

Abstract

In this globalization era, human being need lots of tools to make their job easier, and many effort are done to fulfill this needs, manually or using computers as controllers.

“Stepper motor position controller based on FPGA” is one of the application of the tools in our daily life. This tool consists of control panel part as an input, controller and the output of diskret position. Control panel consists of sixteen position buttons, controller contains digital networks which are implemented using FPGA xilinx’ s.

There are sixteen position which are controlled, and the stepper motor works with coding disk of which code is Grey.

If the sixteen position which is wanted is bigger than the position read by the sensor, the stepper motor will move clock wise to reach the position wanted, if smaller the stepper motor will move opposite clock wise to reach the position wanted and if the wanted position read by the sensor, the motor will stop