

# Border Alert System and Emergency Contact for Fisherman using RSSI

Narmatha S<sup>1</sup>, Roopasri D<sup>2</sup>, Vinitha S<sup>3</sup>, Vijayakumar S<sup>4</sup>

<sup>1,2,3</sup>Department of Electronics and Communication Engineering, PEC, Namakkal

<sup>4</sup>Assistant professor, Department of Electronics and Communication Engineering, PEC, Namakkal

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**Abstract** - Motivation of the project is greatly aid the person more comfortably travel in sea with help of RSSI navigator. Now a days so many people's are suffered for cross the border of the sea, for avoiding that we are design this system. If we reach the border place our system will give the alert to the owner of the ship. This type of process is helpful for reducing the human losses. All these process are take place with help of PIC microcontroller. Operating voltage is 5V it is getting from the power supply unit. The heart of the microcontroller is the oscillator here we are using the 4MHZ crystal oscillator. LCD is used to display the current status of the device.

**Key Words:** RSSI Navigator, PIC Microcontroller, OLCD

## 1. INTRODUCTION

Every nation is isolated by their sea borders. Route in movement is a standout amongst the most principle applications in seaways transport. Sea route is not as simple as street movement since its spread generally and absence of the way. For the sheltered route indicate of the anglers in inside the nation outskirts and along these lines turning away them from intersection as far as possible. RSSI module predicted alarming framework gives useful, valid time pontoon following an area found and announcing. This framework informs where the pontoon is exactly situated, since the land information is being gotten with this framework. At the point when the vessel moves promote towards as far as possible, the bona fide time parameter, for example, correct scope and longitude information's are accounted for to drift sentinel.

## 2. LITERATURE SURVEY

### 2.1 EXISTING SYSTEM

Dr.K.Karuppasamy [1] the paper titled as "Providing a border alert system for fisherman by using GPS & GSM technology wireless sensor networks" the main idea to design a border alert system is to safeguard the fisherman from being caught by Sri Lankans in coastal area. GPS location can be inaccurate sometimes, Battery might drain out and Monitoring travel data might consume time as well as labor these are all the drawbacks of this paper. Aishwarya dalvi [2] the paper titled as "Fisherman nautical border alert system" the main objective of the system is used for border security, tracking of boats and ships in the ocean and in the seas. High cost and large size of the hardware module these are the drawbacks of this paper. D.F. Larios et al [3] the paper titled as "Design of boundary alert system for fisherman using GPS" the main objective of the system is

used to give alert to the fisherman when they crossing the border without this knowledge. The main drawbacks of this paper is system memory is not sufficient.

## 2.2 PROPOSED SYSTEM

The GPS gadget will drearily give the flag which decides the scope and longitude and shows the position of the anglers and which gets read and showed in the LCD. GPS gives steady situating, route, and timing administrations to clients on a persistent premise in consistently and night. At that point GPS store the capacity of the sea position. While looking at the past oceanic limited position and momentum position and result will be the scope and longitudinal level of the pontoon's area is resolved. Then it gives the yield which gets read and showed in the LCD. Similar information is sent to the sea fringe security. The equipment which interfaces with microcontroller are LCD show, GSM and. GPS(global positioning system) is progressively being utilized for an extensive variety of utilizations. It gives solid situating, route, and timing administrations to overall clients consistently in all climate, day and night, anyplace on or close to the earth. 28 satellites slanted at 55degree to the equator circle the earth like clockwork and 58minutes at a tallness of 20,180 km on 6 distinctive orbital lanes and every one of these satellites has up to four nuclear tickers on load up all we require is a precise clock. By looking at the entry time of the satellite flag with the on load up clock time, at which the flag was radiated, the scope and longitudinal level of the vessel's area is resolved. The present outline is an inserted application, which will persistently screen a moving boat and once the watercraft goes past the level of the characterized layer the specific operation.

## 3. SYSTEM ARCHITECTURE

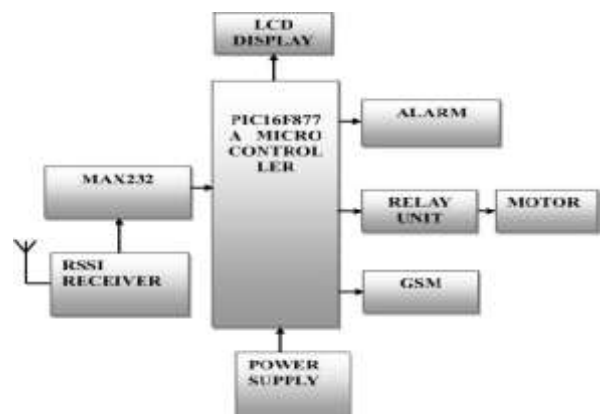


Figure -1: Block diagram of transmitter

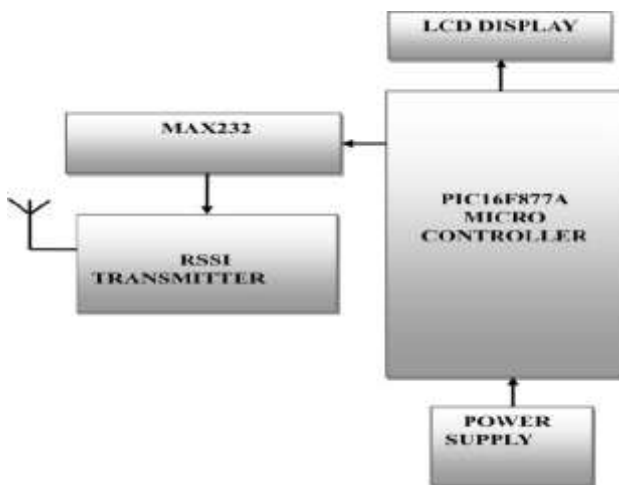


Figure -2: Block diagram of receiver

#### 4. ADVANTAGES AND DISADVANTAGES

##### Advantages

This system is easier to operate manually.

More flexibility

##### Disadvantage

It is costlier

#### 5. CONCLUSION

In previous days fisherman cannot find out the border. With the help of this paper, fisherman can easily know the border and navigation officers can easily track the boat or ship. This paper will reduce the human losses from the border wars.

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