



ONE METHOD FOR IIR FILTER DESIGN BASED ON COMPLEX ALLPASS FILTERS (WedAmOR7)

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★ **Abstract :** This paper presents a new direct method for the lowpass and highpass IIR filter design. The method is based on the design of complex allpass filters. In contrast to the existing direct methods proposed for the IIR filter design, the method presented here uses the same specifications, namely the passband and stopband frequencies, passband droop and stopband attenuation, as the method used in the analog filter based design of IIR filters. The resulting filter is a Butterworth-type filter.