

# NOVEL METHODOLOGY FACULTATIVE OBJECT DETAILS MECHANISM RED TACTON TECHNOLOGY

<sup>1</sup>Uma Maheshwari B, <sup>2</sup>Danusthika M, <sup>3</sup>Manthra D and <sup>4</sup>Monisha L

<sup>1</sup> Assistant professor, Department of Instrumentation and Control  
Sri Sairam Engineering College,  
Chennai, India

<sup>2,3,4</sup> UG scholar, Instrumentation and Control Engineering  
Sri Sairam Engineering College,  
Chennai, India

**Abstract**—“REDTACTON” offers an entire new desiring to the term “networking”.It makes the form as a communication network. HAN(Human space Network). It's a replacement personal areas network technology that uses weak electrical fields on the surface of the physical structure, as a secure information transmission path, at quickens to ten Mbps. The program code for this project was written exploitation MPLAB code. RedTacton transmitter induces a weak force field on the physical structure surface.It detects the changes within the optical properties of an electro-optic crystal employing a optical maser converts the result into an electrical signal in a very detector circuit . The model, wearable on carpus or the other a part of the body has associate degree integrated with pic16F877a and building material (copper) to permit the intra-body communication exploitation the strategy of galvanic coupling. Here we tend to propose a system wherever we will perform grocery item details whenever a selected item is touched.

**Keywords** —Human Area Network; MPLAB; pic16F877a;

## I. PROBLEM ANALYSIS

The aim of the system is to perform a grocery shopping through the red tacton technology. This technology will provide the grocery item details whenever a selected item is touched.It is unremarkably better-known that the main points of the groceries area unit ordinarily obtained exploitation the main points aforesaid by the merchandiser. This needs a manual operation for getting the grocery details.

## II. PACKAGE SELECTED

The package selected is MPLAB and embedded C .The package has additional advanced options. MPLAB supports project management, code writing, debugging and programming of micro chip 8-bit and 32- bit PIC Micro-controller.

## III. LITERATURE SURVEY

To stay competitive, lots of data processing techniques are introduced to assist stores higher perceive consumer's behaviours. How, these studies area unit typically range among the client dealings information truly another reasonably deep searching data.

Eg:which and why merchandise receiving abundant attention don't seem to be purchased ,offers way more valuable info to spice up the merchandise style. sadly, these information area unit altogether neglected in heritage system This paper introduced associate degree innovative system ,called tag booth, to find commodities 'motion and more discover customers' behaviors, exploitation COTS RFID

devices.

With e-commerce activities burgeoning over the last decades consumers have on the face of it been change their purchases from the physical market place to the web market house. However, it remains skeptical to why the shoppers area unit able to build the acquisition selections in lack of temperament experiencing the product. The sample consists of 344 with expertise of shopping for attire product via the web,and they recruited from one in all the foremost fashionable native on-line forums,in answers to the questionnaire by recall technique. This paper presents smartphone based mostly mixed reality application (SPMRA),which makes it attainable to gamify the complete in-store searching expertise with an occasional price ,easy to use ,smart phone based mostly mixed reality platform. In this paper we tend to gift our methodology towards developing such a system consisting of taking part observation, coming up with searching activity models assessing the associated options and analyzing the underlying technology.

## IV. RED TACTON WORKING

RedTacton uses the minute force field emitted on the surface of the physical structure. Technically, it's fully distinct from wireless and infrared. A transmission path is created at the instant a vicinity of the physical structure comes in-tuned with a RedTacton transceiver. Physically separating ends the contact and also the communication starts once terminals carried by the user or embedded in devices area unit joined in numerous combos consistent with the user's natural, physical movements. The signal from the interface is shipped to the info sense circuit and also the transmitter circuit. the info sense circuit senses the signal and if the info is gift it sends management signal to the transmitter that activates the transmitter circuit. The transmitter circuit varies the electrical field on the surface of our body. This modification within the force field is detected by the electro-optic device. The output of the electro-optic device is given to the detector circuit, that successively given to the interface of the receiving RED TACTON device. During this project transmitter half is object section and also the receiver half is user section. Microcontroller is interconnected with each the TACTON receiver and transmitter and conjointly with the UART. Here the informations retrieved from the microcontroller is given to the UART that is then transmitted to the transmitter. so those informations area unit offer to the receiver through UART that is intermediate for each transmitter and

receiver. Voice IC and speaker is connected to the receiver through microcontroller by that the informations area unit transmitted to the speaker. Communication is feasible to any body surfaces such as the hands, fingers, arms, feet, face, legs. RedTacton works through shoes and consumer goodslikewise.

