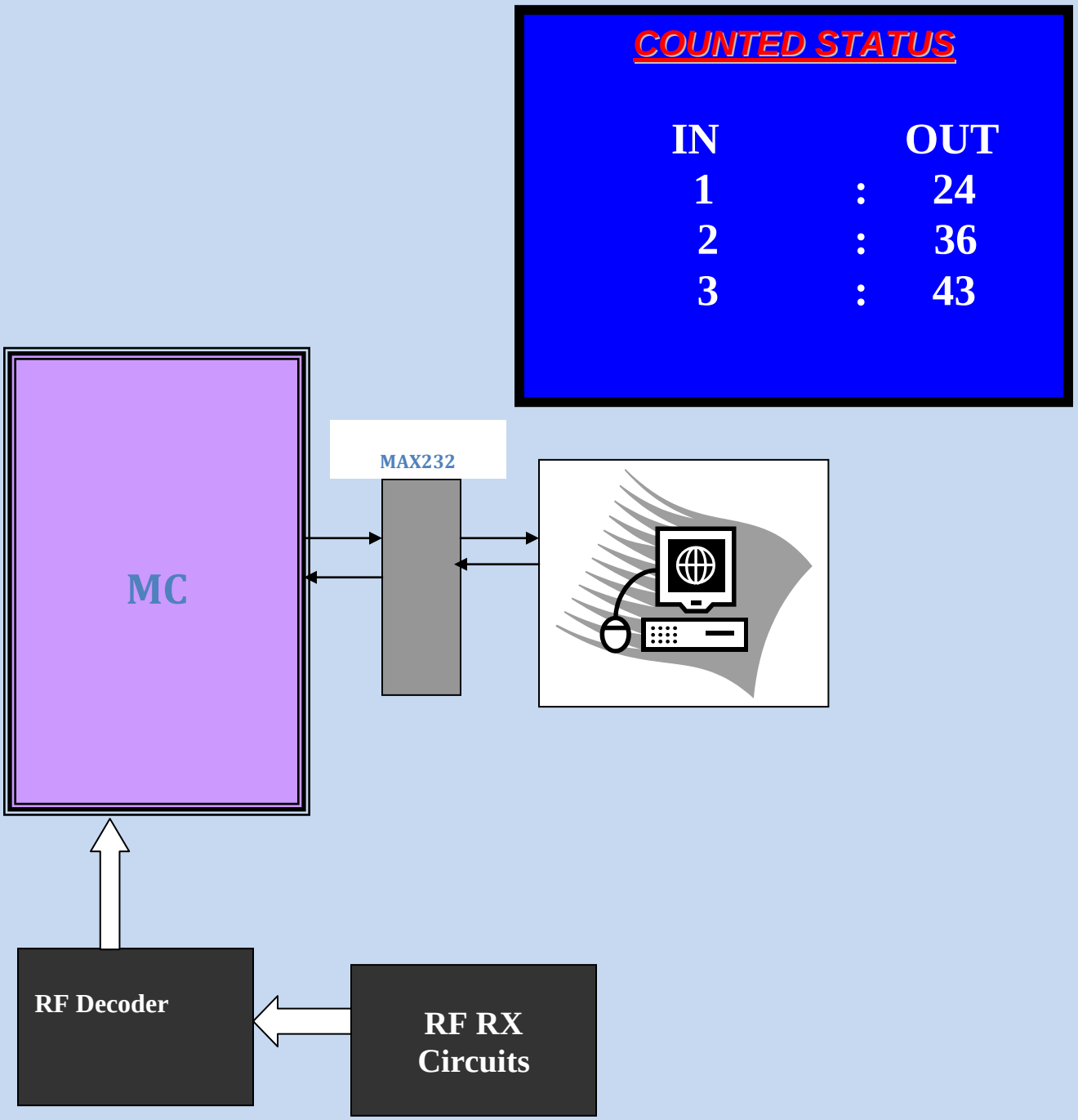
WIRELESS OBJECT DETECTION AND COUNTING MANAGEMENT SYSTEM

Abstract:

