sg13g2_io_slow_1p08V_3p0V_125C Library

Cell Groups
INOUTx
INPUT
SG13G2_IOPADIOVDD
SG13G2_IOPADIOVSS
SG13G2_IOPADVDD
SG13G2_IOPADVSS
TRI_OUTx

INOUTx

sg13g2_io_slow_1p08V_3p0V_125C Cell Library: Process sg13g2_io_slow_1p08V_3p0V_125C, Voltage 1.08, Temp 125.00

Truth Table

INPUT			OUTPUT	
c2p	c2p_en	pad	pad	p2c
-	0	0	-	0
-	0	1	-	1
0	1	-	0	0
1	1	-	1	1

Footprint

Cell Name	Area
sg13g2_IOPadInOut16mA	14400.00000
sg13g2_IOPadInOut30mA	14400.00000
sg13g2_IOPadInOut4mA	14400.00000
sg13g2_IOPadOut16mA	14400.00000
sg13g2_IOPadOut30mA	14400.00000
sg13g2_IOPadOut4mA	14400.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)			Max Cap(pf)	
	c2p	c2p_en	pad	p2c	pad
sg13g2_IOPadInOut16mA	0.02520	0.02386	0.27158	0.51199	2.19096
sg13g2_IOPadInOut30mA	0.02520	0.02386	0.36632	0.51198	0.66866
sg13g2_IOPadInOut4mA	0.02520	0.02386	0.19042	0.51163	0.59977
sg13g2_IOPadOut16mA	0.03712	0.00000	0.00000	0.00000	2.09528
sg13g2_IOPadOut30mA	0.03712	0.00000	0.00000	0.00000	2.62768
sg13g2_IOPadOut4mA	0.03712	0.00000	0.00000	0.00000	0.66125

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_IOPadInOut16mA	398.07800	11864.20000	11864.20000
sg13g2_IOPadInOut30mA	355.71500	13855.10000	13855.10000
sg13g2_IOPadInOut4mA	383.93600	10101.00000	11192.90000
sg13g2_IOPadOut16mA	1041.68000	5678.35000	5678.35000
sg13g2_IOPadOut30mA	1485.88000	7959.51000	9036.95000
sg13g2_IOPadOut4mA	738.34500	3799.75000	3850.99000

Delay Information

Delay(ns) to p2c rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	**pad->p2c (RR)**	0.12000	0.02400	**0.12890**	0.60000	0.14400	**0.26782**	3.50000	0.24000	**0.37175**
sg13g2_IOPadInOut30mA	**pad->p2c (RR)**	0.12000	0.02400	**0.12914**	0.60000	0.14400	**0.26782**	3.50000	0.24000	**0.37174**
sg13g2_IOPadInOut4mA	**pad->p2c (RR)**	0.12000	0.02400	**0.12858**	0.60000	0.14400	**0.26776**	3.50000	0.24000	**0.37158**

Delay(ns) to p2c falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	**pad->p2c (FF)**	0.12000	0.02400	**0.67821**	0.60000	0.14400	**1.03250**	3.50000	0.24000	**2.67950**
sg13g2_IOPadInOut30mA	**pad->p2c (FF)**	0.12000	0.02400	**0.67843**	0.60000	0.14400	**1.03129**	3.50000	0.24000	**2.67736**
sg13g2_IOPadInOut4mA	**pad->p2c (FF)**	0.12000	0.02400	**0.67821**	0.60000	0.14400	**1.01936**	3.50000	0.24000	**2.66330**

