**2-Input NAND Cells**

1. **NAND2x1**

Dimesnions:

36 x 112

Original sizing:

Tuned sizing:

Delays:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **tpdf(ps):** | | | | |
| **input transition (ps)\load (Cinv)** | **1** | **2** | **4** | **8** |
| **0** | 16.5023 | 29.061 | 50.898 | 88.3059 |
| **100** | 38.305 | 50.072 | 69.0877 | 104.485 |
| **400** | 59.8937 | 79.9448 | 112.413 | 163.403 |
| **800** | 75.2149 | 102.141 | 145.347 | 212.704 |
|  |  |  |  |  |
| **tpdr(ps):** | | | | |
| **input transition (ps)\load (Cinv)** | **1** | **2** | **4** | **8** |
| **0** | 15.0344 | 27.0236 | 41.107 | 67.8926 |
| **100** | 38.866 | 49.5626 | 65.9685 | 95.1186 |
| **400** | 69.4659 | 89.733 | 121.094 | 168.383 |
| **800** | 94.5313 | 122.179 | 165.267 | 230.62 |

Cell Linear Model (Best Fit):

tpdf(ps) = 13.329138043478258 x load(Cinv) + 0.10742215645161289 x slew (ps) + 2.464675240182345

tpdr(ps) = 12.024601956521737 x load(Cinv) + 0.14154816612903226 x slew(ps) + 0.26999492110800816