

sg13g2_io_fast_1p32V_3p6V_m40C Library

| Cell Groups |
|-------------------|
| INOUTx |
| INPUT |
| SG13G2_IOPADIOVDD |
| SG13G2_IOPADIOVSS |
| SG13G2_IOPADVDD |
| SG13G2_IOPADVSS |
| TRI_OUTx |

INOUTx



*sg13g2_io_fast_1p32V_3p6V_m40C Cell Library: Process
sg13g2_io_fast_1p32V_3p6V_m40C, Voltage 1.32, Temp
-40.00*

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 | 0.02999 | 0.02692 | 0.26016 | 1.27738 | 6.47325 |
| sg13g2_IOPadInOut30mA | 0.02999 | 0.02691 | 0.34481 | 1.27850 | 9.99915 |
| sg13g2_IOPadInOut4mA | 0.02999 | 0.02691 | 0.18724 | 1.28078 | 1.65074 |
| sg13g2_IOPadOut16mA | 0.04183 | 0.00000 | 0.00000 | 0.00000 | 6.49552 |
| sg13g2_IOPadOut30mA | 0.04183 | 0.00000 | 0.00000 | 0.00000 | 9.69355 |
| sg13g2_IOPadOut4mA | 0.04181 | 0.00000 | 0.00000 | 0.00000 | 1.68950 |

Leakage Information

| Cell Name | Leakage(pW) | | |
|-----------------------|-------------|------------|------------|
| | Min. | Avg | Max. |
| sg13g2_IOPadInOut16mA | 27.44130 | 4923.83000 | 4923.83000 |
| sg13g2_IOPadInOut30mA | 0.00000 | 5340.37000 | 5340.37000 |
| sg13g2_IOPadInOut4mA | 7.07672 | 4489.68000 | 4913.42000 |
| sg13g2_IOPadOut16mA | 282.33200 | 1715.89000 | 1715.89000 |
| sg13g2_IOPadOut30mA | 524.86900 | 2342.76000 | 2342.76000 |
| sg13g2_IOPadOut4mA | 184.99300 | 1285.32000 | 1335.87000 |

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 | 0.05252 | 0.60000 | 0.14400 | 0.10949 | 3.50000 | 0.24000 | 0.15144 |
| sg13g2_IOPadInOut30mA | pad->p2c (RR) | 0.12000 | 0.02400 | 0.05251 | 0.60000 | 0.14400 | 0.10963 | 3.50000 | 0.24000 | 0.15152 |
| sg13g2_IOPadInOut4mA | pad->p2c (RR) | 0.12000 | 0.02400 | 0.05249 | 0.60000 | 0.14400 | 0.10947 | 3.50000 | 0.24000 | 0.15138 |

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 | 0.29981 | 0.60000 | 0.14400 | 0.60545 | 3.50000 | 0.24000 | 2.17756 |
| sg13g2_IOPadInOut30mA | pad->p2c (FF) | 0.12000 | 0.02400 | 0.29982 | 0.60000 | 0.14400 | 0.59585 | 3.50000 | 0.24000 | 2.17754 |
| sg13g2_IOPadInOut4mA | pad->p2c (FF) | 0.12000 | 0.02400 | 0.29980 | 0.60000 | 0.14400 | 0.59579 | 3.50000 | 0.24000 | 2.17769 |

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 | 1.07349 | 0.33000 | 4.00000 | 1.41252 | 2.50000 | 10.00000 | 1.94585 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.78837 | 0.33000 | 4.00000 | 0.83852 | 2.50000 | 10.00000 | 0.98088 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.06441 | 0.33000 | 4.00000 | 1.42262 | 2.50000 | 10.00000 | 1.99542 |
| sg13g2_IOPadInOut30mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.24498 | 0.33000 | 4.00000 | 1.54368 | 2.50000 | 10.00000 | 1.94247 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.95023 | 0.33000 | 4.00000 | 0.99935 | 2.50000 | 10.00000 | 1.14295 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.20930 | 0.33000 | 4.00000 | 1.54130 | 2.50000 | 10.00000 | 1.97474 |
| sg13g2_IOPadInOut4mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.05733 | 0.33000 | 4.00000 | 2.00477 | 2.50000 | 10.00000 | 3.87108 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.63066 | 0.33000 | 4.00000 | 0.68225 | 2.50000 | 10.00000 | 0.82573 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.05880 | 0.33000 | 4.00000 | 2.04265 | 2.50000 | 10.00000 | 3.99439 |
| sg13g2_IOPadOut16mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.03594 | 0.33000 | 9.00000 | 1.85831 | 2.50000 | 15.00000 | 3.10419 |
| sg13g2_IOPadOut30mA | c2p->pad (RR) | 0.02000 | 2.00000 | 1.31313 | 0.33000 | 18.00000 | 2.30568 | 2.50000 | 30.00000 | 3.59930 |
| sg13g2_IOPadOut4mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.01179 | 0.33000 | 4.00000 | 2.04294 | 2.50000 | 10.00000 | 4.64039 |

