

## **ABSTRACT**

Nowaday security aspect become very important thing in Information technology. It's related with how important the message, data or information will be transmitted or received by the people so it still authentic. As an example the sending information through Handy Talky device that generally never become privacy because all people set in same frequency and still in transmit receive range will be able to hear that information. One of the methode that possibly us to send information safely and privacy by using criptography methode. Criptography is an art or knowledge to keep message security, data or information so user won't worry the information they want to send will be known by another else.

At this Final Project is hoped the writer could realised the microcontroller to use the input from voice in this case by using digital data into a scramble data / chipertext use cryptography algorithym RC-4 (Rivest Code-4). At transmitter, analog voice signal from microphone will be converted into digital data using digitalization device ADC0804. That digital data next will be processed by microcontroller to be encrypted. The digital data that have been encrypted next will be processed into analog signal by using FSK modulation to be transmitted through handy talky device, and same process at the receiver side, chipertext that received then converted into digital data by using FSK demodulation, the data that still in chipertext then will be descrypted by microcontroller and switched back into analog voice signal.