Final Project Progress Report (EE4735)

Project Title: Hallway Navi Bot

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Submission Date: August 5th 2015

Hallway Navi Bot

Tasks Completed:

- Sensor calibration and implementation with MSP430 done.
- Checked all three sensors on oscilloscope and MSP430 which shows correct sensing of distance. Pulse width code to detect ultrasonic sensor output works.
- Timer B is used for trigger generation for ultrasonic sensors in UP mode.
- Time A in continuous mode is used to capture ultrasonic sensor outputs for 2 sensors on channel 0 and channel 1.

In process:

- Several iterations in algorithm were tested to navigate the robot between parallel walls of empty hallway using a single sensor.

Next Steps:

- Add second sensor and modify/improve logic to navigate in parallel walls.
- Next step is successful navigation in empty hallway.
- Think about obstacle avoiding logic and implement in above algorithm.

Circuit Block Diagram: