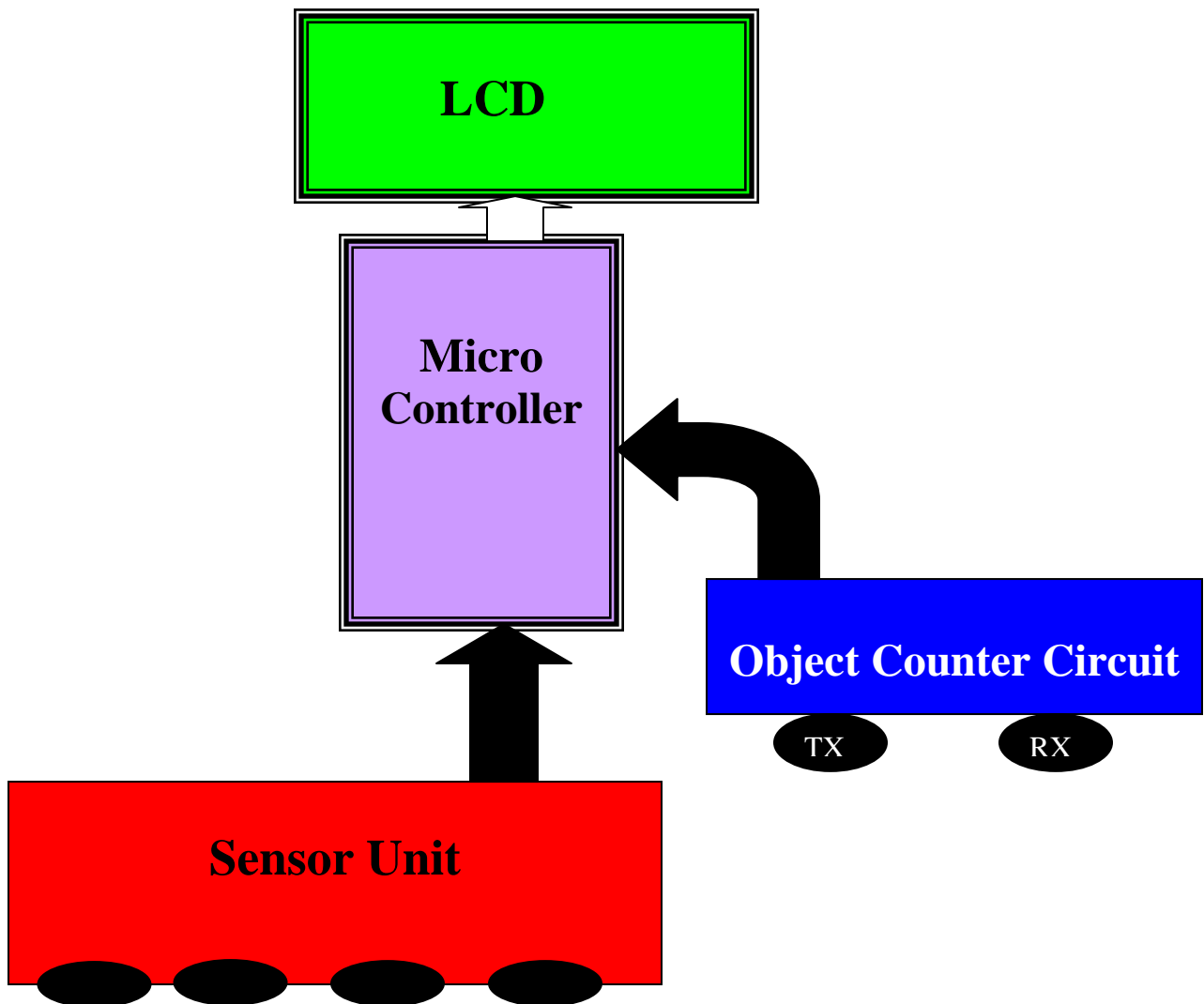


Design of a color sensing system for Textile industries

Aim: This Robot will count and Sense the color by command with color for Textile then Display on LCD.

Color Sensor unit:



Description:

This Monitoring and Control system having three different modules,

- 1) Color Sensor Unit
- 2) Counter Unit
- 3) Display Unit

- 1) Color Sensor Unit
 - a) Sensor Pattern design

This is made up of LDR with eye type sensing circuit to sense the color pattern from the Objects

- 2) Counter Unit

To Read the combination of the color which is by auto detect color or commanded.

- 3) Display Unit
 - a) Color LED Display module for emit the color whether it is in which color in out of nine colors.
 - b) To display the color and count to LCD unit

A color sensing device is implemented using two different color sensors, a microcontroller, and a display. Nine different colors of tissue paper were measured with the color sensors. The performance of the sensors was evaluated by converting the red, green, blue (RGB) values they produced back into colors on a computer and then comparing these colors with the colored tissue paper. An inexpensive commercial color sensor produced very accurate color for **all nine color samples** while the homemade sensor produced recognizable but washed-out looking color for most of the colors. The performance of the homemade sensor is strongly dependent on the positioning of the color sample relative to the light emitting diodes (LEDs).

Software Requirements:

- 1) Embedded C :
- 2) C
- 3) Windows

Hardware Requirements:

- 1) AT89C52
- 2) Max232

Advantage of these Systems:

- 1) Automation of all Textiles to communicate through remote GSM using mobile

- 2) Save data using automatic control systems
- 3) Less cost to communicate
- 4) Less power to automate
- 5) Increase productivity
- 6) To increase n number of customer to communicate and automate.
- 7) Easy and fast production of the system

Feature of these system:

- 1) To automate all customer to communicate through mobile via SMS Communication.
To modify this system into Police for Security System.

Design of a color sensing system to aid the color blind

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This paper appears in: Potentials, IEEE

Publication Date: July-Aug. 2008

Volume: 27, Issue: 4

On page(s): 34-39

ISSN: 0278-6648

INSPEC Accession Number: 10144050

Digital Object Identifier: 10.1109/MPOT.2008.916104

Date Published in Issue: 2008-08-01 14:01:46.0