Delay(ns) to pad rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	c2p->pad (RR)	0.02000	1.00000	**2.65508**	0.33000	4.00000	**3.35279**	2.50000	10.00000	**4.54663**
	c2p_en->pad (FR)	0.02000	1.00000	**2.00669**	0.33000	4.00000	**2.09420**	2.50000	10.00000	**2.33343**
	c2p_en->pad (RR)	0.02000	1.00000	**2.63805**	0.33000	4.00000	**3.34425**	2.50000	10.00000	**4.55610**
sg13g2_IOPadInOut30mA	c2p->pad (RR)	0.02000	1.00000	**2.93670**	0.33000	4.00000	**3.53872**	2.50000	10.00000	**4.40027**
	c2p_en->pad (FR)	0.02000	1.00000	**2.26155**	0.33000	4.00000	**2.35437**	2.50000	10.00000	**2.59872**
	c2p_en->pad (RR)	0.02000	1.00000	**2.89325**	0.33000	4.00000	**3.51010**	2.50000	10.00000	**4.37335**
sg13g2_IOPadInOut4mA	c2p->pad (RR)	0.02000	1.00000	**2.71105**	0.33000	4.00000	**4.78085**	2.50000	10.00000	**8.93163**
	c2p_en->pad (FR)	0.02000	1.00000	**1.73402**	0.33000	4.00000	**1.81882**	2.50000	10.00000	**2.07368**
	c2p_en->pad (RR)	0.02000	1.00000	**2.71370**	0.33000	4.00000	**4.83166**	2.50000	10.00000	**9.07903**
sg13g2_IOPadOut16mA	c2p->pad (RR)	0.02000	1.00000	**2.57522**	0.33000	9.00000	**4.19752**	2.50000	15.00000	**6.33486**
sg13g2_IOPadOut30mA	c2p->pad (RR)	0.02000	2.00000	**3.07452**	0.33000	18.00000	**5.01294**	2.50000	30.00000	**7.24047**
sg13g2_IOPadOut4mA	c2p->pad (RR)	0.02000	1.00000	**2.61645**	0.33000	4.00000	**4.74257**	2.50000	10.00000	**9.86370**

Delay(ns) to pad falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	c2p->pad (FF)	0.02000	1.00000	2.67270	0.33000	4.00000	3.27821	2.50000	10.00000	4.60124
	c2p_en->pad (FF)	0.02000	1.00000	2.58314	0.33000	4.00000	2.67553	2.50000	10.00000	3.02038
	c2p_en->pad (RF)	0.02000	1.00000	2.43577	0.33000	4.00000	3.08768	2.50000	10.00000	4.23734
sg13g2_IOPadInOut30mA	c2p->pad (FF)	0.02000	1.00000	3.07597	0.33000	4.00000	3.51622	2.50000	10.00000	4.45931
	c2p_en->pad (FF)	0.02000	1.00000	3.40017	0.33000	4.00000	3.49191	2.50000	10.00000	3.84486
	c2p_en->pad (RF)	0.02000	1.00000	2.52138	0.33000	4.00000	3.03258	2.50000	10.00000	3.80033
sg13g2_IOPadInOut4mA	c2p->pad (FF)	0.02000	1.00000	2.79174	0.33000	4.00000	4.85481	2.50000	10.00000	9.19395
	c2p_en->pad (FF)	0.02000	1.00000	1.88995	0.33000	4.00000	1.97822	2.50000	10.00000	2.32553
	c2p_en->pad (RF)	0.02000	1.00000	2.78275	0.33000	4.00000	4.89472	2.50000	10.00000	9.11091
sg13g2_IOPadOut16mA	c2p->pad (FF)	0.02000	1.00000	2.57131	0.33000	9.00000	3.89959	2.50000	15.00000	5.00212
sg13g2_IOPadOut30mA	c2p->pad (FF)	0.02000	2.00000	3.11567	0.33000	18.00000	4.61249	2.50000	30.00000	5.74932
sg13g2_IOPadOut4mA	c2p->pad (FF)	0.02000	1.00000	2.65641	0.33000	4.00000	4.64600	2.50000	10.00000	8.74583

Power Information

Internal switching power(pJ) to p2c rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	pad	0.12000	0.02400	**-0.55539**	0.60000	0.14400	**-0.55713**	3.50000	0.24000	**-0.55698**
	pad	0.12000	0.02400	**0.00091**	0.60000	0.14400	**0.00031**	3.50000	0.24000	**-0.00306**
sg13g2_IOPadInOut30mA	pad	0.12000	0.02400	**-1.06281**	0.60000	0.14400	**-1.06015**	3.50000	0.24000	**-1.05964**
	pad	0.12000	0.02400	**0.00096**	0.60000	0.14400	**-0.00007**	3.50000	0.24000	**-0.00329**
sg13g2_IOPadInOut4mA	pad	0.12000	0.02400	**-0.13888**	0.60000	0.14400	**-0.13928**	3.50000	0.24000	**-0.13910**
	pad	0.12000	0.02400	**0.00083**	0.60000	0.14400	**0.00009**	3.50000	0.24000	**-0.00276**

