Abstract

This paper considers the Pulse Width Modulation (PWM), the internal module of ARM7 based microcontroller i.e. LPC2148 designed by NXP (founded by Philips), to study the illumination of a White LED down panel. This paper also shows the effect of PWM implementation on the White LED down panel using the internal module and the general purpose input output (GPIO) pins of LPC2148 microcontroller and compares both PWM implementations on the White LED down panel. They have discussed the effects of PWM waveform controlling the White LED down panel using different intermediate modules like without any LED driver, BJT transistors, relays and current driver IC (ULN2003) connected between the LPC2148 microcontroller and the White LED down panel. The comparison between the different intermediate modules that considered, are analyzed their influences on the White LED down panel.
PWM Strategies in 32-Bit Microcontroller for Interior White LED Down Panel

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Index Terms

Computer Science
Circuit And Systems
Keywords
ARM7   LPC2148   White LED down panel   Pulse Width Modulation   LED down panel drivers