

Involuntary Train Collision Prevention System for Railways

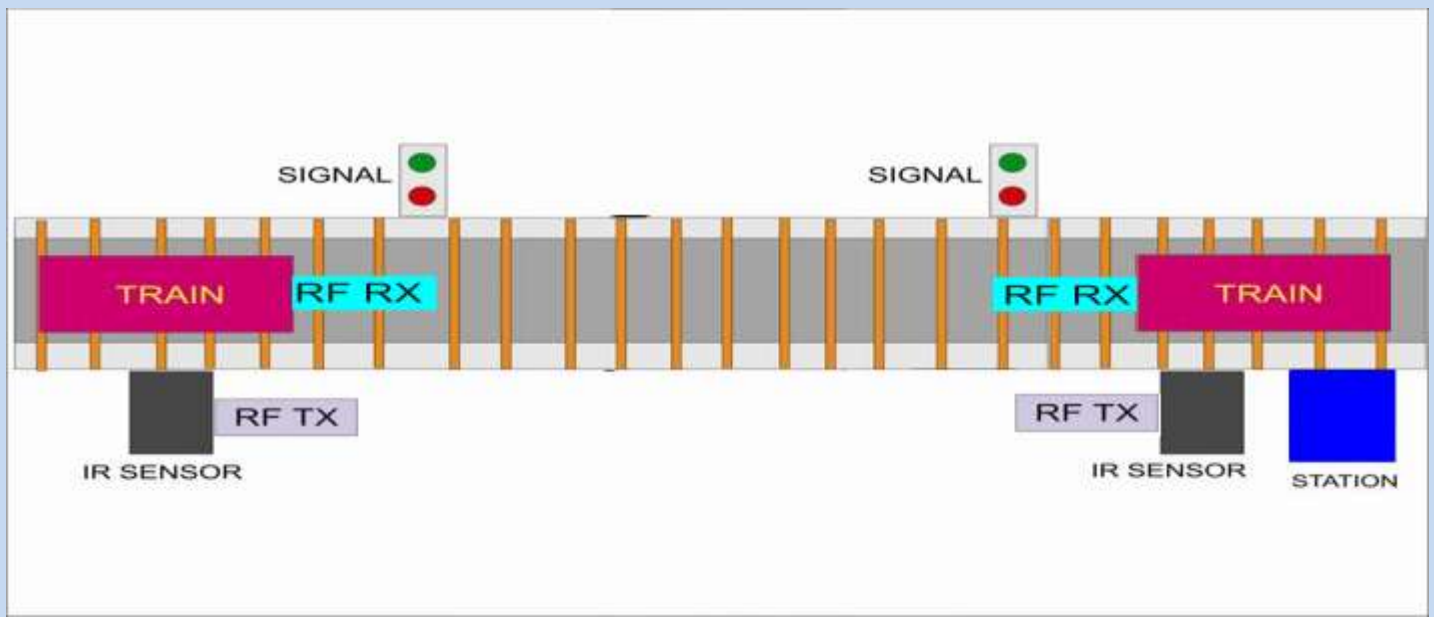
Introduction:

In this Prevention system is to avoid the accident automatically RF Communication is used for Main and Sub Transmission data transmission.

