Digital Filter Design

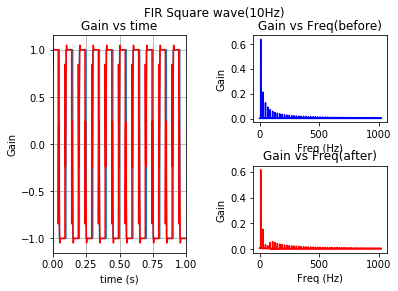
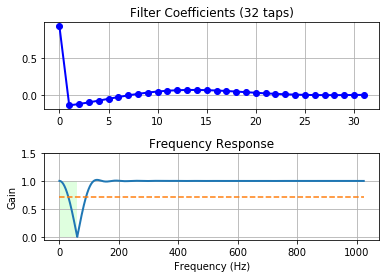
# Document purpose:

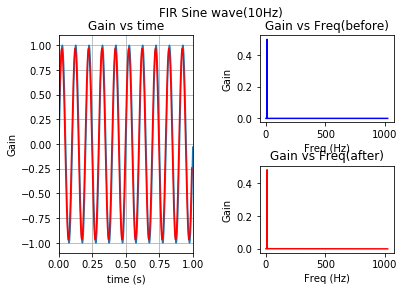
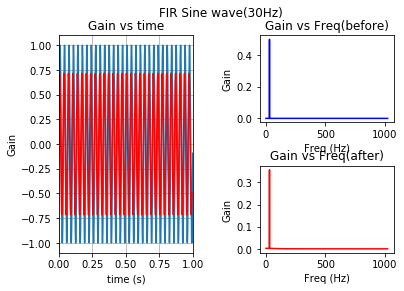
Design digital filter according to the specification section 10.4 in [\\Srv-wsee\Current Projects\02 Long Term Projects\Micro-Infiniti\02\_Design\_Input\DI04-071-00\_MI\_DI\_Encoder\_Command\_Set\DI04-071-01 MicroInfiniti Design Input Specifications Encoder Command Set.docx](file:///\\Srv-wsee\Current%20Projects\02%20Long%20Term%20Projects\Micro-Infiniti\02_Design_Input\DI04-071-00_MI_DI_Encoder_Command_Set\DI04-071-01%20MicroInfiniti%20Design%20Input%20Specifications%20Encoder%20Command%20Set.docx)

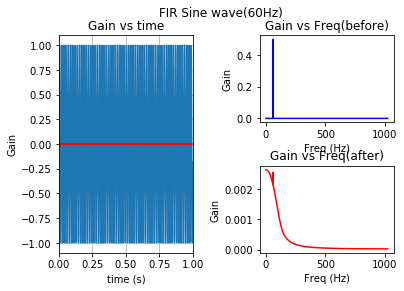
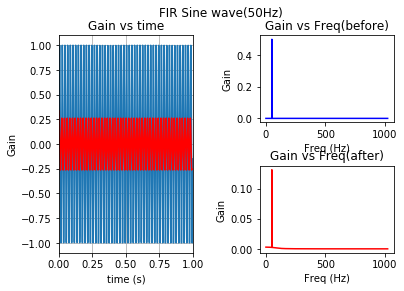
# T1-A : 60Hz Notch

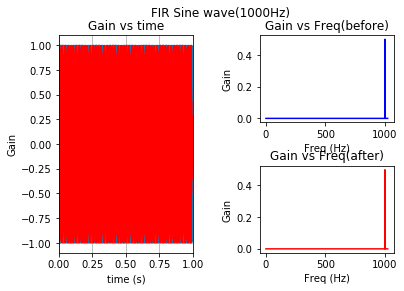
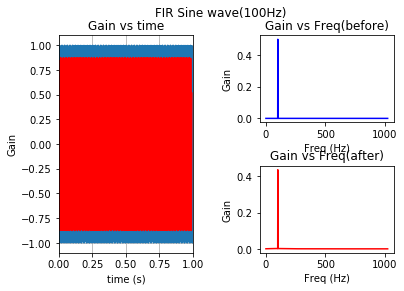
# 

