1. Introduction

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 bandgap 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.

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.
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.

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!