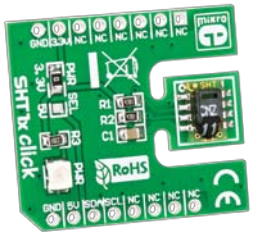


SHT1x click™

1. Introduction

Front and back side appearance of the SHT1x click Board

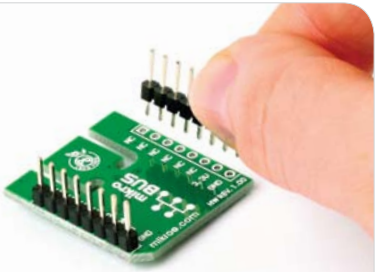
SHT1x Click is an accessory board in **mikroBus™** form factor. It includes a digital humidity and temperature sensor **SHT11**. A unique capacitive sensor element is used to measure relative humidity while the temperature is measured by a band-gap sensor. Serial I²C interface and factory calibration, allow easy and fast system integration. Board is set to use 3.3V power supply by default. Solder **PWR SEL** SMD jumper to 5V position if used with 5V systems.

2. Soldering the headers

Before using your click board, make sure to solder the provided 1x8 male headers to both sides of the board. Two 1x8 male headers are included with the board in the package.

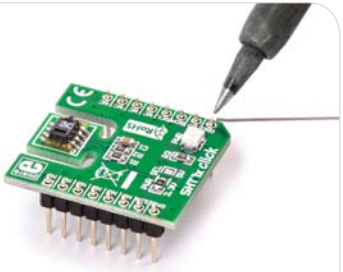
1

2

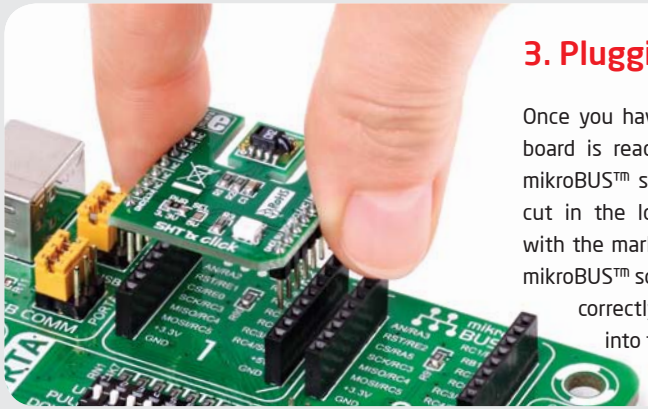


Turn the board upside down, so that bottom side is facing you upwards. Place shorter parts of the header pins in the both soldering pad locations.

3

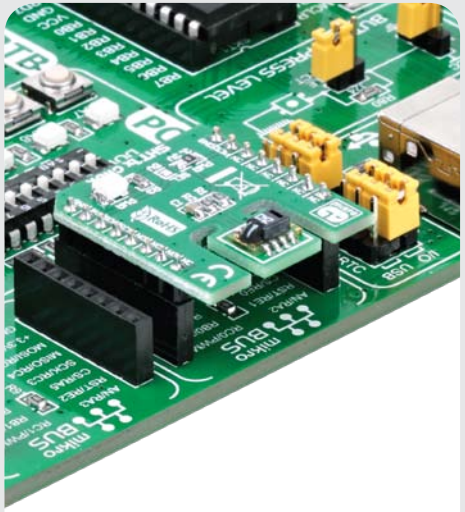


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



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 the pins are aligned correctly, push the board all the way into the socket.



4. Getting The Data

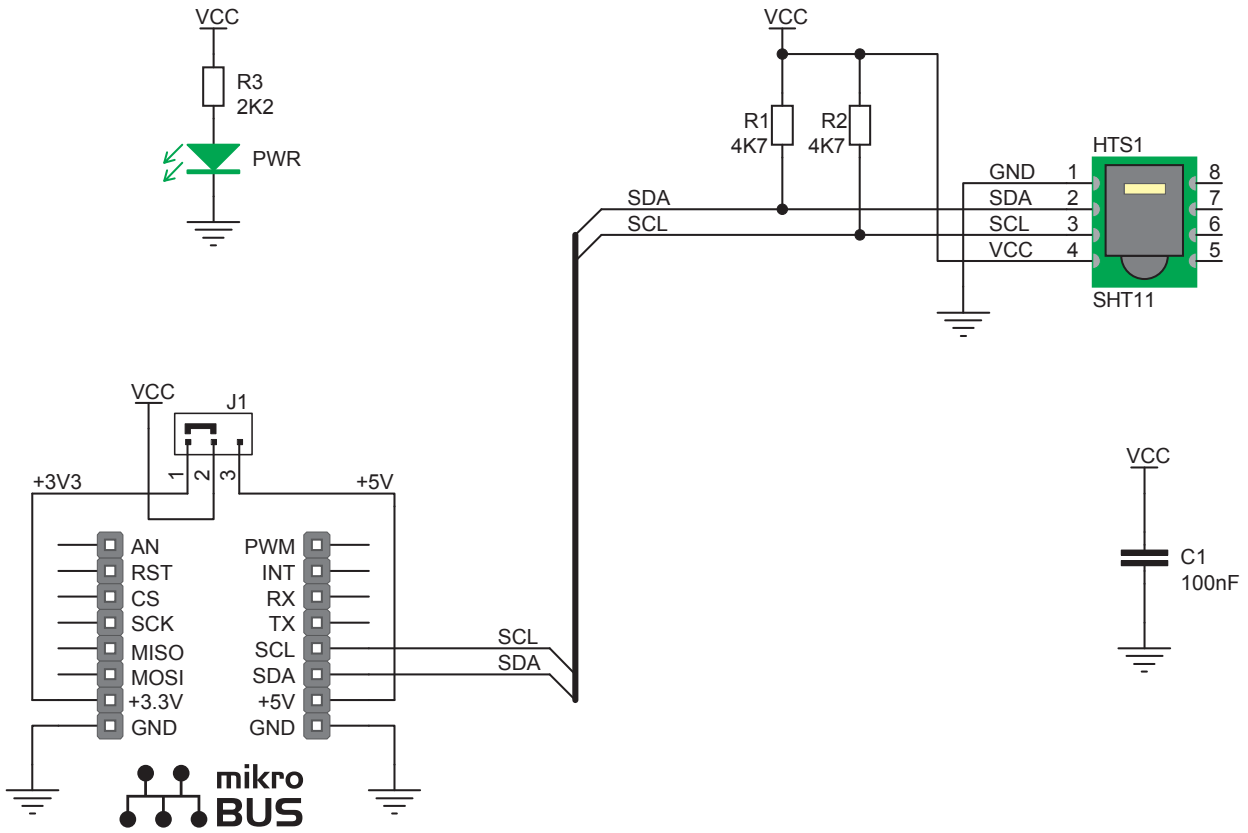
Communication with the SHT11 sensor is done using I²C interface. Temperature can be represented in 12-bit or 14-bit format in operating range from -40 to +100°C with accuracy of ±0.5°C at room temperature. Humidity can be represented in 8-bit or 12-bit resolution with ±3% accuracy.

click™
BOARD
www.mikroe.com

SHT11 click Manual
ver. 1.00

0 100000 020128

5. SHT1x click Board Schematics



6. Power supply selection

On-board **PWR SEL** zero-ohm resistor (SMD jumper) is used to determine whether 5V or 3.3V power supply is used. This resistor is provided in 3.3V position by default. In order to use SHT1x click with 5V development system, it is necessary to resolder this jumper to 5V position.

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.

LIBSTOCK.com

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!

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