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 | 0.85198 | 0.33000 | 4.00000 | 1.16082 | 2.50000 | 10.00000 | 1.83482 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 0.85147 | 0.33000 | 4.00000 | 0.92000 | 2.50000 | 10.00000 | 1.11615 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.72535 | 0.33000 | 4.00000 | 1.05426 | 2.50000 | 10.00000 | 1.61039 |
| sg13g2_IOPadInOut30mA | c2p->pad (FF) | 0.02000 | 1.00000 | 1.05455 | 0.33000 | 4.00000 | 1.28556 | 2.50000 | 10.00000 | 1.78985 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 1.27373 | 0.33000 | 4.00000 | 1.35126 | 2.50000 | 10.00000 | 1.53675 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.75858 | 0.33000 | 4.00000 | 1.01495 | 2.50000 | 10.00000 | 1.37814 |
| sg13g2_IOPadInOut4mA | c2p->pad (FF) | 0.02000 | 1.00000 | 0.89089 | 0.33000 | 4.00000 | 1.87113 | 2.50000 | 10.00000 | 3.95398 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 0.48889 | 0.33000 | 4.00000 | 0.55598 | 2.50000 | 10.00000 | 0.76111 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.90743 | 0.33000 | 4.00000 | 1.96128 | 2.50000 | 10.00000 | 4.03098 |
| sg13g2_IOPadOut16mA | c2p->pad (FF) | 0.02000 | 1.00000 | 0.80292 | 0.33000 | 9.00000 | 1.44383 | 2.50000 | 15.00000 | 1.98261 |
| sg13g2_IOPadOut30mA | c2p->pad (FF) | 0.02000 | 2.00000 | 1.07059 | 0.33000 | 18.00000 | 1.80008 | 2.50000 | 30.00000 | 2.35141 |
| sg13g2_IOPadOut4mA | c2p->pad (FF) | 0.02000 | 1.00000 | 0.82310 | 0.33000 | 4.00000 | 1.77485 | 2.50000 | 10.00000 | 3.70824 |

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 | -0.69608 | 0.60000 | 0.14400 | -0.69634 | 3.50000 | 0.24000 | -0.30648 |
| | pad | 0.12000 | 0.02400 | -0.00084 | 0.60000 | 0.14400 | -0.00300 | 3.50000 | 0.24000 | 0.04122 |
| sg13g2_IOPadInOut30mA | pad | 0.12000 | 0.02400 | -1.32371 | 0.60000 | 0.14400 | -1.32441 | 3.50000 | 0.24000 | -0.59044 |
| | pad | 0.12000 | 0.02400 | -0.00092 | 0.60000 | 0.14400 | -0.00298 | 3.50000 | 0.24000 | 0.04061 |
| sg13g2_IOPadInOut4mA | pad | 0.12000 | 0.02400 | -0.17411 | 0.60000 | 0.14400 | -0.17388 | 3.50000 | 0.24000 | -0.04359 |
| | pad | 0.12000 | 0.02400 | -0.00081 | 0.60000 | 0.14400 | -0.00287 | 3.50000 | 0.24000 | 0.04375 |

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 | 0.69608 | 0.60000 | 0.14400 | 0.69634 | 3.50000 | 0.24000 | 0.69303 |
| | pad | 0.12000 | 0.02400 | 0.06759 | 0.60000 | 0.14400 | 0.06467 | 3.50000 | 0.24000 | 0.06634 |
| sg13g2_IOPadInOut30mA | pad | 0.12000 | 0.02400 | 1.32371 | 0.60000 | 0.14400 | 1.32441 | 3.50000 | 0.24000 | 1.31754 |
| | pad | 0.12000 | 0.02400 | 0.07041 | 0.60000 | 0.14400 | 0.06671 | 3.50000 | 0.24000 | 0.06912 |
| sg13g2_IOPadInOut4mA | pad | 0.12000 | 0.02400 | 0.17411 | 0.60000 | 0.14400 | 0.17419 | 3.50000 | 0.24000 | 0.17321 |
| | pad | 0.12000 | 0.02400 | 0.07038 | 0.60000 | 0.14400 | 0.06670 | 3.50000 | 0.24000 | 0.06914 |

