

**NITTE MAHALINGA ADYANTAYA MEMORIAL INSTITUTE OF
TECHNOLOGY**

Nitte-574110

Department of Electronics and Communication Engineering

2010-2011

PROJECT REPORT

ON

“FAKE CURRENCY DETECTION WITH SECURITY ALERT”

Project Associates

**PRAMODHA S.E
(4NM08EC404)**

**ANIL KUMAR A
(4NM08EC400)**



**MOHAMAD ISAQ SUTAR
(4NM08EC402)**

**VAIBHAV KAPUR
(4NM07EC121)**

Under the guidance of
Mr. N.Durga Prasad
Asst. Professor
Dept. of E&C Engg.

Submitted to Visvesvaraya Technological University, Belgaum in the partial fulfillment of the requirements, for the award of Degree of Bachelor of Engineering in Electronics and Communication Engineering

ABSTRACT

A counterfeit determination is made with respect to currency by illuminating the currency by an array of LED's, and the transmission and reflection fluorescence signal are detected by the group of sensors. The analog signals are in turn digitized. Authentication is made based on a comparison of the intensity levels of the detected signals with the programmed values in the controller. In general some characteristics of the currency is sensed and compared with the reference standard. Along with counterfeit detection the system is programmed for currency categorization. Say good and soiled.

The controller used for this application is 18F458 which is 40 pin IC which is high speed in operation with crystal frequency of 20 MHz It uses the embedded C for programming which converted by assembler to its machine level.

The software tool is necessary to develop embedded application. The high performance embedded workshop is a powerful development environment for embedded applications targeted at MPLAB. It is Microchip LAB application development tool.