FFT Implementation and Filtering in verilog

EE18ACMTECH11005,EE18MTECH11004

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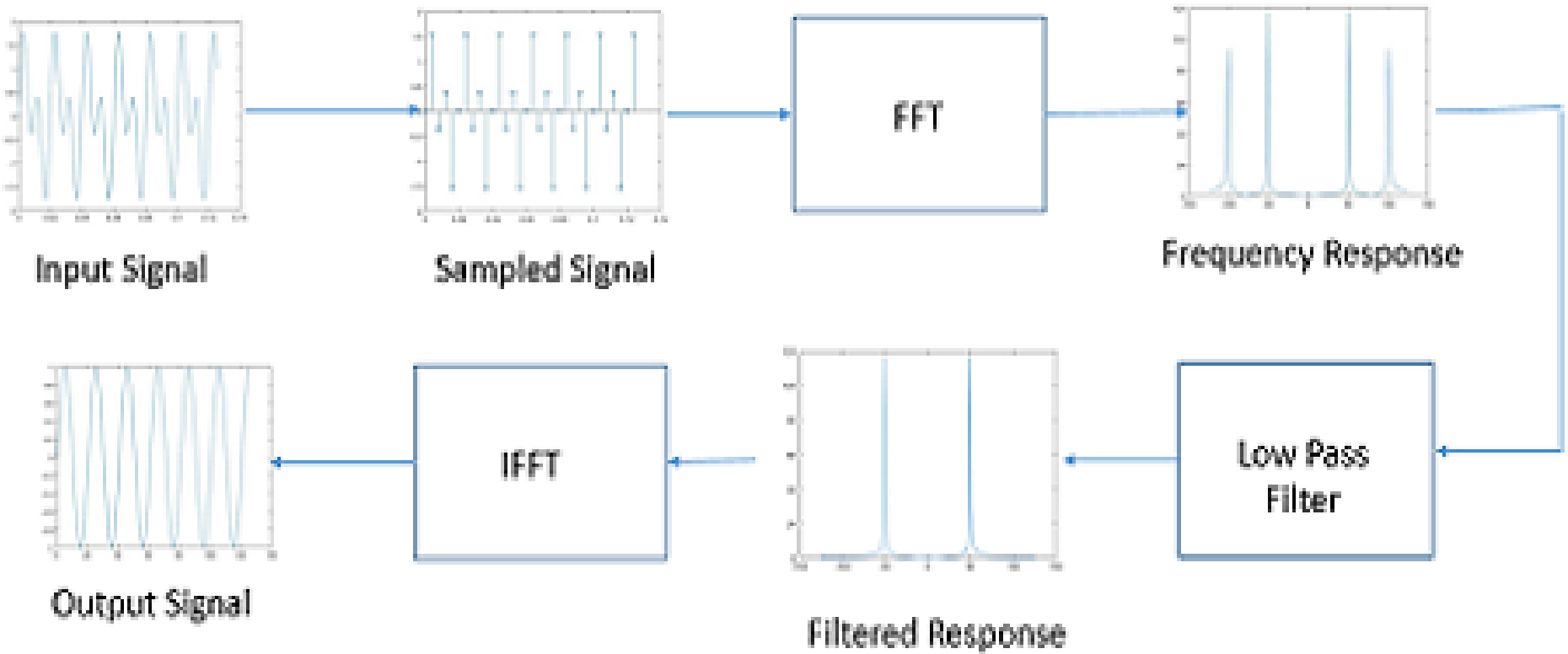
Objective:

- Implement 8 point FFT of a signal using Radix-2 in Verilog.
- Filter the low frequencies in Frequency Response.
- IFFT of filtered Response.

