**Flag Logic - FIFO**

There are few pins required for the flag logic as follows:

Status flags:

Flags such as FULL, EMPTY, HALF FULL, ALMOST FULL, ALMOST EMPTY are used to determine the FIFO status. These flags are generated by comparing the values in the read or write operation performed on the FIFO. The flag logic in the FIFO also inhibits reading from an empty FIFO and writing to a full FIFO.

Full FIFO Status :

This is a status signal that tries to notify full status of the memory array it is checked along with write \_request signal before asserting the w\_enable signal.

Half \_FIFO\_status:

This is a status signal that tries to notify if the memory array is half filled. The limit that tells if the memory array is filled upto half of its limit .

Empty\_FIFO\_status:

This status signal tries to notify the empty status of the memory array of r\_enable signal .Only after checking this signal along with the read request signal ,reading operation will be not perform as FIFO is empty.

Reset:

On the reset both pointers (read and write ) are initialized to zero.

Diagram of fIFO flag logic :

