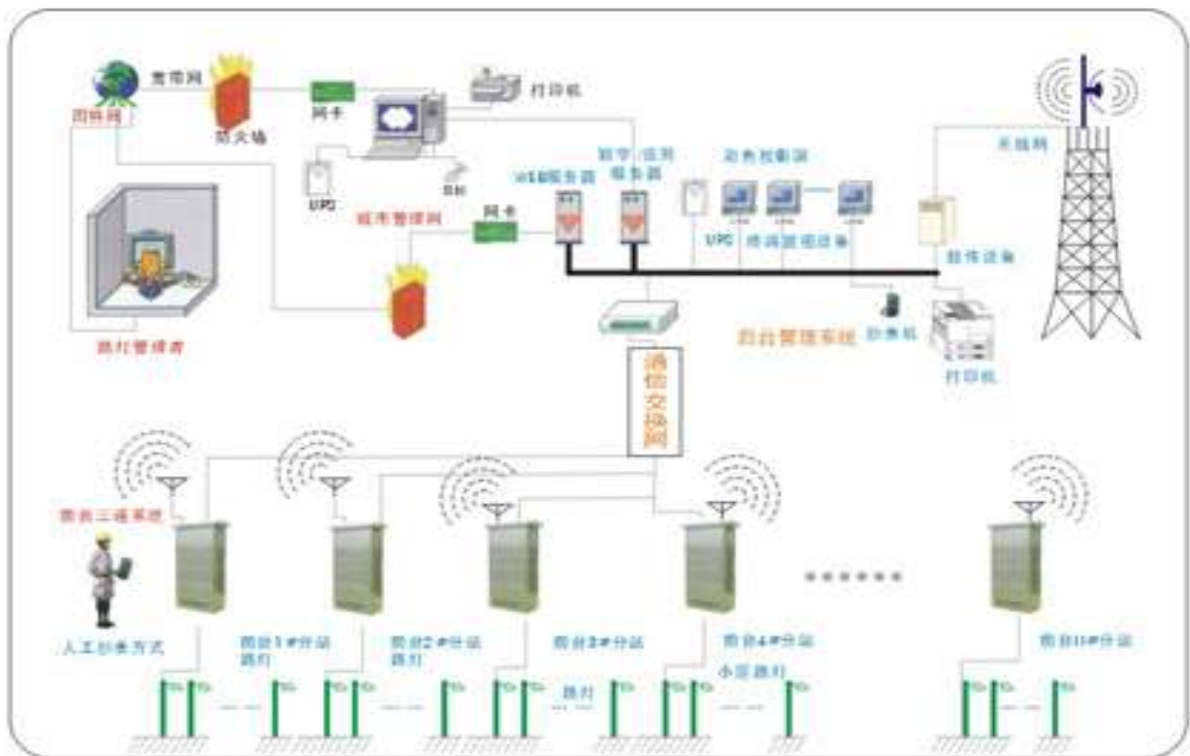


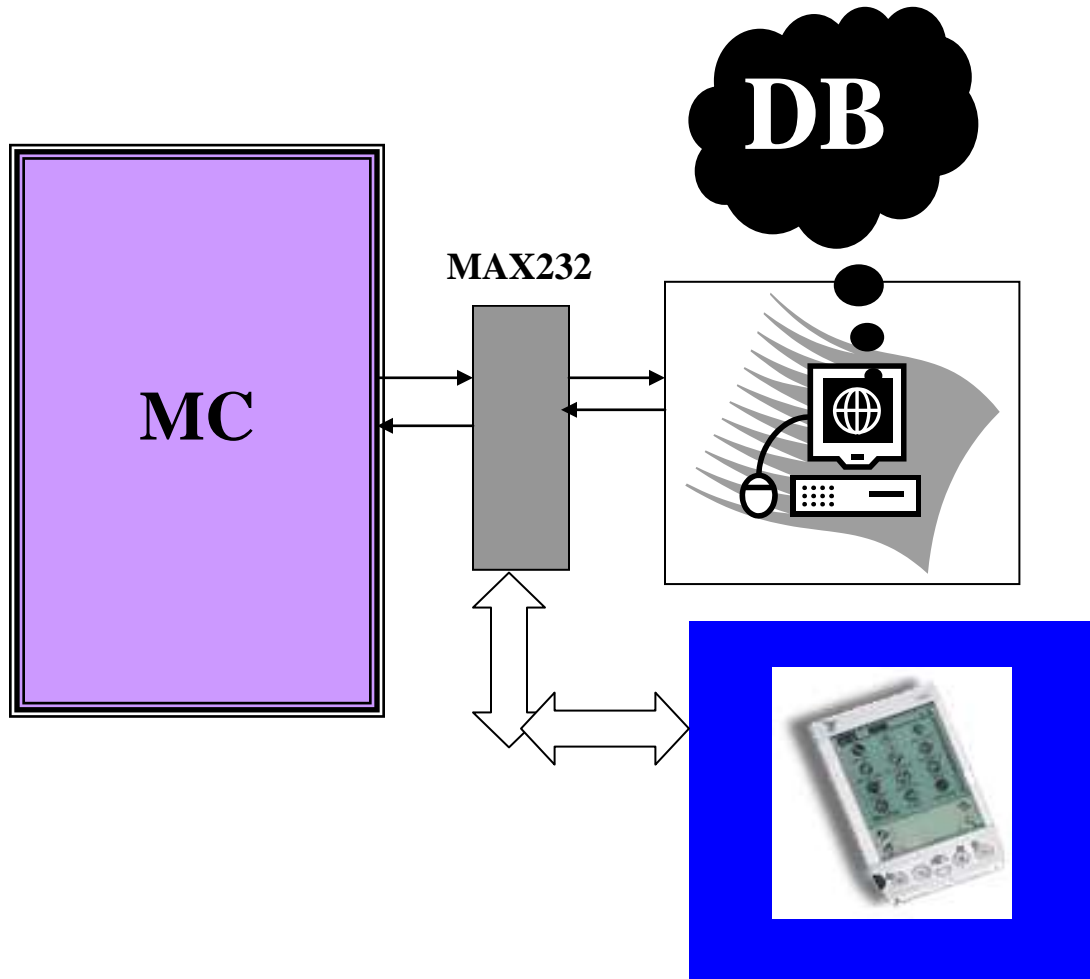
GSM Real Time Street Light Control Systems