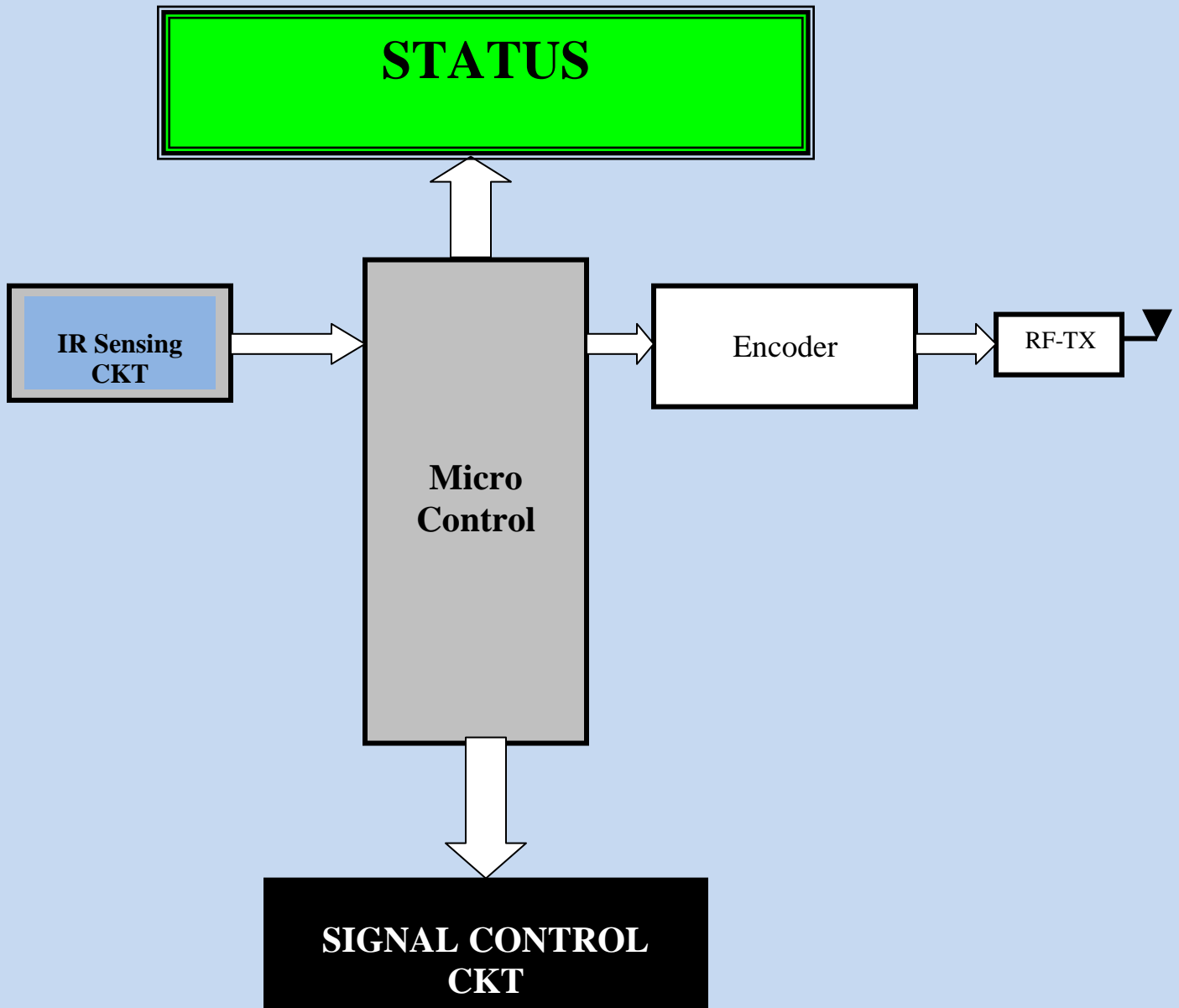
Objectives:

This project has 2 modules. One is RF and Control Unit by both Main and sub main Unit. The second module Auto tracking by display and Control Unit.

