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| ***Cell 001 Inverter*** | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 0 | 1 | | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05087 | |
| **Size** | 85 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.6 | 0.86 | 0.38 | 0.78 | | | |

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| ***Cell 001 Buffer*** | | | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 1 | 1 | | 0 | 0 | | **Symbol** | | | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05087 | |
| **Size** | 146.25 | | | µm2 |
| **Dynamic power dissipation** | 50 | | | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.02 | 1.4 | 1.2 | 1.52 | | | | | |
| ***Cell 002 Inverter*** | | | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 0 | 1 | | 1 | 0 | | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05115 | | |
| **Size** | | 85 | µm2 | |
| **Dynamic power dissipation** | | 12.5 | µWatt/ MHz | |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.4 | 0.831 | 0.142 | 0.258 | | | | | |

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| ***Cell 002 Buffer*** | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 1 | 1 | | 0 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | in | 0.05128 | |
| **Size** | 141.25 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.604 | 0.948 | 0.565 | 0.698 | | | |

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| ***Cell 003 Inverter*** | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 0 | 1 | | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.045 | |
| **Size** | 78 | µm2 |
| **Dynamic power dissipation** | p25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.08 | 0.14 | 0.4 | 0.8 | | | |

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| ***Cell 003 Buffer*** | | | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 1 | 1 | | 0 | 0 | | **Symbol** | | | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.06 | |
| **Size** | 121.875 | | | µm2 |
| **Dynamic power dissipation** | 50 | | | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay in=>F | 0.7 | 1.2 | 0.6 | 0.7 | | | | | |
| ***Cell 004 Inverter*** | | | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 0 | 1 | | 1 | 0 | | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.44419 | | |
| **Size** | | 105 | µm2 | |
| **Dynamic power dissipation** | | 25 | µWatt/ MHz | |
| **Probagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.06 | 0.14 | 0.4 | 0.78 | | | | | |

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| ***Cell 004 Buffer*** | | |
| **Truth Table**   |  |  | | --- | --- | | A | F | | 1 | 1 | | 0 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.20175 | |
| **Size** | 160 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay in=>F | 0.44 | 0.9 | 0.41 | 0.4 | | | |

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| ***Cell 005 NAND*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05167 | | B | 0.05167 | |
| **Size** | 111.25 | µm2 |
| **Dynamic power dissipation** | 5.75 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.363 | 0.58 | 0.145 | 0.0576 | | Delay B=>F | 0.32 | 0.496 | 0.143 | 0.06 | | | |

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| ***Cell 006 NAND*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.187 | | B | 0.187 | |
| **Size** | 580 | µm2 |
| **Dynamic power dissipation** | 6.25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.275 | 0.5633 | 0.182 | 0.408 | | Delay B=>F | 0.3062 | 0.5361 | 0.216 | 0.408 | | | |

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| ***Cell 007 NAND*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0056415 | | B | 0.0056096 | |
| **Size** | 120 | µm2 |
| **Dynamic power dissipation** | 0.295244 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.131 | 0.131 | 1.1521 | 1.4583 | | Delay B=>F | 0.136 | 0.159 | 1.1865 | 1.4661 | | | |

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| ***Cell 008 NAND*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.02359 | | B | 0.023578 | |
| **Size** | 231.25 | µm2 |
| **Dynamic power dissipation** | 6.25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.161 | 1.121n | 0.688 | 1.1152 | | Delay B=>F | 0.173 | 1.131n | 0.689 | 1.1122 | | | |

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| ***Cell 009 3i/p NAND*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.06 | | B | 0.06 | | C | 0.06 | |
| **Size** | 142.5 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.9906 | 1.329 | 1.697 | 2.117 | | Delay B=>F | 0.9366 | 1.236 | 1.63 | 1.926 | | Delay C=>F | 0.7747 | 1.161 | 1.43 | 1.76 | | | |

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| ***Cell 010 3i/p NAND*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00799 | | B | 0.00803 | | C | 0.0082 | |
| **Size** | 184.03125 | µm2 |
| **Dynamic power dissipation** | 37.6 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.8 | 1.075 | 0.675 | 0.95 | | Delay B=>F | 0.875 | 1 | 0.625 | 0.9 | | Delay C=>F | 0.675 | 0.9 | 0.5 | 0.75 | | | |

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| ***Cell 011 3i/p NAND*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00906 | | B | 0.00925 | | C | 0.00929 | |
| **Size** | 115 | µm2 |
| **Dynamic power dissipation** | 623.455 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.55 | 0.8 | 7.35 | 7.5 | | Delay B=>F | 0.55 | 0.8 | 7.55 | 7.7 | | Delay C=>F | 0.55 | 0.8 | 7.25 | 7.5 | | | |

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| ***Cell 012 3i/p NAND*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 5.0116 | | B | 5.0116 | | C | 5.0116 | |
| **Size** | 1270 | µm2 |
| **Dynamic power dissipation** | 24.633 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.699 | 1.012 | 1.51 | 1.782 | | Delay B=>F | 0.633 | 0.956 | 1.369 | 1.738 | | Delay C=>F | 0.518 | 0.84 | 1.168 | 1.479 | | | |

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| ***Cell 013 4i/p NAND*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 1 | 1 | 1 | 1 | 0 | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | X | 1 | | X | X | X | 0 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.002451 | | B | 0.00254 | | C | 0.0026885 | | D | 0.002492 | |
| **Size** | 155 | µm2 |
| **Dynamic power dissipation** | 246.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.916 | 1.2524 | 2.1362 | 2.2338 | | Delay B=>F | 0.79 | 1.1533 | 2.0321 | 2.2558 | | Delay C=>F | 0.7344 | 1.1138 | 1.796 | 2.1397 | | Delay D=>F | 0.869 | 1.1762 | 2.1307 | 2.3404 | | | |

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| ***Cell 014 4i/p NAND*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 1 | 1 | 1 | 1 | 0 | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | X | 1 | | X | X | X | 0 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.024 | | B | 0.03 | | C | 0.038 | | D | 0.041 | |
| **Size** | 162.5 | µm2 |
| **Dynamic power dissipation** | 15 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.745 | 1.238 | 4.4146 | 4.2589 | | Delay B=>F | 0.7532 | 1.229 | 4.537 | 4.1813 | | Delay C=>F | 0.722 | 1.237 | 4.2413 | 4.3642 | | Delay D=>F | 0.643 | 1.179 | 4.5819 | 4.3067 | | | |