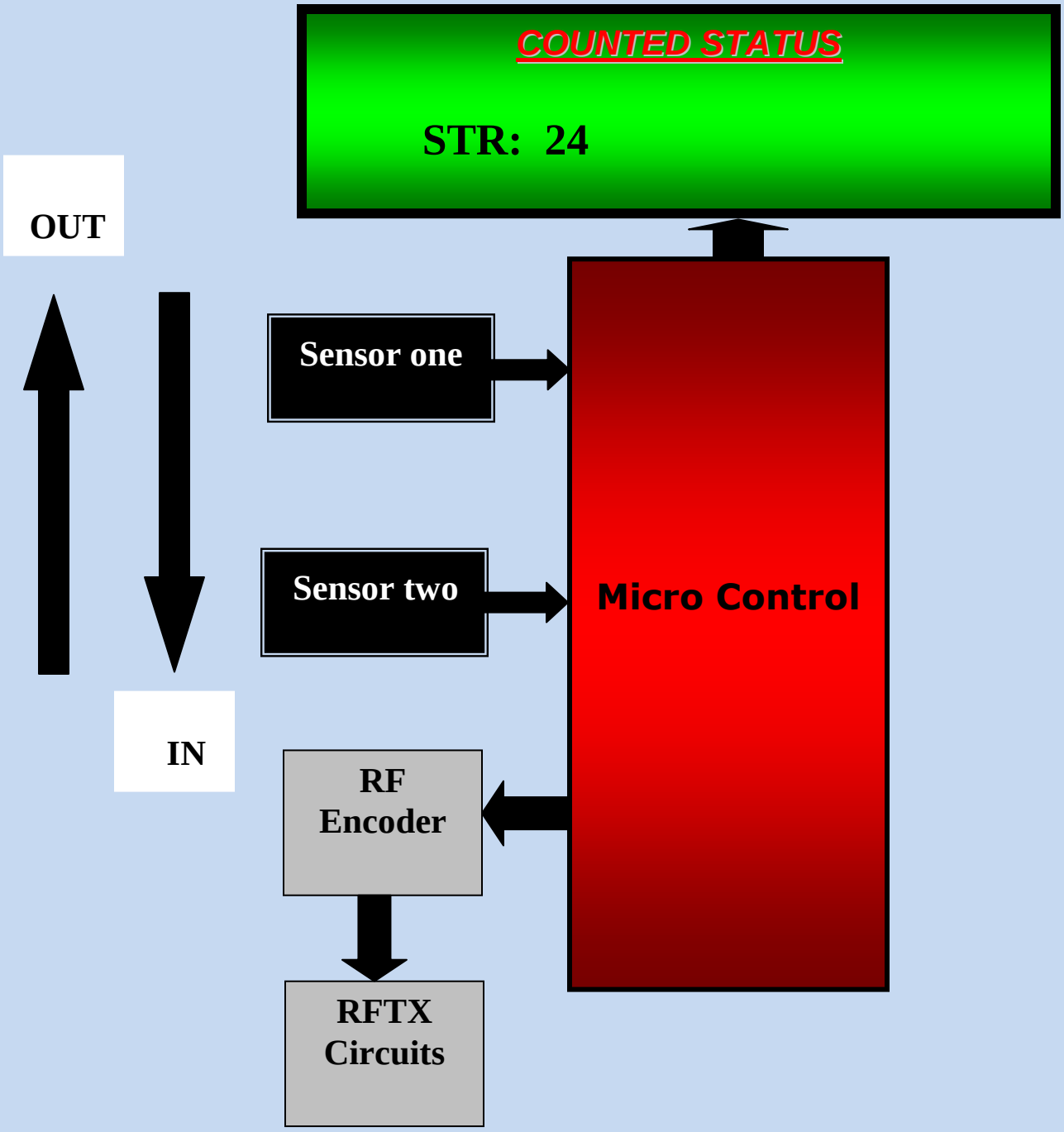
Now-a-days intelligent automation has stepped its presence in every field all over the world. Our project has a stepping in the wireless detection and counting using IR proximity sensor. The use of low cost technologies for highly reliable applications with the help of newly innovated algorithms makes the automation process to reach the consumers at cheaper and reliable cost. Thereby in our project proximity sensors are used to maintain the detection of the object and the counted value is transmitted to main server which is connected to PC the communication here is wireless RF communication. The counted status is also displayed in PC as well as in LCD in slave gadget. All the database of counted value is stored in PC.

In the master kit to pc communication is through serial communication.

Block Diagram:



Counter Unit



Description:

1) Slave Unit:

a) Display module
b) IR sensors
c) Switching circuits
d) Data encoder circuit
e) RF TX module

2) Master Unit:

a) PC
b) Serial communication circuits
c) Data decoder circuit
d) RF RX module

Advantage of these Systems:

1) Automation of industry with database management
2) Total counted value displayed in LCD
3) Less cost to automate
4) Less power to automate
5) Increase Safety
6) Easy and fast identification system