

EDA CIRCUIT DESIGN

Technical specifications:

- Tonic component, band: **0-0.1 Hz**
- Phasic component, band: **0.1-10 Hz**
- Minimum and Maximum voltage Ina: **-3V, +3V**
- ADC: Flash Type

The target is the **phasic component**.

The tonic component can be approximated by a sine wave having an amplitude equal to 0.1 V and frequency equal to 0.01 Hz.

Filter's objective:

- *Attenuate the tonic component so that it has an amplitude less than or equal to 10 mV.*
- *Filter out by at least 50 dB the noise introduced by the motor control electronics of the exoskeleton (band: 200-500 Hz).*
- *Provide a maximum attenuation of 3 dB in passband.*