

GainAMP 3 Click



PID: MIKROE-4800

GainAMP 3 Click is a compact add-on board that contains a 4-channel programmable gain amplifier. This board features the ADA4254, a zero drift, high voltage, programmable gain instrumentation amplifier from Analog Devices. It features 12 binary weighted gains and three scaling gain options resulting in 36 possible gain settings. It comes with an input multiplexer providing $\pm 60V$ protection to the high impedance inputs of the amplifier and an excitation current source output available to bias sensors such as resistance temperature detectors (RTDs). The ADA4254 zero-drift amplifier topology self-calibrates DC errors and low-frequency noise, achieving excellent DC precision over the entire specified temperature range, maximizing dynamic range, and significantly reducing calibration requirements in many applications. This Click board™ represents a perfect choice for industrial systems and process control that demand precision, robustness, and low power, thanks to its low power consumption.

GainAMP 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
Applications	Can be used for industrial systems and process control that demand precision, robustness, and low power, thanks to its low power consumption
On-board modules	ADA4254 - zero drift, high voltage, programmable gain instrumentation amplifier (PGIA) designed for process control and industrial applications from Analog Devices
Key Features	Low power consumption, optimized for ADC synchronization, 12 binary steps and 3 scaling gains, $\pm 60V$ protection input mux, excellent DC precision, and more
Interface	SPI
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V, External

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[GainAMP 3 click example on Libstock](#)

[GainAMP 3 click 2D and 3D files](#)

[GainAMP 3 click schematic](#)

[ADA4254 datasheet](#)

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