DEVELOPMENT OF A PROTOTYPE CNC ROUTER

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ABSTRACT

A CNC router is an automated router whose tool paths can be controlled via Computer Numerical Control. It is a technology which aims to generate, parse and execute sequential actions that describe the behavior of the end effectors. This paper reports the development of small sized prototype CNC router, based on a modular system to achieve the required accuracy and reliability for complex shapes. It also reports the development of the basic electronic devices to run the router with the capability of communication between computer and the router through USB port. The system uses C# as a programming language and Microsoft Visual Studio platform for graphical user interface (GUI).

KEYWORDS: CNC Router, Modular System, C#, Microsoft Visual Studio, GUI