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| ***Cell 015 4i/p NAND*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | X | 1 | | X | X | X | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.003122 | | B | 0.003091 | | C | 0.003088 | | D | 0.002958 | |
| **Size** | 155 | µm2 |
| **Dynamic power dissipation** | 0.542 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.201 | 0.288 | 3.236 | 3.412 | | Delay B=>F | 0.203 | 0.283 | 3.166 | 3.387 | | Delay C=>F | 0.196 | 0.281 | 3.021 | 3.3 | | Delay D=>F | 0.186 | 0.242 | 2.769 | 3.12 | | | |

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| ***Cell 016 4i/p NAND*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 1 | 1 | 1 | 1 | 0 | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | X | 1 | | X | X | X | 0 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2.05207 | | B | 2.05207 | | C | 2.09107 | | D | 2.13205 | |
| **Size** | 2573 | µm2 |
| **Dynamic power dissipation** | 50 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.1435 | 0.2052 | 2.903 | 3.263 | | Delay B=>F | 0.1041 | 0.1712 | 2.541 | 3.017 | | Delay C=>F | 0.1652 | 0.1312 | 2.747 | 2.934 | | Delay D=>F | 0.1389 | 0.1312 | 2.459 | 2.688 | | | |

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| ***Cell 017 NOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.032 | | B | 0.0154 | |
| **Size** | 131.25 | µm2 |
| **Dynamic power dissipation** | 12.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.9 | 1.3 | 0.22 | 0.5 | | Delay B=>F | 0.9 | 1.3 | 0.22 | 0.5 | | | |

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| ***Cell 018 NOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0525 | | B | 0.0525 | |
| **Size** | 131.25 | µm2 |
| **Dynamic power dissipation** | 12.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.383 | 0.424 | 0.407 | 0.821 | | Delay B=>F | 0.308 | 0.372 | 0.293 | 0.685 | | | |

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| ***Cell 019 NOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0536 | | B | 0.0529 | |
| **Size** | 137.5 | µm2 |
| **Dynamic power dissipation** | 12.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.277 | 0.315 | 0.1878 | 0.499 | | Delay B=>F | 0.14 | 0.306 | 0.1331 | 0.4336 | | | |

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| ***Cell 020 NOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05723635 | | B | 0.05814472 | |
| **Size** | 390 | µm2 |
| **Dynamic power dissipation** | 14.275 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.011 | 1.2009 | 0.521 | 0.855 | | Delay B=>F | 0.9272 | 0.306 | 0.453 | 0.784 | | | |

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| ***Cell 021 3i/p NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.002215 | | B | 0.002182 | | C | 0.002419 | |
| **Size** | 213.75 | µm2 |
| **Dynamic power dissipation** | 0.499321 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.694 | 2.096 | 5.504 | 6.067 | | Delay B=>F | 1.614 | 1.955 | 5.335 | 5.5 | | Delay C=>F | 1.384 | 1.777 | 4.18 | 4.522 | | | |

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| ***Cell 022 3i/p NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.002999 | | B | 0.0020989 | | C | 0.0020925 | |
| **Size** | 166.5625 | µm2 |
| **Dynamic power dissipation** | 10 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 4.65 | 4.991 | 2.32 | 2.27 | | Delay B=>F | 3.79 | 4.14 | 1.29 | 1.81 | | Delay C=>F | 3.976 | 5.06 | 1.45 | 1.7 | | | |

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| ***Cell 023 3i/p NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05095 | | B | 0.05028 | | C | 0.05227 | |
| **Size** | 455 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.5891 | 0.6579 | 1.0618 | 1.3612 | | Delay B=>F | 0.5094 | 0.5501 | 0.8605 | 1.1606 | | Delay C=>F | 0.4608 | 0.5829 | 0.7604 | 1.085 | | | |

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| ***Cell 024 3i/p NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.003636 | | B | 0.003714 | | C | 0.003636 | |
| **Size** | 172.5 | µm2 |
| **Dynamic power dissipation** | 166666.7 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1 | 2.5 | 0.2 | 1 | | Delay B=>F | 1.4 | 2.5 | 0.5 | 1 | | Delay C=>F | 1.5 | 1.7 | 0.5 | 0.7 | | | |

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| ***Cell 025 4i/p NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 0 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 0 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.002221 | | B | 0.0021886 | | C | 0.002225 | | D | 0.002244 | |
| **Size** | 150 | µm2 |
| **Dynamic power dissipation** | 0.029283 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 8.806 | 9.432 | 1.388 | 2.114 | | Delay B=>F | 8.537 | 9.069 | 1.402 | 2.113 | | Delay C=>F | 8.293 | 8.537 | 1.06 | 2.113 | | Delay D=>F | 8.07 | 8.541 | 1.14 | 2.277 | | | |

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| ***Cell 026 4i/p NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 0 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 0 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05 | | B | 0.05 | | C | 0.05 | | D | 0.05 | |
| **Size** | 640 | µm2 |
| **Dynamic power dissipation** | 50 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.1 | 1.2 | 0.7 | 1.17 | | Delay B=>F | 1.1 | 1.2 | 0.7 | 1.12 | | Delay C=>F | 1.1 | 1.2 | 0.7 | 1.17 | | Delay D=>F | 1.1 | 1.2 | 0.7 | 1.12 | | | |

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| ***Cell 027 4i/p NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 0 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 0 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.052654 | | B | 0.052769 | | C | 0.0507678 | | D | 0.052735 | |
| **Size** | 170 | µm2 |
| **Dynamic power dissipation** | 0.6412325 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.985 | 1.037 | 1.4556 | 1.8278 | | Delay B=>F | 0.885 | 0.97 | 1.2704 | 1.6558 | | Delay C=>F | 0.722 | 0.84 | 1.041 | 1.4259 | | Delay D=>F | 0.44 | 0.725 | 0.7641 | 1.1433 | | | |

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| ***Cell 028 4i/p NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 0 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 0 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.006 | | B | 0.006 | | C | 0.006 | | D | 0.006 | |
| **Size** | 201.25 | µm2 |
| **Dynamic power dissipation** | 0.005078 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.3 | 2.7 | 1.4 | 1.9 | | Delay B=>F | 2.3 | 2.5 | 1.3 | 1.7 | | Delay C=>F | 2 | 2.2 | 1.1 | 1.6 | | Delay D=>F | 1.3 | 1.6 | 0.8 | 1.3 | | | |

