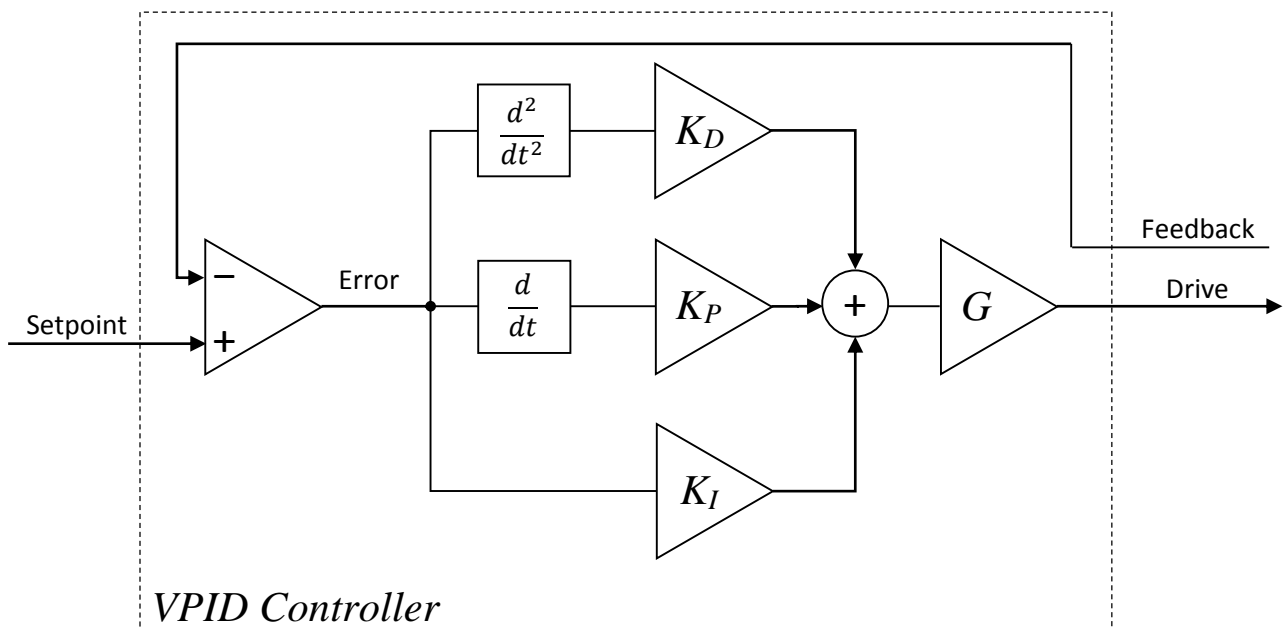


VPID Algorithm Control Flow Diagram



The VPID algorithm implements a generic “velocity”-type PID controller. This is similar to the standard PID controller except the derivative of the error plays the role normally played by the plain error. This alteration prevents integrator wind-up in the VPID controller. The “G” term provides the advantage of increasing the dynamic range of the algorithm making it more flexible for a broad range of applications. It also provides a single point of adjustment when it is desired to change the gain of the control loop without changing the frequency response.