

# Connecting a mouse to the LPC-4088

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## Overview:

Our idea is to be able to use a computer mouse as a peripheral to the LPC4088 Dev-kit. Currently there is a keyboard host example C code, but there is little for the mouse. The mouse movement will be displayed on a 8x8 LED. One LED light will display the sensitivity of mouse sensor. The LED dot will move accordly to the mouse sensor directional inputs and speed of the movement.

## Peripherals:

- One red 8x8 LED board
- One computer mouse
- Breadboard, etc

## Software Design

We will need to code a file to be able to accept the mouse as a valid peripheral, similar to the keyboardhost.c file that is available in the library. Then we possibly need to code the 8x8 LED board to act as a screen where the mouse cursor can then move around. If we manage to obtain the information of the mouse's movement when we make the mouse host file, we will also send the data of the mouse's velocity to a UART everytime the mouse moves.

## Goals:

1. Enable the mouse to be connected to the board and function.
2. Use the LED board as a screen and have the mouse function there.
3. Get data from mouse and cast it to Termit.

## Group Responsibilities:

We will both study the pre-existing keyboard host file to modify it so that a mouse can work when connected to the LPC-4088. Anthony will work on making the LED board a screen for the mouse while Amber will grab the mouse's data and send it to UART.