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 | 7.95486 | 0.33000 | 4.00000 | 7.78468 | 2.50000 | 10.00000 | 7.41020 |
| | c2p | 0.02000 | 1.00000 | 1.77158 | 0.33000 | 4.00000 | 6.93310 | 2.50000 | 10.00000 | 14.84040 |
| | c2p_en | 0.02000 | 1.00000 | 7.46110 | 0.33000 | 4.00000 | 8.35844 | 2.50000 | 10.00000 | 10.14090 |
| | c2p_en | 0.02000 | 1.00000 | 1.73615 | 0.33000 | 4.00000 | 6.89516 | 2.50000 | 10.00000 | 14.85370 |
| sg13g2_IOPadInOut30mA | c2p | 0.02000 | 1.00000 | 13.28660 | 0.33000 | 4.00000 | 12.61260 | 2.50000 | 10.00000 | 12.01000 |
| | c2p | 0.02000 | 1.00000 | 1.77008 | 0.33000 | 4.00000 | 6.92502 | 2.50000 | 10.00000 | 9.76035 |
| | c2p_en | 0.02000 | 1.00000 | 11.39540 | 0.33000 | 4.00000 | 12.32130 | 2.50000 | 10.00000 | 13.95430 |
| | c2p_en | 0.02000 | 1.00000 | 1.73670 | 0.33000 | 4.00000 | 6.92217 | 2.50000 | 10.00000 | 9.53586 |
| sg13g2_IOPadInOut4mA | c2p | 0.02000 | 1.00000 | 4.27180 | 0.33000 | 4.00000 | 4.10479 | 2.50000 | 10.00000 | 3.73993 |
| | c2p | 0.02000 | 1.00000 | 1.78054 | 0.33000 | 4.00000 | 6.97189 | 2.50000 | 10.00000 | 17.52550 |
| | c2p_en | 0.02000 | 1.00000 | 4.05886 | 0.33000 | 4.00000 | 4.69570 | 2.50000 | 10.00000 | 5.81047 |
| | c2p_en | 0.02000 | 1.00000 | 1.74534 | 0.33000 | 4.00000 | 6.94886 | 2.50000 | 10.00000 | 17.51780 |
| sg13g2_IOPadOut16mA | c2p | 0.02000 | 1.00000 | 7.72377 | 0.33000 | 9.00000 | 7.40333 | 2.50000 | 15.00000 | 7.51964 |
| | c2p | 0.02000 | 1.00000 | -0.01469 | 0.33000 | 9.00000 | 0.00169 | 2.50000 | 15.00000 | 0.18556 |
| sg13g2_IOPadOut30mA | c2p | 0.02000 | 2.00000 | 12.90200 | 0.33000 | 18.00000 | 11.81920 | 2.50000 | 30.00000 | 11.76260 |
| | c2p | 0.02000 | 2.00000 | -0.01469 | 0.33000 | 18.00000 | 0.00186 | 2.50000 | 30.00000 | 0.18539 |
| sg13g2_IOPadOut4mA | c2p | 0.02000 | 1.00000 | 3.84845 | 0.33000 | 4.00000 | 3.78173 | 2.50000 | 10.00000 | 3.85819 |
| | c2p | 0.02000 | 1.00000 | -0.01469 | 0.33000 | 4.00000 | 0.00186 | 2.50000 | 10.00000 | 0.18553 |

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 | 17.78360 | 0.33000 | 4.00000 | 13.87190 | 2.50000 | 10.00000 | 10.15590 |
| | c2p | 0.02000 | 1.00000 | 0.21475 | 0.33000 | 4.00000 | 0.22386 | 2.50000 | 10.00000 | 0.40668 |
| | c2p_en | 0.02000 | 1.00000 | 2.98754 | 0.33000 | 4.00000 | 2.98384 | 2.50000 | 10.00000 | 2.98266 |
| | c2p_en | 0.02000 | 1.00000 | 0.11222 | 0.33000 | 4.00000 | 0.11947 | 2.50000 | 10.00000 | 0.21968 |
| sg13g2_IOPadInOut30mA | c2p | 0.02000 | 1.00000 | 71.23290 | 0.33000 | 4.00000 | 61.83350 | 2.50000 | 10.00000 | 47.37880 |
| | c2p | 0.02000 | 1.00000 | 0.21459 | 0.33000 | 4.00000 | 0.22389 | 2.50000 | 10.00000 | 0.40393 |
| | c2p_en | 0.02000 | 1.00000 | 4.99672 | 0.33000 | 4.00000 | 5.00174 | 2.50000 | 10.00000 | 5.00366 |
| | c2p_en | 0.02000 | 1.00000 | 0.11237 | 0.33000 | 4.00000 | 0.11951 | 2.50000 | 10.00000 | 0.21525 |
| sg13g2_IOPadInOut4mA | c2p | 0.02000 | 1.00000 | 2.25203 | 0.33000 | 4.00000 | 2.23778 | 2.50000 | 10.00000 | 2.23759 |
| | c2p | 0.02000 | 1.00000 | 0.21435 | 0.33000 | 4.00000 | 0.22365 | 2.50000 | 10.00000 | 0.40973 |
| | c2p_en | 0.02000 | 1.00000 | 1.28607 | 0.33000 | 4.00000 | 1.28578 | 2.50000 | 10.00000 | 1.28233 |
| | c2p_en | 0.02000 | 1.00000 | 0.11171 | 0.33000 | 4.00000 | 0.11888 | 2.50000 | 10.00000 | 0.22687 |
| sg13g2_IOPadOut16mA | c2p | 0.02000 | 1.00000 | 19.73400 | 0.33000 | 9.00000 | 11.73810 | 2.50000 | 15.00000 | 10.04910 |
| | c2p | 0.02000 | 1.00000 | 0.07015 | 0.33000 | 9.00000 | 0.09082 | 2.50000 | 15.00000 | 0.27190 |
| sg13g2_IOPadOut30mA | c2p | 0.02000 | 2.00000 | 71.08510 | 0.33000 | 18.00000 | 42.36700 | 2.50000 | 30.00000 | 34.88920 |
| | c2p | 0.02000 | 2.00000 | 0.07015 | 0.33000 | 18.00000 | 0.09077 | 2.50000 | 30.00000 | 0.27223 |
| sg13g2_IOPadOut4mA | c2p | 0.02000 | 1.00000 | 2.45117 | 0.33000 | 4.00000 | 2.33350 | 2.50000 | 10.00000 | 2.30478 |
| | c2p | 0.02000 | 1.00000 | 0.07016 | 0.33000 | 4.00000 | 0.09126 | 2.50000 | 10.00000 | 0.27641 |

