0.14203
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.02022	0.32940	0.03395	2.50740	0.15338

sg13g2_sdfrbp_1	(RESET_B * SCD * SCE * Q * !Q_N)	0.01860	0.01983	0.32940	0.03358	2.50740	0.15310
	(RESET_B * SCD * SCE * !Q * Q_N)	0.01860	0.04001	0.32940	0.05421	2.50740	0.17828
	(RESET_B * !SCD * SCE * Q * !Q_N)	0.01860	0.03697	0.32940	0.05136	2.50740	0.17306
	(RESET_B * !SCD * SCE * !Q * Q_N)	0.01860	0.02021	0.32940	0.03395	2.50740	0.15340
	(D * RESET_B * !SCE * Q * !Q_N)	0.01860	0.01983	0.32940	0.03358	2.50740	0.15310
	(!RESET_B * !Q * Q_N)	0.01860	0.00883	0.32940	0.02256	2.50740	0.14205
	(!D * RESET_B * !SCE * !Q * Q_N)	0.01860	0.02019	0.32940	0.03395	2.50740	0.15340

SDFRRS



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

Truth Table

INPUT						OUTPUT	
D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
0	0	x	1	1	R	0	1
0	1	0	1	1	R	0	1
x	1	1	1	1	R	1	0
1	x	0	1	1	R	1	0
1	0	1	1	1	R	0	1
x	x	x	x	0	x	1	0
x	x	x	0	1	x	0	1
x	x	x	1	1	x	IQ	IQN

Footprint

Cell Name	Area
sg13g2_sdfbbp_1	63.50400

Pin Capacitance Information

Cell Name	Pin Cap(pf)						Max Cap(pf)	
	D	SCD	SCE	RESET_B	SET_B	CLK	Q	Q_N
sg13g2_sdfbbp_1	0.00218	0.00225	0.00395	0.00195	0.00587	0.00341	0.30000	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_sdfbbp_1	5256.03000	6694.12000	7569.43000

Delay Information

Delay(ns) to Q rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RR)	0.01860	0.00100	0.14325	0.32940	0.06480	0.27514	2.50740	0.30000	0.66096
	SET_B->Q (FR)	0.01860	0.00100	0.06017	0.32940	0.06480	0.20434	2.50740	0.30000	0.63105

Delay(ns) to Q falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RF)	0.01860	0.00100	0.12065	0.32940	0.06480	0.24333	2.50740	0.30000	0.59393
	RESET_B->Q (FF)	0.01860	0.00100	0.10058	0.32940	0.06480	0.23213	2.50740	0.30000	0.61605

Delay(ns) to Q rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RR)	SCE	0.01860	0.00100	0.14325	0.32940	0.06480	0.27514	2.50740	0.30000	0.66096

Delay(ns) to Q falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q (RF)	SCE	0.01860	0.00100	0.12065	0.32940	0.06480	0.24333	2.50740	0.30000	0.59393

Delay(ns) to Q_N rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RR)	0.01860	0.00100	0.10015	0.32940	0.06480	0.24516	2.50740	0.30000	0.64443
	RESET_B->Q_N (FR)	0.01860	0.00100	0.07943	0.32940	0.06480	0.23754	2.50740	0.30000	0.67304

Delay(ns) to Q_N falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RF)	0.01860	0.00100	0.12071	0.32940	0.06480	0.26021	2.50740	0.30000	0.60262
	SET_B->Q_N (FF)	0.01860	0.00100	0.04106	0.32940	0.06480	0.18811	2.50740	0.30000	0.57498

Delay(ns) to Q_N rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RR)	SCE	0.01860	0.00100	0.10015	0.32940	0.06480	0.24516	2.50740	0.30000	0.64443

Delay(ns) to Q_N falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK->Q_N (RF)	SCE	0.01860	0.00100	0.12071	0.32940	0.06480	0.26021	2.50740	0.30000	0.60262

Constraint Information

Constraints(ns) for D rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.14841	2.50740	2.50740	-0.20661
	setup	CLK (R)	0.01860	0.01860	0.05624	1.26300	1.26300	0.15651	2.50740	2.50740	0.21546

Constraints(ns) for D falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.11873	2.50740	2.50740	-0.16824
	setup	CLK (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.13762	2.50740	2.50740	0.19775

Constraints(ns) for SCD rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.05868	1.26300	1.26300	-0.16190	2.50740	2.50740	-0.22727
	setup	CLK (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.17000	2.50740	2.50740	0.23612

