

## **Chapter Five**

### **Conclusion and Recommendation**

5.1 Conclusion

5.2 Recommendation

## **5.1 Conclusion:**

In this research a successful simulation as well as practical implementation of vehicle tracking system has been done. The proposed system is composed of a complete hardware prototype and user friendly Software application. The current vehicle location and speed have been determined using Linkit-ONE development board and GPS technology. This important information will be sent to the centralized server or the smart phone of the responsible person for monitoring through Wi-Fi antenna or GPRS module. Moreover this information can be visualized and tracked via digital map. This system has the ability to remotely stop the vehicle when it is out of pre-defined range. Moreover, in this research an idea has been presented for price negotiation with vehicle renter, if the range has been exceeded, the driver can respond by the push button and accordingly the system will automatically change the price unit. Unless the driver didn't agree to increase price he must return to the pre-defined zone or an alternative solution for stopping the vehicle will be used.

This project is done by using Proteus simulation software and it work properly when GPS module receives location from satellites and then the speed can be calculated. LED will be turned on to indicate that the vehicle is out of range.

By achieving that the system can be reduces the lost time for vehicle rental offices, and provide more security system which act as Anti-theft system.

## 5.2 Recommendation:

This project can be improved to more advanced projects for tracking vehicles and making it more efficient and more secure recommended to:

- Add a sensor to the system such as accelerometer sensor to determine the g-force of three axis X, Y, Z.
- Send control signal for both of main power line and ignition of vehicle, because sometimes vehicle dose not turning off by only isolate the power line from the vehicle.
- Identification camera can be added to the system for more security feature.
- Automated connection between traffic radar and vehicle tracker will be used to send message to traffic center offices.
- Upgrading this system is very easy which make it open to future requirement without the need of rebuilding everything.