Internal switching power(pJ) to p2c falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	pad	0.12000	0.02400	**0.55539**	0.60000	0.14400	**0.55915**	3.50000	0.24000	**0.55698**
	pad	0.12000	0.02400	**0.04277**	0.60000	0.14400	**0.04089**	3.50000	0.24000	**0.03987**
sg13g2_IOPadInOut30mA	pad	0.12000	0.02400	**1.06281**	0.60000	0.14400	**1.06425**	3.50000	0.24000	**1.05964**
	pad	0.12000	0.02400	**0.04280**	0.60000	0.14400	**0.04085**	3.50000	0.24000	**0.03977**
sg13g2_IOPadInOut4mA	pad	0.12000	0.02400	**0.13888**	0.60000	0.14400	**0.13984**	3.50000	0.24000	**0.13910**
	pad	0.12000	0.02400	**0.04292**	0.60000	0.14400	**0.04072**	3.50000	0.24000	**0.04007**

Internal switching power(pJ) to pad rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	c2p	0.02000	1.00000	5.18851	0.33000	4.00000	5.11074	2.50000	10.00000	4.95138
	c2p	0.02000	1.00000	1.19355	0.33000	4.00000	4.66195	2.50000	10.00000	7.66348
	c2p_en	0.02000	1.00000	4.81725	0.33000	4.00000	4.98003	2.50000	10.00000	5.48673
	c2p_en	0.02000	1.00000	1.17221	0.33000	4.00000	4.65029	2.50000	10.00000	7.66202
sg13g2_IOPadInOut30mA	c2p	0.02000	1.00000	8.11007	0.33000	4.00000	7.87239	2.50000	10.00000	7.66539
	c2p	0.02000	1.00000	1.19413	0.33000	4.00000	4.64006	2.50000	10.00000	2.67353
	c2p_en	0.02000	1.00000	7.24673	0.33000	4.00000	7.22328	2.50000	10.00000	7.26264
	c2p_en	0.02000	1.00000	1.17383	0.33000	4.00000	4.61972	2.50000	10.00000	2.65975
sg13g2_IOPadInOut4mA	c2p	0.02000	1.00000	2.92209	0.33000	4.00000	2.82429	2.50000	10.00000	2.58906
	c2p	0.02000	1.00000	1.19592	0.33000	4.00000	4.66740	2.50000	10.00000	11.63040
	c2p_en	0.02000	1.00000	2.73665	0.33000	4.00000	2.99109	2.50000	10.00000	3.51291
	c2p_en	0.02000	1.00000	1.17486	0.33000	4.00000	4.64436	2.50000	10.00000	11.61750
sg13g2_IOPadOut16mA	c2p	0.02000	1.00000	5.00582	0.33000	9.00000	4.88085	2.50000	15.00000	4.79895
	c2p	0.02000	1.00000	-0.00633	0.33000	9.00000	-0.00684	2.50000	15.00000	0.01911
sg13g2_IOPadOut30mA	c2p	0.02000	2.00000	7.89091	0.33000	18.00000	7.57392	2.50000	30.00000	7.38228
	c2p	0.02000	2.00000	-0.00633	0.33000	18.00000	-0.00717	2.50000	30.00000	0.01910
sg13g2_IOPadOut4mA	c2p	0.02000	1.00000	2.63443	0.33000	4.00000	2.56170	2.50000	10.00000	2.51904
	c2p	0.02000	1.00000	-0.00633	0.33000	4.00000	-0.00684	2.50000	10.00000	0.01911

