

Ready -

It is an acknowledgement signal from I/O devices that data is transferred. When it is high, it indicates that the device is ready to transfer data.

Reset -

It is used to restart the execution. It causes the processor to immediately terminate its present activity.

INTR -

It is an interrupt request signal.

INTA -

It is an interrupt acknowledgement signal.

NMI -

[Non-maskable interrupt]

It is an edge triggered input which causes an interrupt request to the microprocessor.

## (ii) Flag Register -

A flag is a flip-flop which indicates some conditions which arises after the execution of an arithmetic or logical instruction. It is an 8-bit register.

It has five status flags -

- (a) Carry flag (CS)
- (b) Parity flag (P)
- (c) Auxiliary carry flag (AC)
- (d) Zero flag (Z)
- (e) Sign flag (S)

