

AUTOMATED PHARMACEUTICAL TABLET COUNTING AND FILLING SYSTEM

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ABSTRACT

My project 'Automated Pharmaceutical Tablet Counting and Filling System' is a system that can use by that pharmaceutical tablet manufactures for packing purpose. This system can help them to fill the pharmaceutical tablets with desired amount in each bottle. A simple and small size electronic device can handle all these works.

Initially the required amount of pharmaceutical tablets in the bottle will be set on the counter by using the dipswitches that connected to the counter. Once the value had been set, it will display on the seven segment displays after it loaded into the counter.

An electronic counter that constructed by 1 the integrated circuits is responsible for the counting part. All the counting will be displayed on the seven segments displayer. The electronic counter will do counting only when there is a signal sent into it. This signal is actually the motion of the pharmaceutical tablets that has been detected. For every signal received, the counter will do one step down counting until it counts to zero and then it will reset back to the initial value.

A pair of infrared LED sensor is used in this project. The purpose of this sensor is to detect the motion of the pharmaceutical tablets. When the pharmaceutical tablets that delivering on the conveyor passing through the sensor, the sensor will detect it and send a signal to the electronic counter. After passed through the sensor, the pharmaceutical tablets will deliver until it reached the end of the conveyor and drop into the bottle that waiting below.