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| ***Cell 029 2i/p XOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 1.17\*10^-4 | | B | 1.17\*10^-4 | |
| **Size** | 290 | µm2 |
| **Dynamic power dissipation** | 0.458 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.119 | 3.287 | 1.742 | 2.303 | | Delay B=>F | 1.389 | 1.533 | 0.738 | 1.196 | | | |

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| ***Cell 030 2i/p XOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2 | | B | 2 | |
| **Size** | 215 | µm2 |
| **Dynamic power dissipation** | 0.4815 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.49 | 1.58 | 1.36 | 1.53 | | Delay B=>F | 1.31 | 1.42 | 1.28 | 1.72 | | | |

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| ***Cell 031 2i/p XOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00667 | | B | 0.00643 | |
| **Size** | 1100 | µm2 |
| **Dynamic power dissipation** | 0.99 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.06 | 1.03 | 3.812 | 3.708 | | Delay B=>F | 0.9 | 1.004 | 2.57 | 3.55 | | | |

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| ***Cell 032 2i/p XOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.078417 | | B | 0.0801425 | |
| **Size** | 346.5 | µm2 |
| **Dynamic power dissipation** | 93.975 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 3.2324 | 3.551 | 2.535 | 3.001 | | Delay B=>F | 4.1628 | 4.4713 | 2.445 | 2.839 | | | |

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| ***Cell 033 2i/p XNOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.004717 | | B | 0.00447 | |
| **Size** | 273 | µm2 |
| **Dynamic power dissipation** | 0.82663 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.136 | 2.37 | 2.161 | 2.418 | | Delay B=>F | 2.12 | 2.33 | 2.132 | 2.47 | | | |

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| ***Cell 034 2i/p XNOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0074 | | B | 0.069 | |
| **Size** | 371.25 | µm2 |
| **Dynamic power dissipation** | 1.58451 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.1527 | 1.404 | 3.828 | 4.137 | | Delay B=>F | 0.634 | 0.998 | 1.978 | 2.315 | | | |

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| ***Cell 035 2i/p XNOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0030655 | | B | 0.00317876 | |
| **Size** | 214.226 | µm2 |
| **Dynamic power dissipation** | 81.9 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.35 | 0.491803 | 2.0563 | 2.46 | | Delay B=>F | 0.49435 | 0.491803 | 2.1312 | 2.377 | | | |

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| ***Cell 036 2i/p XNOR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.42\*10^-3 | | B | 0.42\*10^-3 | |
| **Size** | 220 | µm2 |
| **Dynamic power dissipation** | 45 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 3.115 | 3.442 | 2.623 | 2.951 | | Delay B=>F | 1.485 | 1.830 | 2.469 | 2.951 | | | |

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| ***Cell 037 Dynamic SR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | I/P | CLK | F | | 0 | 0 | No Change | | 0 | 1 | 1 | | 1 | 0 | No Change | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0152 | | B | 0.0241 | |
| **Size** | 97.5 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay I/P=>F | 1 | 0.488 | 0.635 | 0.99 | | Delay CLK=>F | 0.326 | 0.901 | 0.001 | 0.2 | | | |

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| ***Cell 038 Dynamic SR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | I/P | CLK | F | | 0 | 0 | No Change | | 0 | 1 | 1 | | 1 | 0 | No Change | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.08378 | | B | 0.111 | |
| **Size** | 98.75 | µm2 |
| **Dynamic power dissipation** | 31.25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay I/P=>F , CLK=1 | 1.564 | 0.941 | 0.261 | 0.415 | | | |

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| ***Cell 039 Dynamic SR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | I/P | CLK | F | | 0 | 0 | 0 | | 0 | 1 | 1 | | 1 | 0 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | I/P | 31.65 | | Clk | 5.6377 | |
| **Size** | 118.75 | µm2 |
| **Dynamic power dissipation** | 5.362 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay I/P=>F , CLK=1 | 0.721 | 0.413 | 0.6 | 0.651 | | | |

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| ***Cell 040 Dynamic SR*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | E | F | | X | 0 | Z ( Fold is held) | | 0 | 1 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.01018 | | B | 0.01021 | |
| **Size** |  | µm2 |
| **Dynamic power dissipation** | 29.775 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.751 | 1.11 | 0.66 | 1 | | Delay E=>F | 0.84 | 0.673 | 0.062 | 0.16 | | | |

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| ***Cell 041 Dynamic SR with TG*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | Input | A | A\_bar | F | | 1 | 1 | 0 | 0 (Inverting the input) | | 1 | 0 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | I/P | 0.01095 | |
| **Size** | 165 | µm2 |
| **Dynamic power dissipation** | 5.2 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay I/P=>F | 1.844 | 2.985 | 0.917 | 0.995 | | | |

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| ***Cell 042 Dynamic SR with TG*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | Input | A | A\_bar | F | | 1 | 1 | 0 | 0 (Inverting the input) | | 1 | 0 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | I/P | 0.08218 | | A\_bar | 0.06426 | | A | 0.07033 | |
| **Size** | 172.5 | µm2 |
| **Dynamic power dissipation** | 66.66 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay I/P=>F | 1.065 | 1.522 | 0.451841 | 0.66532 | | | |

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| ***Cell 043 Dynamic SR with TG*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | Input | CLK | F | | X | 1 | X’ | | X | const | 0 | | **Symbol**  C:\Users\Amel\Desktop\nnhn.png | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | Input | 0.051 | |
| **Size** | 157.5 | µm2 |
| **Dynamic power dissipation** | 62.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay Input=>F | 0.398 | 0.511 | 0.408 | 0.625 | | | |

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| ***Cell 044 Dynamic SR with TG*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | IN | TG | Out | | 0 | 0 | Z | | 1 | 0 | Z | | 0 | 1 | 1 | | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | IN | 0.008406 | | TG | 0.012325 | |
| **Size** | 255 | µm2 |
| **Dynamic power dissipation** | 2.2456 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay IN=>Out | 0.025397 | 1.0018 | 0.075 | 2.998 | | Delay TG=>Out | 0.025045 | 1.0018 | 0.075 | 2.998 | | | |

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| ***Cell 045 AND-OR-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.06043682058 | | B | 0.06056003 | | C | 0.06389584377 | | D | 0.06844934748 | |
| **Size** | 225.75 | µm2 |
| **Dynamic power dissipation** | 12.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.2526 | 0.322334 | 5.00399 | 0.250002 | | Delay B=>F | 1.2526 | 0.322334 | 5.00399 | 0.250002 | | Delay C=>F | 1.2051 | 1.81333 | 5.0742 | 1.79551 | | Delay D=>F | 1.2051 | 1.81333 | 5.0742 | 1.79551 | | | |

