## SANTA CLARA UNIVERSITY Electrical and Computer Engineering Department

Real-Time Embedded Systems - ECEN 121 Lab 7

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## **USB Mouse**

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## Pre Lab:

Read the STM32Cube USB host library manual.

1) When using a basic mouse as an HID class device, how many device endpoints are used and what are they called?

There are two endpoints; the control endpoint and the interrupt (data) endpoint.

2) What is the format of the data structure used to report mouse motion and button information?

The data structure is a struct that has an 8-bit int x,y, and array [3] for the buttons.

- 3) What function is used to get this data about mouse motion and button information? USBH\_HID\_GetMouseInfo
- 4) What source code file includes the HID mouse subclass handler? usbh\_hid\_mouse.c
- 5) How many total USB pipes are supported by this library without modification?

15

6) Does the existing USB library support USB hubs?

NAH