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 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| sg13g2_IOPadInOut30mA | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| sg13g2_IOPadInOut4mA | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |

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 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| sg13g2_IOPadInOut30mA | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | 0.02000 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| sg13g2_IOPadInOut4mA | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | 0.02000 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |

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 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| sg13g2_IOPadInOut30mA | (!c2p_en * pad * p2c) | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * pad * p2c) | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| sg13g2_IOPadInOut4mA | (!c2p_en * pad * p2c) | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * pad * p2c) | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | -0.02152 | 0.33000 | -0.02255 | 2.50000 | -0.02283 |

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 | 0.02861 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| sg13g2_IOPadInOut30mA | (!c2p_en * pad * p2c) | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * pad * p2c) | 0.02000 | 0.02861 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| sg13g2_IOPadInOut4mA | (!c2p_en * pad * p2c) | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * pad * p2c) | 0.02000 | 0.02861 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.00001 | 0.33000 | 0.00000 | 2.50000 | 0.00000 |
| | (!c2p_en * !pad * !p2c) | 0.02000 | 0.02860 | 0.33000 | 0.02837 | 2.50000 | 0.02781 |

Passive power(pJ) for c2p_en rising :

| Cell Name | Power(pJ) | | | | | |
|-----------------------|-----------|----------------|----------|----------------|----------|----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadInOut16mA | 0.02000 | 2.07018 | 0.33000 | 2.07491 | 2.50000 | 2.07712 |
| | 0.02000 | 0.04026 | 0.33000 | 0.04807 | 2.50000 | 0.15635 |
| sg13g2_IOPadInOut30mA | 0.02000 | 3.27910 | 0.33000 | 3.27952 | 2.50000 | 3.29028 |
| | 0.02000 | 0.04026 | 0.33000 | 0.04807 | 2.50000 | 0.15632 |
| sg13g2_IOPadInOut4mA | 0.02000 | 1.05787 | 0.33000 | 1.05830 | 2.50000 | 1.05634 |
| | 0.02000 | 0.04027 | 0.33000 | 0.04808 | 2.50000 | 0.15611 |

Passive power(pJ) for c2p_en falling :

| Cell Name | Power(pJ) | | | | | |
|-----------------------|-----------|----------------|----------|----------------|----------|----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadInOut16mA | 0.02000 | 0.35186 | 0.33000 | 0.35004 | 2.50000 | 0.34796 |
| | 0.02000 | 0.10147 | 0.33000 | 0.11075 | 2.50000 | 0.21909 |
| sg13g2_IOPadInOut30mA | 0.02000 | 0.33451 | 0.33000 | 0.33272 | 2.50000 | 0.33062 |
| | 0.02000 | 0.10147 | 0.33000 | 0.11074 | 2.50000 | 0.21910 |
| sg13g2_IOPadInOut4mA | 0.02000 | 0.38772 | 0.33000 | 0.38591 | 2.50000 | 0.38372 |
| | 0.02000 | 0.10147 | 0.33000 | 0.11075 | 2.50000 | 0.21909 |