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| ***Cell 046 AND-OR-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05012 | | B | 0.05003 | | C | 0.05003 | | D | 0.05003 | |
| **Size** | 4140 | µm2 |
| **Dynamic power dissipation** | 9.375 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.643 | 0.949 | 0.518 | 0.598 | | Delay B=>F | 0.614 | 1.013 | 0.493 | 0.578 | | Delay C=>F | 1.178 | 1.418 | 0.668 | 0.765 | | Delay D=>F | 1.064 | 1.517 | 0.636 | 0.712 | | | |

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| ***Cell 047 2x2AND-2NOR*** | | |
| **Truth Table**  **F = (AD + BC)'**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05 | | B | 0.049 | | C | 0.05 | | D | 0.048 | |
| **Size** | 186.25 | µm2 |
| **Dynamic power dissipation** | 75 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.3 | 1.7 | 0.8 | 0.9 | | Delay B=>F | 2.3 | 2.5 | 1 | 1 | | Delay C=>F | 2.1 | 2.55 | 1 | 1 | | Delay D=>F | 1.4 | 1.7 | 0.9 | 1 | | | |

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| ***Cell 048 2x2AND-2NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0835 | | B | 0.0835 | | C | 0.0835 | | D | 0.0835 | |
| **Size** | 232.5 | µm2 |
| **Dynamic power dissipation** | 199.75 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.982314 | 0.00108 | 2.7713 | 3.0443 | | Delay B=>F | 0.982314 | 0.00108 | 2.7713 | 3.0443 | | Delay C=>F | 0.39267 | 0.687415 | 1.0802 | 1.4730 | | Delay D=>F | 0.39267 | 0.687415 | 1.0802 | 1.4730 | | | |

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| ***Cell 049 2-AND 2-NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2.0054 | | B | 2.00348 | | C | 2.00348 | |
| **Size** | 168.25 | µm2 |
| **Dynamic power dissipation** | 8.333 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.285 | 2.651 | 1.2496 | 1.6754 | | Delay B=>F | 1.844 | 2.1 | 1.0635 | 1.4003 | | Delay C=>F | 0.808 | 1.158 | 0.3804 | 0.6972 | | | |

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| ***Cell 050 2-AND 2-NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0547 | | B | 0.05488 | | C | 0.054956 | |
| **Size** | 278.25 | µm2 |
| **Dynamic power dissipation** |  | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.61844 | 0.812665 | 1.32 | 1.71 | | Delay B=>F | 0.58 | 0.71096 | 1.357 | 1.792 | | Delay C=>F | 0.341113 | 0.535 | 0.425755 | 0.805936 | | | |

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| ***Cell 051 2-AND 2-NOR*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.014328 | | B | 0.0141888 | | C | 0.0141904 | |
| **Size** | 220.375 | µm2 |
| **Dynamic power dissipation** | 7.2 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.729 | 0.875 | 0.9722 | 1.1439 | | Delay B=>F | 0.665 | 0.812 | 0.9212 | 1.2473 | | Delay C=>F | 0.471 | 0.63 | 0.359 | 0.6668 | | | |

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| ***Cell 052 2-AND 2-NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00478 | | B | 0.00478 | | C | 0.004776 | |
| **Size** | 198.75 | µm2 |
| **Dynamic power dissipation** | 0.13977 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.319 | 1.539 | 2.184 | 2.452 | | Delay B=>F | 1.152 | 1.424 | 2.071 | 2.378 | | Delay C=>F | 0.556 | 0.878 | 0.591 | 1.029 | | Delay C=>F | 0.791 | 1.099 | 0.595 | 0.971 | | Delay C=>F | 0.65 | 0.952 | 0.591 | 0.972 | | | |

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| ***Cell 053 2-AND 2-NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.002378 | | B | 0.0021718 | | C | 0.002399 | | D | 0.00209 | |
| **Size** | 242.5 | µm2 |
| **Dynamic power dissipation** | 0.61425 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.078 | 2.5 | 5.4945 | 5.8333 | | Delay B=>F | 1.9954 | 2.3039 | 4.9546 | 5.2941 | | Delay C=>F | 0.9252 | 1.3632 | 3.5819 | 3.8474 | | Delay D=>F | 0.793 | 1.1941 | 2.9802 | 3.2541 | | | |

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| ***Cell 054 2-AND-3-NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00242748 | | B | 0.00238202 | | C | 0.00226118 | | D | 0.00226593 | |
| **Size** | 216.25 | µm2 |
| **Dynamic power dissipation** | 0.675 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.5978 | 1.7305 | 1.989 | 2.22 | | Delay B=>F | 1.444 | 1.5933 | 1.922 | 2.235 | | Delay C=>F | 1.088 | 1.1966 | 0.76 | 1.096 | | Delay D=>F | 0.939 | 1.1291 | 0.682 | 1.026 | | | |

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| ***Cell 055 2-AND-3-NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0063 | | B | 0.00346 | | C | 0.0032 | | D | 0.006 | |
| **Size** | 276.25 | µm2 |
| **Dynamic power dissipation** | 0.11 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.293 | 1.64 | 1.55 | 1.97 | | Delay B=>F | 1.37 | 1.55 | 1.55 | 1.88 | | Delay C=>F | 0.5 | 0.8 | 0.4 | 0.5 | | Delay D=>F | 0.57 | 0.6 | 0.32 | 0.4 | | | |

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| ***Cell 056 AND-OR-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 0 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 3.6428 | | B | 3.6426 | | C | 3.6425 | | D | 3.6428 | |
| **Size** | 202.5 | µm2 |
| **Dynamic power dissipation** | 0.0276 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.772 | 2.96 | 1.638 | 2.06 | | Delay B=>F | 3.093 | 3.38 | 1.732 | 2.042 | | Delay C=>F | 1.886 | 1.957 | 0.638 | 1.09 | | Delay D=>F | 1.67 | 1.932 | 0.586 | 0.988 | | | |

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| ***Cell 057 3AND-2NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | 0 | 1 | | X | 0 | X | 0 | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 1 | X | 0 | | X | X | X | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05355 | | B | 0.057493 | | C | 0.057438 | | D | 0.056672 | |
| **Size** | 227.8125 | µm2 |
| **Dynamic power dissipation** | 11.85 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.01 | 2.263 | 2.01 | 2.263 | | Delay B=>F | 2.097 | 2.287 | 2.097 | 2.287 | | Delay C=>F | 1.93 | 2.074 | 1.93 | 2.074 | | Delay D=>F | 0.792 | 0.914 | 0.792 | 0.914 | | | |

