



#### Requirements:-

The system application consists of a 4 -digit 7 segment display which is shared between 2 independent processors. The high priority processor has its own display content with control and data lines (12 pins) and MSP430 also has its own display contents with its own control and data lines. The need is to hack the display by MSP430 for a moment and then to release the display data and control lines to the high priority processor.

Hence need to design a interface logic which consist of buffers or multiplexers with least pin counts so as to accommodate the design using MSP430 value line series.