Passive power(pJ) for pad rising :

| Cell Name | Power(pJ) | | | | | |
|-----------------------|-----------|-----------------|----------|-----------------|----------|-----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadInOut16mA | 0.02000 | 7.95486 | 0.33000 | 7.78468 | 2.50000 | 7.41020 |
| | 0.02000 | 1.77158 | 0.33000 | 6.93310 | 2.50000 | 14.84040 |
| | 0.02000 | 7.46110 | 0.33000 | 8.35844 | 2.50000 | 10.14090 |
| | 0.02000 | 1.73615 | 0.33000 | 6.89516 | 2.50000 | 14.85370 |
| sg13g2_IOPadInOut30mA | 0.02000 | 13.28660 | 0.33000 | 12.61260 | 2.50000 | 12.01000 |
| | 0.02000 | 1.77008 | 0.33000 | 6.92502 | 2.50000 | 9.76035 |
| | 0.02000 | 11.39540 | 0.33000 | 12.32130 | 2.50000 | 13.95430 |
| | 0.02000 | 1.73670 | 0.33000 | 6.92217 | 2.50000 | 9.53586 |
| sg13g2_IOPadInOut4mA | 0.02000 | 4.27180 | 0.33000 | 4.10479 | 2.50000 | 3.73993 |
| | 0.02000 | 1.78054 | 0.33000 | 6.97189 | 2.50000 | 17.52550 |
| | 0.02000 | 4.05886 | 0.33000 | 4.69570 | 2.50000 | 5.81047 |
| | 0.02000 | 1.74534 | 0.33000 | 6.94886 | 2.50000 | 17.51780 |
| sg13g2_IOPadOut16mA | 0.02000 | 7.72377 | 0.33000 | 7.40333 | 2.50000 | 7.51964 |
| | 0.02000 | -0.01469 | 0.33000 | 0.00169 | 2.50000 | 0.18556 |
| sg13g2_IOPadOut30mA | 0.02000 | 12.90200 | 0.33000 | 11.81920 | 2.50000 | 11.76260 |
| | 0.02000 | -0.01469 | 0.33000 | 0.00186 | 2.50000 | 0.18539 |
| sg13g2_IOPadOut4mA | 0.02000 | 3.84845 | 0.33000 | 3.78173 | 2.50000 | 3.85819 |
| | 0.02000 | -0.01469 | 0.33000 | 0.00186 | 2.50000 | 0.18553 |

Passive power(pJ) for pad falling :

| Cell Name | Power(pJ) | | | | | |
|-----------------------|-----------|-----------------|----------|-----------------|----------|-----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadInOut16mA | 0.02000 | 17.78360 | 0.33000 | 13.87190 | 2.50000 | 10.15590 |
| | 0.02000 | 0.21475 | 0.33000 | 0.22386 | 2.50000 | 0.40668 |
| | 0.02000 | 2.98754 | 0.33000 | 2.98384 | 2.50000 | 2.98266 |
| | 0.02000 | 0.11222 | 0.33000 | 0.11947 | 2.50000 | 0.21968 |
| sg13g2_IOPadInOut30mA | 0.02000 | 71.23290 | 0.33000 | 61.83350 | 2.50000 | 47.37880 |
| | 0.02000 | 0.21459 | 0.33000 | 0.22389 | 2.50000 | 0.40393 |
| | 0.02000 | 4.99672 | 0.33000 | 5.00174 | 2.50000 | 5.00366 |
| | 0.02000 | 0.11237 | 0.33000 | 0.11951 | 2.50000 | 0.21525 |
| sg13g2_IOPadInOut4mA | 0.02000 | 2.25203 | 0.33000 | 2.23778 | 2.50000 | 2.23759 |
| | 0.02000 | 0.21435 | 0.33000 | 0.22365 | 2.50000 | 0.40973 |
| | 0.02000 | 1.28607 | 0.33000 | 1.28578 | 2.50000 | 1.28233 |
| | 0.02000 | 0.11171 | 0.33000 | 0.11888 | 2.50000 | 0.22687 |
| sg13g2_IOPadOut16mA | 0.02000 | 19.73400 | 0.33000 | 11.73810 | 2.50000 | 10.04910 |
| | 0.02000 | 0.07015 | 0.33000 | 0.09082 | 2.50000 | 0.27190 |
| sg13g2_IOPadOut30mA | 0.02000 | 71.08510 | 0.33000 | 42.36700 | 2.50000 | 34.88920 |
| | 0.02000 | 0.07015 | 0.33000 | 0.09077 | 2.50000 | 0.27223 |
| sg13g2_IOPadOut4mA | 0.02000 | 2.45117 | 0.33000 | 2.33350 | 2.50000 | 2.30478 |
| | 0.02000 | 0.07016 | 0.33000 | 0.09126 | 2.50000 | 0.27641 |

INPUT



*sg13g2_io_fast_1p32V_3p6V_m40C Cell Library: Process
sg13g2_io_fast_1p32V_3p6V_m40C, Voltage 1.32, Temp -40.00*

