

CNC Machine with Controller

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Abstract: *Computer numeric control (CNC) machine plays an important role in the field of automation. It reduces human involvement which eventually reduces rate of error, and increases processing speed resulting into an efficient system. In this research work universal serial bus (USB) based CNC controller has been designed and implemented using open source software (G-Code) and hardware (Arduino and other mechanical systems) which are easily available and cheaper as compared to commercially available controllers. This paper deals with the design of automatic mini CNC machine for PCB cutting and drilling using controller ATMEGA 328 in an arduino uno.*

Keywords: CNC, Arduino controller, USB, Gcode, Relay with PIC18F4550

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