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| ***Cell 058 3AND-2NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | 0 | 1 | | X | 0 | X | 0 | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 1 | X | 0 | | X | X | X | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0022859 | | B | 0.00225 | | C | 0.002249 | | D | 0.002495 | |
| **Size** | 196.25 | µm2 |
| **Dynamic power dissipation** | 50 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.763364 | 0.961365 | 2.58 | 2.9387 | | Delay B=>F | 0.731027 | 0.886016 | 2.46 | 2.752 | | Delay C=>F | 0.637914 | 0.845313 | 2.36 | 2.625 | | Delay D=>F | 0.300549 | 0.454607 | 0.495672 | 0.889202 | | | |

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| ***Cell 059 3AND-2NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00396 | | B | 0.003937 | | C | 0.0039705 | | D | 0.0039696 | |
| **Size** | 291.25 | µm2 |
| **Dynamic power dissipation** | 1.2256 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.583 | 1.973 | 3.621 | 4.013 | | Delay B=>F | 1.584 | 1.974 | 3.675 | 4.013 | | Delay C=>F | 1.58 | 1.974 | 3.617 | 3.013 | | Delay D=>F | 0.459 | 0.527 | 0.531 | 0.855 | | | |

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| ***Cell 060 3AND-2NOR*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | 0 | 1 | | X | 0 | X | 0 | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 1 | X | 0 | | X | X | X | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00368 | | B | 0.003703 | | C | 0.003681 | | D | 0.003689 | |
| **Size** | 255 | µm2 |
| **Dynamic power dissipation** | 50 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 3.6416 | 3.9988 | 2.308 | 2.6635 | | Delay B=>F | 3.9749 | 4.3365 | 2.6416 | 3.0032 | | Delay C=>F | 4.3084 | 4.6667 | 2.9749 | 3.333 | | Delay D=>F | 0.59174 | 0.65317 | 0.13083 | 0.16635 | | | |

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| ***Cell 061 Majority AB+BC+AC*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2.26 | | B | 2.13 | | C | 2.4166 | |
| **Size** | 350 | µm2 |
| **Dynamic power dissipation** | 1.24\*10^-10 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.2155 | 2.4686 | 3.6677 | 3.9399 | | Delay B=>F | 2.4585 | 2.7931 | 6.6375 | 7.2064 | | Delay C=>F | 2.9914 | 3.4091 | 5.9655 | ZERO | | | |

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| ***Cell 062 Majority AB+BC+AC*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0411 | | B | 0.0416 | | C | 0.0412 | |
| **Size** | 525 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.2324 | 2.6497 | 2.0215 | 2.205 | | Delay B=>F | 1.72215 | 2.03085 | 1.67 | 1.936 | | Delay C=>F | 1.8893 | 2.2756 | 1.7905 | 2.0175 | | | |

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| ***Cell 063 Majority AB+BC+AC*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2.16 | | B | 2.13 | | C | 2.46 | |
| **Size** | 320 | µm2 |
| **Dynamic power dissipation** | 35 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.58115 | 1.4991 | 1.2794 | 1.1754 | | Delay B=>F | 1.13235 | 1.035 | 1.038 | 1.06705 | | Delay C=>F | 1.3314 | 1.283 | 1.2265 | 1.1563 | | | |

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| ***Cell 064 Majority AB+BC+AC*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.051125 | | B | 0.053875 | | C | 0.05437 | |
| **Size** | 322.5 | µm2 |
| **Dynamic power dissipation** | 33.33 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 4.57 | 4.94 | 5.3 | 5.44 | | Delay B=>F | 4.14 | 4.44 | 5.6 | 5.94 | | Delay C=>F | 3.5 | 4.7 | 6.3 | 6.5 | | | |

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| ***Cell 065 Inv Majority*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.01225 | | B | 0.002435 | | C | 0.0043196 | |
| **Size** | 238.75 | µm2 |
| **Dynamic power dissipation** | 206824 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 3 | 3 | 2 | 2 | | Delay B=>F | 4 | 4 | 2 | 3 | | Delay C=>F | 5 | 5 | 2 | 3 | | | |

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| ***Cell 066 Inv-Majority*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.003814 | | B | 0.005535 | | C | 0.0064717 | |
| **Size** | 276.25 | µm2 |
| **Dynamic power dissipation** | 0.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.8651 | 1.0674 | 2.876 | 3.247 | | Delay B=>F | 0.9887 | 1.179 | 2.8315 | 3.168 | | Delay C=>F | 1.01 | 1.1124 | 3.0899 | 3.382 | | | |

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| ***Cell 067 inv-majority*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol**  **Capture.PNG** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.497 | | B | 0.49 | | C | 0.49 | |
| **Size** | 300 | µm2 |
| **Dynamic power dissipation** | 76 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.75 | 0.95 | 2.7 | 3.1 | | Delay B=>F | 0.5 | 0.75 | 1.75 | 2.1 | | Delay C=>F | 0.9 | 1 | 3 | 3.2 | | | |

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| ***Cell 068 inv-majority*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol**  **Capture.PNG** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0107 | | B | 0.0222 | | C | 0.0214 | |
| **Size** | 341.25 | µm2 |
| **Dynamic power dissipation** | 0.359 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.256 | 1.837 | 1.549 | 1.5981 | | Delay B=>F | 2.325 | 2.649 | 2.1751 | 2.6488 | | Delay C=>F | 1.539 | 2.994 | 2.031 | 1.7319 | | | |

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| ***Cell 069 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.059 | | B | 0.059 | | C | 0.059 | |
| **Size** | 203.75 | µm2 |
| **Dynamic power dissipation** | 4.1667 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.449 | 1.8009 | 2.712 | 3 | | Delay B=>F | 1.268 | 1.579 | 2.454 | 2.749 | | Delay C=>F | 0.705 | 1.0824 | 0.734 | 1.057 | | | |

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| ***Cell 070 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00416 | | B | 0.00416215 | | C | 0.00415 | |
| **Size** | 187.5 | µm2 |
| **Dynamic power dissipation** | 50/3 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.8 | 3.1 | 0.5 | 0.789 | | Delay B=>F | 1.75 | 1.85 | 0.53 | 0.87 | | Delay C=>F | 2.1 | 2.3 | 0.7 | 0.88 | | | |

