

CONVEYOR BELT PROTOTYPE FOR MICROCONTROLLER-BASED GOODS SORTING USING QR CODE SCANNER

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ABSTRACT

Goods delivery is a business that operates in the service sector with timely delivery services according to destination. Generally, the sorting process for goods delivery services is currently still done manually. This requires a relatively long time. The increase in consumers in online shopping has an impact on delivery services that exceed human capabilities in terms of performance, so in this research a prototype system for a microcontroller-based goods sorting conveyor belt using a QR Code Scanner has been designed. The aim of this research is to design a goods sorter on a conveyor system with GM66 using the Scan QR Code method. The main components used are Arduino Uno, Stepper Motor, Servo Motor and Infrared. Based on the results of testing the detection distance on QR Code Scanning, the distance between the QR Code and the Scanner that can be detected is in the range of 3 cm to 19 cm. The final result of the design and testing process as a whole can work well and adequately, so that the system process works according to the expected design work method. This is shown by the success rate value of 100%.

Keywords: *Conveyor, Arduino, QR Code, Sorter, Scanner*