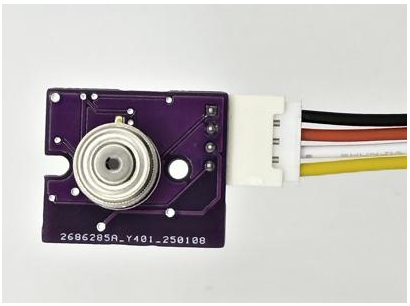
Getting Started

In sample volumes the Heimann Sensor I²C module is supplied with a cable that can be connected to an ESP32 DevKit, enabling the DevKit to act as the master device for streaming data from the module. Please note that the ESP32 DevKit is not included and must be purchased separately.

1. Connecting the I²C Module



Plug the 4-pin cable into the module's socket and connect the jumper wires to the ESP32 pins as explained below.

Make sure that the ESP32 is not powered while connecting the jumper wires to it.

Pin/Color	Description	ESP32 Pin
1 - Black	SDA	21
2 - Red	VSS	GND
3 - White	VDD	5 V
4 - Yellow	SCL	22

Important note: Please make sure that all the pins are connected prior to powering the DevKit via USB. Otherwise unexpected behavior may occur.

HEIMANN Sensor GmbH
Maria-Reiche-Str. 1
D-01109 Dresden / Germany

Contact / Customer Support
Phone 49 (0) 6123 60 50 30
sales@heimannsensor.com

Internet
www.heimannsensor.com
mail: info@heimannsensor.com

2. Software Installation and Setup

Download the demo master software from the link below and flash it onto the ESP32. Make sure to select the correct sensor type (8x8, 16x16, or 32x32).
https://github.com/HeimannSensor/ESP32_DemoMaster_ULC

For instructions on how to setup the correct Arduino I²C library as well as which IDE version to use, refer to the *User Manual Application Shield ESP32* at
https://github.com/HeimannSensor/ESP32_ApplicationShield/blob/main/ApplicationShieldESP23_user_manual.pdf.

The ArraySoft v2 GUI is suited to display the sampled temperature frames from the I²C module via the Application Shield ESP32. The software and the accompanying manual can be downloaded from our homepage https://www.heimannsensor.com/development.

The password is
AwU#N-y7&2E-hD$5!-1MBgA-E0%=9

To establish a direct access to the Application Shield ESP32's access point, click on the *Search UDP* button on the GUI's starting window. If a connection to that access point is enabled the Application Shield can be bound and used.

3. Handling the I²C module

The easiest way to handle the I²C module is via the serial monitor of the Arduino IDE. By sending the character *m* via this monitor a menu is printed displaying all input options available.