

Time-saving embedded tools

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## PID: MIKROE-4193

**Force 4 Click** is based on <u>HSEPAR003A</u> piezoresistive force sensor from <u>Alpsalpine</u>. This product is a force sensor using the effect of a piezoresistive bridge circuit formed on silicon diaphragm. Piezoresistive force sensors achieve higher linearity than other force sensors. To help with stability and accuracy Force 4 Click also includes MCP1101-33 a high precision buffered voltage reference as a power supply to a force sensor that allows high stability and accuracy of output voltage readings.

Force 4 Click board<sup>™</sup> is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>™</sup> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> 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).



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## Specifications

Туре	Force
Applications	Fine-diameter stylus pen evelopment, load and compression sensing, variable tension control and many more
On-board modules	HSFPAR003A
Key Features	High sensitivity and good linearity, precisely detect micro force less than 0.01 N. no characteristics change after 1 million cycles
Interface	Analog,I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

## Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

## **Downloads**

Force 4 click 2D and 3D files

HSFPAR003A datasheet

Force 4 click schematic

Force 4 click example on Libstock

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