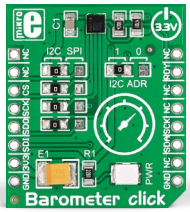
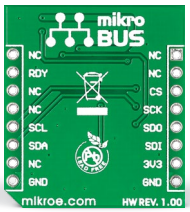


Barometer click





1. Introduction

Barometer click carries the **LPS25HB** IC, which is a piezoresistive absolute pressure sensor with a measurement range from 260 to 1260 hPa (with a 24-bit resolution output). *Barometer click* communicates with the target board microcontroller either through mikroBUS I²C (SCL, SDA) or SPI pins (MISO, MOSI, SCK, CS). Additionally, there's a Data Ready Interrupt pin. It's designed to use a 3.3V power supply only.

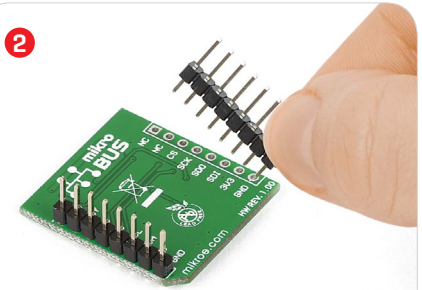
2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



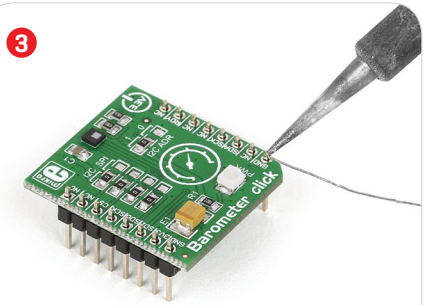
1

2

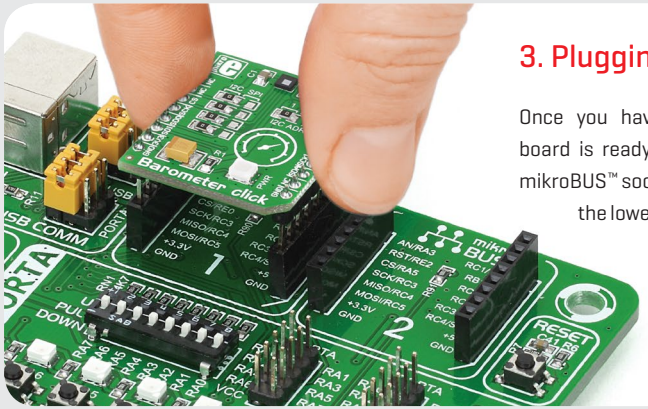


Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

3

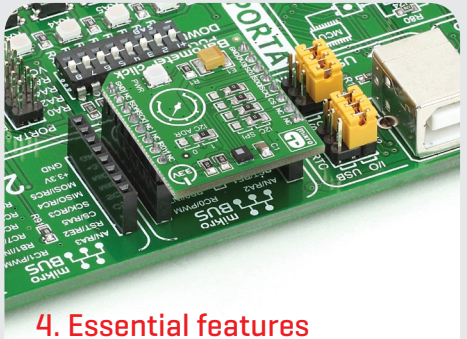


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the socket.



4. Essential features

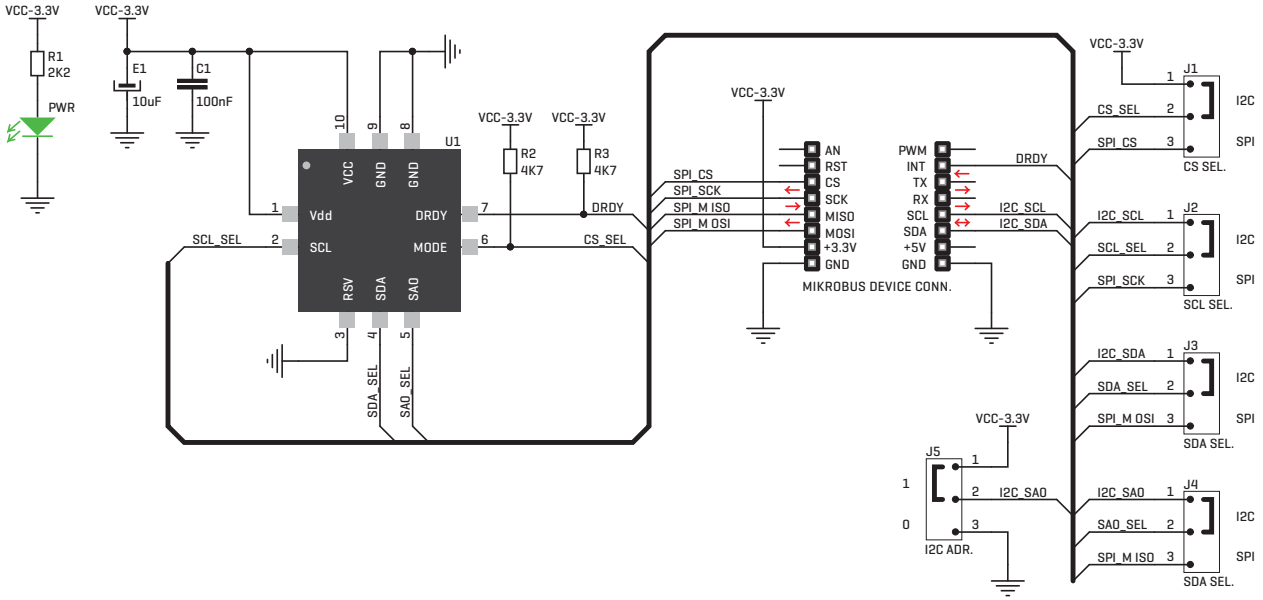
LPS25HB is a high precision sensor. It's suitable for adding barometer or altimeter function to your design (altitude measurement for wearables, weather station equipment etc.). In high resolution mode it can measure pressure within 0.01 hPa RMS. A low resolution mode can be implemented to reduce power consumption. To further optimize power consumption, a Data Ready function can be used to send an interrupt whenever the pressure value changes. The interrupt can also be configured to send a signal whenever a specified high or low pressure threshold is reached.

click BOARD™

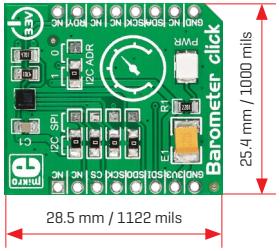
www.mikroe.com

Barometer click manual
ver 1.00
0100000074879

5. Schematic



6. Dimensions



	mm	mils
LENGTH	28.5	1122
WIDTH	25.4	1000
HEIGHT*	3.6	142

* without headers

7. SMD jumpers



Barometer click features two sets of jumpers. Three jumpers for switching between SPI and I²C interfaces (soldered in I²C by default), and an I²C ADD is for specifying the I²C address.

8. Code examples

Once you have done all the necessary preparations, it's time to get your click board™ up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.

LIBSTOCK.com

9. Support

MikroElektronika offers **free tech support (www.mikroe.com/support)** until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

MikroElektronika
DEVELOPMENT TOOLS | COMPILERS | BOOKS

10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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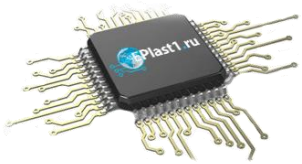
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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