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 | 0.22055 | 1.28354 |

Leakage Information

| Cell Name | Leakage(pW) | | |
|----------------|-------------|-----------|-----------|
| | Min. | Avg | Max. |
| sg13g2_IOPadIn | 0.00000 | 512.42700 | 670.73900 |

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 | 0.05230 | 0.60000 | 0.14400 | 0.10932 | 3.50000 | 0.24000 | 0.15120 |

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 | 0.29957 | 0.60000 | 0.14400 | 0.60757 | 3.50000 | 0.24000 | 2.17829 |

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 | -0.00095 | 0.60000 | 0.14400 | -0.00270 | 3.50000 | 0.24000 | 0.04505 |

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 | 0.06756 | 0.60000 | 0.14400 | 0.06450 | 3.50000 | 0.24000 | 0.06629 |

SG13G2_IOPADIOVDD



sg13g2_io_fast_1p32V_3p6V_m40C
Cell Library: Process
sg13g2_io_fast_1p32V_3p6V_m40C,
Voltage 1.32, Temp -40.00

Footprint

| Cell Name | Area |
|-------------------|-------------|
| sg13g2_IOPadIOVdd | 14400.00000 |

Pin Capacitance Information

Leakage Information

| Cell Name | Leakage(pW) | | |
|-------------------|-------------|------------|------------|
| | Min. | Avg | Max. |
| sg13g2_IOPadIOVdd | 0.00000 | 7677.59000 | 7677.59000 |

SG13G2_IOPADIOVSS



sg13g2_io_fast_1p32V_3p6V_m40C

Cell Library: Process

sg13g2_io_fast_1p32V_3p6V_m40C,

Voltage 1.32, Temp -40.00

Footprint

| Cell Name | Area |
|-------------------|-------------|
| sg13g2_IOPadIOVss | 14400.00000 |

Pin Capacitance Information

Leakage Information

| Cell Name | Leakage(pW) | | |
|-------------------|-------------|---------|---------|
| | Min. | Avg | Max. |
| sg13g2_IOPadIOVss | 0.00000 | 1.83299 | 1.83299 |

SG13G2_IOPADVDD



sg13g2_io_fast_1p32V_3p6V_m40C
Cell Library: Process
sg13g2_io_fast_1p32V_3p6V_m40C,
Voltage 1.32, Temp -40.00

Footprint

| Cell Name | Area |
|-----------------|-------------|
| sg13g2_IOPadVdd | 14400.00000 |

Pin Capacitance Information

Leakage Information

| Cell Name | Leakage(pW) | | |
|-----------------|-------------|---------|---------|
| | Min. | Avg | Max. |
| sg13g2_IOPadVdd | 0.00000 | 0.00000 | 0.00000 |

SG13G2_IOPADVSS



sg13g2_io_fast_1p32V_3p6V_m40C
Cell Library: Process
sg13g2_io_fast_1p32V_3p6V_m40C,
Voltage 1.32, Temp -40.00

Footprint

| Cell Name | Area |
|-----------------|-------------|
| sg13g2_IOPadVss | 14400.00000 |

Pin Capacitance Information

Leakage Information

| Cell Name | Leakage(pW) | | |
|-----------------|-------------|---------|---------|
| | Min. | Avg | Max. |
| sg13g2_IOPadVss | 0.00000 | 1.15235 | 1.15235 |

TRI_OUTx



*sg13g2_io_fast_1p32V_3p6V_m40C Cell Library:
Process sg13g2_io_fast_1p32V_3p6V_m40C, Voltage
1.32, Temp -40.00*

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 | 0.02972 | 0.02766 | 6.49603 |
| sg13g2_IOPadTriOut30mA | 0.02972 | 0.02765 | 10.07610 |
| sg13g2_IOPadTriOut4mA | 0.02972 | 0.02765 | 1.68907 |

Leakage Information

| Cell Name | Leakage(pW) | | |
|------------------------|-------------|------------|------------|
| | Min. | Avg | Max. |
| sg13g2_IOPadTriOut16mA | 224.19900 | 4264.73000 | 4387.39000 |
| sg13g2_IOPadTriOut30mA | 349.68200 | 4619.41000 | 4619.41000 |
| sg13g2_IOPadTriOut4mA | 37.18440 | 3893.28000 | 4387.67000 |

