

DIGITAL KM-STEP COUNTER

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Abstract

A counter is a one of the most useful and versatile subsystem in a digital system. A counter driven by a clock can be used to count the number of clock cycles.

This project is about the DIGITAL STEP-KM COUNTER. I only make a model which function and it concept is similar with commercial product. It only a basic model and hope it can be upgrade to better equipment.

This project is a small box that slipped in pants pocket to measure the distance during a walk. It display distance from 0 km to 9 km. It have 2 LED mini display, one show hundred meters and the other show the km. In every 50 meters of walking this LED will be light.

In every 2 step, a beeper will occur. For low consumption, the display light only on request, we can use P2 switch. For reset the circuit we must push both button together. This will avoid accidental reset of the counter.

Applications of this project is, we can use it in sport during training and to everybody who want to keep health.

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INTRODUCTION

This project is use to count step in kilometer during walking. It can be used by sportsman, athlete ; used in research or others. For athletes it can make sure that the athletes can reach the certain distance that we need during training. In researching; this product can help the researchers to measure distance without using any rope or wire. This product is also cheaper than the other product. It size is also smaller and it can be slipped into pant pocket, so it is easy to carry to anywhere.

In chapter 1 of this report, you can know about our objective – why we done this project. You also will find our expectation and consideration while doing this project. In this chapter also you can see the list of the component and its value.

Besides of that you can know more details about the component in that use in this project in chapter 2. In chapter 2,you also can know can see the schematic diagram of this product and know how this circuit is operated.

All practical activities that we have done during this is written in chapter 3. Here all of can know more about hardware development , the PCB construction, how our planning and layout, our printed and etching technique and how to solder the component to PCB. In this chapter we also mention about our result, our problem and trouble shooting.

In last chapter we also mention our conclusion and recommendations about this project. Hope you will enjoy to read this report and after all of this I think that these program have a great future, even in our daily life or as a commercial product.