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| **Abstract:** |  |
| Abstract— This paper reports a microcontroller-based control system to change the speed and direction of rotation of a DC motor. Armature voltage is varied by pulse width modulation (PWM) of input DC voltage by using the developed microcontroller's program. Thus, the speed of the DC motor is changed. The direction of rotation of the DC motor is changed by initiating an interrupt signal to the microcontroller using push switches. To drive the DC motor, a four-channel monolithic integrated buffer circuit was used. PCB of the control circuit has also been designed and fabricated. Test data shows very good agreement with the expected results. | |