Internal switching power(pJ) to pad falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadInOut16mA	c2p	0.02000	1.00000	**10.09400**	0.33000	4.00000	**7.88423**	2.50000	10.00000	**6.28133**
	c2p	0.02000	1.00000	**0.13540**	0.33000	4.00000	**0.13244**	2.50000	10.00000	**0.15076**
	c2p_en	0.02000	1.00000	**2.11183**	0.33000	4.00000	**2.10785**	2.50000	10.00000	**2.11070**
	c2p_en	0.02000	1.00000	**0.07200**	0.33000	4.00000	**0.06980**	2.50000	10.00000	**0.08159**
sg13g2_IOPadInOut30mA	c2p	0.02000	1.00000	**40.03120**	0.33000	4.00000	**34.15670**	2.50000	10.00000	**27.16490**
	c2p	0.02000	1.00000	**0.13500**	0.33000	4.00000	**0.13258**	2.50000	10.00000	**0.14806**
	c2p_en	0.02000	1.00000	**3.45374**	0.33000	4.00000	**3.45138**	2.50000	10.00000	**3.44980**
	c2p_en	0.02000	1.00000	**0.07206**	0.33000	4.00000	**0.07000**	2.50000	10.00000	**0.07773**
sg13g2_IOPadInOut4mA	c2p	0.02000	1.00000	**1.70883**	0.33000	4.00000	**1.70289**	2.50000	10.00000	**1.69664**
	c2p	0.02000	1.00000	**0.13495**	0.33000	4.00000	**0.13171**	2.50000	10.00000	**0.15295**
	c2p_en	0.02000	1.00000	**0.98103**	0.33000	4.00000	**0.97994**	2.50000	10.00000	**0.98290**
	c2p_en	0.02000	1.00000	**0.07169**	0.33000	4.00000	**0.06932**	2.50000	10.00000	**0.08427**
sg13g2_IOPadOut16mA	c2p	0.02000	1.00000	**11.26550**	0.33000	9.00000	**6.94345**	2.50000	15.00000	**6.07842**
	c2p	0.02000	1.00000	**0.04454**	0.33000	9.00000	**0.04516**	2.50000	15.00000	**0.07047**
sg13g2_IOPadOut30mA	c2p	0.02000	2.00000	**40.05580**	0.33000	18.00000	**23.76350**	2.50000	30.00000	**19.75090**
	c2p	0.02000	2.00000	**0.04456**	0.33000	18.00000	**0.04515**	2.50000	30.00000	**0.07046**
sg13g2_IOPadOut4mA	c2p	0.02000	1.00000	**1.84183**	0.33000	4.00000	**1.75363**	2.50000	10.00000	**1.71404**
	c2p	0.02000	1.00000	**0.04456**	0.33000	4.00000	**0.04515**	2.50000	10.00000	**0.07360**

Passive power(pJ) for c2p rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01245**	0.33000	**-0.01334**	2.50000	**-0.01353**
sg13g2_IOPadInOut30mA	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01245**	0.33000	**-0.01334**	2.50000	**-0.01353**
sg13g2_IOPadInOut4mA	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01246**	0.33000	**-0.01334**	2.50000	**-0.01353**

Passive power(pJ) for c2p falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
sg13g2_IOPadInOut30mA	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
sg13g2_IOPadInOut4mA	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**

Passive power(pJ) for c2p rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	(!c2p_en * pad * p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**-0.01246**	0.33000	**-0.01334**	2.50000	**-0.01353**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.01245**	0.33000	**-0.01334**	2.50000	**-0.01353**
sg13g2_IOPadInOut30mA	(!c2p_en * pad * p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**-0.01246**	0.33000	**-0.01334**	2.50000	**-0.01353**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.01245**	0.33000	**-0.01334**	2.50000	**-0.01353**
sg13g2_IOPadInOut4mA	(!c2p_en * pad * p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**-0.01246**	0.33000	**-0.01334**	2.50000	**-0.01353**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**-0.01246**	0.33000	**-0.01334**	2.50000	**-0.01353**

Passive power(pJ) for c2p falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	(!c2p_en * pad * p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
	(!c2p_en * !pad * !p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
sg13g2_IOPadInOut30mA	(!c2p_en * pad * p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
	(!c2p_en * !pad * !p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
sg13g2_IOPadInOut4mA	(!c2p_en * pad * p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * pad * p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**
	(!c2p_en * !pad * !p2c)	0.02000	**0.00001**	0.33000	**0.00000**	2.50000	**0.00000**
	(!c2p_en * !pad * !p2c)	0.02000	**0.01568**	0.33000	**0.01537**	2.50000	**0.01534**

Passive power(pJ) for c2p_en rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**1.43341**	0.33000	**1.43272**	2.50000	**1.43645**
	0.02000	**0.03003**	0.33000	**0.02844**	2.50000	**0.04339**
sg13g2_IOPadInOut30mA	0.02000	**2.17129**	0.33000	**2.17105**	2.50000	**2.17461**
	0.02000	**0.03003**	0.33000	**0.02845**	2.50000	**0.04339**
sg13g2_IOPadInOut4mA	0.02000	**0.81095**	0.33000	**0.81016**	2.50000	**0.81442**
	0.02000	**0.03002**	0.33000	**0.02843**	2.50000	**0.04338**

