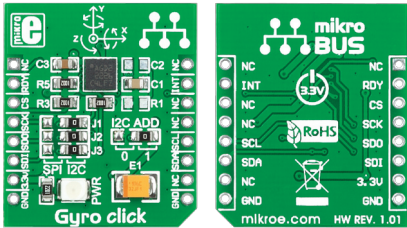


Gyro click™

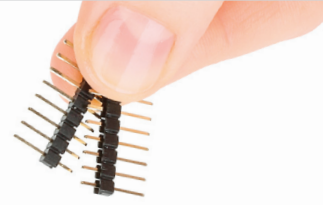
1. Introduction



Gyro Click™ is an accessory board in **mikroBUS™** form factor. It's a compact and easy solution for adding gyroscope to your design. It features **L3GD20** three-axis digital gyroscope module. Gyro Click™ communicates with the target board microcontroller via **mikroBUS™** SPI (MOSI, MISO, SCK, CS), I²C (SDA, SCL), INT and RST lines. The board is designed to use 3.3V power supply only. LED diode (GREEN) indicates the presence of power supply.

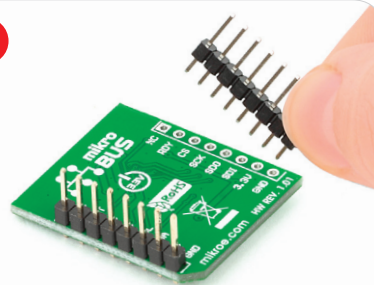
2. Soldering the headers

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.



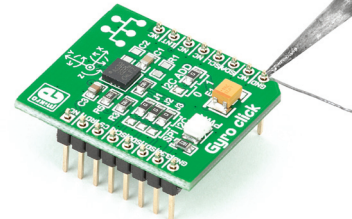
1

2

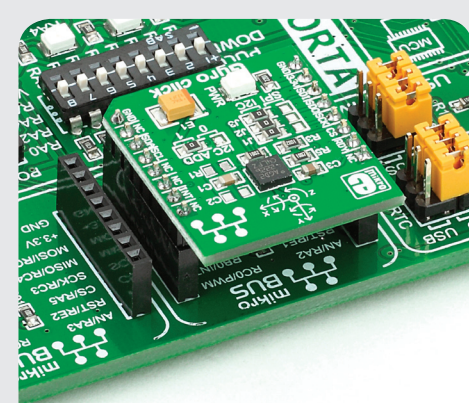


Turn the board upside down so that bottom side is facing you upwards. Place shorter parts of the header pins in both soldering pad locations.

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.

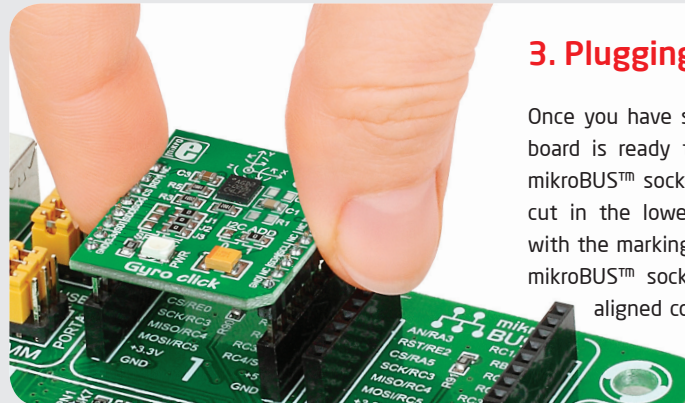


4. Essential features

Gyro Click™ with its **L3GD20** IC is capable of providing the measured angular rate to the external world through a digital interface (I²C, SPI). The **L3GD20** has a full scale of $\pm 250 / \pm 500 / \pm 2000$ dps and is capable of measuring rates with a user-selectable bandwidth. All these features make this board ideal for gaming and virtual reality input devices, motion control, GPS navigation systems and more.

3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into 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 of the pins are aligned correctly, push the board all the way into the socket.



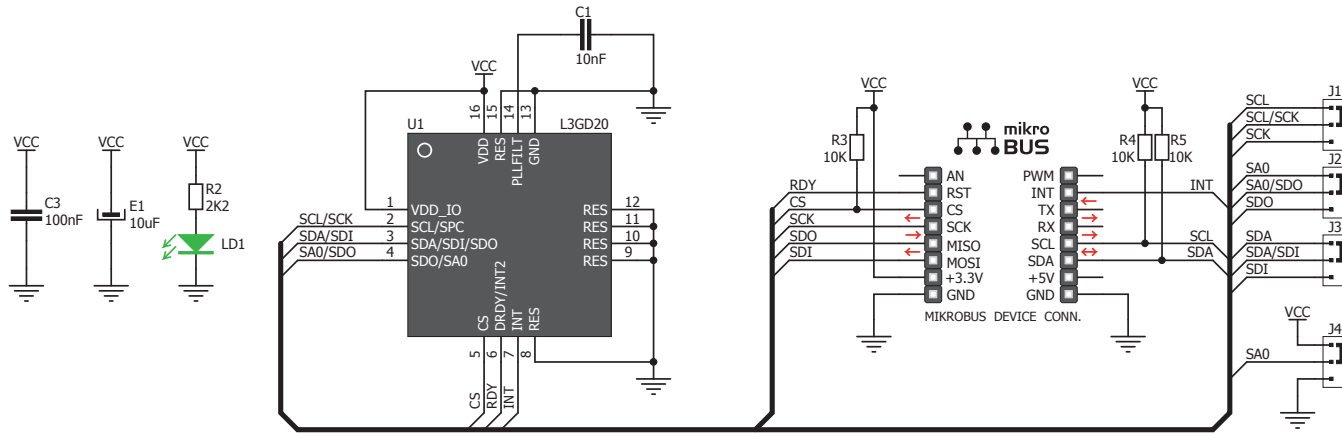
click™
BOARD
www.mikroe.com

Gyro click Manual
ver. 1.01

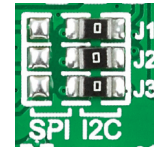


0 100000 023198

5. Gyro Click™ Board Schematic



6. SMD Jumpers



The Gyro Click™ board communicates with the main board microcontroller via I²C or SPI interface depending on the position of the **J1**, **J2** and **J3** SMD jumpers. These jumpers are soldered in I²C interface position by default. There is an option to select the alternate address with jumper **J4** in the case of I²C interface (default position is logic 1).

7. Code Examples

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



8. Support

MikroElektronika offers **Free Tech Support** (www.mikroe.com/esupport) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9