

Developing and Study of STRR and ATRR Receivers in UWB Systems

羅貴華、陳雍宗

E-mail: 9701017@mail.dyu.edu.tw

ABSTRACT

In this paper based on the techniques of OFDM (orthogonal frequency division multiplexing) the project of the development and implement of ATRR (average transmit reference receiver) and STRR (simple transmit reference receiver) receivers for the UWB (ultra-wideband) systems are proposed. For the purpose of pursuing to keep up with top technologies, the newest techniques, for example the OFDM, UWB and sensor networking, etc., the UWB wireless communication technique will be adopted in this paper in order to research and develop some added applications in private enterprise area. Some of the theories of optimal and suboptimal receiver for UWB techniques will start up and be modeled by using of the analytic methods. Finally, all the theory models will be verified by computer simulations. There are also some of the measured data with simulation will be obtained in this thesis.

Keywords : OFDM, transmit reference receiver (STRR), average reference receiver (ATRR), Ultra Wideband, MC-CDMA access communications.

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