

| S | X1 | X2 | Z | K | Y | D | W1I | W2I | W1F | W2F | a | bias | threshold | |
|---|----|----|---|---|-----|---|-----|-----|-----|-----|-----|------|-----------|-----|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.5 |
| | 0 | 1 | 0 | 0 | 0.1 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.5 |
| | 1 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.5 |
| | 1 | 1 | 1 | 1 | 0.2 | 0 | 1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0 | 0.5 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0 | 0.5 |
| | 0 | 1 | 0 | 0 | 0.2 | 0 | 0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0 | 0.5 |
| | 1 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0 | 0.5 |
| | 1 | 1 | 1 | 1 | 0.4 | 0 | 1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0 | 0.5 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 |
| | 0 | 1 | 0 | 0 | 0.3 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 |
| | 1 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 |
| | 1 | 1 | 1 | 1 | 0.6 | 1 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 |

| OR GATE | | | | | | | | | | | | | | |
|---------|----|----|---|-----|---|---|-----|-----|-----|-----|-----|------|-----------|-----|
| S | X1 | X2 | Z | K | Y | D | W1I | W2I | W1F | W2F | a | bias | threshold | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.5 |
| | 0 | 1 | 1 | 0.1 | 0 | 1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0 | 0.5 | |
| | 1 | 0 | 1 | 0.2 | 0 | 1 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0 | 0.5 | |
| | 1 | 1 | 1 | 0.6 | 1 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 | |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.1 | 0 | 0.5 | |
| | 0 | 1 | 1 | 0.3 | 0 | 1 | 0.3 | 0.3 | 0.4 | 0.4 | 0.1 | 0 | 0.5 | |
| | 1 | 0 | 1 | 0.4 | 0 | 1 | 0.4 | 0.4 | 0.5 | 0.5 | 0.1 | 0 | 0.5 | |
| | 1 | 1 | 1 | 1 | 1 | 0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.1 | 0 | 0.5 | |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.1 | 0 | 0.5 | |
| | 0 | 1 | 1 | 0.5 | 0 | 1 | 0.5 | 0.5 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| | 1 | 0 | 1 | 0.6 | 1 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| | 1 | 1 | 1 | 1.2 | 1 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| | 0 | 1 | 1 | 0.6 | 1 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| | 1 | 0 | 1 | 0.6 | 1 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |
| | 1 | 1 | 1 | 1.2 | 1 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.1 | 0 | 0.5 | |

| S | NAND Gate | | | | | | | | | | a | bias | threshold |
|---|-----------|----|---|-----|---|----|------|------|------|------|-----|------|-----------|
| | X1 | X2 | Z | K | Y | D | W1I | W2I | W1F | W2F | | | |
| 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 1.1 | 1 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 1.1 | 1 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 1.2 | 1 | -1 | 0.1 | 0.1 | 0 | 0 | 0.1 | 1 | 0.5 |
| 2 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 1 | 1 | -1 | 0 | 0 | -0.1 | -0.1 | 0.1 | 1 | 0.5 |
| 3 | 0 | 0 | 1 | 1 | 1 | 0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.9 | 1 | 0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.9 | 1 | 0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.8 | 1 | -1 | -0.1 | -0.1 | -0.2 | -0.2 | 0.1 | 1 | 0.5 |
| 4 | 0 | 0 | 1 | 1 | 1 | 0 | -0.2 | -0.2 | -0.2 | -0.2 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.8 | 1 | 0 | -0.2 | -0.2 | -0.2 | -0.2 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.8 | 1 | 0 | -0.2 | -0.2 | -0.2 | -0.2 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.6 | 1 | -1 | -0.2 | -0.2 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| 5 | 0 | 0 | 1 | 1 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.4 | 0 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| 6 | 0 | 0 | 1 | 1 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.4 | 0 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| 7 | 0 | 0 | 1 | 1 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.4 | 0 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| 8 | 0 | 0 | 1 | 1 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 0 | 1 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 0 | 1 | 0.7 | 1 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |
| | 1 | 1 | 0 | 0.4 | 0 | 0 | -0.3 | -0.3 | -0.3 | -0.3 | 0.1 | 1 | 0.5 |