

292. SINGLE AND THREE PHASE ESTIMATION OF FREQUENCY AND PHASE USING PHASE LOCKED LOOP

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This paper describes about the digital phase locked loop design procedures to estimate the phase and frequency of the single phase and the three phases of the sinusoidal waveforms. The estimation of the phase and frequency in additive white Gaussian noise has a complex exponential which is a fundamental and a well discusses problem in the communication and the power systems. Different approaches are transpiring to overcome this problem, which is primarily used to estimate the accuracy and complexity in computation have been developed. Hence digital phase locked loop technique is used to estimate the phase and frequency in single and three phase. A digital phase locked loop can trail the different components such as frequency, phase and amplitude of an input signal or else it can generate a frequency with respect to the input signal. It is employed in many applications such as communication systems and power systems. The simulation is carried out using the MATLAB SIMULINK.

Index Terms— Digital Phase Locked Loop, Frequency, Phase.

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