Delta Robotics Embedded Software

The software needs to loop through muscle control functions, sensor reading functions, and comms with the local system of muscles. One of these muscles (and/or a master controller developed later) needs to facilitate instructions to the others.

General Controller Functionality:

1. Receive command instructions from master
2. Respond to commands with appropriate data
3. Perform PID on the muscle in the correct operating mode
4. Raise flags for errors/warnings with the system. Appropriately halt operation if necessary.

Master Controller Functionality:

1. Act as the hardware layer below the ThermaFlex API to facilitate the delivery of commands to the CAN network of slave muscle controllers.

Master Commands: