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BER performance of OFDM system with the effect of error control code

(Conference Paper)

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Abstract

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Orthogonal Frequency Division Multiplexing (OFDM) is one of the promising modulation techniques suitable for high data rates in a wireless communication system. OFDM is the most effective modulation technique suitable for multipath communication channel and fading environment at reasonable complexity. However, the existence of Error Control Coding (ECC) in OFDM system is necessary for the reliable data transmission. This is due to the capability of ECC which can detect and correct the data received. Two types of ECC performance which are Hamming code and convolutional code are investigated in this paper. The simulation system and parameter are described and the results are discussed. © 2014 IEEE.

Author keywords

ECC OFDM Rayleigh Channel Wireless Communication System

Indexed keywords

Engineering controlled terms: Codes (symbols) Complex networks Convolutional codes Frequency division multiplexing
 Frequency modulation Modulation Telecommunication networks
 Wireless telecommunication systems

ECC

Error control code

Error control coding

Modulation techniques


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Engineering main heading: Orthogonal frequency division multiplexing

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1 Cimini, L.J.

Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing

(1985) *IEEE Transactions on Communications*, 33 (7), pp. 665-675. Cited 1548 times.
doi: 10.1109/TCOM.1985.1096357

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2 Hwegi, Y., Kordi, H.

Reliable data transmission over rayleigh channel

(2010) *Proceedings 2010 IEEE International Conference on Software Engineering and Service Sciences, ICSESS 2010*, art. no. 5552330, pp. 471-473.
ISBN: 978-142446052-6
doi: 10.1109/ICSESS.2010.5552330

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3 Jatinder, S.

A comparative study of error detection and correction coding techniques

(2012) *Advanced Computing & Communication Technologies (ACCT), 2012 Second International Conference On. IEEE*

4 Sigurd, S.

An Introduction to 802.11 ac

(2011) *White Paper, Quantenna Communications Inc*, 9.

5 Al-Rawi, G.A., Al-Naffouri, T.Y., Bahai, A., Cioffi, J.

Exploiting error-control coding and cyclic-prefix in channel estimation for coded ofdm systems

(2003) *IEEE Communications Letters*, 7 (8), pp. 388-390. Cited 25 times.
doi: 10.1109/LCOMM.2003.814712

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6 Lin, S., Lin, S., Costello, D.J.

Error control coding

(2004) *Pearson Education India*

7 Yuan, J.

A practical guide to error-control coding using Matlab

(2010) *Artech House*, pp. 155-163.

-
- 8 Peter, E.
Coding for noisy channels
(1955) *Proceedings of the Institute of Radio Engineers.*, 43 (3).
-
- 9 Claude, D., Fort, A.
Selection of channel coding for low-power wireless systems
(2003) *Vehicular Technology Conference 2003. VTC 2003-Spring, the 57th IEEE Semiannual.*, 3.
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-

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