Abstract-

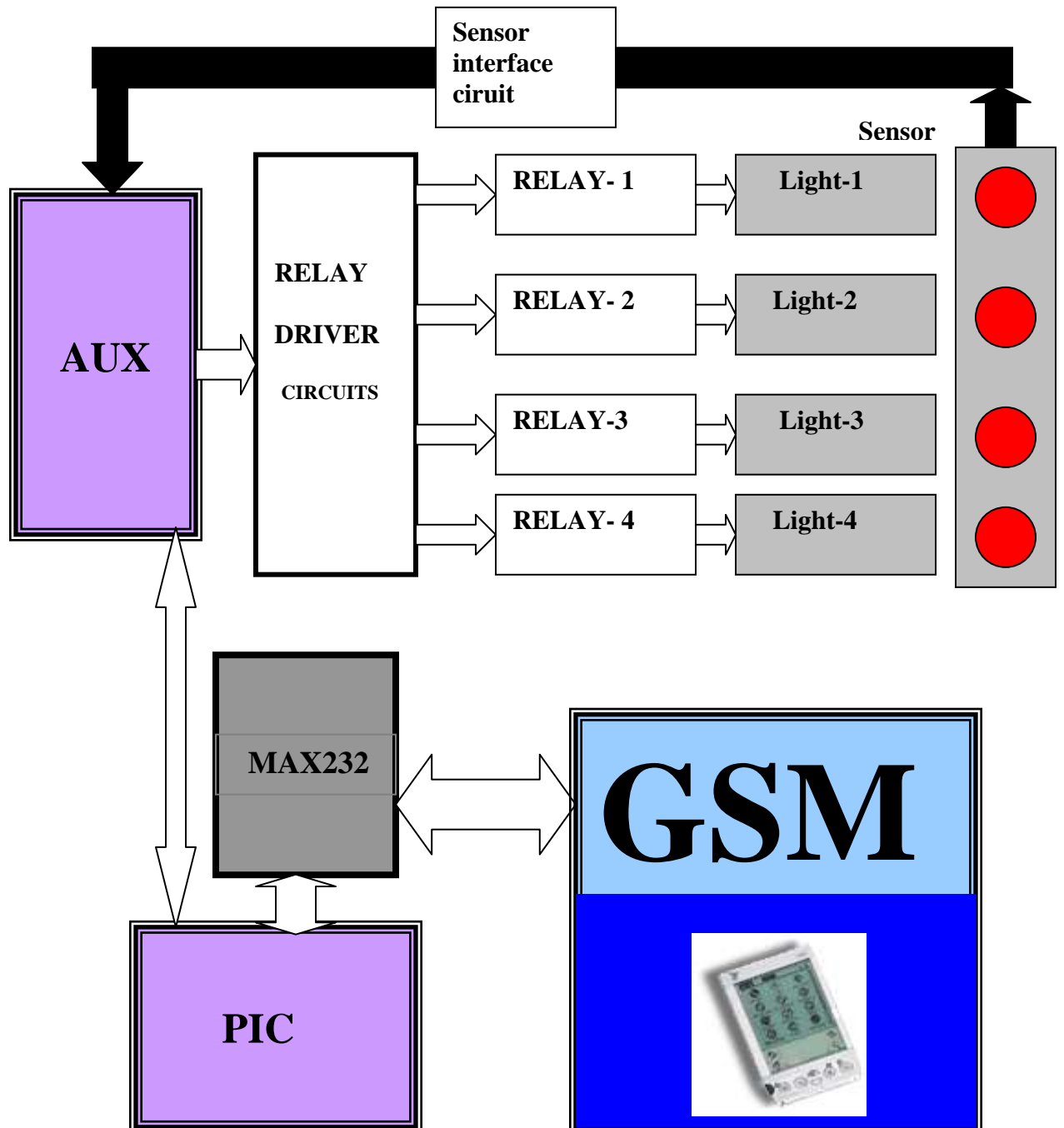
The remote streetlight monitoring and control system has been applied in urban streetlight. In general, this system monitoring and control scope only reaches the streetlight transformer station. In this work, an experimental system of wireless sensor network was developed to study the feasibility for streetlight monitoring and control system. This system consists of the sensor node, the remote terminal unit and the control center. The sensor node was installed at each lamp pole and used to detect and control lamp. The remote terminal unit serves as relay station between the control center and the sensor nodes. The control center monitor and control all streetlight real time. The hardware of sensor node and remote terminal unit was design. The software was developed for sensor node, remote terminal unit and the control center. The multi-hop used in nodes. The test results show that the system can be used for the streetlight control. The system application in streetlight can extend control scope to each lamp, reduce in streetlight electricity and maintenance cost, and increase availability of streetlight.



GSM PC Data Base Module:



Master Control System



Description:

This Monitoring and Control system having three different modules,

- 1) Controller for RF and Machine
- 2) GSM
- 3) PC -Data Base Storage System

1) Controller for RF and Relays

This is divided into two different modules,

- a) Serial Communication
- b) Driver for four Relay control
- c) RF Communication

2) PC:

This is divided into three modules,

- a) RS232 communication(Serial Communication)
- b) Display module
- c) Data Base Storage System

3) GSM

- a) GSM communication technique is used for long range communication by SMS.
- b) The long range communication is utilized between main-server and sub-server.

Advantage of these Systems:

- 1) Automation of all Street Light through remote place using mobile
- 2) Save Energy using automatic control systems
- 3) Less cost to communicate
- 4) Less power to automate

Feature of these system:

- 1) To automate Street Light error testing and debugging through mobile via SMS Communication.
- 2) Secure this system through GSM technologies. (To read the data from your mobile)