

CS 362: Computer Design

HOMEWORK – 4

Due: Thursday 6th November 2014

Q1) The following stream of data is to be transmitted by USB:

01111111001000000001101110000011

- a) Assuming bit stuffing is not used, sketch the NRZI waveform.
- b) Modify the stream applying bit stuffing.
- c) Sketch the NRZI waveform for the result in (b).

Q2) The 8 bit ASCII word “Bye” is to be transmitted to a device address 39 and endpoint 2. List the Output and Data 0 packets and the Handshake packet for a Stall for this transmission prior to NRZI encoding.

Q3) List the differences between I2C and USB. Give Strengths and Weaknesses.