



Touch Screen Based Advanced Menu Display and Ordering System for Restaurants

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Abstract:

The development of remote innovation and versatile administrations in this age is making an incredible effect on our way of life. Some early endeavors have been taken to use these advancements in friendliness industry. Presently days the Technology has been enhanced in all perspectives yet at the same time slack in the sustenance requesting system. so, In this field the touch screen based propelled menu show and requesting framework idea is another creative thought. It intends to robotize the sustenance requesting process in the eatery and furthermore to enhance the eating knowledge of the client. It plans to lessen the requirement for overabundance labor and pen paper strategy is time spent on giving manual request. The easy to understand arrangement of menu card and its ease of use is expanded through basic route method utilizing (PC) and touch screen. It drives the yield from an inaccessible place through RF Module.

Keywords: PC, RF Transceiver

1. INTRODUCTION:

The paper prevalently purposes in outlining totally robotized menu in eateries with the assistance of touch screen sensor and a GLCD to give a capable domain. There is no need of a server to take the request from the table. The menu will be shown cardinally on the work area and we can specifically arrange the menu with the help of touch screen. Touch screens give quick access to a wide range of computerized media, with no content bound interface acting as a burden. Quicker information can mean predominant administration. A touch interface can viably upsurge administrator precision, recoil preparing time and advance general operational effectiveness. An appropriately outlined touch interface can update every administrator's precision. Touch screens are hands-on in computerization, and has turned out to be much less difficult with touch screen innovation.

2. LITERATURE REVIEW:

Jingjing Wang^[1] presented the design and achievement of wireless ordering food system. This paper presented in-depth on the technical operation of 4*4 matrix keyboard to realize data input.

N. M. Z. Hashim *et-al*^[2] proposed the smart ordering system via Bluetooth (SOS). It uses a small keyboard to make orders and Bluetooth for transmission.

Prof. Sagar Soitkar *et-al*^[3] presented the touch screen based digital menu ordering system using AVR. This paper dictates the method of low cost, efficient and easy to access the system for digital menu ordering system for restaurants.

Asan, N. Badariah *et-al*^[4] developed zigbee-based smart ordering system. The smart ordering system is proposed orders using hand tools used to make an order in a restaurant.

Bhanu Siramshetti *et-al*^[5] later on took one step ahead. They further extended the service with zigbee based

Kiran Kumar reddy *et-al*^[7] employed combination of Bluetooth technology along with android phone. An android application was designed containing food item details in restaurant. The input unit was smart phone/tablet and output section was PC. Cloud-based server for storing the data base was used which made it inexpensive and secure.

3. PROPOSED SYSTEM:

Yearning of the proposed technique is to advance a financially savvy framework which could work in little scale eateries that are not willing to put immense measure of reserve in these frameworks.

4.PICAT89C52 MICROCONTROLLER:

PIC microcontroller is the native RISC bolstered microcontroller manufactured in CMOS (corresponding metal oxide semiconductor) that utilizations separated transport for guideline and information permitting synchronous access of program and information memory. The principle support of CMOS and RISC union is low power utilization bringing about a little chip measure with a little stick tally. The basic preferred standpoint of CMOS is that it has insusceptibility to clamor than other creation strategies.



Figure.1. PICAT89C52

5.FEATURES:

- High-achievement RISC CPU
- Performing speed:
 - DC - 20 MHz clock input
 - DC - 200 ns instruction cycle
- Direct, implied, and relative addressing modes
- Power-on Reset (POR)
- Power-up Timer and Oscillator Start-up Timer
- Programmable code-protection
- Power preserving SLEEP mode
- Low-power, high-speed CMOS EPROM/EEPROM technology.

6.1 RECEIVER BLOCK DIAGRAM:

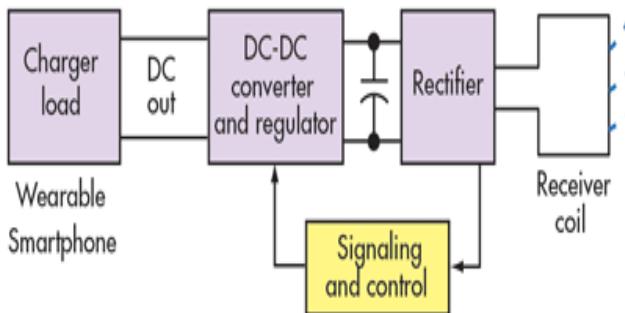


Figure.2. Receiver block diagram:

The receiving coil receives the signals from transmitting coil and it is given to the rectifier which is used to convert Alternating Current to Direct Current and also the rectifier output is given to the signaling and control system and capacitor which charges and used to store the electric field and after sometime it discharges. The output from the signaling and control system and capacitor is given to the DC-DC Converter and regulator which regulates the voltage and gives DC output to the charger load. Charger load is nothing but Wearable Smart Phone.