32 Taps



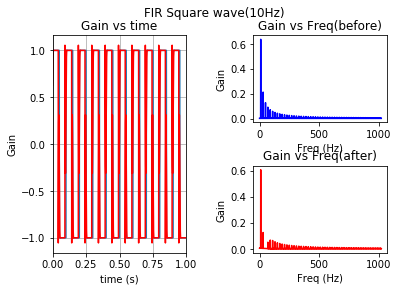
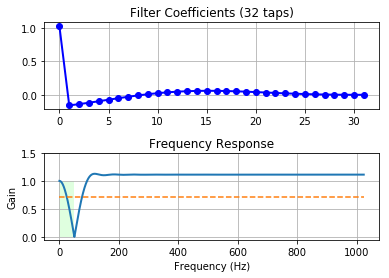
 

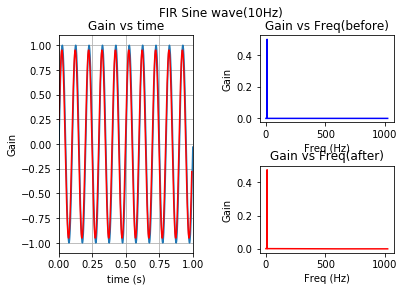
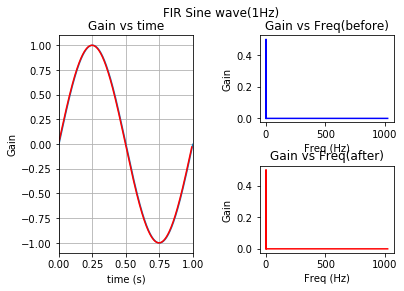


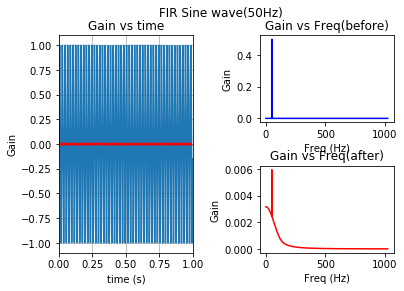
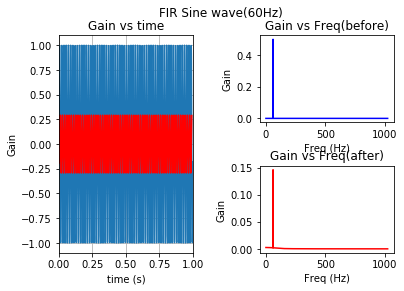


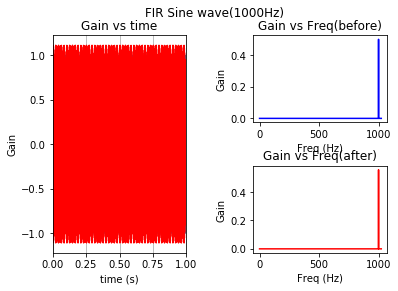
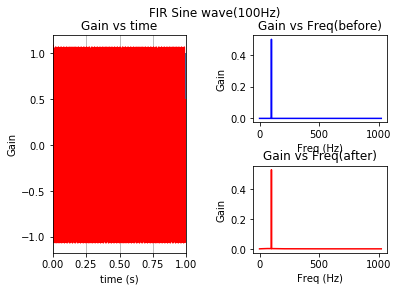
# T1-A : 50Hz Notch





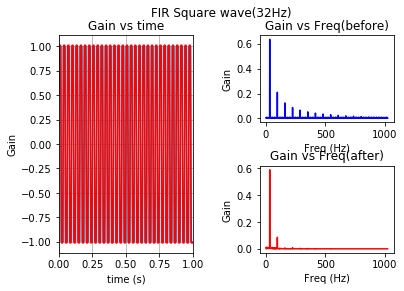
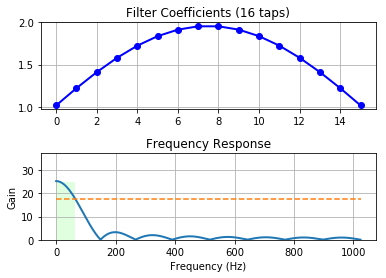
 