Constraints(ns) for SCD falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.06113	1.26300	1.26300	-0.11063	2.50740	2.50740	-0.15348
	setup	CLK (R)	0.01860	0.01860	0.08314	1.26300	1.26300	0.13222	2.50740	2.50740	0.18299

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.04890	1.26300	1.26300	-0.17269	2.50740	2.50740	-0.26269
	setup	CLK (R)	0.01860	0.01860	0.06113	1.26300	1.26300	0.19158	2.50740	2.50740	0.28630

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	hold	CLK (R)	0.01860	0.01860	-0.04646	1.26300	1.26300	-0.06746	2.50740	2.50740	-0.07674
	setup	CLK (R)	0.01860	0.01860	0.06847	1.26300	1.26300	0.08905	2.50740	2.50740	0.10921

Constraints(ns) for RESET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.02934	1.26300	1.26300	0.05127	2.50740	2.50740	0.06198
	removal	CLK (R)	0.01860	0.01860	-0.01956	1.26300	1.26300	-0.04048	2.50740	2.50740	-0.04722

Constraints(ns) for RESET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	RESET_B ()	0.01860	0.00000	0.06699	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for SET_B rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	recovery	CLK (R)	0.01860	0.01860	0.00489	1.26300	1.26300	0.09714	2.50740	2.50740	0.26564
	removal	CLK (R)	0.01860	0.01860	0.01956	1.26300	1.26300	0.03778	2.50740	2.50740	0.02952
	hold	RESET_B (R)	0.01860	0.01860	-0.03668	1.26300	1.26300	-0.12412	2.50740	2.50740	-0.18890
	setup	RESET_B (R)	0.01860	0.01860	0.04646	1.26300	1.26300	0.14571	2.50740	2.50740	0.23022

Constraints(ns) for SET_B falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	SET_B ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_sdfbbp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.05737	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to Q rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.03414	0.32940	0.06480	0.04065	2.50740	0.30000	0.10078
	SET_B	0.01860	0.00100	0.06163	0.32940	0.06480	0.16657	2.50740	0.30000	0.63278

Internal switching power(pJ) to Q falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.03302	0.32940	0.06480	0.04008	2.50740	0.30000	0.10294
	RESET_B	0.01860	0.00100	0.07060	0.32940	0.06480	0.16487	2.50740	0.30000	0.55509

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.03414	0.32940	0.06480	0.04065	2.50740	0.30000	0.10078

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.03302	0.32940	0.06480	0.04008	2.50740	0.30000	0.10294

Internal switching power(pJ) to Q_N rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.03301	0.32940	0.06480	0.04019	2.50740	0.30000	0.10358
	RESET_B	0.01860	0.00100	0.07053	0.32940	0.06480	0.16486	2.50740	0.30000	0.55600

Internal switching power(pJ) to Q_N falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	0.01860	0.00100	0.03413	0.32940	0.06480	0.04062	2.50740	0.30000	0.09998
	SET_B	0.01860	0.00100	0.06162	0.32940	0.06480	0.16651	2.50740	0.30000	0.63211

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.03301	0.32940	0.06480	0.04019	2.50740	0.30000	0.10358

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_sdfbbp_1	CLK	SCE	0.01860	0.00100	0.03413	0.32940	0.06480	0.04062	2.50740	0.30000	0.09998

Passive power(pJ) for D rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02091	0.32940	0.02565	2.50740	0.07793

Passive power(pJ) for D falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02228	0.32940	0.02716	2.50740	0.07890

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.02091	0.32940	0.02565	2.50740	0.07793
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00678	0.32940	0.01074	2.50740	0.05702

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * !SCE * SET_B)	0.01860	0.02228	0.32940	0.02716	2.50740	0.07890
	(!CLK * RESET_B * !SCE * !SET_B)	0.01860	0.00876	0.32940	0.01293	2.50740	0.05898

Passive power(pJ) for SCD rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02379	0.32940	0.02785	2.50740	0.08166

Passive power(pJ) for SCD falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.03083	0.32940	0.03488	2.50740	0.08838

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.02379	0.32940	0.02785	2.50740	0.08166
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00986	0.32940	0.01318	2.50740	0.06172

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * RESET_B * SCE * SET_B)	0.01860	0.03083	0.32940	0.03488	2.50740	0.08838
	(!CLK * RESET_B * SCE * !SET_B)	0.01860	0.00651	0.32940	0.01001	2.50740	0.05851

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02757	0.32940	0.03450	2.50740	0.09968

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.03780	0.32940	0.05259	2.50740	0.11588

