|  |  |
| --- | --- |
| Input | Output |
| SB | MuxB |
| 11111 | 00000000000000000000000000011111 |

Zero Fill takes in the SB signal from the Instance Register and converts it from a 5-bit binary number to a 32-bit binary number by filling the remaining 27 digits before SB with 0 in order to fit the 32-bit input of IR\_IN for the Datapath.