Passive power(pJ) for c2p_en falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**0.24452**	0.33000	**0.24420**	2.50000	**0.24306**
	0.02000	**0.06245**	0.33000	**0.06168**	2.50000	**0.07558**
sg13g2_IOPadInOut30mA	0.02000	**0.23647**	0.33000	**0.23581**	2.50000	**0.23470**
	0.02000	**0.06245**	0.33000	**0.06168**	2.50000	**0.07558**
sg13g2_IOPadInOut4mA	0.02000	**0.26338**	0.33000	**0.26307**	2.50000	**0.26195**
	0.02000	**0.06245**	0.33000	**0.06168**	2.50000	**0.07558**

Passive power(pJ) for pad rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**5.18851**	0.33000	**5.11074**	2.50000	**4.95138**
	0.02000	**1.19355**	0.33000	**4.66195**	2.50000	**7.66348**
	0.02000	**4.81725**	0.33000	**4.98003**	2.50000	**5.48673**
	0.02000	**1.17221**	0.33000	**4.65029**	2.50000	**7.66202**
sg13g2_IOPadInOut30mA	0.02000	**8.11007**	0.33000	**7.87239**	2.50000	**7.66539**
	0.02000	**1.19413**	0.33000	**4.64006**	2.50000	**2.67353**
	0.02000	**7.24673**	0.33000	**7.22328**	2.50000	**7.26264**
	0.02000	**1.17383**	0.33000	**4.61972**	2.50000	**2.65975**
sg13g2_IOPadInOut4mA	0.02000	**2.92209**	0.33000	**2.82429**	2.50000	**2.58906**
	0.02000	**1.19592**	0.33000	**4.66740**	2.50000	**11.63040**
	0.02000	**2.73665**	0.33000	**2.99109**	2.50000	**3.51291**
	0.02000	**1.17486**	0.33000	**4.64436**	2.50000	**11.61750**
sg13g2_IOPadOut16mA	0.02000	**5.00582**	0.33000	**4.88085**	2.50000	**4.79895**
	0.02000	**-0.00633**	0.33000	**-0.00684**	2.50000	**0.01911**
sg13g2_IOPadOut30mA	0.02000	**7.89091**	0.33000	**7.57392**	2.50000	**7.38228**
	0.02000	**-0.00633**	0.33000	**-0.00717**	2.50000	**0.01910**
sg13g2_IOPadOut4mA	0.02000	**2.63443**	0.33000	**2.56170**	2.50000	**2.51904**
	0.02000	**-0.00633**	0.33000	**-0.00684**	2.50000	**0.01911**

Passive power(pJ) for pad falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadInOut16mA	0.02000	**10.09400**	0.33000	**7.88423**	2.50000	**6.28133**
	0.02000	**0.13540**	0.33000	**0.13244**	2.50000	**0.15076**
	0.02000	**2.11183**	0.33000	**2.10785**	2.50000	**2.11070**
	0.02000	**0.07200**	0.33000	**0.06980**	2.50000	**0.08159**
sg13g2_IOPadInOut30mA	0.02000	**40.03120**	0.33000	**34.15670**	2.50000	**27.16490**
	0.02000	**0.13500**	0.33000	**0.13258**	2.50000	**0.14806**
	0.02000	**3.45374**	0.33000	**3.45138**	2.50000	**3.44980**
	0.02000	**0.07206**	0.33000	**0.07000**	2.50000	**0.07773**
sg13g2_IOPadInOut4mA	0.02000	**1.70883**	0.33000	**1.70289**	2.50000	**1.69664**
	0.02000	**0.13495**	0.33000	**0.13171**	2.50000	**0.15295**
	0.02000	**0.98103**	0.33000	**0.97994**	2.50000	**0.98290**
	0.02000	**0.07169**	0.33000	**0.06932**	2.50000	**0.08427**
sg13g2_IOPadOut16mA	0.02000	**11.26550**	0.33000	**6.94345**	2.50000	**6.07842**
	0.02000	**0.04454**	0.33000	**0.04516**	2.50000	**0.07047**
sg13g2_IOPadOut30mA	0.02000	**40.05580**	0.33000	**23.76350**	2.50000	**19.75090**
	0.02000	**0.04456**	0.33000	**0.04515**	2.50000	**0.07046**
sg13g2_IOPadOut4mA	0.02000	**1.84183**	0.33000	**1.75363**	2.50000	**1.71404**
	0.02000	**0.04456**	0.33000	**0.04515**	2.50000	**0.07360**

