CS120B – Homework #3
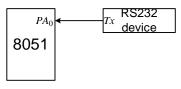
Given August 23, 2002. Due August 28, 2002 at the beginning of class.

1. Write about the I2C protocol in your own words. It must be typed written and about 500 words in length. Remember to include all your references. (5)

2. A RS232 device is sending a signal to the 8051 as shown in the figure. Assume that a **for** loop that counts to 100 is equivalent to one bit time. Also assume that the timing for one pseudo code statement is equivalent to one count of the **for** loop. Write a segment of code that waits for the start bit and then reads in the next 8 data bits, MSB first. Reading of the data bits must occur at the middle of each bit time. Finally the 8 data bits are stored in the variable "**data**." (5)