Ahsanullah University of Science & Technology
Department of Computer Science & Engineering

CSE 3216

Microcontroller Based System Design Lab

Ms. Afsana Ahmed Munia
Ms. Fayza Amreen

Project Name: **CNC Machine**

Submitted By:

Md Junaeid Bhuiyan	16.01.04.055
Amir Hossain	16.01.04.056
Afranul Haque Afran	16.01.04.059
Md Ruhul Amin Rakib	16.01.04.074

Introduction:

This proposal outlines the planned construction of a Computer Numeric Control (CNC) type machine. The purpose of the project is to construct a functional CNC type machine capable of writing sentences in English on a two-dimensional object such as paper. The machine will be able to move on three axes and will be able to write with pen. The device would be capable of functioning independent of computer for both writing and determining writing paths. The goal is to keep balance between high precision and speed for functioning the device.

Equipment:

- ➢ Stepper motor
- ➢ Servo motor
- ➢ CNC shield
- ➢ A4988 driver
- ➢ Arduino Mega 2560
- ➢ Battery
- ➢ Wire

Features:

- ➢ Device would be able to write anything in English.
- ➢ Device will operate with high precision.
- ➢ Device would be independent of computer for functioning.
- ➢ Device would be dependent on computer for loading program into its microcontroller.
- ➢ Device will be operated by a DC power source.

Conclusion:

Our goal is to construct a writing machine which will operate with good accuracy and we will try to make it faster as much we can. Making a CNC machine of this type is not an easy task in the given time period. We will try our level best to achieve our goal in this project.