Automated car seed limiter for cars with electronic fuel pedal

Abstract

With increasing of road network and vehicle's specification, most of new vehicles will be driven exceeding the posted speed limit. More than half of the fatalities in motor vehicle accidents have been proved to be due to over speeding. To improve the safety of cars EURONCAP (European New Car Assessment Program) has a safety rating category that rewards manufacturers for the fitment of electronic stability control. In this paper, we describe the method of using a Microcontroller to Monitor and Reduce the Speed of Cars with electronic fuel pedals. We propose a continuous monitoring method based on speedometer feedback and then vary the input from the cars fuel pedal input that is going into the Electronic Control Unit (ECU) to reduce the cars' speed. A conceptual model was built to demonstrate the concept using a PIC18 Microcontroller. The fuel pedal is also known as Electronic Throttle Controller (ETC).