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Transit Elevated Bus

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Abstract: *The Transit Elevated Bus (TEB) (simplified Chinese: traditional Chinese: pinyinis a proposed new bus concept where a guided bus straddles above road traffic, giving it the alternative names such as straddling bus, straddle bus, land airbus, or tunnel bus by international media. A trial was scheduled to begin in Beijing's Mentougou District by late s2010. However the project was not given authorization by the district authorities because the technology was considered to be too immature, and further trials were subject to the development of a concept to prove the system actually works.The city of Manaus, Brazil, hasalso evaluated the option of installing a straddle bus in its city streets. At the time of the 2016 unveiling of the scale model, it was reported that a prototype would be deployed by mid-2016 in Qinhuangdao. Four other Chinese cities, Nan yang, Shenyang, Tianjin, and Zhoukou, had also signed contracts for pilot projects involving the construction of test tracksbeginning in 2016. However a claimed test of a prototype design was heavily criticized in August 2016, and appears to be abandoned as of December 2016.*

Keywords: Solar panel, Battery, Regulator IC, Sensors, Motor drive, Motor wheel

I. INTRODUCTION

Energy is one of the most vital needs for human survival on earth. We are dependent on one form of energy or the other for fulfilling our needs. One such form of energy is the energy from fossil fuels. We use energy from these sources for generating electricity, running automobiles etc. But the main disadvantages of these fossil fuels are that they are not environmental friendly and they are exhaustible. To deal with these problems of fossil fuels, we need to look at the Non-Conventional Sources of energy. With regard to this idea we have designed a train that runs on solar energy. Many specifications must to know about solar train from solar array , motor, battery and so on each specification has theory and calculation to mate it function correctly & able to move perfectly. This project a lot depends on solar panel because it using influence if the solar train can drive or not. Using brain storming techniques to generate ideas , several initial design may be consider a common place to start is with the shape of the train since it will dictate the design of many other system initial designing concept are also developed for chassis design mechanical system design, electric system design, driving train design & solar array design that show promise are investigated further so that design can be compare through trade of studies the concept must be eliminated until a final design can be agreed upon there are many factors to consider to each design, for example: Weight Efficiency Speed Knowledge about solar array also important because the array is made up of any photovoltaic solar cell that convert sun energy into electricity .the cell types & the dimensions of the array depends on the vehicle size and class. More over knowledge about drive train in solar powered vehicle is very different from that a conventional car. Throw this project the drive trains consist of electric motor& the means by which the motor power is transmitted to the vehicle to move. This project is to design a solar powered train with objective as follows:

a) To design use photovoltaic source of power.
b) To fabricate & assemble a working proto type model.

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II. METHODOLOGY

1.1 Block Diagram

1.2 Circuit Diagram

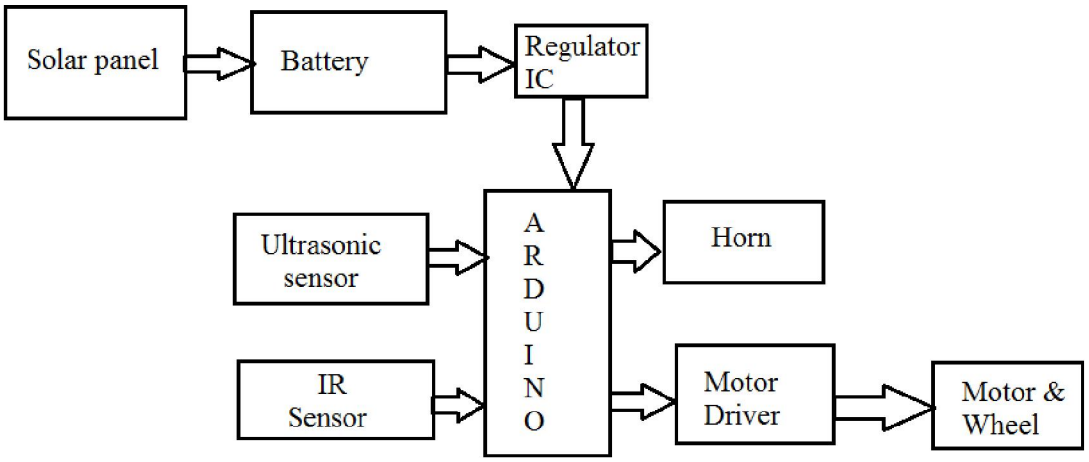

Figure 1: Block diagram

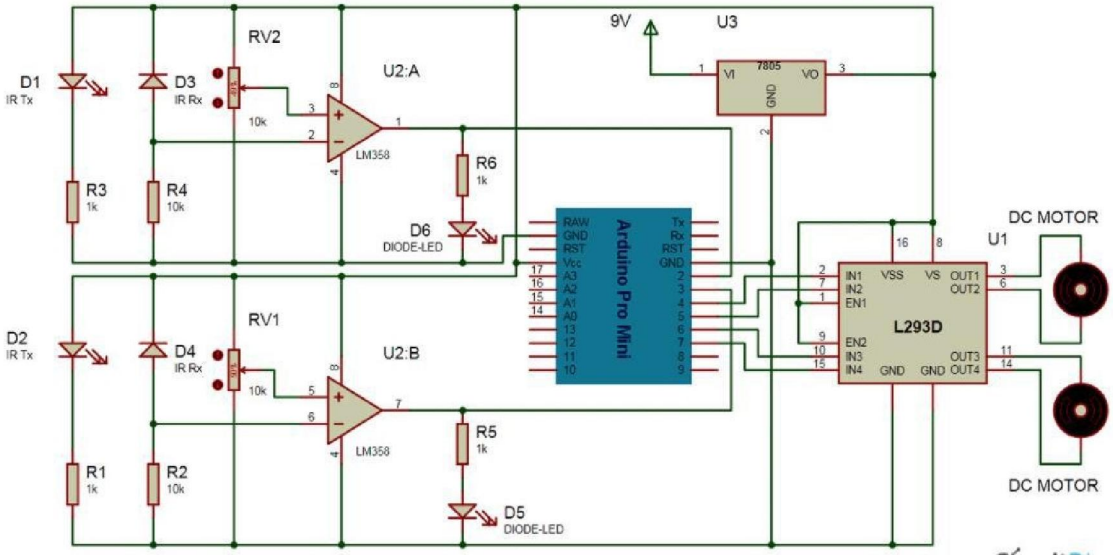

Figure 2: Circuit Diagram

III. CONCLUSION

The solar straddling bus are used at very low scale, at present. Though they have been ground for about few years only, the technology is still in the developmental stages. Hence they cannot be used as a practical means of traction. So here is the conclusion that the challenge lies in making it a viable means of transport. Further research is needed in this regard to improve solar panels, increase efficiency, and reduce weight, to improve reliability and to reduce the cost. Research is being carried out on many semi-conductors and their alloys to develop more efficient solar cells. Thus this technology will definitely live up to its potential sometime in the future.

IV. ACKNOWLEDGEMENTS

A project is something that could not have been materialized without cooperation of many people involved in making this project are reality it takes many desiccated people and it is our great pleasure to acknowledge the contribution of those involved in the project directly or indirectly.

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