

TD Machine TNA:

Polyphase filters

1-/Design filter that verify the our objective of Signal to Alias Ratio of around 100dB for a resampling of 3

2-/Implement a polyphase filter for a decimation rate of 3. Compare to the transverse implementation.

3-/ Implement a polyphase filter for a interpolation ratio of 3. Compare to the transverse implementation.

4-/ Implement a polyphase filter for an interpolation ratio of $3/2$. Compare to the transverse implementation.

Tips: You may use the functions `firpm` (or `remez` for octave users), `reshape`, and the way to make a vector a column is `a(:)`.