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## Impulse response of the 25-tap raised-cosine FIR filter.



## Frequency response of the 25-tap raised-cosine FIR filter.

The magnitude of the frequency response:



The phase of frequency response versus normalized frequency:



## 從傅立葉轉換後的頻域中，可以看出訊號從低頻通過，所以這是一種低通濾波器(Low-pass filter)。

## Time-domain waveform of the input.



## Frequency-domain response of the input.



## Time-domain waveform of the output.



## Frequency-domain response of the output.



## Output error versus input word-length.



## Output error versus coefficient word-length.



## Output error versus word-length after multiplication.



## Output error versus word-length after addition.





**S2.17**

**S1.18**

**S1.15**

**S1.15**

## Output error versus input word-length.



## Output error versus coefficient word-lengths.



## Output error versus word-lengths after multiplication.



## Output error versus word-lengths after addition.







**S2.19**

**S1.20**

**S2.16**

**S1.16**

**S1.17**