DEVELOPMENT OF AN EPROM CONTROLLED WAVEFORM GENERATOR

Project report submitted by

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ABSTRACT

Eprom Contolled Waveform Generator

by Pirillos P. Christoforos

The purpose of this project is to design,construct and test a waveform generator.
The generator,unlike usual approaches,is based on a pulse counting system which is an experimental approach.

An Eprom converts the counter outputs into a proper digital number and this number is then converted into an analogue waveform by a digital to analogue converter.The output can be of four types:

a)Sine wave
b)Square wave
c)Triangular wave
d)Saw-tooth wave

The output of the D/A converter is buffered so as to have a more stable output.There are three additional controls:

a)Variable frequency.
b)Variable Gain
c)DC offset

The scope of the first two is obvious.The DC offset moves the waveform up and down the axis i.e.DC or AC.

At the end of the project some improvements are given to increase the output frequency range and to provide some other useful controls.

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