Abstract

This paper describes a new method to detect and correct a single bit in the data message. This method has been developed based on Reed Muller matrix. The key point for the
implementation of error-free is the encoding of the information to be transmitted in such a way that some extent of redundancy is included in the encoded data, and a method for efficient decoding at the receiver is available. These two requirements have been achieved in the new method in an efficient and simple way. The new method is implemented using XILINX, and has demonstrated using some examples. The design detects and corrects all single bit errors in a 16 bit data, and 6 check bits.

Reference

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Index Terms

Computer Science Communication Systems
Key words
Communication
Encoding messages
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