Abstract

In Digital Signal Processing (DSP), there are two types of filters used to perform the filtering operations and they are the Infinite Impulse Response (IIR) filter and the Finite Impulse Response (FIR) filter. The present output sample of an IIR filter depends on the present input samples, past input samples and past output samples, i.e. IIR filter is of recursive type. Now to design the Digital IIR filter, the coefficients are essentially required. There are a number of techniques available for designing the IIR filter. In this paper, the design and determination of the IIR filter coefficients are introduced using computer based approach. The program based on the algorithm proposed in this paper is simulated in Matlab which provides with the satisfactory results.

References


Design and Determination of Optimum Coefficients of IIR Digital Highpass Filter using Analog to Digital Mapping Technique


Index Terms

Computer Science  
Signal Processing

Keywords

IIR filter  Digital filters  coefficient  High pass filter  Butterworth filter  Chebyshev filter  
analog-to-digital mapping