

PCM DATA LINK USING ANALOG-TO-DIGITAL CONVERTER

(ADC)

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Most Gracious Most Merciful**

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ABSTRACT

The main advantage of Pulse Code Modulation (PCM) is its very good signal to noise ratio obtained at the expense of an increased bandwidth. However the main advantage of PCM is a much wider bandwidth than that of the corresponding analog signal.

In PCM there are three processing stage involved in the conversion of an analog signal to PCM signal that is sampling, quantizing and coding. Quantizing and coding are the basis for Analog-to-Digital conversion. In other words the ADC converter is the main part in PCM technique.

In this thesis, it covers the basic principle of Pulse Code Modulation, and studies the properties of PCM. For the hardware development we just focus to the Analog-to-digital converter circuit that the main part in PCM technique. This project concerned with the development of a basic communication circuit that was build around communication Toolbox Hardware.

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