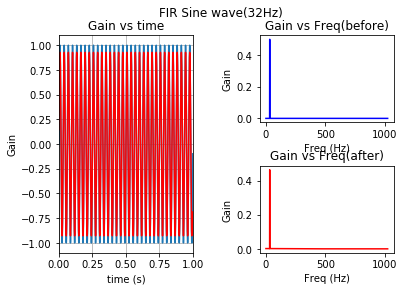
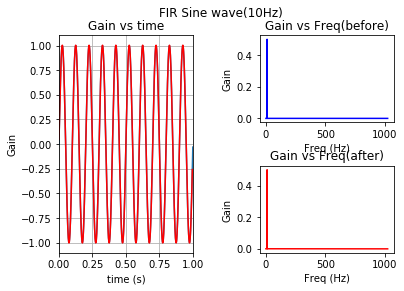
 

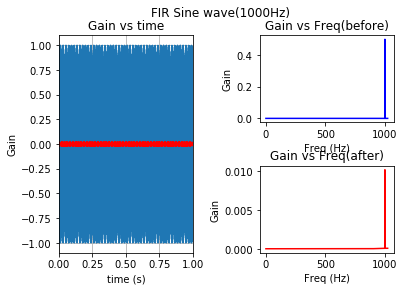
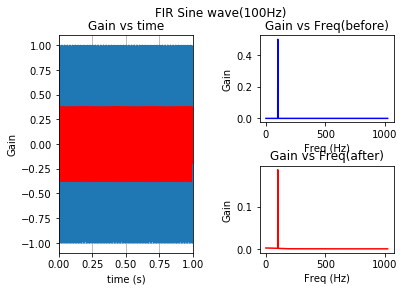
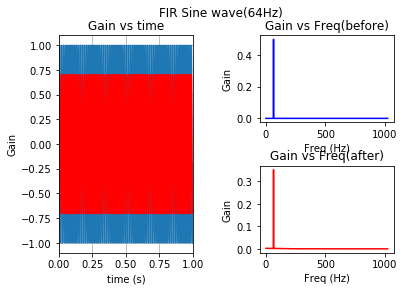


# LPF: 64HZ



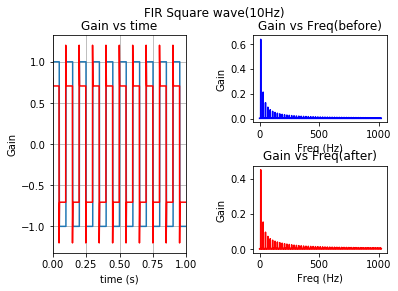
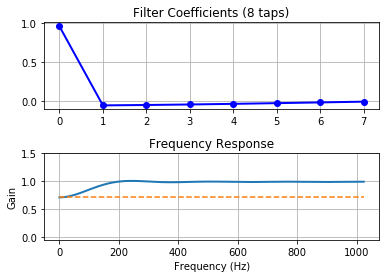


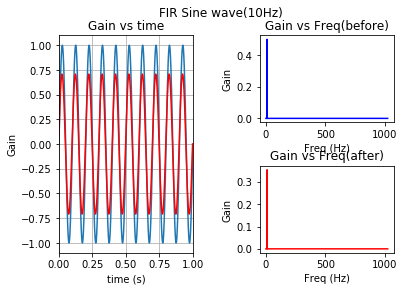
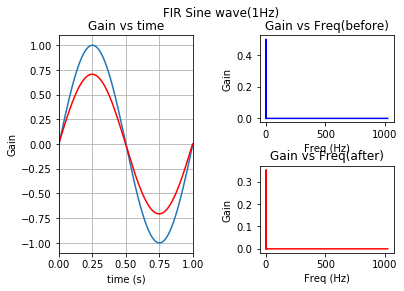


