

32-1 1 bit muxxer

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|-----------|---------------------------|
| 🕒 Created | @October 6, 2024 10:13 PM |
| 🏷️ Tags | |
| 🌟 Status | Not started |

32-to-1 1-Bit Multiplexer Truth Table

| S4 | S3 | S2 | S1 | S0 | Selected Input | Y (Output) |
|----|----|----|----|----|----------------|------------|
| 0 | 0 | 0 | 0 | 0 | I_0 | I_0 |
| 0 | 0 | 0 | 0 | 1 | I_1 | I_1 |
| 0 | 0 | 0 | 1 | 0 | I_2 | I_2 |
| 0 | 0 | 0 | 1 | 1 | I_3 | I_3 |
| 0 | 0 | 1 | 0 | 0 | I_4 | I_4 |
| 0 | 0 | 1 | 0 | 1 | I_5 | I_5 |
| 0 | 0 | 1 | 1 | 0 | I_6 | I_6 |
| 0 | 0 | 1 | 1 | 1 | I_7 | I_7 |
| 0 | 1 | 0 | 0 | 0 | I_8 | I_8 |
| 0 | 1 | 0 | 0 | 1 | I_9 | I_9 |
| 0 | 1 | 0 | 1 | 0 | I_{10} | I_{10} |
| 0 | 1 | 0 | 1 | 1 | I_{11} | I_{11} |
| 0 | 1 | 1 | 0 | 0 | I_{12} | I_{12} |
| 0 | 1 | 1 | 0 | 1 | I_{13} | I_{13} |
| 0 | 1 | 1 | 1 | 0 | I_{14} | I_{14} |
| 0 | 1 | 1 | 1 | 1 | I_{15} | I_{15} |
| 1 | 0 | 0 | 0 | 0 | I_{16} | I_{16} |
| 1 | 0 | 0 | 0 | 1 | I_{17} | I_{17} |
| 1 | 0 | 0 | 1 | 0 | I_{18} | I_{18} |
| 1 | 0 | 0 | 1 | 1 | I_{19} | I_{19} |
| 1 | 0 | 1 | 0 | 0 | I_{20} | I_{20} |
| 1 | 0 | 1 | 0 | 1 | I_{21} | I_{21} |
| 1 | 0 | 1 | 1 | 0 | I_{22} | I_{22} |
| 1 | 0 | 1 | 1 | 1 | I_{23} | I_{23} |
| 1 | 1 | 0 | 0 | 0 | I_{24} | I_{24} |
| 1 | 1 | 0 | 0 | 1 | I_{25} | I_{25} |
| 1 | 1 | 0 | 1 | 0 | I_{26} | I_{26} |
| 1 | 1 | 0 | 1 | 1 | I_{27} | I_{27} |
| 1 | 1 | 1 | 0 | 0 | I_{28} | I_{28} |

| | | | | | | |
|---|---|---|---|---|----------|----------|
| 1 | 1 | 1 | 0 | 1 | I_{29} | I_{29} |
| 1 | 1 | 1 | 1 | 0 | I_{30} | I_{30} |
| 1 | 1 | 1 | 1 | 1 | I_{31} | I_{31} |