

## **ABSTRACT**

Data encryption algorithm (payload) implementation in a chip which declared at Bluetooth specification is a more complex design than the last generation (Data Encryption Standard). Standard Bluetooth not encrypt the packet header and access code, but Bluetooth only encrypt a user data. Plain text input is a serial bit stream, which encoded mod 2 sum with a key stream on a chip. Chipper text output is serial bit stream encode. Logic function on this chip, a lot purpose for build the serial key stream.