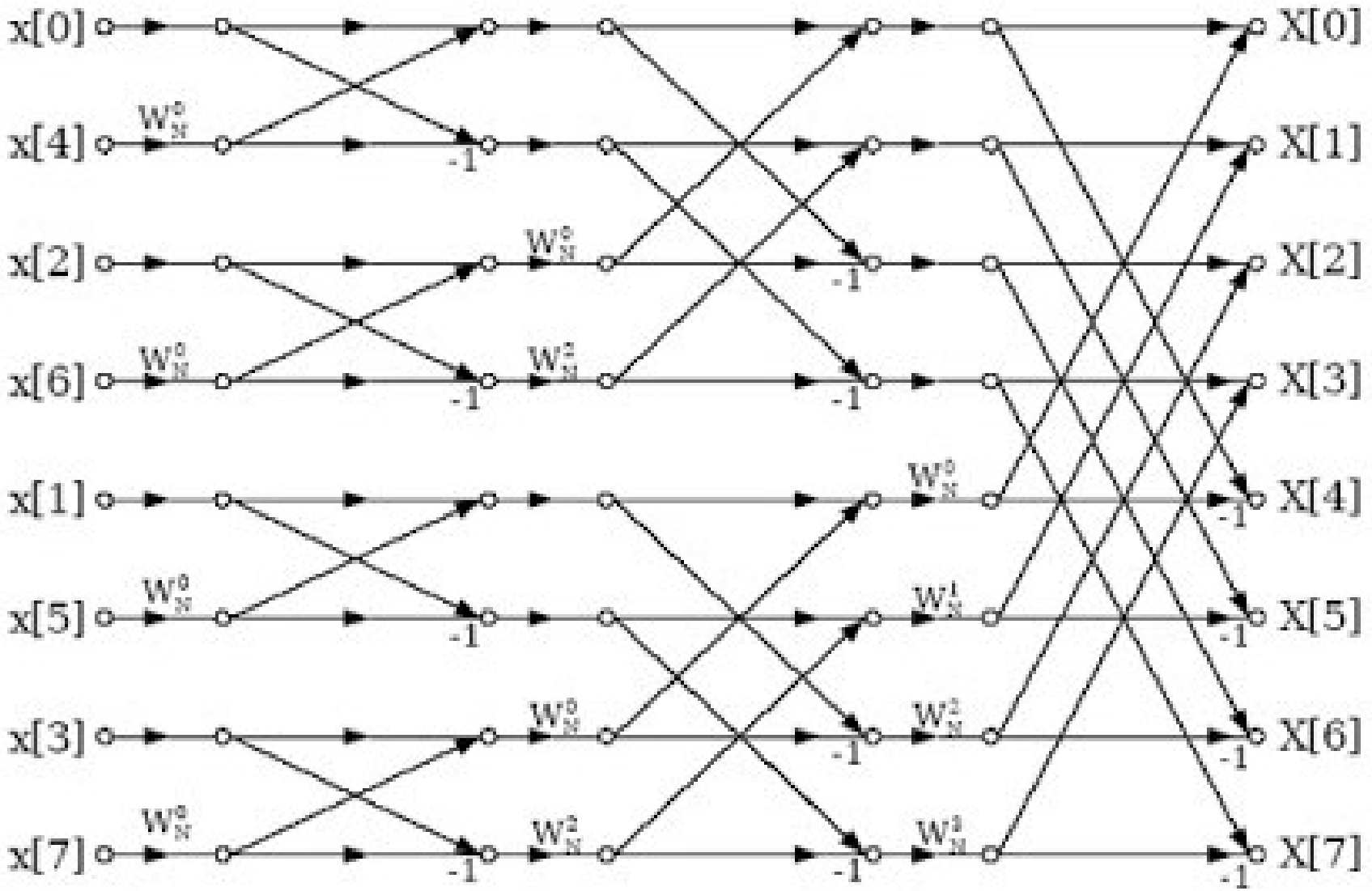
Approach:

Block Diagram



FFT(Fast Fourier Transform):

$$X[k] = \sum_{n=0}^{N-1} x[n] e^{\frac{-j2\pi}{N} kn}, W_N = e^{\frac{-j2\pi}{N}}$$



Thank You!