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.02164	0.32940	0.02908	2.50740	0.09446
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.02757	0.32940	0.03450	2.50740	0.09968
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.02317	0.32940	0.03580	2.50740	0.15347
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00860	0.32940	0.02043	2.50740	0.13234

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(!CLK * D * RESET_B * !SCD * SET_B)	0.01860	0.02868	0.32940	0.03586	2.50740	0.09926
	(!CLK * D * RESET_B * !SCD * !SET_B)	0.01860	0.03780	0.32940	0.05259	2.50740	0.11588
	(!CLK * !D * RESET_B * SCD * SET_B)	0.01860	0.01744	0.32940	0.06125	2.50740	0.17480
	(!CLK * !D * RESET_B * SCD * !SET_B)	0.01860	0.00835	0.32940	0.01948	2.50740	0.12830

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02233	0.32940	0.03553	2.50740	0.15811

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	0.01860	0.02254	0.32940	0.03610	2.50740	0.15487

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.01978	0.32940	0.03283	2.50740	0.15529
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02429	0.32940	0.03736	2.50740	0.15943
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.01992	0.32940	0.03312	2.50740	0.15563
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.02688	0.32940	0.03995	2.50740	0.16247
	(!RESET_B * !Q * Q_N)	0.01860	0.02233	0.32940	0.03553	2.50740	0.15811
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.01987	0.32940	0.03312	2.50740	0.15586

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_sdfbbp_1	(RESET_B * SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.02128	0.32940	0.03486	2.50740	0.15385
	(RESET_B * SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.03833	0.32940	0.05220	2.50740	0.17520
	(RESET_B * !SET_B * Q * !Q_N)	0.01860	0.02076	0.32940	0.03492	2.50740	0.15588
	(RESET_B * !SCD * SCE * SET_B * Q * !Q_N)	0.01860	0.04167	0.32940	0.05587	2.50740	0.17707
	(RESET_B * !SCD * SCE * SET_B * !Q * Q_N)	0.01860	0.02161	0.32940	0.03516	2.50740	0.15393
	(D * RESET_B * !SCE * SET_B * Q * !Q_N)	0.01860	0.02100	0.32940	0.03458	2.50740	0.15360
	(!RESET_B * !Q * Q_N)	0.01860	0.02254	0.32940	0.03610	2.50740	0.15487
	(!D * RESET_B * !SCE * SET_B * !Q * Q_N)	0.01860	0.02161	0.32940	0.03516	2.50740	0.15393

SGCLK



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_slgcp_1	30.84480

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)
	GATE	SCE	CLK	GCLK
sg13g2_slgcp_1	0.00220	0.00264	0.00567	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_slgcp_1	3359.58000	3666.94000	4067.25000

Delay Information

Delay(ns) to GCLK rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK->GCLK (RR)	0.01860	0.00100	0.03690	0.32940	0.06480	0.16432	2.50740	0.30000	0.58834

Delay(ns) to GCLK falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK->GCLK (FF)	0.01860	0.00100	0.03170	0.32940	0.06480	0.15614	2.50740	0.30000	0.55559

Constraint Information

Constraints(ns) for GATE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.01697	1.26300	1.26300	-0.08850	2.50740	2.50740	-0.11152
	setup	CLK (R)	0.01860	0.01860	0.03530	1.26300	1.26300	0.13409	2.50740	2.50740	0.19095

Constraints(ns) for GATE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02907	1.26300	1.26300	-0.14959	2.50740	2.50740	-0.25100
	setup	CLK (R)	0.01860	0.01860	0.05000	1.26300	1.26300	0.17265	2.50740	2.50740	0.28342

Constraints(ns) for SCE rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02059	1.26300	1.26300	-0.12069	2.50740	2.50740	-0.18594
	setup	CLK (R)	0.01860	0.01860	0.03500	1.26300	1.26300	0.16628	2.50740	2.50740	0.25353

Constraints(ns) for SCE falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	hold	CLK (R)	0.01860	0.01860	-0.02957	1.26300	1.26300	-0.10603	2.50740	2.50740	-0.17058
	setup	CLK (R)	0.01860	0.01860	0.05204	1.26300	1.26300	0.12653	2.50740	2.50740	0.20156

Constraints(ns) for CLK rising :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.11185	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Constraints(ns) for CLK falling :

Cell Name	Timing Check	Ref Pin(trans)	Constraint(ns)								
			Input Slew(ns)	Ref Slew(ns)	First	Input Slew(ns)	Ref Slew(ns)	Mid	Input Slew(ns)	Ref Slew(ns)	Last
sg13g2_slgcp_1	min_pulse_width	CLK ()	0.01860	0.00000	0.04776	1.26300	0.00000	2.08496	2.50740	0.00000	4.13818

