|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Inputs | | | Output |
| Cases | In0 | In1 | Sel |  |
| A | 11111111111111111 | 10101010101010101 | 0 | 11111111111111111 |
| B | 11111111111111111 | 10101010101010101 | 1 | 10101010101010101 |

The 2 to 17 bit multiplexer takes in two 17-bit values and outputs In0 when Sel = 0 and outputs In1 when Sel = 1.

This was made by instantiating 17 2 to 1 bit multiplexers