

ABSTRACT

The aim of this final project is describe the design and implementation of sms encryption with AT89S8252 MCS-51 Microcontroller as the core of cryptography processor.

Microcontroller reads the SMS and encrypt the message with Advanced Encryption Standard 256 bits (AES-256) Algorithm. SMS Decryption is processed by microcontroller with keys from 2KByte EEPROM AT89S8252.

The delay of 1 block encryption is 18,16 ms and decryption is 61,22 ms with Oscillator 11,0592MHz. In Encryption and Decryption process, Key generation not in once, but updated every rounds. The Project Design is supply with 9V DC and in Power Down mode.