6.2 BLOCK DIAGRAM OF TRANSMITTER:

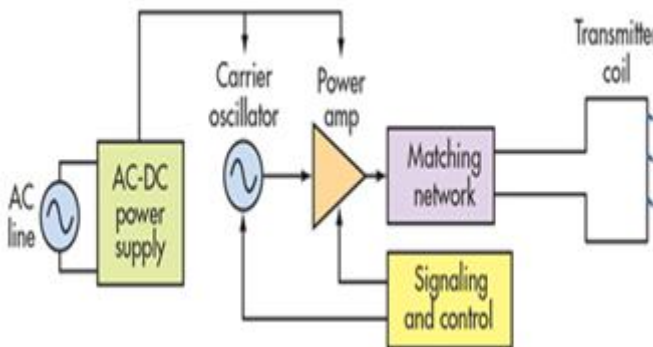


Figure.3. Block Diagram of Transmitter

Alternating Voltage is given as an input to the AC-DC power supply and the output is given as input to the two devices one is the carrier oscillator and the other device is power amplifier. Signaling and control system is used to provide the input signal to the carrier oscillator and to control the level of the power amplifier. The output of the power amplifier is fed to the matching network, from the transmitting coil the signals are passed to the receiving coil.

6.3 AT89C52 MICROCONTROLLER:

The AT89C52 has 4 different ports, each one have 8 Input/output lines equipping a total of 32 I/O lines. Those ports

can be worn to output DATA and orders do other devices, or to interpret the state of a sensor, or a switch. Most of the ports of the AT89C52 have 'dual function' connotation that they can be used for two different functions.

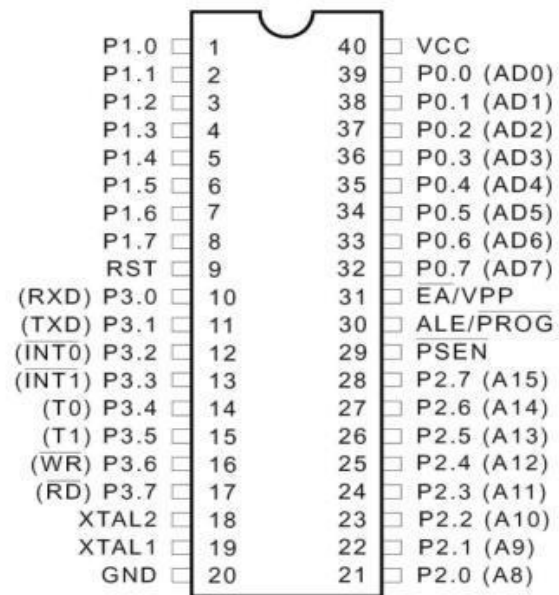


Figure.4. At89c52 microcontroller

7.BLUETOOTH:

Bluetooth is a remote innovation standard for trading information over short separations (utilizing short-wavelength UHF radio waves in the ISM band from 2.4 to 2.485 GHz[3]) from settled and cell phones, and building individual zone systems (PANs). Concocted by telecom seller Ericsson in 1994,[4] it was initially imagined as a remote other option to RS-232 information links. Bluetooth is overseen by the Bluetooth Special Interest Group (SIG), which has in excess of 30,000 part organizations in the regions of media transmission, figuring, systems administration, and shopper electronics.[5] The IEEE institutionalized Bluetooth as IEEE 802.15.1, yet never again keeps up the standard. The Bluetooth SIG supervises advancement of the detail, deals with the capability program, and ensures the trademarks.[6] A maker must meet Bluetooth SIG norms to advertise it as a Bluetooth device.[7] A system of licenses apply to the innovation, which are authorized to singular qualifying gadgets.

8.TOUCH SCREEN:

A resistive touch screens are touch-sensitive PC Shows made out of two versatile sheets secured with a resistive material and secluded by an air opening or microdots. There are two exceptional sorts of metallic layers. The key compose is called Framework, in which striped terminals on substrates, for illustration, glass or on the other hand plastic face. second sort is called Analog which involves forward cathodes with no outlining standing up to each other. Beginning at 2011 basic promoted cut down age costs. Right when contact is made to the surface of the touch screen, the two sheets are crushed together. On these two sheets there are level and vertical lines that, when pushed together, enroll the correct territory of the touch. Since the touch screen recognizes commitment from contact with about any inquiry (finger, stylus/pen, palm) resistive touch screens are a kind of "latent" advancement. Resistive touch screens ordinarily have high assurance (4096 x 4096 DPI or higher), giving exact touch control. Since the

touch screen responds to weight on its surface, contact can be made with a finger or some other pointing.

9.RESULTS



Figure.5. Resistive type touch screen

10. REFERENCES:

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