

MEMORANDUM

To: Charlie Refvem

crefvem@calpoly.edu

From: Rees Verleur Jack Ellsworth

rverleur@calpoly.edu gjellswo@calpoly.edu

Group: Hippotronics **Date:** May 30, 2023

RE: Lab 4: Read Sensor Input

We created a driver class for the Pixy2 camera module which allows for easy communication over an SPI connection.

To demonstrate the functionality of this driver we created an example program which queries the camera to find the position of a red ping-pong ball and prints out the result over a UART interface to Putty. We recorded a demonstration of this functionality where the camera is rotated left/right and up/down and the resulting position readout can be seen on the screen. This video is attached as 2023_05_30_HIPPOTRONICS_LAB4_VIDEO.mp4.

The code is fully commented but does not include doxygen comments because we were not sure how to properly implement them within the structure of our class.