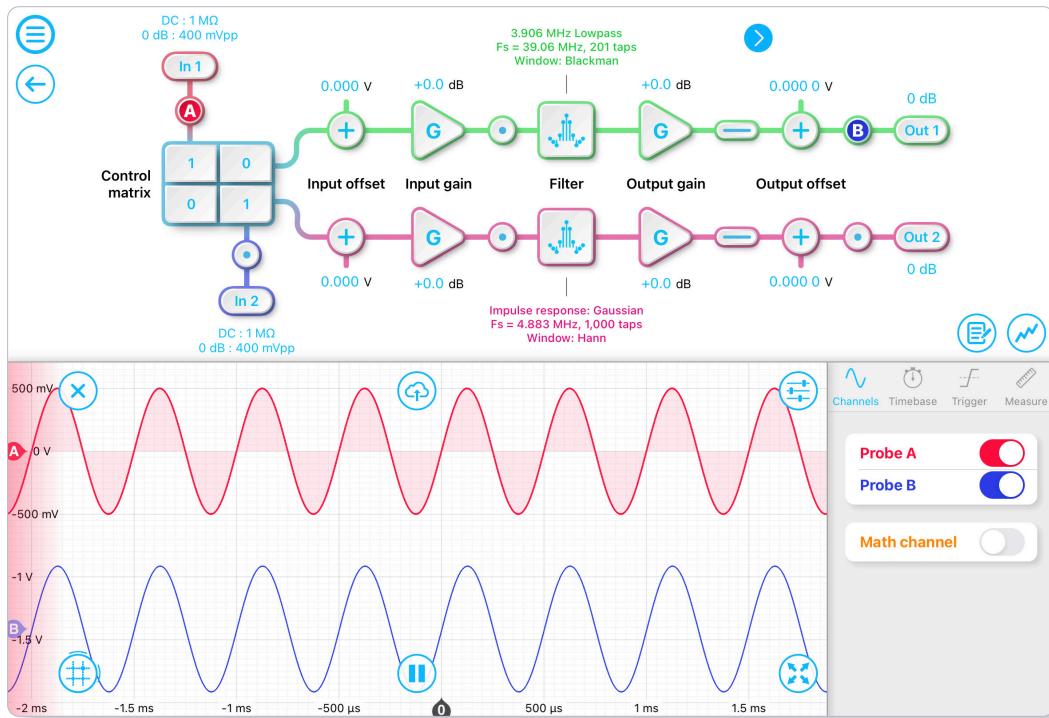




With the Moku:Pro FIR Filter Builder, you can design and implement lowpass, highpass, bandpass, and bandstop finite impulse response (FIR) filters with up to 14,819 coefficients. The Moku:Pro desktop interface allows you to fine-tune your filter's response in the frequency and time domains to suit your specific application. Select between four frequency response shapes, five common impulse responses, and eight window functions.



Sampling Rate
Up to 39.06 MHz

Filter Coefficients
Up to 14,819

Input Range
Up to 40 Vpp

Output Voltage Range
Up to 10 Vpp (50 Ω)

Integrated Oscilloscope
1.25 GSa/s

Features

- Visualize your signal and configuration in real-time: design filters in the time domain or in the frequency domain
- Visualize the filter's transfer function, impulse and step response, or group and phase delay
- Block diagram view of the digital signal processing chain with built-in probe points for signal monitoring and logging
- Load your own filter coefficients or enter an equation to create a customized impulse response

