PIDController.h File Reference

Header for a class that implements a PID Controller. More...

#include <stdint.h>

Go to the source code of this file.

Classes

class

PIDController

Class that implements a PID Controller. More...

Detailed Description

Header for a class that implements a PID Controller.

This class allows the user to implement a PID Controller. It is given a setpoint, low saturation, high saturation, and Kp, Ki, and Kd gain values. In addition to providing PID output, the class accounts for integral windup by disabling the integral term if the output is determined as saturated. The class can also serve as a P-Only, PI, or PD controller by setting the appropriate gains to 0, although this does result in some unnecessary calculations.

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