ABSTRACT

One of reliable techniques for overcome signaling damage is Orthogonal Frequency Division Multiplexing (OFDM). Basically OFDM dividing a high rate data serial into some orthogonally subcarrier, so can be obtained a low rate data. But, with more number of used carrier, the value of Peak-to-Average Power Ratio (PAPR) is becoming greater.

Peak-to-Average Power Ratio (PAPR) is a ratio about maximum signaling amplitude and average signaling amplitude. This is a weakness from OFDM system, because of high PAPR value can causing a non-linier distortion resulting an intermodulation and spectral leakage. Therefore, some technique that can reduce the value of PAPR. Some of technique has been develop for reduce a high value of PAPR, including Selected Mapping (SLM) and Partial Transmit Sequence (PTS), Clipping, Interleaving, Sub Block Coding, Peak Windowing.

In this final project, will be implemented some system that reduce value of PAPR using PTS method. This implementation will be using DSK TMS320C6416T. An expectation from reduction value of PAPR with PTS method that implemented on some DSP processor is can be some idea in the future which helped to analyze an reduction value of PAPR on OFDM signal. From experiment that we do using randomize information data parameter. OFDM with PAPR reduction PTS method with 8 subcarrier that can reduce PAPR until 22% is more efficient than 24 subcarrier. But in other hand OFDM with 24 subcarrier is more efficient if we use number of transmitted data, its efficient is 24.7%.

Keyword : **OFDM, PAPR, PTS, DSK TMS**
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