Specifications

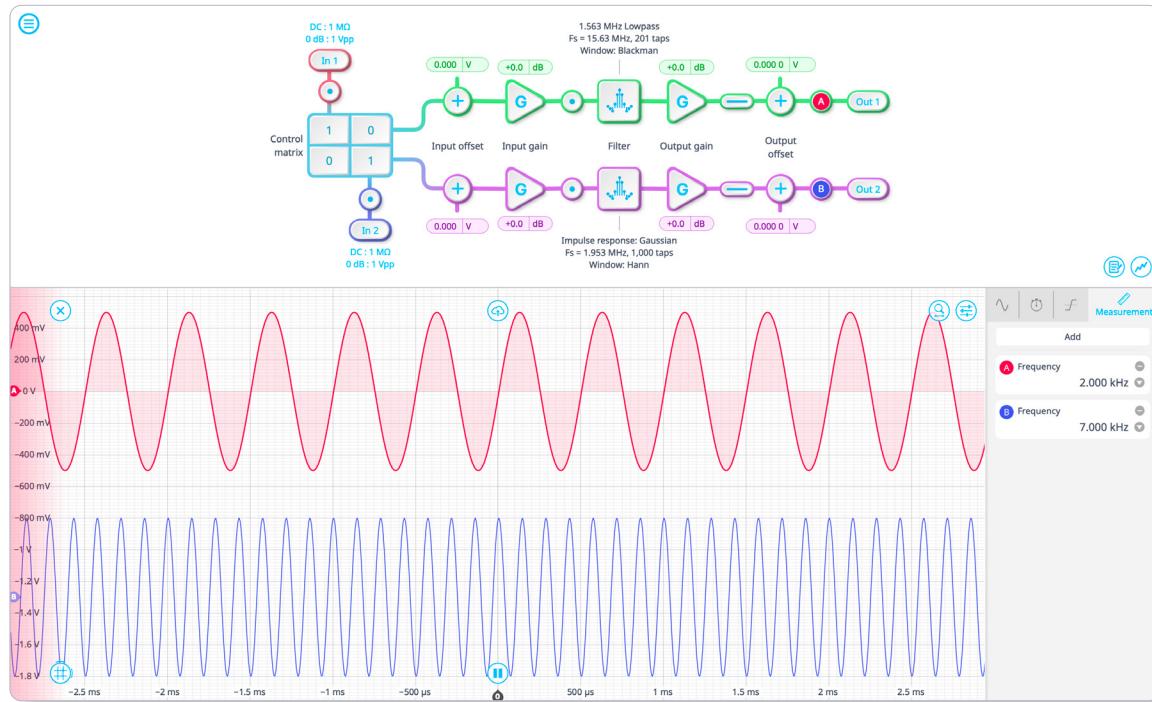
- Independent channels: 4
- Coefficient count at various sampling rates:
 - 2 to 232 @ 39.06 MHz
 - 2 to 928 @ 9.766 MHz
 - 2 to 7,424 @ 1.221 MHz
 - 2 to 14,819 @ 610.4 kHz
 - 2 to 14,819 @ 305.2 kHz
- Design domains: time (impulse response), frequency (frequency response)
- Impulse response: rectangular, sinc, equation input, custom, etc.
- Frequency response: lowpass, highpass, bandpass, bandstop
- Window functions: Blackman, Hanning, Barlett, etc.

Applications

- Impulse response simulation
- DSP system design
- Noise filtering
- Signal amplification
- Fractional delay generation



With the Moku:Lab FIR Filter Builder, you can design and implement lowpass, highpass, bandpass, and bandstop finite impulse response (FIR) filters with up to 14,819 coefficients. The Moku interface allows you to fine-tune your filter's response in the frequency and time domains to suit your specific application. Select between four frequency response shapes, four common impulse responses, and eight different window functions.



Sampling Rate
Up to 15.625 MHz

Filter Coefficients
Up to 14,819

Input Range
1 Vpp or 10 Vpp

Output Voltage Range
2 Vpp into 50 Ω

Integrated Oscilloscope
500 MSa/s

Features

- Visualize your signal and configuration in real time: design filters in the time domain or in the frequency domain
- Visualize the filter's transfer function, impulse and step response, or group and phase delay
- Block diagram view of the digital signal processing with built-in probe points for signal monitoring
- Load your own filter coefficients or enter an equation to create a customized impulse response

