ROBOTIC ARM MICROCONTROLLER

by:

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SUMMARY

This project deals with the design and construction of a Robotic arm Microcontroller with a manual control as well.

Chapter I presents Robotics as they appear in the real world and shows some uses and applications of them. It also describes the types of Robot arms and drive systems. There are a few words about Actuators and describes the stepping Motor Driving Methods, as well as the hardware in a block diagram.

Chapter II shows all the circuit diagrams of the interface card describing the operation in detail. Construction and testing are also analysed.

Chapter III describes the operation of the 8085 microcontroller explaining all the signals and peripheral components used.

Chapter IV covers the software programs developed to control the stepper motors of the Robot arm. A detailed explanation of this software along with the program listing is provided.

All the CCT diagrams are also provided and data sheets for every component used. Moreover information about the companies involved with robotics is given.

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