

AUTONOMOUS MODULATION DETECTION WITH S3C2440 PROCESSOR AND OPEN SOURCE MODULES

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ABSTRACT

The digital world, with or without the use of interconnected networks is influenced by channel conditions and maintaining the required throughput and quality of service is challenging. In this paper, automatic detection of modulation techniques with hardware implementation is presented. The modulated techniques used for the classification is binary phase shift keying, binary amplitude phase shift keying, pulse width modulation, quadrature amplitude modulation and frequency shift keying. The hardware is implemented on S3C2440 (FL2440) processor. The performance evaluation of the proposed system is carried using various test signals. Experimental results show that the proposed method is able to perform autonomous detection.

KEYWORDS: Automatic Modulation Detection, FL2440 Hardware, GNU Radio