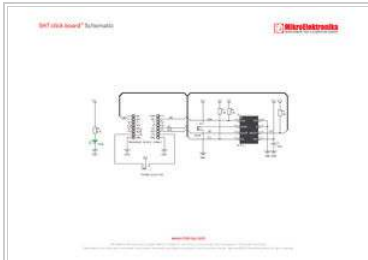


SHT click

From MikroElektronika Documentation

SHT click is a temperature and humidity sensing click board that carries Sensirion's SHT3x IC. Compared to its predecessor (SHT11), SHT3x click has increased reliability and enhanced signal processing features with a high signal-to-noise ratio. Best measurement results are achieved within a 5-60° C temperature range (0.015 resolution) and a 20%–80%RH humidity range (0.01 resolution). SHT click outputs a fully calibrated, linearized, and temperature compensated digital output through the mikroBUS™ I2C interface (SCL, SDA). An additional INT pin is for setting up alerts for certain temperature or humidity values. Finally, aN RST pin allows you to reset the sensor. Designed to use either 3.3V or 5V power supply.

Features and usage notes



Schematic also available in PDF (http://cdn-docs.mikroe.com/images/d/d5/Sht_click_board_sche)

state by itself.

Also note that prolonged exposure to extreme conditions may accelerate ageing.

Programming

The following code snippet shows how to send temperature readings from SHT click to a TFT display. The brevity of the code illustrates the simplicity of implementing SHT3x into your design.

```

1 void display_temp()
2 {
3     temperature = sht_temp_ss();
4     Delay_ms( 200 );
5     sprintf( tmp_txt, "%3.1f C", temperature );
6     TFT_Rectangle( 195, 95, 250, 120 );
7     TFT_Write_Text( tmp_txt, 200, 100 );
8 }

```

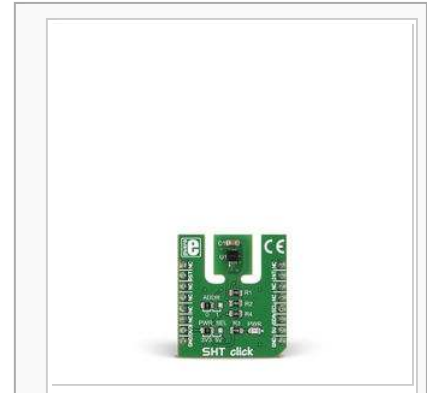
Code examples that demonstrate the usage of SHT click with MikroElektronika hardware, written for mikroC for ARM, AVR, dsPIC, FT90x, PIC and PIC32 are available on Libstock (<http://libstock.mikroe.com/projects/view/1777/sht-click>).

Resources

- learn.mikroe.com tutorial about SHT click (<http://learn.mikroe.com/leader-humidity-measurement-sht/>)
- Sensirion SHT3x page (<https://www.sensirion.com/products/digital-humidity-sensors-for-reliable-measurements/digital-humidity-sensors-for-various-applications/>)
- Sensirion SHT3x Data Sheet (https://www.sensirion.com/fileadmin/user_upload/customers/sensirion/Dokumente/Humidity_Sensors/Sensirion_Humidity_Sensors_SHT3x_Datasheet_digital.pdf)
- Sensirion SHT3x Application notes (https://www.sensirion.com/fileadmin/user_upload/customers/sensirion/Dokumente/Humidity_Sensors/Sensirion_Humidity_Sensors_SHT3x_Application_Note_Alert_Mode_)
- SHT click examples on Libstock (<http://libstock.mikroe.com/projects/view/1777/sht-click>)
- mikroBUS standard specifications (<http://download.mikroe.com/documents/standards/mikrobus/mikrobus-standard-specification-v200.pdf>)

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SHT click



SHT click

| | |
|---------------------|--|
| IC/Module | Sensirion SHT3x (https://www.sensirion.com/products/digital-humidity-sensors-for-reliable-measurements/digital-humidity-sensors-for-various-applications/) |
| Interface | I2C (SCL, SDA), INT, RST |
| Power supply | 3.3V, 5V |
| Website | www.mikroe.com/click/sht (http://www.mikroe.com/click/sht) |

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