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## DAC 13 Click



PID: MIKROE-5412

**DAC 13 Click** is a compact add-on board providing highly accurate digital-to-analog conversion. This board features the <u>AD3541R</u>, a low drift, single channel, 16-bit accuracy, voltage output digital-to-analog converter (DAC) from <u>Analog Devices</u>. The AD3542R operates with a fixed 2.5V reference, communicates with the host MCU through the SPI interface, and can be configured for multiple voltage span ranges. Also, it enables the selection of the power supply of the internal trans-impedance amplifier as well as its gain, which scales the output voltage. This Click board™ represents an excellent choice for DAC applications in data acquisition systems, process control equipment, programmable voltage sources, and many more.

DAC 13 Click is supported by a  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}$  board  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}}^{\mathsf{m}}$  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.





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## **Specifications**

Туре	DAC
Applications	Can be used for DAC applications in data acquisition systems, process control equipment, programmable voltage sources, and more
On-board modules	AD3541R - single channel voltage output digital-to-analog converter (DAC) from Analog Devices
Key Features	Multiple voltage span ranges, 16-bit resolution, internal or external voltage reference, selectable TIA gain, external or internal TIA supply, precision and accuracy, SPI interface, multiple error detectors, and more
Interface	SPI
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**

**DAC 13 click schematic** 

DAC 13 click 2D and 3D files

NVT2010 datasheet

AP2112 datasheet

DAC 13 click example on Libstock

AD3541R datasheet

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