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| ***Cell 071 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00575 | | B | 0.005956 | | C | 0.006004 | |
| **Size** | 128.75 | µm2 |
| **Dynamic power dissipation** | 0.38677 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.793 | 0.869 | 2.725 | 3.002 | | Delay B=>F | 0.72 | 0.815 | 2.097 | 2.364 | | Delay C=>F | 0.468 | 0.496 | 1.48 | 1.844 | | | |

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| ***Cell 072 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0051 | | B | 0.005 | | C | 0.00485 | |
| **Size** | 150 | µm2 |
| **Dynamic power dissipation** | 0.290485 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.3987 | 2.7014 | 1.947 | 2.3406 | | Delay B=>F | 2.117 | 2.3284 | 1.5922 | 2.0062 | | Delay C=>F | 0.7209 | 1.0604 | 0.9881 | 1.3161 | | | |

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| ***Cell 073 (3ipNAND\_2ipOR)*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | N1 | N2 | B | C | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 1 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol**  33 | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | N1 | 0.003858 | | N2 | 0.00386 | | B | 0.004756 | | C | 0.004329 | |
| **Size** | 215 | µm2 |
| **Dynamic power dissipation** | 33.2 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay N1=>F | 1.29 | 1.623 | 1.612 | 1.885 | | Delay N2=>F | 1.508 | 1.833 | 1.782 | 2.04 | | Delay B=>F | 1.237 | 1.368 | 0.64 | 1 | | Delay C=>F | 0.944 | 1.21 | 0.475 | 0.845 | | | |

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| ***Cell 074 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 1 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 4.386 | | B | 4.45 | | C | 4.456 | | D | 4.563 | |
| **Size** | 190 | µm2 |
| **Dynamic power dissipation** | 0.53 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.837 | 1.0023 | 2.35 | 2.499 | | Delay B=>F | 0.837 | 1.0023 | 2.35 | 2.499 | | Delay C=>F | 0.3 | 0.521 | 1.7 | 2.0667 | | Delay D=>F | 0.194 | 0.336 | 1.48 | 1.74 | | | |

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| ***Cell 075 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 5.0108 | | B | 5.0108 | | C | 5.0108 | | D | 5.0108 | |
| **Size** | 101.25 | µm2 |
| **Dynamic power dissipation** | 12.45 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 2.1498 | 2.295 | 2.1812 | 2.5234 | | Delay B=>F | 1.897 | 2.1413 | 1.8194 | 2.1933 | | Delay C=>F | 0.763 | 1.012 | 1.549 | 1.912 | | Delay D=>F | 0.596 | 0.944 | 1.328 | 1.628 | | | |

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| ***Cell 076 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.003881 | | B | 0.004609 | | C | 0.003664 | | D | 0.003751 | |
| **Size** | 212.5 | µm2 |
| **Dynamic power dissipation** | 236.1 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.835 | 1.165 | 2.0895 | 2.3 | | Delay B=>F | 0.756 | 1.1371 | 1.9375 | 2.2004 | | Delay C=>F | 2.3435 | 2.5334 | 1.549 | 3.3701 | | Delay D=>F | 2.4218 | 2.5038 | 1.328 | 3.0742 | | | |

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| ***Cell 077 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | X | X | X | 1 | | X | 0 | X | X | 1 | | X | X | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.041 | | B | 0.04 | | C | 0.04 | | D | 0.041 | |
| **Size** | 222.5 | µm2 |
| **Dynamic power dissipation** | 30 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 6.009 | 5.935 | 2.127 | 2.362 | | Delay B=>F | 6.217 | 5.899 | 1.852 | 2.199 | | Delay C=>F | 4.548 | 4.704 | 1.730 | 1.876 | | Delay D=>F | 4.616 | 4.582 | 2.031 | 2.259 | | | |

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| ***Cell 078 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 1 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.006526 | | B | 0.005377 | | C | 0.005383 | | D | 0.006036 | |
| **Size** | 230 | µm2 |
| **Dynamic power dissipation** | 0.66 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.679775 | 0.859551 | 0.601124 | 0.792135 | | Delay B=>F | 0.634832 | 0.932584 | 0.337079 | 0.561798 | | Delay C=>F | 0.398876 | 0.657303 | 0.308989 | 0.589888 | | Delay D=>F | 0.438202 | 0.573834 | 0.370787 | 0.685393 | | | |

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| ***Cell 079 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 1 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2.1312 | | B | 2.1312 | | C | 2.0525 | | D | 2.0525 | |
| **Size** | 226.5 | µm2 |
| **Dynamic power dissipation** | 34.625 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.526 | 0.787 | 0.853 | 1.262 | | Delay B=>F | 0.5388 | 0.76403 | 0.675 | 1.228 | | Delay C=>F | 0.8704 | 0.9337 | 1.107 | 1.262 | | Delay D=>F | 0.7847 | 0.9887 | 0.771 | 1.212 | | | |

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| ***Cell 080 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 1 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 0 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.05 | | B | 0.05 | | C | 0.05 | | D | 0.05 | |
| **Size** | 230 | µm2 |
| **Dynamic power dissipation** | 25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.13 | 0.2 | 0.7 | 1.13 | | Delay B=>F | 0.13 | 0.2 | 0.7 | 1.13 | | Delay C=>F | 0.13 | 0.2 | 0.7 | 1.13 | | Delay D=>F | 0.13 | 0.2 | 0.7 | 1.13 | | | |

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| ***Cell 081 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0525 | | B | 0.0525 | | C | 0.0525 | | D | 0.0525 | |
| **Size** | 278.75 | µm2 |
| **Dynamic power dissipation** | 15.625 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 4.574 | 4.794 | 2.38 | 2.685 | | Delay B=>F | 4.924 | 5.228 | 2.431 | 2.803 | | Delay C=>F | 5.294 | 5.603 | 2.488 | 2.936 | | Delay D=>F | 0.582 | 0.876 | 0.647 | 0.849 | | | |

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| ***Cell 082 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0051668 | | B | 0.0074818 | | C | 0.0065335 | | D | 0.006754 | |
| **Size** | 157.5 | µm2 |
| **Dynamic power dissipation** | 1383100 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.7 | 1 | 0.7 | 1 | | Delay B=>F | 1 | 1 | 1 | 1 | | Delay C=>F | 1 | 1 | 1.1 | 1 | | Delay D=>F | 0.2 | 1 | 1 | 1 | | | |

