|  |  |  |  |
| --- | --- | --- | --- |
| Cases | S1 | S2 | Y |
| A | 1 | 0 | I0 |
| B | 0 | 1 | I1 |

The C Flag multiplexer outputs I0 when S1 = 1 and I1 when S2 = 1. This is used in the DP Shifter to output the correct bit, either bit 0 or bit 31 of the input depending on if it is being shifted left or right.