ETSIOT01419 - Energy Efficient Embedded Systems for LED Lighting Control in Traffic

Abstract:- The paper considers, proposes and describes possibilities and ways for application, design and implementation of energy efficient microprocessor based embedded systems for LED lighting control in the traffic. Using LED lighting technology and appropriate designed embedded systems it is possible to implement very efficient and smart systems for very wide range of applications in the traffic. This type of systems can be widely used in many places in the traffic where there is needed quality lighting and low energy consumption. Application of such systems enables to increase energy consumption efficiency, quality of lighting and security of traffic and to decrease total costs for the lighting. Way of design and use of such digital embedded system to effectively increase functionality and efficiency of lighting in the traffic is proposed and described. It is also proposed and described one practically designed and implemented simple and universal embedded system for LED lighting control for many applications in the traffic.

Keywords:- LED technology; LED lighting; energy efficiency; microprocessor based embedded systems; lighting control in traffic