



EFFICIENT AND SECURE DYNAMIC ID-BASED REMOTE USER IDENTIFICATION

ABSTRACT

RFID technology is gaining strong support from business for various applications such as supply chain management, access control, air line luggage management, etc. Due to the cost consideration, it is still not a replacement for the traditional item-level Base-code. From a business perspective, RFID technology can be beneficially utilized to improve operational efficiency in domains such as inventory taking, warehouse picking, and verifying order numbering. RFID systems enable enterprises to seamlessly capture source data that can be further processed to be used for making decisions.

The demand for combined network security and secure platform functionality has exploded with the massive growth of mobile networking applications, smart phones, femtocell access points, smart-grid market applications, and home-based gateways.

AuthenTec's Platform Security Engines are IP cores that secure the customer's platform, like the Safe Zone Trusted Module and SafeXcel Crypto Module, allowing such devices to securely generate, store and use sensitive data like cryptographic keys, digital identities, and sensitive stored data. This proposed project is for finding preferred shopping paths and their relationships to the purchased items. In the experiments, we build a data set generator for cold storage paths and purchased items of customers, and the results show that our model is applicable to real time application.

MIWI protocol transmits the data from trolley to PC. Each and every product will be attached with RFID card to detect the products from trolley in the cold storage area. Controlling and data transferring is done by Microcontroller unit which is already programmed according to our convenience.

A voice board is also fixed to the trolley which gives the information about the products how long it can be withstand without cold storage. A switch is connected for the control. Whenever the RFID card or products with RFID label is shown to the RFID reader, the factors such as cost of the product or expiry date or any offer details are sensed by the controller and pronounced by the voice board and displayed on the LCD. Also, the number of products taken can be displayed on the LCD and voice board.

If the product is retrieved back from the trolley to replace it in the shelf, then the product count is decremented, the load sensor which is connected to ADC senses the input and output load of the trolley. All these details sensed will be sent to the PC at the billing section simultaneously.

EXISTING SYSTEM

A shopping cart including a receptacle to hold shopping items, said shopping cart having a shopping cart identity, said shopping items bearing coded data tags identifying a shopping item identity and a plurality of locations on the shopping item; a scanning device mounted to the shopping receptacle and configured to: where in said scanning device is an optical scanning device configured for reading the coded data tags of both the user identity card and the product items.

DISADVANTAGES

- No alert message.
- The total cost of the products purchased is not indicated to the users while selecting products itself.
- Manual operated.

