

## Filterbank coefficients generation

The following procedure should be followed to obtain the coefficients used in the FIR filter of the Polyphase Filterbank, based on a 12288 taps FIR filter with a Blackman-Harris window.

1. Go to directory `.../modules/fn_pfs/src/Matlab/golden_reference`
2. Start matlab.
3. Start Filter Design and Analysis tool within matlab by typing `'fdatool'`.
4. In `fdatool` the filter characteristics can be changed.
5. Write out the coefficients file in ASCII format.
6. Edit the coefficients file by removing head and tail.
7. Run `cf2mif_2k_6taps_split.m` to obtain six `.mif` files, one for each tap.
8. Results are: `memory_2k_cf_tap[1..6]_blackman_harris.mif`
9. Specify these six files in `ram2048x18_cf_tap[1..6].vhd`, which are in `.../modules/fn_pfs_dr/src/ip`