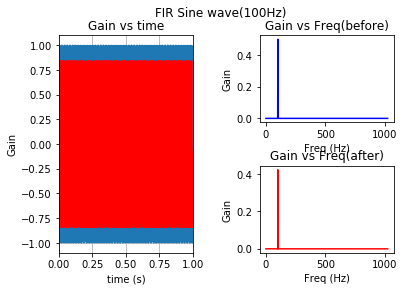
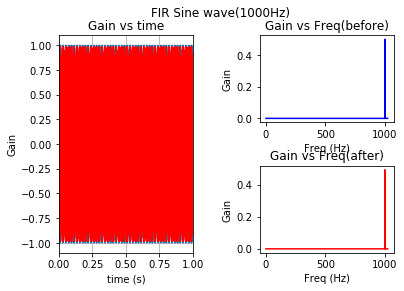


# HPF (Fc = 1Hz)

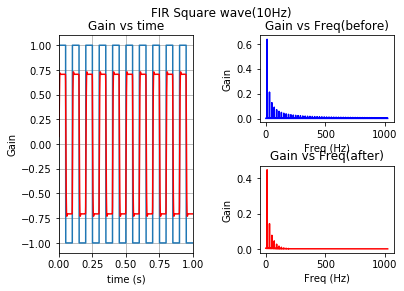
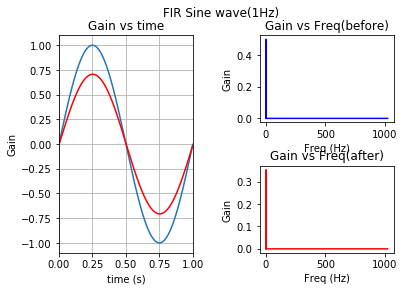


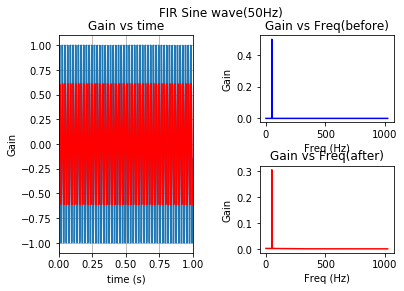
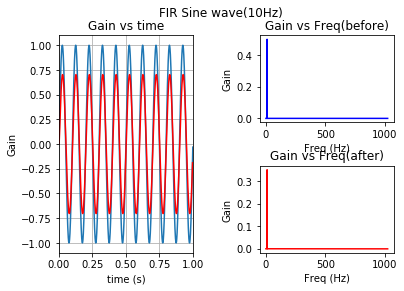


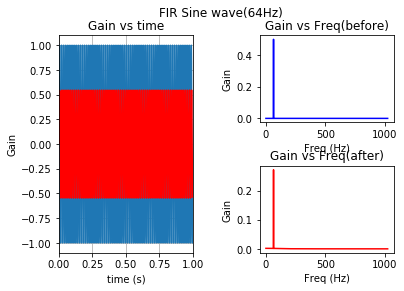
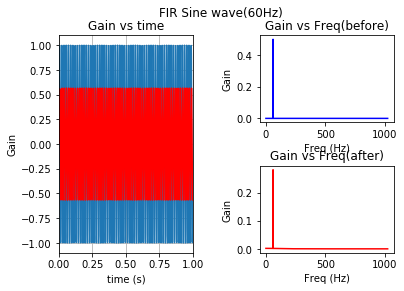


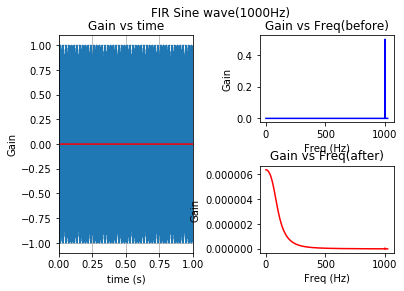
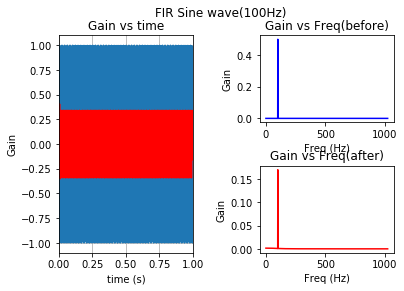
 

