

Search



Paper Titles



A Kind of Traffic Light Controller Simulation Design



Abstract:



With traffic problems becoming more prominent issues, directing traffic is no longer can be solved relying solely on human effort. Therefore, the design of traffic lights to complete this demand has become increasingly urgent. In order to ensure vehicular and pedestrian traffic at the crossroads of the smooth, clear through, electronic traffic signal control command is often used. This article describes the use of digital circuits to achieve the design of traffic lights. The paper first describes the design principles of traffic lights and the total circuits, all units were introduced in the total circuits, the final design of the circuit diagram of the test simulation. Simulation results from the experiment can be seen in this article the design of the circuit can be achieved on the control of traffic lights, and simple method for the design of traffic signal controller to provide a certain degree of meaningful research.

Info:

Periodical:	Advanced Materials Research (Volume 852)
Main Theme:	Material Science and Advanced Technologies in Manufacturing
Edited by:	David M. Batisdas and Alexander Bagatur'yants
Pages:	342-346
DOI:	https://doi.org/10.4028/www.scientific.net/AMR.852.342
Citation:	C. H. Yang, "A Kind of Traffic Light Controller Simulation Design", <i>Advanced Materials Research</i> , Vol. 852, pp. 342-346, 2014
Online since:	January 2014
Authors:	Cheng Hui Yang
Keywords:	Controller , Digital Circuits , Electronics Workbench , Traffic Lights
Export:	RIS , BibTeX
Price:	36,00 €
Permissions:	Request Permissions

Share:

[References >](#)

[Cited by >](#)

[Related Articles >](#)

[DISTRIBUTION & ACCESS](#)

[FOR PUBLICATION](#)

[SUPPLEMENTS](#)

[ABOUT US](#)

[POLICY & ETHICS](#)

[CONTACT US](#)

[IMPRINT & PRIVACY POLICY](#)

[SITEMAP](#)

Scientific.Net is a registered brand of Trans Tech Publications Inc
© 2019 by Trans Tech Publications Inc. All Rights Reserved

• Design, simulate, and program a traffic-light controller using VHDL. Lab Reference. Equipment Required. • Dueck, Robert K., Digital Design with CPLD Applications and VHDL, 2/e • o Chapter 10: State Machine Design. 10.3 State Machines With Control Inputs. Creating a Traffic Light Controller in VHDL 1. Create a VHDL file to implement the traffic controller state diagram shown in Figure 30.1, combined with the mod-5 cycle timer, but not the clock divider. The individual modules a [redacted] ard [redacted] st all be done in VHDL. 2. Create a simulation that shows the combined operation of the output c [redacted] . 2. 2. clock divider to the VHDL file for the traffic controller, as shown on the logic diagram of Figure 30.2.