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 | 1.08412 | 0.33000 | 4.00000 | 1.42786 | 2.50000 | 10.00000 | 1.96147 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.80147 | 0.33000 | 4.00000 | 0.85551 | 2.50000 | 10.00000 | 0.99462 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.07386 | 0.33000 | 4.00000 | 1.43902 | 2.50000 | 10.00000 | 2.01143 |
| sg13g2_IOPadTriOut30mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.25698 | 0.33000 | 4.00000 | 1.55973 | 2.50000 | 10.00000 | 1.96139 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.96673 | 0.33000 | 4.00000 | 1.01875 | 2.50000 | 10.00000 | 1.15943 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.21816 | 0.33000 | 4.00000 | 1.55557 | 2.50000 | 10.00000 | 1.99312 |
| sg13g2_IOPadTriOut4mA | c2p->pad (RR) | 0.02000 | 1.00000 | 1.06088 | 0.33000 | 4.00000 | 2.00950 | 2.50000 | 10.00000 | 3.87628 |
| | c2p_en->pad (FR) | 0.02000 | 1.00000 | 0.64485 | 0.33000 | 4.00000 | 0.69928 | 2.50000 | 10.00000 | 0.84235 |
| | c2p_en->pad (RR) | 0.02000 | 1.00000 | 1.06285 | 0.33000 | 4.00000 | 2.05165 | 2.50000 | 10.00000 | 4.00660 |

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 | 0.86290 | 0.33000 | 4.00000 | 1.17251 | 2.50000 | 10.00000 | 1.84626 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 0.86476 | 0.33000 | 4.00000 | 0.93315 | 2.50000 | 10.00000 | 1.12903 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.73410 | 0.33000 | 4.00000 | 1.06637 | 2.50000 | 10.00000 | 1.62949 |
| sg13g2_IOPadTriOut30mA | c2p->pad (FF) | 0.02000 | 1.00000 | 1.06784 | 0.33000 | 4.00000 | 1.30125 | 2.50000 | 10.00000 | 1.80449 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 1.28636 | 0.33000 | 4.00000 | 1.35094 | 2.50000 | 10.00000 | 1.54891 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.76588 | 0.33000 | 4.00000 | 1.02599 | 2.50000 | 10.00000 | 1.38999 |
| sg13g2_IOPadTriOut4mA | c2p->pad (FF) | 0.02000 | 1.00000 | 0.89269 | 0.33000 | 4.00000 | 1.87283 | 2.50000 | 10.00000 | 3.95425 |
| | c2p_en->pad (FF) | 0.02000 | 1.00000 | 0.49929 | 0.33000 | 4.00000 | 0.56705 | 2.50000 | 10.00000 | 0.77235 |
| | c2p_en->pad (RF) | 0.02000 | 1.00000 | 0.90977 | 0.33000 | 4.00000 | 1.96842 | 2.50000 | 10.00000 | 4.04899 |

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 | 7.63818 | 0.33000 | 4.00000 | 7.58329 | 2.50000 | 10.00000 | 7.23550 |
| | c2p | 0.02000 | 1.00000 | 0.06022 | 0.33000 | 4.00000 | 0.06808 | 2.50000 | 10.00000 | 0.25209 |
| | c2p_en | 0.02000 | 1.00000 | 7.12147 | 0.33000 | 4.00000 | 8.25181 | 2.50000 | 10.00000 | 9.99511 |
| | c2p_en | 0.02000 | 1.00000 | 0.02505 | 0.33000 | 4.00000 | 0.04032 | 2.50000 | 10.00000 | 0.23730 |
| sg13g2_IOPadTriOut30mA | c2p | 0.02000 | 1.00000 | 13.04880 | 0.33000 | 4.00000 | 12.38530 | 2.50000 | 10.00000 | 11.95090 |
| | c2p | 0.02000 | 1.00000 | 0.06020 | 0.33000 | 4.00000 | 0.06807 | 2.50000 | 10.00000 | 0.25239 |
| | c2p_en | 0.02000 | 1.00000 | 11.02890 | 0.33000 | 4.00000 | 12.08170 | 2.50000 | 10.00000 | 14.05450 |
| | c2p_en | 0.02000 | 1.00000 | 0.02504 | 0.33000 | 4.00000 | 0.04030 | 2.50000 | 10.00000 | 0.23760 |
| sg13g2_IOPadTriOut4mA | c2p | 0.02000 | 1.00000 | 3.83829 | 0.33000 | 4.00000 | 3.73597 | 2.50000 | 10.00000 | 3.52696 |
| | c2p | 0.02000 | 1.00000 | 0.06026 | 0.33000 | 4.00000 | 0.06809 | 2.50000 | 10.00000 | 0.25200 |
| | c2p_en | 0.02000 | 1.00000 | 3.64209 | 0.33000 | 4.00000 | 4.34642 | 2.50000 | 10.00000 | 5.76256 |
| | c2p_en | 0.02000 | 1.00000 | 0.02509 | 0.33000 | 4.00000 | 0.04035 | 2.50000 | 10.00000 | 0.24164 |