# BPF (1Hz-64Hz): Hybrid of HPF\_1HZ and LPF\_64HZ



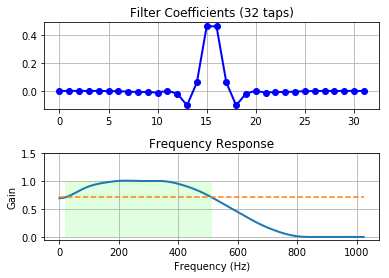
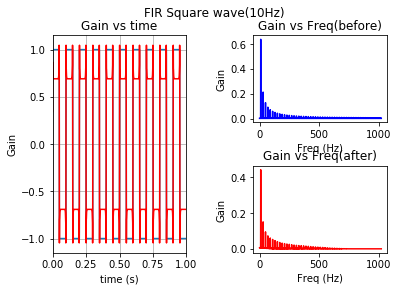


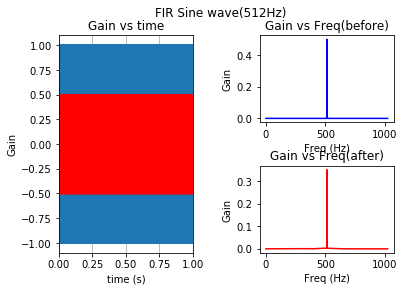
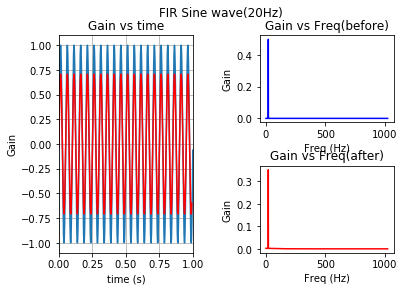
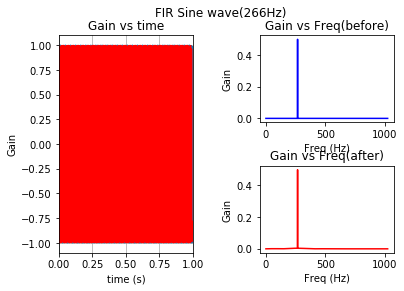
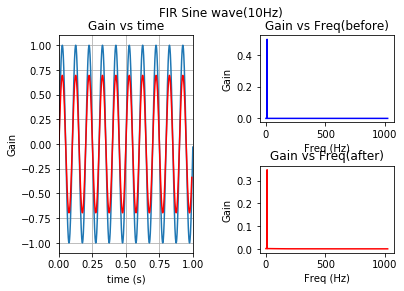


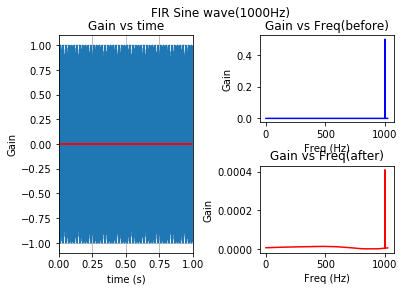
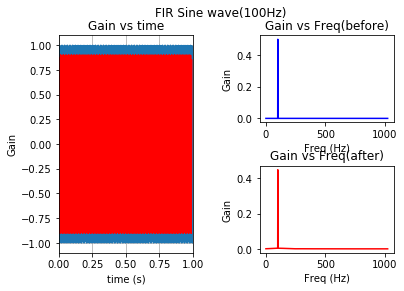


# BPF(20Hz-512Hz)



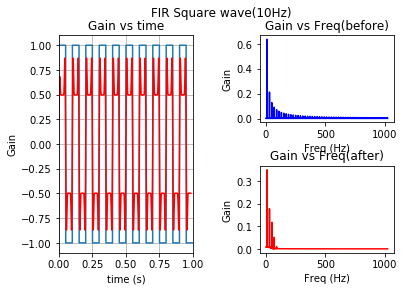
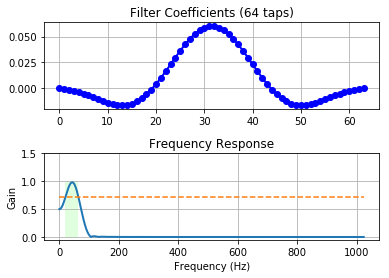
 