Power Information

Internal switching power(pJ) to GCLK rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.02249	0.32940	0.06480	0.03014	2.50740	0.30000	0.11113

Internal switching power(pJ) to GCLK falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_slgcp_1	CLK	0.01860	0.00100	0.01533	0.32940	0.06480	0.02540	2.50740	0.30000	0.10394

Passive power(pJ) for GATE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.03546	0.32940	0.04433	2.50740	0.12384

Passive power(pJ) for GATE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.04473	0.32940	0.06526	2.50740	0.14245

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	!CLK	0.01860	0.03546	0.32940	0.04433	2.50740	0.12384

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

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	!CLK	0.01860	0.04473	0.32940	0.06526	2.50740	0.14245

Passive power(pJ) for SCE rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01617	0.32940	0.02477	2.50740	0.10838

Passive power(pJ) for SCE falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.04633	0.32940	0.06339	2.50740	0.14293

Passive power(pJ) for CLK rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.00897	0.32940	0.02053	2.50740	0.12285

Passive power(pJ) for CLK falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_slgcp_1	0.01860	0.01026	0.32940	0.02255	2.50740	0.12485

TIE0



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

Footprint

Cell Name	Area
sg13g2_tielo	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_LO
sg13g2_tielo	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tielo	1134.26000	1134.26000	1134.26000

TIE1



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

Footprint

Cell Name	Area
sg13g2_tiehi	7.25760

Pin Capacitance Information

Cell Name	Max Cap(pf)
	L_HI
sg13g2_tiehi	-

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_tiehi	977.89000	977.89000	977.89000

XNOR2_1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xnor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	Y
sg13g2_xnor2_1	0.00645	0.00565	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xnor2_1	683.60500	1834.59000	2725.61000

Delay Information

Delay(ns) to Y rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (-R)	0.01860	0.00100	0.02728	0.32940	0.06480	0.26955	2.50740	0.30000	1.34037
	B->Y (-R)	0.01860	0.00100	0.02451	0.32940	0.06480	0.30510	2.50740	0.30000	1.58729

Delay(ns) to Y falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (-F)	0.01860	0.00100	0.02530	0.32940	0.06480	0.23893	2.50740	0.30000	1.19871
	B->Y (-F)	0.01860	0.00100	0.02122	0.32940	0.06480	0.23360	2.50740	0.30000	1.18473

Delay(ns) to Y rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (RR)	B	0.01860	0.00100	0.03655	0.32940	0.06480	0.16428	2.50740	0.30000	0.58640
	A->Y (FR)	!B	0.01860	0.00100	0.02728	0.32940	0.06480	0.26955	2.50740	0.30000	1.34037
	B->Y (RR)	A	0.01860	0.00100	0.03488	0.32940	0.06480	0.17187	2.50740	0.30000	0.63743
	B->Y (FR)	!A	0.01860	0.00100	0.02451	0.32940	0.06480	0.30510	2.50740	0.30000	1.58729

Delay(ns) to Y falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A->Y (FF)	B	0.01860	0.00100	0.03714	0.32940	0.06480	0.21472	2.50740	0.30000	0.80748
	A->Y (RF)	!B	0.01860	0.00100	0.02530	0.32940	0.06480	0.23893	2.50740	0.30000	1.19871
	B->Y (FF)	A	0.01860	0.00100	0.03690	0.32940	0.06480	0.20635	2.50740	0.30000	0.76289
	B->Y (RF)	!A	0.01860	0.00100	0.02122	0.32940	0.06480	0.23360	2.50740	0.30000	1.18473

Power Information

Internal switching power(pJ) to Y rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	0.01860	0.00100	0.01526	0.32940	0.06480	0.02360	2.50740	0.30000	0.10527
	B	0.01860	0.00100	0.01568	0.32940	0.06480	0.02443	2.50740	0.30000	0.10378

Internal switching power(pJ) to Y falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	0.01860	0.00100	0.01340	0.32940	0.06480	0.02323	2.50740	0.30000	0.10374
	B	0.01860	0.00100	0.01414	0.32940	0.06480	0.02168	2.50740	0.30000	0.09966

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	B	0.01860	0.00100	0.01526	0.32940	0.06480	0.02360	2.50740	0.30000	0.10527
	A	!B	0.01860	0.00100	0.00940	0.32940	0.06480	0.01223	2.50740	0.30000	0.05180
	B	A	0.01860	0.00100	0.01568	0.32940	0.06480	0.02443	2.50740	0.30000	0.10378
	B	!A	0.01860	0.00100	0.00610	0.32940	0.06480	0.00998	2.50740	0.30000	0.04911

