World Academy of Science, Engineering and Technology International Journal of Electrical and Computer Engineering Vol:18, No:01, 2024

Precise CNC Machine for Multi-Tasking

Authors: Haroon Jan Khan, Xian-Feng Xu, Syed Nasir Shah, Anooshay Niazi

Abstract : CNC machines are not only used on a large scale but also now become a prominent necessity among households and smaller businesses. Printed Circuit Boards manufactured by the chemical process are not only risky and unsafe but also expensive and time-consuming. A 3-axis precise CNC machine has been developed, which not only fabricates PCB but has also been used for multi-tasks just by changing the materials used and tools, making it versatile. The advanced CNC machine takes data from CAM software. The TB-6560 controller is used in the CNC machine to adjust variation in the X, Y, and Z axes. The advanced machine is efficient in automatic drilling, engraving, and cutting.

Keywords: CNC, G-code, CAD, CAM, Proteus, FLATCAM, Easel

Conference Title: ICECECE 2024: International Conference on Electrical, Computer, Electronics and Communication

ngineering

Conference Location: Bali, Indonesia Conference Dates: January 11-12, 2024