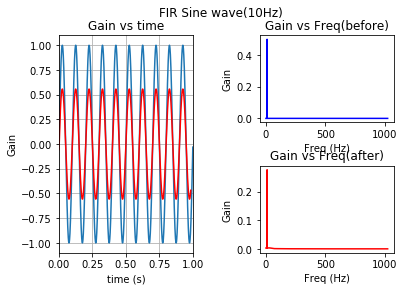
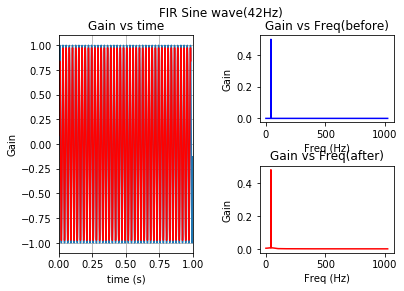
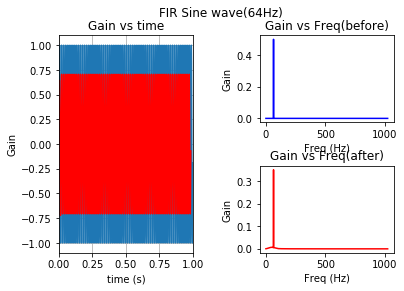
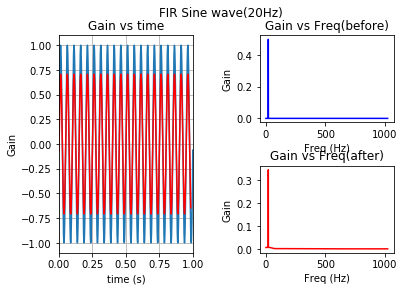


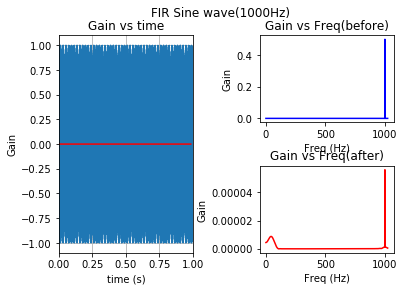
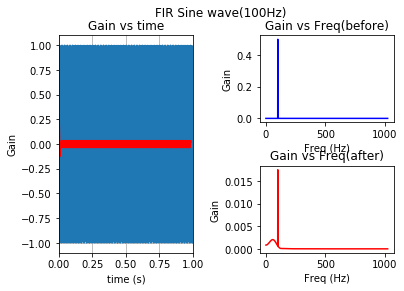


# BPF(20Hz-64Hz)



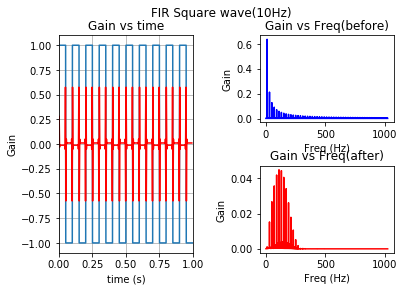
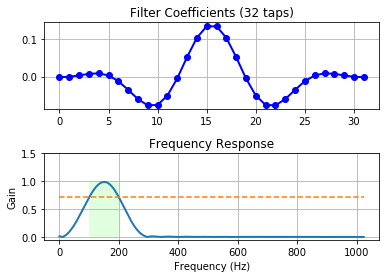