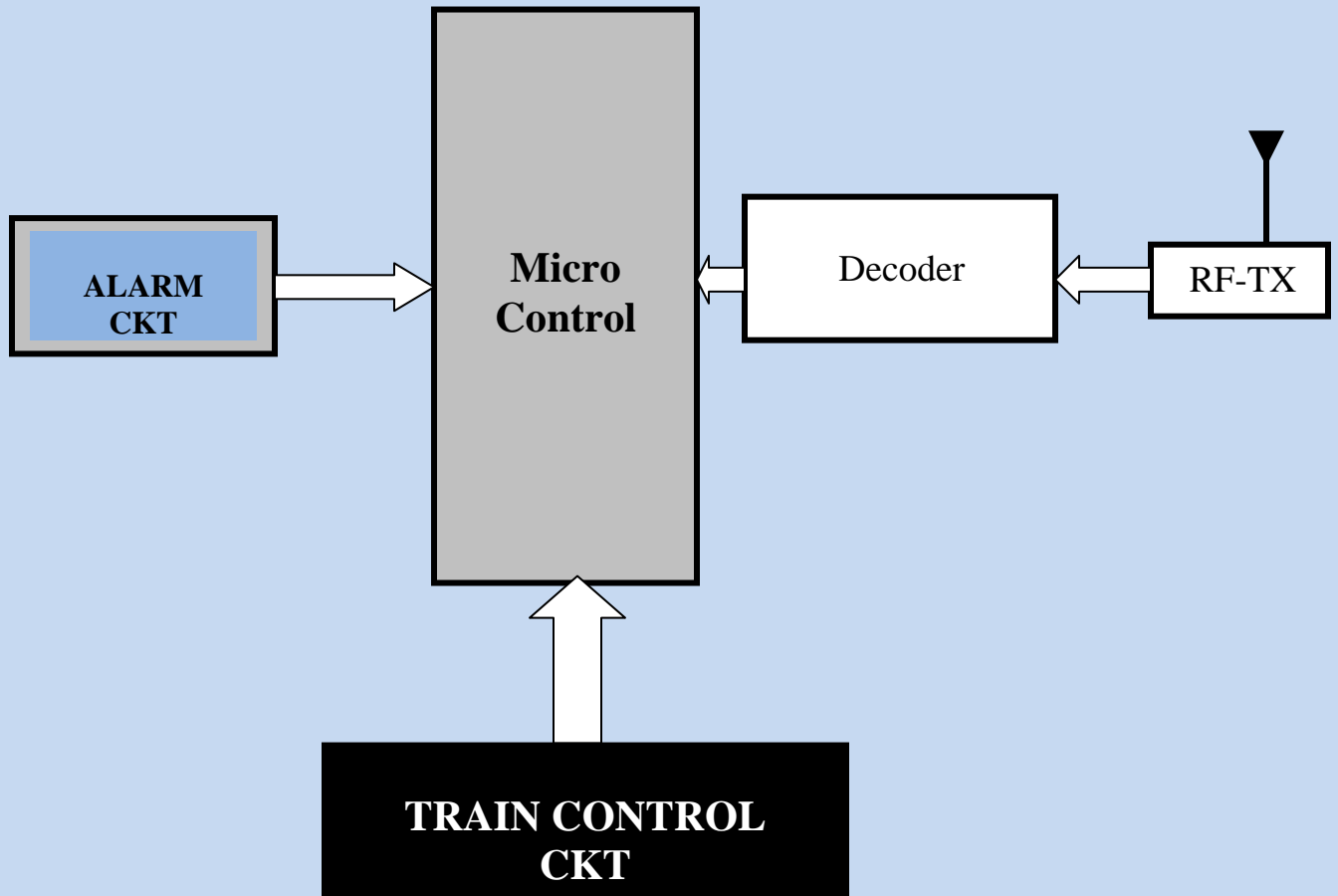
- 1) When we start the train which is from current Station that is called Main Train.
- 2) Which is coming from station i.e. Sub main Train.
- 3) When we start the train from station automatically will identify the submain1 or 2 or etc.
- 4) This auto identify is to give a buzzer alarm. By that time you have to reply to opposite train.
- 5) If the both train is not identify the train automatically will stop without driver.
- 6) When the train is coming in which track and the train name also will detect automatically
- 7) If we didn't get any response from any train will automatically will stop the both train.
- 8) Here for anti collision tracking proximity sensor is utilized
- 9) Whenever the collision is monitored the train signal will alert in RED for both trains



MAIN RF BLOCK DIAGRAM:



MAIN RF BLOCK DIAGRAM:



Methodology of this Project:

1. RF Communication-433MHZ
2. LCD Display
3. IR Proximity Sensor