Laboratory #12 Pre-lab

Class:

Name: Student ID:

1. Problem 1 (Datasheet reading)

Download the datasheet of 74HC08 IC (the website is listed in Ref [2]), then read and answer the following questions:

1. What’s the range of supply voltage?
2. What’s the Boolean function?
3. Problem 2 (Operation Analysis)

According to Fig. 12.6, please briefly explain the operation of D flip flop. And then, please plot the output (Q) waveform of D flip flop based on the below figure.



1. Problem 3 (Datasheet reading)

Download the datasheet of 74LS163 IC (the website is listed in Ref [3]), then read and answer the following questions:

1. What’s the range of supply voltage?
2. What’s the function of pin1~pin16?