HIPERLAN/2: OFDM SIMULATION USING SIMULINK

This project report is presented in partial fulfillment for the award of the Bachelor of Electrical Engineering (Hons.)

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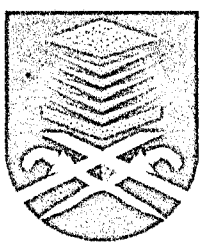

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ABSTRACT

Orthogonal Frequency Division Multiplexing (OFDM) is a new digital modulation technique, which consists of transmitting a data stream on several carriers instead of using single carrier. It is adopted in several recent digital wireless broadcast and network standards, including HiperLAN/2, IEEE802.11a and Digital Audio Broadcasting (DAB).

This project paper will explore the use of Simulink to model features of OFDM receiver design. This thesis will also discuss the implementation of OFDM in HiperLAN/2 by simulation using Simulink. It will also explore the use of Simulink to model features of OFDM receiver designs, in packet based and in continuous transmission systems, including synchronization and channel compensation problems.

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