

LED DRIVING CIRCUITS FOR LUMINOUS FLUX CONTROL

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ABSTRACT *Many contemporary LED lamp applications offer the possibility of brightness control. Specialized controllers have to stabilize the luminance flux of LED the lamp at ordered level or change its value according to the selected algorithm. The classical controller uses the feedback to compare current value of controlled quantity with its ordered value. But the properties of LED devices allow to control the luminous flux open loop system. That simplified control technique can be matched to the applied LED driving circuit. The article contains some examples of realizations, using digital technique, especially microcontrollers, FPGA devices and specialized integrated drivers. The features of each realization are pointed, too.*

Keywords: *LED driving circuits, PWM control, constant-current LED driving, microcontrollers*