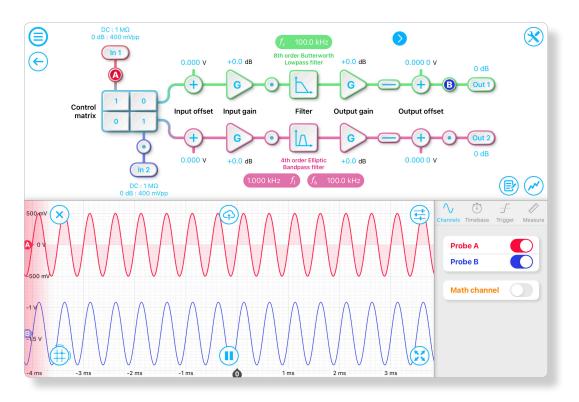


With the Moku:Pro Digital Filter Box, you can interactively design and generate different types of infinite impulse response filters with sampling rates of 305 kHz, 4.88 MHz, or 39 MHz. Select between lowpass, highpass, bandpass, and bandstop filter shapes with up to eight fully configurable types including Butterworth, Chebyshev, and Elliptic. This instrument can be deployed independently or used as filter components in Multi-instrument Mode.



Sampling Rate 305.28 kHz, 4.8828 MHz, or 39.063 MHz

Filter Order **2**, **4**, **6**, **8** 

Input Range up to 40 Vpp

Output Voltage Range
10 Vpp into 50 Ω

Filter Shapes Lowpass, Highpass, Bandpass, Bandstop, Custom

## **Features**

- Visualize your signal and configuration in real time: design your filter's frequency response using the interactive Bode plot
- Block diagram view of the digital signal processing with built-in probe points for signal monitoring
- Versatile input and output options: 4 input channels, 4 output channels with optional blending for input signal mixing
- Supports custom filter designs
- Built-in Oscilloscope and Data Logger

## **Specifications**

- Filter shapes: lowpass, highpass, bandpass, bandstop
- Filter types: Butterworth, Chebyshev I, Chebyshev II, Elliptic, Cascaded, Bessel, Gaussian, and Legendre
- Corner frequencies: 58.63 mHz 17.58 MHz
- Input-output latency: sub-microsecond
- Passband ripple: configurable 0.1 10 dB
- Stopband attenuation: configurable
   10 100 dB
- Independently adjustable input and output offsets and gains

## **Applications**

- System design
- Closed-loop control
- Noise filtering
- · Signal amplification
- Filter design and evaluation