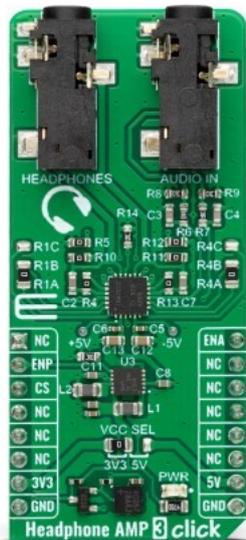


## Headphone AMP 3 Click



PID: MIKROE-5721

**Headphone AMP 3 Click** is a compact add-on board that contains a stereo headphone amplifier. This board features the [INA1620](#), a high-fidelity audio operational amplifier with integrated thin-film resistors and EMI filters from [Texas Instruments](#). Over its dual amplifiers, it achieves a very low noise density and drives a 32Ω load at 150mW of output power. Total harmonic distortion plus noise (THD+N), a degree to which an amplifier alters a pure sinusoidal signal by adding harmonics to the fundamental signal, is ultra-low, some -119.2dB at 1KHz. This Click board™ makes the perfect solution for developing high-fidelity (Hi-Fi) headphone drivers, professional audio equipment, audio test, measurement devices, analog and digital mixing consoles, and more.

Headphone AMP 3 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.  
 ISO 14001: 2015 certification of environmental management system.  
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

## Specifications

Type	Amplifier, Signal Processing
Applications	Can be used for the development of high-fidelity (Hi-Fi) headphone drivers, professional audio equipment, audio test, and measurement devices, analog and digital mixing consoles, and more
On-board modules	INA1620 - high-fidelity audio operational amplifier with integrated thin-film resistors and EMI filters from Texas Instruments TPS65133 - $\pm 5V$ , 250mA dual output power supply from Texas Instruments
Key Features	Low power consumption, shutdown feature, short-circuit protection, 32 $\Omega$ load at 150mW, EMI filters, integrated thin resistors for configuration, two 3.5mm audio connectors (IN and OUT), boost and buck-boost power supply onboard with positive and negative output voltage, and more
Interface	GPIO
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[Headphone AMP 3 click example on Libstock](#)

[Headphone AMP 3 click 2D and 3D files](#)

[TPS65133 datasheet](#)

[INA1620 datasheet](#)

[Headphone AMP 3 click schematic](#)

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