|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Inputs | | | | | | | | | Output |
| Cases | C Flag | Reset C | V Flag | Reset V | N Flag | Reset N | Z Flag | Reset Z | LoadFlags | Status Vector |
| A | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1111 |
| B | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1/0 | 1110 |
| C | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1/0 | 1100 |
| D | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1/0 | 1000 |
| E | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1/0 | 0000 |

On rising edge of Clock

The inputs each represent a different flag relating to binary operations, which are inputted into D Flip Flops are outputted when the LoadFlags signal = 1.

The flags can be individually reset using the corresponding reset signal, which resets their values in the output to 0.