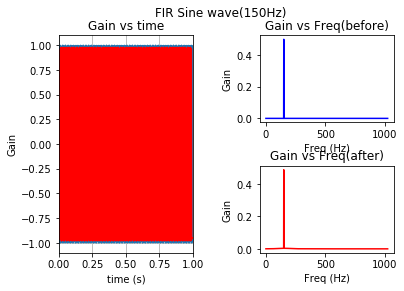
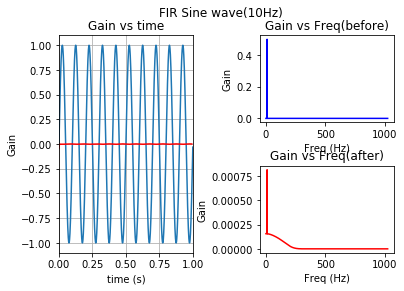
  

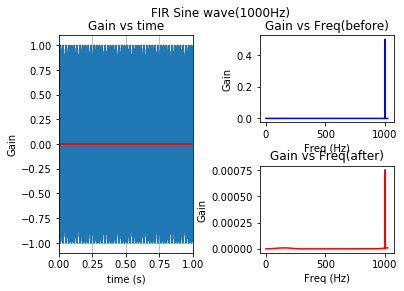
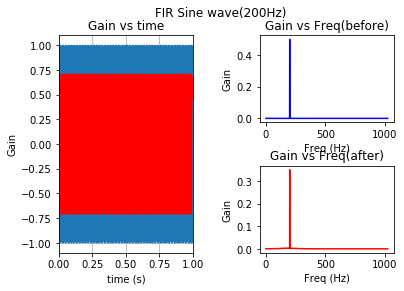
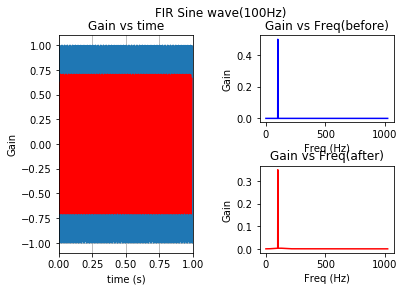


# BPF(100Hz-200Hz)



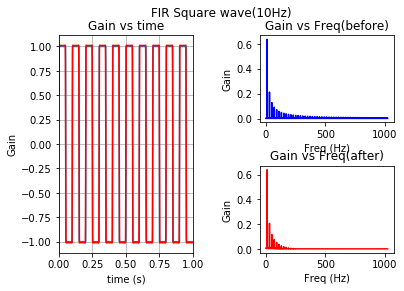
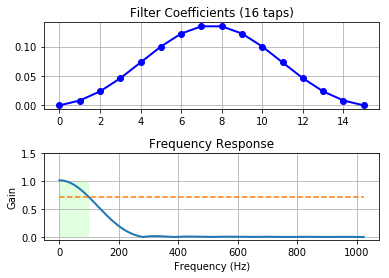


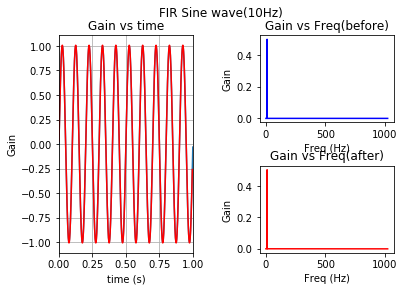
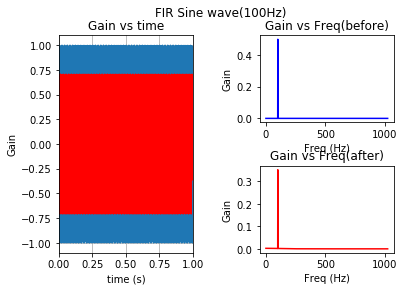
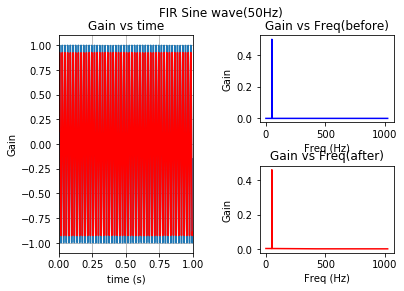
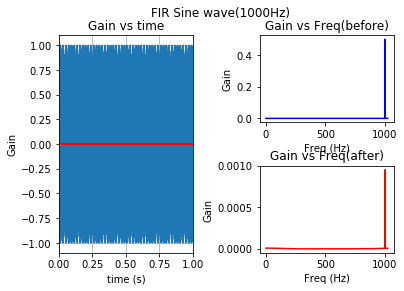