## V. FEATURES OF RED TACTON

1. Communication is extremely secure and much immune from eavesdropping as radio waves don't seem to be emitted.
2. No ought to bring out and activate the device consciously; communication is enabled by normal natural actions like touching or stepping.

### UART:

UART stands for Universal Asynchronous Receiver / Transmitter. it'sa awfully fashionable serial communication interface that provides Full Duplex communication between 2 devices. UART uses 2 information lines for causation (TX) and receiving (RX) information.

The model, wearable on carpus or the other a part of the body has associate degree integrated with pic16F877aand associate degree building material (copper) to permit the intra-body communication using the strategy of galvanic coupling. Optocouplers or opto-isolators are used as a safe passage between the high power circuit and the low power control circuit. It merely converts signals between high voltagepitot devices and low voltage solid-state logic circuits. They are primarily used to safeguard the electronic components from damaging byseparating them from voltage fluctuations. Thus optocoupler also acts as a point of interaction between two circuits.

## VI. PROPOSED SYSTEM

The projected system overcomes the disadvantage intimate by the present system. The projected system consists of a 2 sections: The groceries section and also the user section. The groceries section consists of a red tacton transmitter. The transmitter transmits the detail of the actual product. Based on the received signal, the various details concerning the merchandise area unit transferred to the user as voice signals

### MODULE SPECIFICATION:

#### LCD:

Input: 5VDC

Output: light-weight signal

Use: observance section

#### VOICE IC:

Input: 12V DC

Output: analog output

Use: voice signal storage purpose

#### PIC16F877AMICRO CONTROLLER:

Input: 5V DC

Output: Digital outputs

Use: Controlled in devices

#### UART:

Input: 5V

Output:  $\pm 15V$

Use: TTL to rs232 and contrariwise

#### RED-TACTON:

Input: 5V DC

Output: information transmit and receive

Use: Communication purpose exploitation physical structure

#### SPEAKER:

Input: 12V DC

Output: Analog signal

Use: Convert electrical signal into sound signal

#### HARDWARE:

Power supply

PIC16F877A small controller

UART

Red Tacton American state & RX

Voice IC

Speaker

#### SOFTWARE:

MPLAB

Embedded C

#### ADVANTAGES:

- Information transfer is quicker and easier through this technology
- Information loss throughout transfer is minimum
- Use of minimum quantity of power
- Security is additional

#### DISADVANTAGES:

- It's been used solely among a number of centimeters
- Price is additional

## VII. CONCLUSION

The outcome of this system is when the customer touches the red tacton transmitter connected to the product they will receive the recorded information about the product through the receiver provided to them. The receiver can be a speaker or anheadphone.Thus, red tacton replaces the other data transmitting technologies.

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VIII. BLOCK DIAGRAM

Fig1. USER SECTION

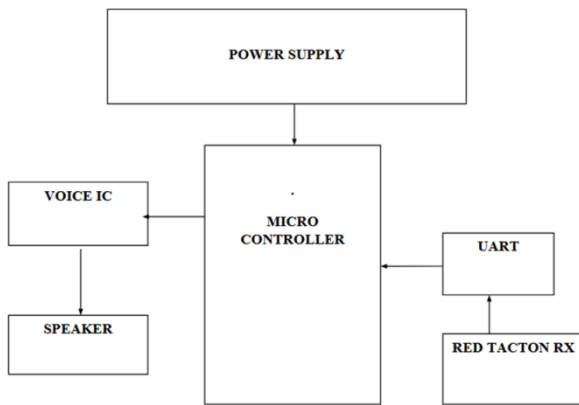


FIG2.OBJECT SECTION