INPUT

Truth Table

INPUT	OUTPUT
pad	p2c
0	0
1	1

Footprint

Cell Name	Area
sg13g2_IOPadIn	14400.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)	Max Cap(pf)
	pad	p2c
sg13g2_IOPadIn	0.22094	0.51189

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_IOPadIn	0.00000	1363.86000	1939.34000

Delay Information

Delay(ns) to p2c rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadIn	**pad->p2c (RR)**	0.12000	0.02400	**0.12844**	0.60000	0.14400	**0.26761**	3.50000	0.24000	**0.37152**

Delay(ns) to p2c falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadIn	**pad->p2c (FF)**	0.12000	0.02400	**0.67801**	0.60000	0.14400	**1.02116**	3.50000	0.24000	**2.64892**

Power Information

Internal switching power(pJ) to p2c rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadIn	pad	0.12000	0.02400	**0.00000**	0.60000	0.14400	**0.00000**	3.50000	0.24000	**0.00000**
	pad	0.12000	0.02400	**0.00075**	0.60000	0.14400	**0.00026**	3.50000	0.24000	**-0.00318**

Internal switching power(pJ) to p2c falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadIn	pad	0.12000	0.02400	**-0.00000**	0.60000	0.14400	**-0.00000**	3.50000	0.24000	**-0.00000**
	pad	0.12000	0.02400	**0.04282**	0.60000	0.14400	**0.04071**	3.50000	0.24000	**0.04052**

SG13G2_IOPADIOVDD

Footprint

Cell Name	Area
sg13g2_IOPadIOVdd	14400.00000

Pin Capacitance Information
Leakage Information

Cell Name	Leakage(pW)		
	Min.	**Avg**	**Max.**
sg13g2_IOPadIOVdd	0.00000	26693.50000	26693.50000

SG13G2_IOPADIOVSS

Footprint

Cell Name	Area
sg13g2_IOPadIOVss	14400.00000

Pin Capacitance Information
Leakage Information

Cell Name	Leakage(pW)		
	Min.	**Avg**	**Max.**
sg13g2_IOPadIOVss	0.00000	1.22704	1.22704

SG13G2_IOPADVDD

Footprint

Cell Name	Area
sg13g2_IOPadVdd	14400.00000

Pin Capacitance Information
Leakage Information

Cell Name	Leakage(pW)		
	Min.	**Avg**	**Max.**
sg13g2_IOPadVdd	0.00000	1.01727	1.01727

SG13G2_IOPADVSS

Footprint

Cell Name	Area
sg13g2_IOPadVss	14400.00000

Pin Capacitance Information
Leakage Information

Cell Name	Leakage(pW)		
	Min.	**Avg**	**Max.**
sg13g2_IOPadVss	0.00000	0.77141	0.77141

TRI_OUTx

Truth Table

INPUT		OUTPUT
c2p	c2p_en	pad
-	0	HiZ
0	1	0
1	1	1

Footprint

Cell Name	Area
sg13g2_IOPadTriOut16mA	14400.00000
sg13g2_IOPadTriOut30mA	14400.00000
sg13g2_IOPadTriOut4mA	14400.00000

Pin Capacitance Information

Cell Name	Pin Cap(pf)		Max Cap(pf)
	c2p	c2p_en	pad
sg13g2_IOPadTriOut16mA	0.02539	0.02445	2.21523
sg13g2_IOPadTriOut30mA	0.02539	0.02445	0.69851
sg13g2_IOPadTriOut4mA	0.02539	0.02445	0.66125

Leakage Information

Cell Name	Leakage(pW)		
	Min.	Avg	Max.
sg13g2_IOPadTriOut16mA	937.30000	9708.49000	9708.49000
sg13g2_IOPadTriOut30mA	1341.23000	11036.10000	11036.10000
sg13g2_IOPadTriOut4mA	536.30600	8525.17000	9373.78000