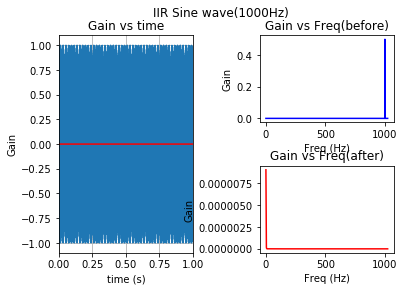
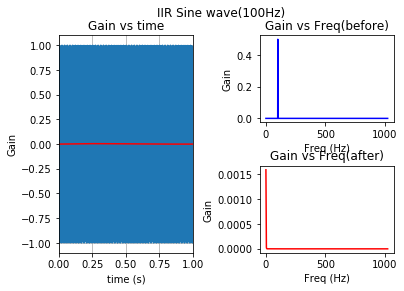
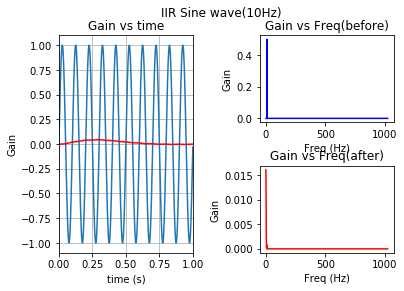
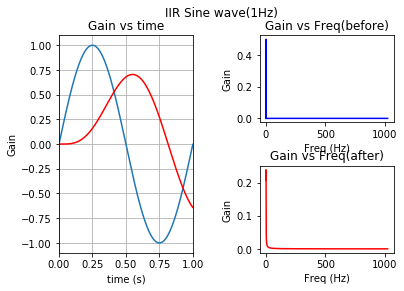
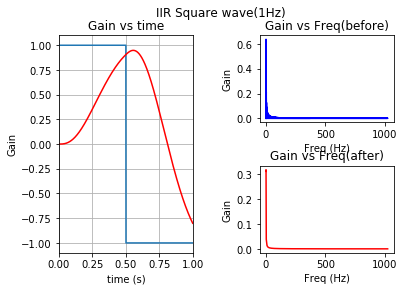
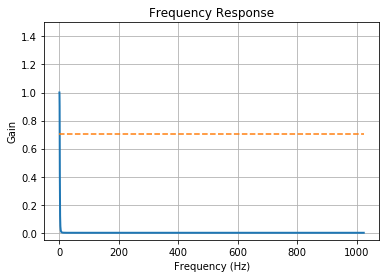
## LPF(0-100Hz)



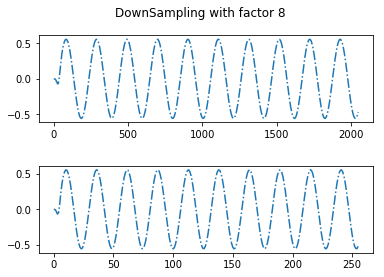


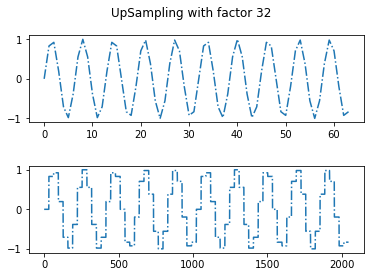
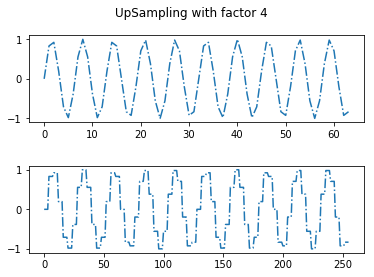
## LPF(0-1Hz)



# Decimation filter: T4



# Up Sampling: T7



# RMS(32:1)

