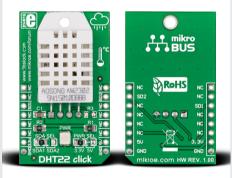


DHT22 click™

1. Introduction

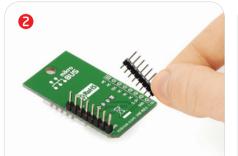


DHT22 click[™] is a temperature and humidity measurement board carrying the AM2302 sensor (also known as DHT22). It's a low cost reliable sensor that communicates with the target board microcontroller through a single Serial Data Line. You can choose between the mikroBUS[™] CS or INT pins for communicating with the target board microcontroller. The board is designed to use either a 3.3V or a 5V power supply.

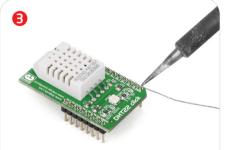
2. Soldering the headers

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.





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.



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

The DHT22 click temperature and humidity sensor can detect temperatures between -40 and 80 degrees centigrade with a half a degree precision (0.5C). The relative humidity measurement from 0-100% is accurate within 2%. Both relative humidity and temperature data signals have a 16Bit resolution. To get accurate data you should set up the interval between individual sensor readings at least two seconds apart.

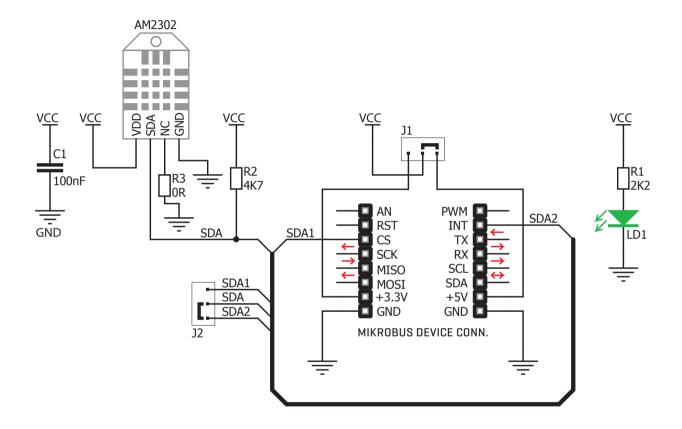
3. Plugging the board in

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

board all the way into the socket.



5. DHT22 click[™] board schematic



6. Jumpers



DHT22 click[™] has two jumpers (zero ohm resistors). **SDA SEL** lets you select either CS (SDA1) or INT (SDA2) for outputting the one wire signal. The **PWER SEL** jumper is for choosing between 3.3 and 5V power supplies.

7. Code examples

Once you have done all the necessary preparations, it's time to get your click¹⁰⁰ board up and running. We have provided examples for mikroC¹⁰⁰, mikroBasic¹⁰⁰ and mikroPascal¹⁰⁰ compilers on our **Libstock** website. Just download them and you are ready to start.



8. 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!

