**AB’**

1. **Input pin capacitances:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Input Pins** | **Rise Cap (pF)** | **Fall Cap (pF)** | **Average Cap (pF)** |
| A | 0.01266 | 0.00343 | 0.008045 |
| B | 0.002670 | 0.002676 | 0.002673 |

1. **Transition Time Table:** (please strictly consider 20% and 80% of VDD for transition time)

**(i) Output Rise Transitions** **(in ns)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.041 | 0.308 | 80.957p |
| **10 fF** | 0.074 | 74.474p | 119.168p |
| **100 fF** | 0.595n | 0.595n | 0.595n |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.047 | 0.046 | 0.0716 |
| **10 fF** | 0.073 | 0.077 | 0.123 |
| **100 fF** | 0.594 | 0.595 | 0.594 |

**(ii) Output Fall Transitions** **(in ns)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 38.693p | 24.712p | 66.526p |
| **10 fF** | 83.509p | 79.058p | 116.780p |
| **100 fF** | 0.645 | 0.643 | 0.445 |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.063 | 0.0302 | 0.0717 |
| **10 fF** | 0.084 | 0.0805 | 0.104 |
| **100 fF** | 0.643 | 0.644 | 0.645 |

1. **Propagation delay time tables**

**(i) Cell Rise Delay (in ns)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.066 | 0.0796 | 0.114 |
| **10 fF** | 0.106 | 0.122 | 0.200 |
| **100 fF** | 0.463 | 0.478 | 0.560 |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.091 | 0.118 | 0.209 |
| **10 fF** | 0.142 | 0.160 | 0.285 |
| **100 fF** | 0.498 | 0.515 | 0.637 |

**(ii) Cell Fall Delay (in ns)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.075 | 0.0897 | 0.207 |
| **10 fF** | 0.122 | 0.140 | 0.289 |
| **100 fF** | 0.577 | 0.577 | 0.727 |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 0.108 | 0.128 | 0.210 |
| **10 fF** | 0.164 | 0.179 | 0.297 |
| **100 fF** | 0.598 | 0.614 | 0.732 |

1. **Static Power (cover all possible input combinations based on number of inputs).**

|  |  |
| --- | --- |
| **Condition (AB)** | **Power (nW)** |
| 00 | 0.133 |
| 01 | 0.2325 |
| 10 | 0.2327 |
| 11 | 0.2326 |

1. **Dynamic Power Table:**

**(i) Rise Power (in nW)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 1579.5 | 1350 | 1575 |
| **10 fF** | 2133 | 4500 | 1890 |
| **100 fF** | 33750 | 33755 | 1836 |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 2160 | 2574 | 7200 |
| **10 fF** | 3780 | 4095 | 5832 |
| **100 fF** | 11200 | 14700 | 5040 |

**(ii) Fall Power (in nW)** [Input slew vs output capacitance].

**Related pin A**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 3420 | 2700 | 1484 |
| **10 fF** | 3510 | 3510 | 1566 |
| **100 fF** | 7200 | 2520 | 1679 |

**Related pin B**: (i.e., other input pins are held constant)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **10 ps** | **100 ps** | **1000 ps** |
| **0.5 fF** | 4350 | 2700 | 8640 |
| **10 fF** | 9450 | 7560 | 17010 |
| **100 fF** | 22050 | 15750 | 38880 |