

Class Project

CMPE310, April 11th, 2008

Design a Digital Clock:

Use : 8086 in minimum mode, 8279 to interface keyboard and display and 8254 for keeping time (second, minute and hour) and also date (mm/dd/yyyy). Display of the clock will be a 16 digit display the will show : mm.dd.yyyy(space) hour(space) minute.second (assume that seven segments will have a dot ).

User should be able to set the date and time through the keyboard. Clearly state the your assumptions about the addresses of each of the devices you use and employ a programmable device as address decoder (write the logic equations that needs to be programmed into this device).

Draw a clear schematic for the circuit (preferably use a software ..). Write the codes for programming each of the ICs. Write the codes for each of the procedures required.