

DESIGN AND CONSTRUCTION OF

DIGITAL TO ANALOGUE

AND ANALOGUE TO DIGITAL

CONVERTERS

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Project Supervisors : Dr.A. Malloupas, B.Sc.,M.Sc.,Ph.D.,

M.Inst. M.C.(HTI)

Mr. D.Curran

Lecturer (LOUTON COLLEGE-ENGLAND)

External Assesor : Mr. S.Othonos,B.Sc.,MSc., (EMS)

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Group

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A B S T R A C T

This project deals with the design and construction of Analogue to digital and digital to Analogue converters

An investigation proved that a box-type teaching module of A/D and D/A converters are essential, for the electronic laboratory to be used for experimental and practical educational purposes.

For example, averaging of data, the ability to store data and manipulating them is a basic requirement of a modern day computer system.

It is well known that the most common method of digitizing an analogue signal is to sample it at regular intervals and then to convert each sample into an equivalent digital form.

The following section describes the design of a simple and efficient digital-to-analogue converter (DAC) or D/A converter.

The DAC is an electronic circuit which converts digital data into an equivalent analog output.

With the use of a microcontroller, digital data can be easily generated. This makes it a very attractive choice for real time applications. By using digital-to-analog converters, we can interface microcontrollers to the external world and other units for applications.

The DAC consists of a digital control section, digital-to-analog converter, a digital-analog converter, a digital-to-analog converter and a digital-analog converter.

The DAC is a very useful device for interfacing microcontrollers to the external world and other units for applications.

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