VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI – 590 018



A MICRO PROJECT REPORT ON

"DIGITAL CLOCK WITH ALARM TIME DISPLAY"

Submitted By,

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE

This is to certify that the Micro-Project entitled "DIGITAL CLOCK WITH ALARM TIME DISPLAY" has been Successfully Completed By

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The bonafide students of Department of Electronics and Communication Engineering, Alva's Institute of Engineering and Technology, affiliated to VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the academic year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Dr. D.V.Manjunatha Micro Project Guide

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ABSTRACT

The aim of the project is to design a twelve hour Digital Clock that displays the time digitally, in contrast to an analog clock, where the time is indicated by the positions of rotating hands. With the help of counters and decoders, a digital clock to display time in hours, minutes and seconds can be constructed. Digital clock has a counter that receives a clock signal from any source and increases the number according to the clock signal. The main clock signal having 1 Hertz frequency is given to the decade counter which provides binary output to the decoder driver. This driver decodes the binary input to decimal and sends it to the seven segment display. The counter triggers the counter next to it when it resets. The remaining counters work in a similar fashion by receiving a clock signal from the previous counter and giving a clock signal to the next counter when it resets. Seven-segment display is a very common and efficient option for displaying a decimal value. The project focuses on building a digital clock with simple gates, flip-flops and counters with sequential logic rather than any programming based element.