|  |  |  |  |
| --- | --- | --- | --- |
| Cases | I0 | I1 | S |
| A | 00000001010101001101000101010000 | 11111111111111110000000000000000 | 0 |
| B | 00000001010101001101000101010000 | 11111111111111110000000000000000 | 1 |
| Cases | Y |
| A | 00000001010101001101000101010000 |
| B | 11111111111111110000000000000000 |

The CPU 2 to 32 Multiplexer takes in 2 32 bit values and outputs the input A if S = 0 and outputs the input B if S = 1.