



**DEVELOPMENT OF A MICROCONTROLLER FOR A COFFEE MACHINE**

by

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**Project Report**

**Submitted to**

**the Department of Electrical Engineering**

**of the Higher Technical Institute**

**Nicosia Cyprus**

**in partial fulfillment of the requirements**

**for the diploma of**

**TECHNICIAN ENGINEER**

**in**

**ELECTRICAL ENGINEERING**

**June 1991**



# ACKNOWLEDGEMENTS

I would like to express my deep gratitude to my project supervisor Mr Sotiris Hadjioannou for his valuable guidance throughout the project period.

I would like also to thank my fiancée Alexandra Gharalambous for her valuable help during typing this project.

Special thanks must be given to the PALINEX company for its support for the successful completion of this project.

Finally I would like to thank anybody who help me during the project period

# SUMMARY

The purpose of this project is to design and construct a microprocessor controlled coffee machine. All the operations of a coffee machine are performed and for this reason actual accessories needed for a coffee machine are used. In this way the coffee machine principal can be easily understand by anyone.

The amount of coffee selected which is fixed for all the types of coffees, the amount of sugar selected which is variable depending on the user preference as well as the coffee pot movement are performed with the use of three stepper motors.

The water flow is controlled trough a 240 Volts AC solenoid valve and the stirring of the ready coffee is done with the use of a stirrer which is actually a 240 Volts ac motor. During the whole operation of making coffee a 240 Volts AC fan operates for the removing of moisture withthin the coffee machine which may cost the coffee to get stack.

The coffee machine is set into operation after the user has inserted a coin. The user has the ability to chose any type of coffee he prefers from a variety of six different types of coffees.

The MTB 85-1 (micro target board) is used as the controller element of the coffee machine which together with an interface card designed and constructed consists the hardware part of the coffee machine. The whole operation of the coffee machine is controlled though a software package which was written and transferred to an eprom.

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