Specifications

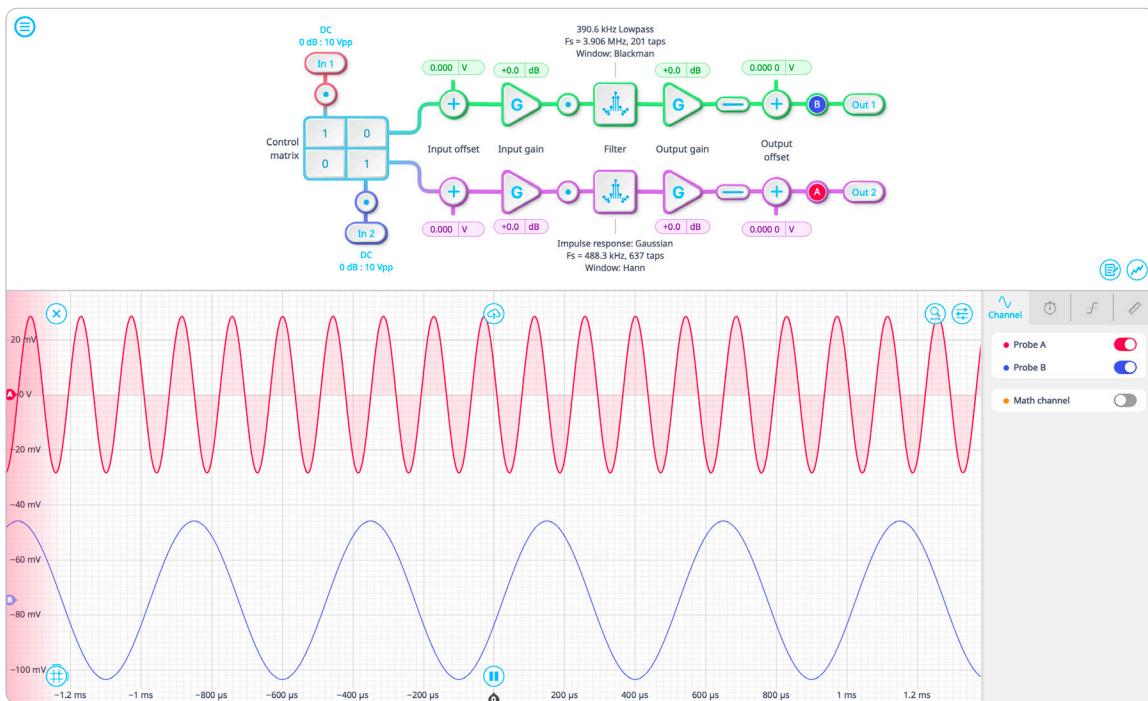
- Independent channels: 2
- Coefficient count at various sampling rates:
 - 2 to 232 @ 15.63 MHz
 - 2 to 928 @ 3.906 MHz
 - 2 to 3712 @ 976.6 kHz
 - 2 to 14819 @ 244.1 kHz
- Filter coefficient precision: up to 24 bits
- Design domains: time (impulse response), frequency (frequency response)
- Impulse response: rectangular, sinc, triangular, gaussian, equation input, custom
- Frequency response: lowpass, highpass, bandpass, bandstop

Applications

- Impulse response simulation
- DSP system design
- Noise filtering
- Signal amplification
- Fractional delay generation



With the Moku:Go FIR Filter Builder, you can design and implement lowpass, highpass, bandpass, and bandstop finite impulse response (FIR) filters with up to 14,819 coefficients. The desktop interface allows you to fine-tune your filter's response in the frequency and time domains to suit your specific application. Select between four frequency response shapes, five common impulse responses, and eight window functions.



Sampling Rate
Up to 3.906 MHz

Filter Coefficients
Up to 14,819

Input Range
 $\pm 5\text{ V}$ or $\pm 25\text{ V}$

Output Voltage Range
 $\pm 5\text{ V}$ into high-z

Integrated Oscilloscope
125 MSa/s

Features

- Visualize your signal and configuration in real-time: design filters in the time domain or in the frequency domain
- Visualize the filter's transfer function, impulse and step response, or group and phase delay
- Block diagram view of the digital signal processing chain with built-in probe points for signal monitoring and logging
- Load your own filter coefficients or enter an equation to create a customized impulse response

Specifications

- Independent channels: 2
- Coefficient count at various sampling rates:
 - 2 to 232 @ 3.906 MHz
 - 2 to 928 @ 976.6 kHz
 - 2 to 7,424 @ 244.1 kHz
 - 2 to 14,819 @ 61.04 kHz
 - 2 to 14,819 @ 30.52 kHz
- Design domains: time (impulse response), frequency (frequency response)
- Impulse response: rectangular, sinc, equation input, custom, etc.
- Frequency response: lowpass, highpass, bandpass, bandstop
- Window functions: Blackman, Hanning, Barlett, etc.

Applications

- Impulse response simulation
- DSP system design
- Noise filtering
- Signal amplification
- Fractional delay generation