

## **ABSTRACT**

Application of digital signal processing is currently very broad and has penetrated into various fields of human life. One area of application is the field modulation. Modulation is a method of laying the information signal into a carrier signal having a frequency higher, so this method is very important in the process of sending information. One type is Amplitude Modulation Analog modulation. In analog signal processing, analog input signal go to Signal Processing (ASP), given different treatment (eg filtering, gain, etc..) And its output in the form of an analog signal. Analog modulation is designed at the end of this project is Amplitude Modulation. Amplitude Modulation is the process of laying the information signal on a carrier signal (carrier signal), AM modulator current is usually in the form of a chip or microprocessor. Another way to make the modulator in a form that can be programmed by using a DSP processor.

To implement it, at the end of the project is to design AM Transmitters on TMS320C6713 DSK by using Simulink. Manually programming the DSP processor that can be avoided by using a complicated Simulink. AM modulator system model is designed to be made in Simulink, then simulated. After that, using the available libraries C6713DSK in Simulink, a model system that has made the source code is automatically generated and loaded into the C6713DSK through intermediaries Code Composer Studio software and displayed using Visual Analyzer.

The results obtained at the end of the project can be analyzed and demonstrated that the modulation index carrier signal must be greater than the information signal so that the signal can be modulated by both. Inputs used in the final project is Mic for voice input with frequency 0.3-3.4 kHz voice and line-in for MP3.

**Keywords: SIMULINK, Visual Analyzer, AM Transmitters**