

Section-10

Q1 write the function of magnitude comparator.

Ans A comparator used to compare two bits, i.e., two numbers each of single bit is called a single bit comparator. It consists of two inputs and following outputs: two single bit numbers are there three outputs to generate less than, equal, and greater than comparison outputs.

The figure below shows the block diagram. A digital comparator or magnitude comparator is a hardware electronic device that takes two numbers as input in binary form and determines whether one number is greater than, less than or equal to the other number. Comparators are used in central processing units (CPUs) and microcontroller (MCUs).

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The analog equivalent of digital comparator is the voltage comparator. Many microcontrollers have analog comparators on some of their inputs that can be read or trigger an interrupt.