Delay Information

Delay(ns) to pad rising :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadTriOut16mA	c2p->pad (RR)	0.02000	1.00000	**2.68401**	0.33000	4.00000	**3.38994**	2.50000	10.00000	**4.58613**
	c2p_en->pad (FR)	0.02000	1.00000	**2.04309**	0.33000	4.00000	**2.12913**	2.50000	10.00000	**2.36624**
	c2p_en->pad (RR)	0.02000	1.00000	**2.66434**	0.33000	4.00000	**3.38176**	2.50000	10.00000	**4.58410**
sg13g2_IOPadTriOut30mA	c2p->pad (RR)	0.02000	1.00000	**2.96941**	0.33000	4.00000	**3.57380**	2.50000	10.00000	**4.44866**
	c2p_en->pad (FR)	0.02000	1.00000	**2.29820**	0.33000	4.00000	**2.39268**	2.50000	10.00000	**2.63608**
	c2p_en->pad (RR)	0.02000	1.00000	**2.92013**	0.33000	4.00000	**3.54459**	2.50000	10.00000	**4.41255**
sg13g2_IOPadTriOut4mA	c2p->pad (RR)	0.02000	1.00000	**2.72623**	0.33000	4.00000	**4.79866**	2.50000	10.00000	**8.95119**
	c2p_en->pad (FR)	0.02000	1.00000	**1.77767**	0.33000	4.00000	**1.85906**	2.50000	10.00000	**2.11103**
	c2p_en->pad (RR)	0.02000	1.00000	**2.72534**	0.33000	4.00000	**4.84982**	2.50000	10.00000	**9.10190**

Delay(ns) to pad falling :

Cell Name	Timing Arc(Dir)	Delay(ns)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadTriOut16mA	c2p->pad (FF)	0.02000	1.00000	**2.70681**	0.33000	4.00000	**3.31678**	2.50000	10.00000	**4.64057**
	c2p_en->pad (FF)	0.02000	1.00000	**2.61841**	0.33000	4.00000	**2.70002**	2.50000	10.00000	**3.06537**
	c2p_en->pad (RF)	0.02000	1.00000	**2.46513**	0.33000	4.00000	**3.12227**	2.50000	10.00000	**4.27309**
sg13g2_IOPadTriOut30mA	c2p->pad (FF)	0.02000	1.00000	**3.11612**	0.33000	4.00000	**3.56132**	2.50000	10.00000	**4.50377**
	c2p_en->pad (FF)	0.02000	1.00000	**3.44942**	0.33000	4.00000	**3.54215**	2.50000	10.00000	**3.90158**
	c2p_en->pad (RF)	0.02000	1.00000	**2.55100**	0.33000	4.00000	**3.06668**	2.50000	10.00000	**3.84224**
sg13g2_IOPadTriOut4mA	c2p->pad (FF)	0.02000	1.00000	**2.81181**	0.33000	4.00000	**4.87153**	2.50000	10.00000	**9.20370**
	c2p_en->pad (FF)	0.02000	1.00000	**1.92455**	0.33000	4.00000	**2.01102**	2.50000	10.00000	**2.36064**
	c2p_en->pad (RF)	0.02000	1.00000	**2.79790**	0.33000	4.00000	**4.89948**	2.50000	10.00000	**9.09729**

Power Information

Internal switching power(pJ) to pad rising :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadTriOut16mA	c2p	0.02000	1.00000	**4.96808**	0.33000	4.00000	**4.98861**	2.50000	10.00000	**4.85781**
	c2p	0.02000	1.00000	**0.04018**	0.33000	4.00000	**0.03800**	2.50000	10.00000	**0.05927**
	c2p_en	0.02000	1.00000	**4.57991**	0.33000	4.00000	**4.89399**	2.50000	10.00000	**5.17830**
	c2p_en	0.02000	1.00000	**0.01860**	0.33000	4.00000	**0.01714**	2.50000	10.00000	**0.04637**
sg13g2_IOPadTriOut30mA	c2p	0.02000	1.00000	**7.96381**	0.33000	4.00000	**7.77108**	2.50000	10.00000	**7.78092**
	c2p	0.02000	1.00000	**0.04016**	0.33000	4.00000	**0.03798**	2.50000	10.00000	**0.05925**
	c2p_en	0.02000	1.00000	**7.01835**	0.33000	4.00000	**7.11696**	2.50000	10.00000	**7.15986**
	c2p_en	0.02000	1.00000	**0.01858**	0.33000	4.00000	**0.01712**	2.50000	10.00000	**0.04632**
sg13g2_IOPadTriOut4mA	c2p	0.02000	1.00000	**2.63263**	0.33000	4.00000	**2.56026**	2.50000	10.00000	**2.44905**
	c2p	0.02000	1.00000	**0.04024**	0.33000	4.00000	**0.03806**	2.50000	10.00000	**0.05934**
	c2p_en	0.02000	1.00000	**2.43918**	0.33000	4.00000	**2.74746**	2.50000	10.00000	**3.39708**
	c2p_en	0.02000	1.00000	**0.01866**	0.33000	4.00000	**0.01718**	2.50000	10.00000	**0.04580**

