Current Setup

Arduino Uno

wheelSpeedSketch:

WheelSpeedLibrary

Arduino Uno

servoPotHandlebar:

servoLibrary

I2C

Original New Plan

Arduino 101

wheelSpeedSketch:

WheelSpeedLibrary

AccelSpeedLibrary

Arduino Uno

PotHandlebar:

servoLibrary

I2C

New Plan

Arduino Uno

wheelSpeedSketch (reads magnet sensor and calculates speed of all the wheels):

WheelSpeedLibrary

Arduino 101

AccelMaster (calculates true velocity and PID control for ABS braking):

AccelSpeedLibrary

I2C

Wheel Speeds

Braking Amount

Arduino Uno

servoControllerSketch (controls motor signal) :

servoLibrary