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 | 17.97880 | 0.33000 | 4.00000 | 14.05200 | 2.50000 | 10.00000 | 10.27890 |
| | c2p | 0.02000 | 1.00000 | 0.14970 | 0.33000 | 4.00000 | 0.15974 | 2.50000 | 10.00000 | 0.34408 |
| | c2p_en | 0.02000 | 1.00000 | 3.04504 | 0.33000 | 4.00000 | 3.04750 | 2.50000 | 10.00000 | 3.04468 |
| | c2p_en | 0.02000 | 1.00000 | 0.04417 | 0.33000 | 4.00000 | 0.05195 | 2.50000 | 10.00000 | 0.15559 |
| sg13g2_IOPadTriOut30mA | c2p | 0.02000 | 1.00000 | 71.45190 | 0.33000 | 4.00000 | 62.08150 | 2.50000 | 10.00000 | 47.62190 |
| | c2p | 0.02000 | 1.00000 | 0.14966 | 0.33000 | 4.00000 | 0.15969 | 2.50000 | 10.00000 | 0.34425 |
| | c2p_en | 0.02000 | 1.00000 | 5.04922 | 0.33000 | 4.00000 | 5.05802 | 2.50000 | 10.00000 | 5.05912 |
| | c2p_en | 0.02000 | 1.00000 | 0.04412 | 0.33000 | 4.00000 | 0.05188 | 2.50000 | 10.00000 | 0.15652 |
| sg13g2_IOPadTriOut4mA | c2p | 0.02000 | 1.00000 | 2.35388 | 0.33000 | 4.00000 | 2.34017 | 2.50000 | 10.00000 | 2.33966 |
| | c2p | 0.02000 | 1.00000 | 0.14989 | 0.33000 | 4.00000 | 0.15994 | 2.50000 | 10.00000 | 0.34451 |
| | c2p_en | 0.02000 | 1.00000 | 1.33772 | 0.33000 | 4.00000 | 1.33599 | 2.50000 | 10.00000 | 1.33251 |
| | c2p_en | 0.02000 | 1.00000 | 0.04437 | 0.33000 | 4.00000 | 0.05217 | 2.50000 | 10.00000 | 0.15959 |

Passive power(pJ) for c2p rising :

| Cell Name | Power(pJ) | | | | | |
|------------------------|-----------|-----------------|----------|-----------------|----------|-----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadTriOut16mA | 0.02000 | 0.00005 | 0.33000 | 0.00009 | 2.50000 | 0.00009 |
| | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |
| sg13g2_IOPadTriOut30mA | 0.02000 | 0.00018 | 0.33000 | 0.00021 | 2.50000 | 0.00021 |
| | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |
| sg13g2_IOPadTriOut4mA | 0.02000 | 0.00000 | 0.33000 | 0.00000 | 2.50000 | 0.00001 |
| | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |

Passive power(pJ) for c2p falling :

| Cell Name | Power(pJ) | | | | | |
|------------------------|-----------|-----------------|----------|-----------------|----------|-----------------|
| | Slew(ns) | First | Slew(ns) | Mid | Slew(ns) | Last |
| sg13g2_IOPadTriOut16mA | 0.02000 | -0.00005 | 0.33000 | -0.00009 | 2.50000 | -0.00009 |
| | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02631 |
| sg13g2_IOPadTriOut30mA | 0.02000 | -0.00018 | 0.33000 | -0.00021 | 2.50000 | -0.00021 |
| | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02636 |
| sg13g2_IOPadTriOut4mA | 0.02000 | 0.00000 | 0.33000 | -0.00000 | 2.50000 | -0.00001 |
| | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02631 |

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 | 0.00005 | 0.33000 | 0.00009 | 2.50000 | 0.00009 |
| | !c2p_en | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |
| sg13g2_IOPadTriOut30mA | !c2p_en | 0.02000 | 0.00018 | 0.33000 | 0.00021 | 2.50000 | 0.00021 |
| | !c2p_en | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |
| sg13g2_IOPadTriOut4mA | !c2p_en | 0.02000 | 0.00000 | 0.33000 | 0.00000 | 2.50000 | 0.00001 |
| | !c2p_en | 0.02000 | -0.02149 | 0.33000 | -0.02249 | 2.50000 | -0.02309 |

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 | -0.00005 | 0.33000 | -0.00009 | 2.50000 | -0.00009 |
| | !c2p_en | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02631 |
| sg13g2_IOPadTriOut30mA | !c2p_en | 0.02000 | -0.00018 | 0.33000 | -0.00021 | 2.50000 | -0.00021 |
| | !c2p_en | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02636 |
| sg13g2_IOPadTriOut4mA | !c2p_en | 0.02000 | 0.00000 | 0.33000 | -0.00000 | 2.50000 | -0.00001 |
| | !c2p_en | 0.02000 | 0.02730 | 0.33000 | 0.02684 | 2.50000 | 0.02631 |