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| ***Cell 083 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0669 | | B | 0.06457 | | C | 0.04949 | | D | 0.01193 | |
| **Size** | 630 | µm2 |
| **Dynamic power dissipation** | 6.25 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.8489 | 0.9523 | 0.886 | 0.997 | | Delay B=>F | 0.7773 | 0.9255 | 0.779 | 0.921 | | Delay C=>F | 0.5933 | 0.7632 | 1.095 | 1.301 | | Delay D=>F | 0.2179 | 0.251 | 0.527 | 0.776 | | | |

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| ***Cell 084 OR-AND-INVERT*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | A | B | C | D | F | | 0 | 0 | 0 | 0 | 1 | | 0 | 0 | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | 1 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 0 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | | 1 | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 0 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0034855 | | B | 0.0034855 | | C | 0.003459 | | D | 0.003261 | |
| **Size** | 202.5 | µm2 |
| **Dynamic power dissipation** | 1.83511 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 3.892 | 4.15 | 1.98244 | 2.402 | | Delay B=>F | 4.089 | 4.346 | 2.1075 | 2.4566 | | Delay C=>F | 4.417 | 4.726 | 2.405 | 2.809 | | Delay D=>F | 0.83 | 1.168 | 1.9743 | 2.3499 | | | |

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| ***Cell 085 (2:1 MUX)*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | Y | X | A | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0247 | | B | 0.02095 | | C | 0.004505 | |
| **Size** | 232.5 | µm2 |
| **Dynamic power dissipation** | 0.217135 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay S=>F | 0.528 | 0.78 | 0.425 | 0.615 | | Delay A=>F | 0.528 | 0.727 | 0.425 | 0.694 | | Delay B=>F | 0.767 | 1.168 | 0.528 | 0.885 | | | |

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| ***Cell 086 (2:1 MUX)*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S | A | B | F | | 0 | 0 | 0 | 0 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.052426 | | B | 0.055955 | | C | 0.055943 | |
| **Size** | 560 | µm2 |
| **Dynamic power dissipation** | 41.667 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay S=>F | 0.21 | 0.25 | 0.3976 | 0.7283 | | Delay A=>F | 0.1736 | 0.2179 | 0.177 | 0.235 | | Delay B=>F | 0.1734 | 0.2211 | 0.169 | 0.204 | | | |

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| ***Cell 087 (2:1 MUX)*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | X | Y | F | | 0 | X | Y | X | | 1 | X | Y | Y | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0061 | | X | 0.0335 | | Y | 0.0197 | |
| **Size** | 368.75 | µm2 |
| **Dynamic power dissipation** | 0.09884 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.695 | 1.148 | 0.381 | 0.742 | | Delay X=>F | 0.204 | 0.399 | 0.298 | 0.349 | | Delay Y=>F | 0.216 | 0.409 | 0.279 | 0.344 | | | |

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| ***Cell 088 2:1 MUX*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S | X | Y | F | | 0 | X | Y | X | | 1 | X | Y | Y | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | X | 0.03771 | | Y | 0.02112 | |
| **Size** | 273.75 | µm2 |
| **Dynamic power dissipation** | 2.3327 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay X=>F | 0.2 | 0.61 | 0.2 | 1.008 | | Delay Y=>F | 0.1 | 0.61 | 0.2 | 1.008 | | | |

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| ***Cell 089 INVERTER\_MUX*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S | A0 | A1 | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A0 | 0.048 | | A1 | 0.05 | | S | 0.051 | |
| **Size** | 885 | µm2 |
| **Dynamic power dissipation** | 49.5 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay S=>F | 0.15 | 0.3 | 0.45 | 0.725 | | Delay A=>F | 0.4 | 0.52 | 1.2 | 1.56 | | Delay B=>F | 0.455 | 0.65 | 1.2 | 1.42 | | | |

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| ***Cell 090 INVERTER\_MUX*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S | A0 | A1 | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A0 | 0.052813 | | A1 | 0.05291388172 | | S | 0.05492129 | |
| **Size** | 251.25 | µm2 |
| **Dynamic power dissipation** | 0.667778 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A0=>F | 0.423 | 0.652 | 1.1953 | 1.53 | | Delay A1=>F | 0.713 | 0.923 | 2.2801 | 2.6154 | | Delay S=>F | 0.968 | 1.182 | 2.3131 | 2.5943 | | | |

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| ***Cell 091 INVERTER\_MUX*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | Sel | A | B | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | Sel | 0.02206 | | A | 0.0204 | | B | 0.0042 | |
| **Size** | 217.5 | µm2 |
| **Dynamic power dissipation** |  | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay Sel=>F | 0.697 | 1.131 | 0.335 | 0.326 | | Delay A=>F | 0.366 | 0.457 | 0.345 | 0.572 | | Delay B=>F | 0.356 | 0.485 | 0.326 | 0.563 | | | |

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| ***Cell 092 INVERTER\_MUX*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S | A0 | A1 | F | | 0 | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 1 | 0 | 0 | 1 | | 1 | 0 | 1 | 0 | | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A0 | 13.5294 | | A1 | 13.4732 | | S | 21.11 | |
| **Size** | 388.34375 | µm2 |
| **Dynamic power dissipation** | 8.42 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A0=>F | 0.999 | 1.31 | 1.2481 | 1.5702 | | Delay A1=>F | 2.357 | 2.681 | 2.1692 | 2.4969 | | Delay S=>F | 1.7012 | 2.0441 | 1.849 | 2.156 | | | |

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| ***Cell 093 Equality Comparator*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 2 | | B | 2 | |
| **Size** | 230 | µm2 |
| **Dynamic power dissipation** | 0.55 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.5 | 1.77 | 1.15 | 1.47 | | Delay B=>F | 1.34 | 1.58 | 1.28 | 1.41 | | | |

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| ***Cell 094 Equality Comparator*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00806 | | B | 0.0078125 | | A` | 0.00782 | | B` | 0.0076 | |
| **Size** | 740 | µm2 |
| **Dynamic power dissipation** | 0.797 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1.09 | 1.06 | 3.91 | 4.2 | | Delay B=>F | 0.81 | 1.91 | 2.67 | 3.9 | | | |

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| ***Cell 096 Equality Comparator*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.0070314 | | B | 0.006055 | |
| **Size** | 277.5 | µm2 |
| **Dynamic power dissipation** | 0.721 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.5416 | 1.0192 | 1.1486 | 1.5896 | | Delay B=>F | 0.6157 | 1.0584 | 1.4039 | 1.3 | | | |