PROPOSED SYSTEM

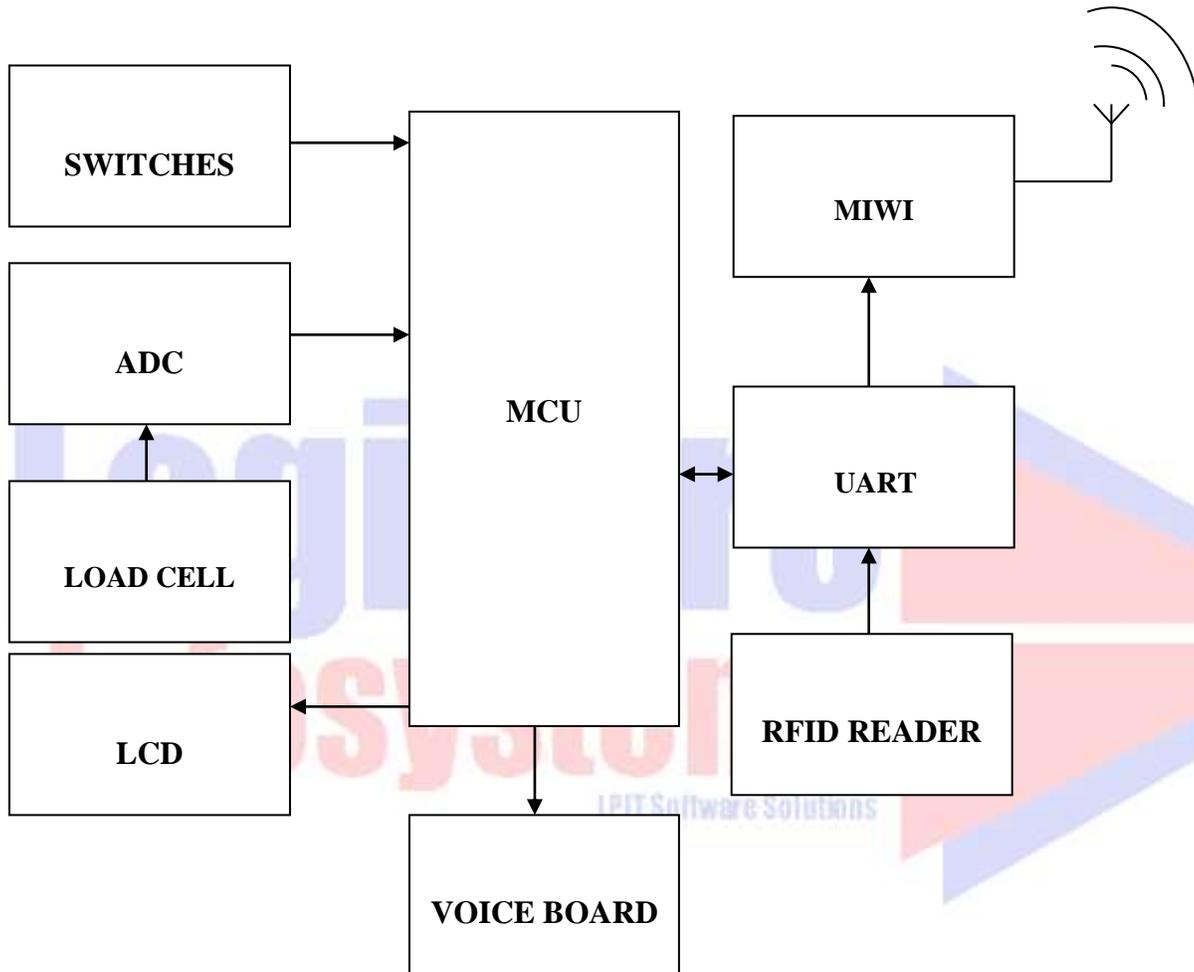
The paper presents a conceptual design of a RFID-based automated warehousing system with its inherent feature of scalability and re-configurability. Physical infrastructure and operational control events within these systems are illustrated in the paper. Such a warehousing system was also modeled to indicate the level of capability that the system can provide in terms of the desired coordinated functionality of various operations that take place within the proposed system.

ADVANTAGES

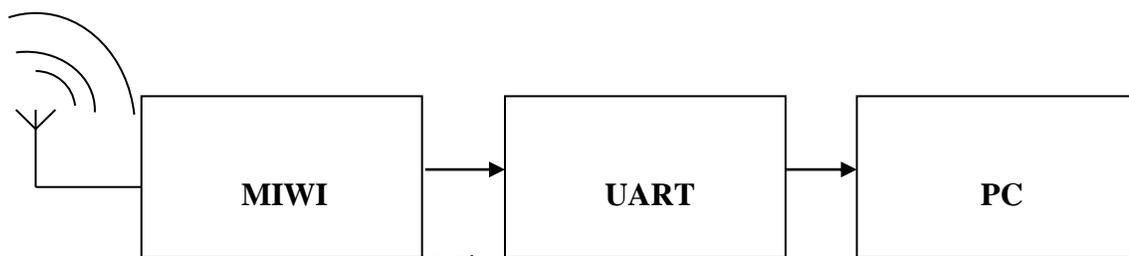
- Preliminary results appear promising and show evidence that our model is a step in the direction to effectively attain the goal of maintaining relatively low-false RFID read rates.
- Modular construction allows for future relocation of equipment
- Online Cost Control
- Reduces field installation time
- Consume time.

BLOCK DIAGRAM

TROLLEY SECTION



BILLING SECTION



HARDWARE REQUIREMENTS

- MICROCONTROLLER
- RFID READER
- SWITCHES
- MIWI
- PC
- ADC
- LOAD CELL
- LCD
- VOICE BOARD
- UART

SOFTWARE REQUIREMENTS

- MCU COMPIERS
- PROTEUS SOFTWARE

MICROCONTROLLER may ATMEGA,8051,PIC OR Arduino