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I ordered the navigational sensors and servos. I decided to purchase an IMU instead of a compass or gyroscope, the combination of sensors may be useful to help the robot interpolate its motion between the increments of measurement given by the sonars. After discussing navigational correction with my TA, I've decided that my first attempted technique will be a PD method. I sketched several possible ideas for the chassis. I discovered that my board has 2 PRUs, which appear to be analogous to built in microcontrollers.

Commentary on Laboratory

In the lab, I experimented with controlling servo position based on an analog sensor's output. I discovered that when running loops with PWM output commands, it was necessary (on my hardware, at least) to introduce a delay. Without one, it appeared that the PWM signal was interrupted, and thus the servo didn't function. I suspect that this is related to the fact that my board is a microprocessor, rather than a microcontroller, and will keep this result in mind when adapting code from other hardware.