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| ***Cell 096 Equality Comparator*** | | |
| **Truth Table**   |  |  |  | | --- | --- | --- | | A | B | F | | 0 | 0 | 1 | | 0 | 1 | 0 | | 1 | 0 | 0 | | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00662 | | B | 0.00662 | |
| **Size** | 316.25 | µm2 |
| **Dynamic power dissipation** | 0.368 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 0.786 | 1.075 | 0.869 | 1.141 | | Delay B=>F | 1.4899 | 1.6529 | 1.431 | 1.545 | | | |

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| ***Cell 097 Half Adder*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | S | | 0 | 0 | 0 | 0 | | | 0 | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.00469 | | B | 0.00467 | |
| **Size** | 372.5 | µm2 |
| **Dynamic power dissipation** | 1.879375 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>S | 7.252 | 7.147 | 5.385 | 5.527 | | Delay A=>C | 2.013 | 1.777 | 1.385 | 1.675 | | Delay B=>S | 6.17 | 6.76 | 4.575 | 4.76 | | Delay B=>C | 1.55 | 1.67 | 1.473 | 1.68 | | | |

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| ***Cell 098 Half Adder*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | S | | 0 | 0 | 0 | 0 | | | 0 | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.005 | | B | 0.0045 | |
| **Size** | 430 | µm2 |
| **Dynamic power dissipation** | 0.779 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>S | 2.7 | 3 | 3.8 | 4 | | Delay A=>C | 4 | 4.5 | 2.2 | 2.5 | | Delay B=>S | 2.6 | 2.98 | 3.9 | 3.9 | | Delay B=>C | 3.7 | 3.98 | 2.1 | 2.2 | | | |

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| ***Cell 099 Half Adder*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | S | | 0 | 0 | 0 | 0 | | | 0 | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.01 | | B | 0.00925 | |
| **Size** | 456.25 | µm2 |
| **Dynamic power dissipation** | 2500000 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>F | 1 | 1.2 | 1.5 | 1.3 | | Delay B=>F` | 0.8 | 0.8 | 0.7 | 1.2 | | | |

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| ***Cell 100 Half Adder*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | A | B | C | S | | 0 | 0 | 0 | 0 | | | 0 | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 1 | 1 | 1 | 0 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | A | 0.006625 | | B | 0.0066315 | |
| **Size** | 417.5 | µm2 |
| **Dynamic power dissipation** | 0.6945215 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay A=>S | 2.664 | 3.536 | 3.697 | 4.9 | | Delay A=>C | 2.575 | 3.97 | 1.586 | 2.563 | | Delay B=>S | 2.979 | 3.288 | 3.566 | 4.041 | | Delay B=>C | 2.73 | 3.223 | 2.457 | 2.841 | | | |

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| ***Cell 101 Slave Cell Of Static DFF*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | S` | R` | CLK | F | | 0 | 0 | X | Forbidden Case | | 0 | 1 | X | 1 | | 1 | 0 | X | 0 | | 1 | 1 | 1 | No Change | | 1 | 1 | 0 | P | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | P | 0.06766 | | P` | 0.06766 | | Set` | 0.06791 | | Reset` | 0.06749 | | CLK` | 0.079 | |
| **Size** | 327.5 | µm2 |
| **Dynamic power dissipation** | 37.2 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay S=>F | 0.285 | 0.406 |  |  | | Delay R=>F` |  |  | 0.259 | 0.466 | | Delay P=>F | 0.65 | 2.81 | 2.6588 | 2.76 | | | |

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| ***Cell 102 Master of static D FF*** | | |
| **Truth Table**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | D | Set | RST | Fi | F | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 0 | 0 | | 0 | 0 | 1 | 1 | 0 | | 0 | 1 | 0 | 0 | 1 | | 0 | 1 | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 1 | | 0 | 1 | 1 | 1 | 1 | | 1 | 0 | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | 0 | | 1 | 0 | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | 1 | | 1 | 1 | 0 | 1 | 1 | | 1 | 1 | 1 | 0 | 1 | | 1 | 1 | 1 | 1 | 1 | | **Symbol** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | D | 0.0018 | | Set | 0.0022 | | RST | 0.0022 | | Fi | 0.003125 | |
| **Size** | 412.5 | µm2 |
| **Dynamic power dissipation** | 20 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay D=>F | 0.95 | 1.2 | 0.35 | 0.8 | | Delay RST=>F` | 1.15 | 1.2 | 0.65 | 1 | | Delay Set=>F | 0.4 | 0.65 | 0.2 | 0.4 | | | |

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| ***Cell 103 T-Flip flop slave cell*** | | |
| **Truth Table**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | S | R | Cp | Q | Q’ | State | | X | X | 0 | Qold | Q’old | No change | | 0 | 0 | 1 | Qold | Q’old | No change | | 0 | 1 | 1 | 0 | 1 | Reset | | 1 | 0 | 1 | 1 | 0 | Set | | 1 | 1 | 1 | 1 | 1 | Forbidden state | | **Symbol**  **Description: C:\Users\Radwan\Downloads\lab6.h5.gif** | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | S | 0.003978 | | R | 0.00398 | | Cp | 0.0078623 | |
| **Size** | 270 | µm2 |
| **Dynamic power dissipation** | 617.285 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay S=>Q | 1.4 | 3.023 | 2.798 | 1.6583 | | Delay R=>Q | 2.798 | 3.023 | 1.4 | 1.6583 | | Delay Cp=>Q | 1.4 | 1.71 | 2 | 2.933 | | | |

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| ***Cell 104 T FF Master*** | | |
| **Truth Table**   |  |  |  |  | | --- | --- | --- | --- | | T | Qs | Qs\_bar | F | | 0 | 0 | 1 | 0 | | 0 | 1 | 0 | 1 | | 1 | 0 | 1 | 1 | | 1 | 1 | 0 | 0 |   SL (set)&RL (reset) both are active low | **Symbol**  t flipflop.jpg | **Pin Capacitance**   |  |  | | --- | --- | | Pin | Cap[pF] | | T | 0.011 | |
| **Size** | 573 | µm2 |
| **Dynamic power dissipation** | 67.421 | µWatt/ MHz |
| **Propagation Delay**   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | Rise LH Transition | | Fall HL Transition | | | Input Slope [ns] | 0.05 | 2 | 0.05 | 2 | | Delay T=>F | 5.105 | 5.24 | 7.685 | 7.84 | | Delay T=>F` | 4.385 | 4.55 | 7.76 | 7.932 | | | |