Abstract

In general all road traffic control system employed a variety of microcontroller based designs with added peripherals in order to perform control and timing management of traffic lights. The objective of this paper is to design an Application Specific Integrated Circuit (ASIC) for a road traffic light control and manage traffic light's timing in accordance with time of the day or any special occasion and also be set manually. The VHSIC (Very High Speed Integrated Circuit) HDL (Hardware Description Language) or VHDL has been used as a programming language. ASIC reduces the system cost, area, power consumption and also well defined operational modes and timing management flexibility.
References

- ‘Practical Design of ASIC’, Edinburg Napier University, United Kingdom.

Index Terms

Computer Science  Circuits And Systems

Keywords

Asic  Vhdl  Traffic Light Control  Real Time Clock  Clock Divider  Clock Distributor

Straight Traffic

Crossed Traffic.