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# **RFID BASED PARCEL TRACING SYSTEM**

## **ABSTRACT**

The aim of the project is to track the parcel to find the location where exactly it is at an instance of time, from the time of shipment to the time of delivery, using RFID and GSM technologies.

Radio Frequency Identification (RFID) Card Readers provide a low-cost solution to read passive RFID transponder tags up to 2 inches away. The RFID Card Readers can be used in a wide variety of hobbyist and commercial applications, including access control, automatic identification, robotics navigation, inventory tracking, payment systems, and car immobilization. The RFID card reader reads the RFID tag in range and outputs unique identification code of the tag at baud rate of 9600. The data from RFID reader can be interfaced to be read by microcontroller or PC.

This GSM Modem can accept any GSM network operator SIM card and act just like a mobile phone with its own unique phone number. Advantage of using this modem will be that you can use its RS232 port to communicate and develop embedded applications. Applications like SMS Control, data transfer, remote control and logging can be developed easily. The modem can either be connected to PC serial port directly or to any microcontroller.

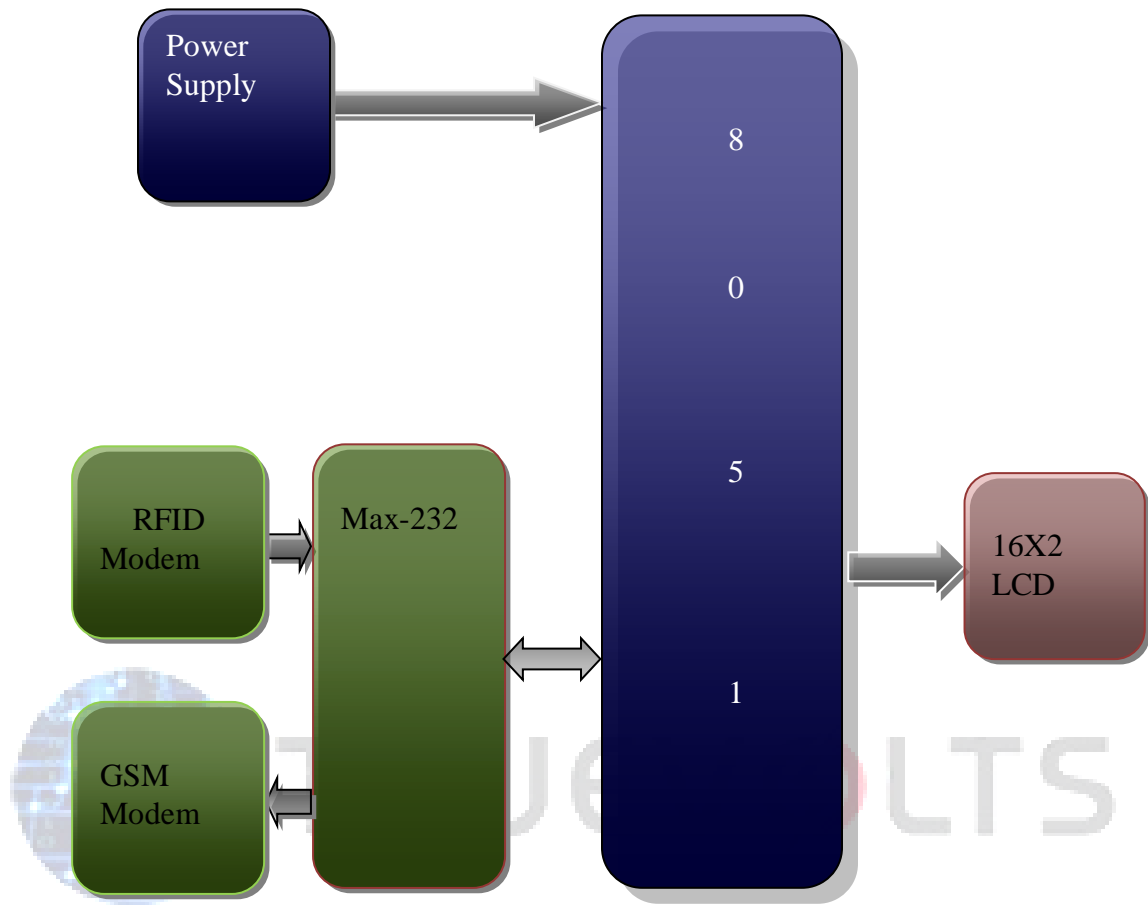
The parcel will be attached with an RFID tag. This tag contains a unique number. As the parcel travels many stages of postal nodes in various regions before reaching the destination, it will read in every region. When ever the card is read, the information of the parcel is updated with the new location and status, the same information is sent as an SMS to the user.

In this project 7805 is a regulator and it avoids noise spikes in power supply. RFID modem is connected microcontroller through serial port. These RFID modem works under 9600 or 4800 baud rates. 16X2 LCD connected to microcontroller through digital I/O lines.

## **APPLICATIONS:**

- Parcel tracking system

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCK DIAGRAM