Internal switching power(pJ) to pad falling :

Cell Name	Input	Power(pJ)								
		Slew(ns)	Load(pf)	First	Slew(ns)	Load(pf)	Mid	Slew(ns)	Load(pf)	Last
sg13g2_IOPadTriOut16mA	c2p	0.02000	1.00000	**10.19300**	0.33000	4.00000	**7.97648**	2.50000	10.00000	**6.35755**
	c2p	0.02000	1.00000	**0.09424**	0.33000	4.00000	**0.09177**	2.50000	10.00000	**0.11273**
	c2p_en	0.02000	1.00000	**2.14708**	0.33000	4.00000	**2.14839**	2.50000	10.00000	**2.14849**
	c2p_en	0.02000	1.00000	**0.03024**	0.33000	4.00000	**0.02865**	2.50000	10.00000	**0.04349**
sg13g2_IOPadTriOut30mA	c2p	0.02000	1.00000	**40.13000**	0.33000	4.00000	**34.22030**	2.50000	10.00000	**27.25120**
	c2p	0.02000	1.00000	**0.09419**	0.33000	4.00000	**0.09173**	2.50000	10.00000	**0.11267**
	c2p_en	0.02000	1.00000	**3.48630**	0.33000	4.00000	**3.49034**	2.50000	10.00000	**3.49218**
	c2p_en	0.02000	1.00000	**0.03023**	0.33000	4.00000	**0.02859**	2.50000	10.00000	**0.04340**
sg13g2_IOPadTriOut4mA	c2p	0.02000	1.00000	**1.77959**	0.33000	4.00000	**1.77224**	2.50000	10.00000	**1.76818**
	c2p	0.02000	1.00000	**0.09446**	0.33000	4.00000	**0.09201**	2.50000	10.00000	**0.11298**
	c2p_en	0.02000	1.00000	**1.01642**	0.33000	4.00000	**1.01635**	2.50000	10.00000	**1.01939**
	c2p_en	0.02000	1.00000	**0.03049**	0.33000	4.00000	**0.02889**	2.50000	10.00000	**0.04378**

Passive power(pJ) for c2p rising :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadTriOut16mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**
sg13g2_IOPadTriOut30mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**
sg13g2_IOPadTriOut4mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**

Passive power(pJ) for c2p falling :

Cell Name	Power(pJ)					
	Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadTriOut16mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01560**	0.33000	**0.01529**	2.50000	**0.01531**
sg13g2_IOPadTriOut30mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01561**	0.33000	**0.01529**	2.50000	**0.01531**
sg13g2_IOPadTriOut4mA	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	0.02000	**0.01559**	0.33000	**0.01529**	2.50000	**0.01532**

Passive power(pJ) for c2p rising (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadTriOut16mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**
sg13g2_IOPadTriOut30mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**
sg13g2_IOPadTriOut4mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**-0.01244**	0.33000	**-0.01334**	2.50000	**-0.01352**

Passive power(pJ) for c2p falling (conditional):

Cell Name	When	Power(pJ)					
		Slew(ns)	First	Slew(ns)	Mid	Slew(ns)	Last
sg13g2_IOPadTriOut16mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**0.01560**	0.33000	**0.01529**	2.50000	**0.01531**
sg13g2_IOPadTriOut30mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**0.01561**	0.33000	**0.01529**	2.50000	**0.01531**
sg13g2_IOPadTriOut4mA	!c2p_en	0.02000	**0.00000**	0.33000	**0.00000**	2.50000	**0.00000**
	!c2p_en	0.02000	**0.01559**	0.33000	**0.01529**	2.50000	**0.01532**