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xnor2_1	A	B	0.01860	0.00100	0.01340	0.32940	0.06480	0.02323	2.50740	0.30000	0.10374
	A	!B	0.01860	0.00100	0.00924	0.32940	0.06480	0.01197	2.50740	0.30000	0.04746
	B	A	0.01860	0.00100	0.01414	0.32940	0.06480	0.02168	2.50740	0.30000	0.09966
	B	!A	0.01860	0.00100	0.00741	0.32940	0.06480	0.01058	2.50740	0.30000	0.04331

XOR2_1



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

Truth Table

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

Footprint

Cell Name	Area
sg13g2_xor2_1	14.51520

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	A	B	X
sg13g2_xor2_1	0.00658	0.00569	0.30000

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_xor2_1	1083.26000	1605.40000	2318.26000

Delay Information

Delay(ns) to X rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (-R)	0.01860	0.00100	0.02975	0.32940	0.06480	0.27251	2.50740	0.30000	1.34917
	B->X (-R)	0.01860	0.00100	0.02480	0.32940	0.06480	0.26675	2.50740	0.30000	1.33421

Delay(ns) to X falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (-F)	0.01860	0.00100	0.02373	0.32940	0.06480	0.23685	2.50740	0.30000	1.19204
	B->X (-F)	0.01860	0.00100	0.02183	0.32940	0.06480	0.26738	2.50740	0.30000	1.38961

Delay(ns) to X rising (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (RR)	!B	0.01860	0.00100	0.03754	0.32940	0.06480	0.25354	2.50740	0.30000	0.97705
	A->X (FR)	B	0.01860	0.00100	0.02975	0.32940	0.06480	0.27251	2.50740	0.30000	1.34917
	B->X (RR)	!A	0.01860	0.00100	0.03791	0.32940	0.06480	0.24356	2.50740	0.30000	0.91232
	B->X (FR)	A	0.01860	0.00100	0.02480	0.32940	0.06480	0.26675	2.50740	0.30000	1.33421

Delay(ns) to X falling (conditional):

Cell Name	Timing Arc(Dir)	When	Delay(ns)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A->X (FF)	!B	0.01860	0.00100	0.04130	0.32940	0.06480	0.15737	2.50740	0.30000	0.53871
	A->X (RF)	B	0.01860	0.00100	0.02373	0.32940	0.06480	0.23685	2.50740	0.30000	1.19204
	B->X (FF)	!A	0.01860	0.00100	0.03890	0.32940	0.06480	0.16691	2.50740	0.30000	0.59784
	B->X (RF)	A	0.01860	0.00100	0.02183	0.32940	0.06480	0.26738	2.50740	0.30000	1.38961

Power Information

Internal switching power(pJ) to X rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	0.01860	0.00100	0.01311	0.32940	0.06480	0.02202	2.50740	0.30000	0.10281
	B	0.01860	0.00100	0.01391	0.32940	0.06480	0.02100	2.50740	0.30000	0.09845

Internal switching power(pJ) to X falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	0.01860	0.00100	0.01675	0.32940	0.06480	0.02490	2.50740	0.30000	0.10258
	B	0.01860	0.00100	0.01553	0.32940	0.06480	0.02430	2.50740	0.30000	0.09920

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	B	0.01860	0.00100	0.01004	0.32940	0.06480	0.01268	2.50740	0.30000	0.05225
	A	!B	0.01860	0.00100	0.01311	0.32940	0.06480	0.02202	2.50740	0.30000	0.10281
	B	A	0.01860	0.00100	0.00776	0.32940	0.06480	0.01069	2.50740	0.30000	0.04764
	B	!A	0.01860	0.00100	0.01391	0.32940	0.06480	0.02100	2.50740	0.30000	0.09845

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

Cell Name	Input	When	Power(pJ)								
			Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_xor2_1	A	B	0.01860	0.00100	0.00908	0.32940	0.06480	0.01173	2.50740	0.30000	0.04762
	A	!B	0.01860	0.00100	0.01675	0.32940	0.06480	0.02490	2.50740	0.30000	0.10258
	B	A	0.01860	0.00100	0.00724	0.32940	0.06480	0.01055	2.50740	0.30000	0.04546
	B	!A	0.01860	0.00100	0.01553	0.32940	0.06480	0.02430	2.50740	0.30000	0.09920