



SILICON LABS ZGM130S Z-Wave Transceiver User Guide

[Home](#) » [SILICON LABS](#) » SILICON LABS ZGM130S Z-Wave Transceiver User Guide 

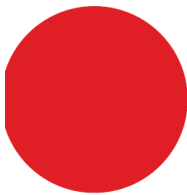
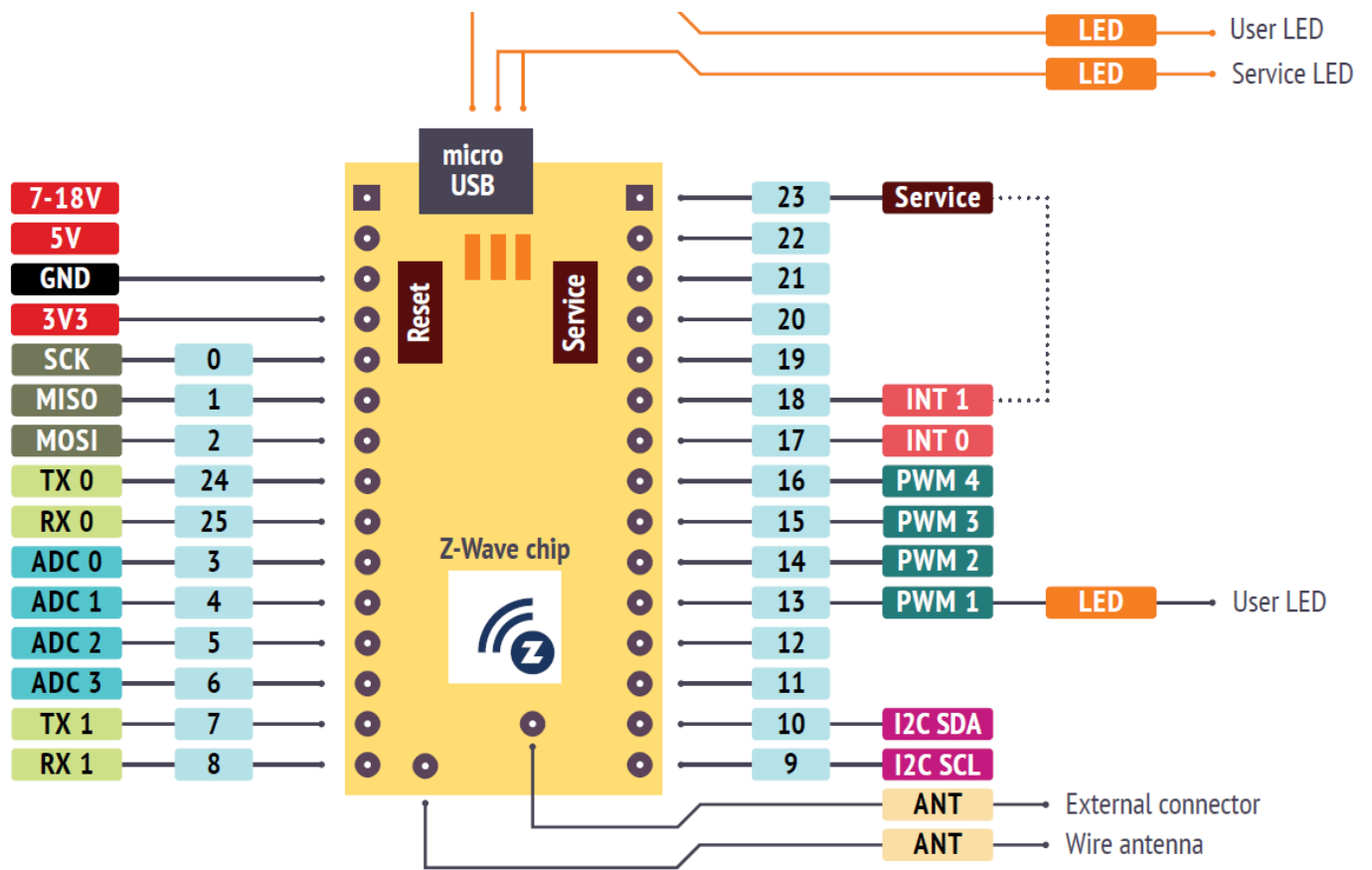
Contents

- [1 SILICON LABS ZGM130S Z-Wave Transceiver](#)
- [2 Documents / Resources](#)
 - [2.1 References](#)
- [3 Related Posts](#)

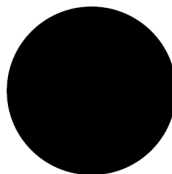
SILICON

SILICON LABS ZGM130S Z-Wave Transceiver

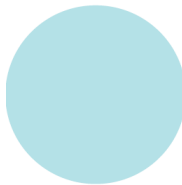




- Power Pin



- GND Pin



- Digital Pin



- Analog Read Pin



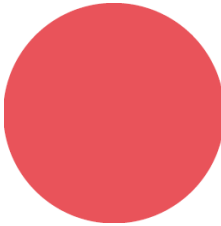
- Analog Write Pin



- UART Pin



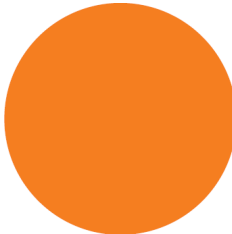
- SPI Pin



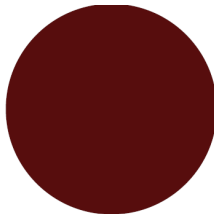
- Interrupt Pin



- 12CPin



- LED



- Button

Here are a few steps to help you get started:

1. Unpack your Z-Uno 2
2. Connect the board to the USB port of your computer
3. Confirm the LED is blinking. That's because Blink demo sketch is already loaded inside
4. Open your Z-Wave™ controller user interface
5. Start Inclusion (Add) mode on your controller
6. Start Learn Mode on Z-Uno 2 using triple click on the Service Button
7. Confirm the device gets included in the Z-Wave network

8. Check the sketch functionality — changing dimmer value should change LED blinking rate
9. Congratulations! Your Z-Uno 2 is up and running

Start writing sketches with Arduino IDE

1. Download the latest Arduino IDE from <https://www.arduino.cc/en/software>
2. Follow instructions on <https://z-uno.z-wave.me/arduino-install> to install Z-Uno 2 package for Arduino IDE and Z-Uno 2 drivers for your platform

with VS Code

1. Download the latest VS Code from <https://code.visualstudio.com/download>
2. Follow instructions on <https://z-uno.z-wave.me/vs-code-install> to install Z-Uno 2 package for VS Code and Z-Uno 2 drivers for your platform
3. Update your Z-Uno 2 board to the latest version, using «Burn Bootloader» menu item
4. You can find many basic and advanced examples on <https://z-uno.z-wave.me/examples/>
5. Explore a whole new world of knowledge on <https://z-uno.z-wave.me/getting-started/>
6. Create new awesome devices, already compatible with more than 1300 existing Z-Wave products!

Z-Wave Transceiver	Silicon Labs ZGM130S
Wireless Range	Min. 40 m indoor in direct line of sight
Dimensions	39 x 20 x 16 mm
Frequency range	(865...869 MHz): Europe (EU) [default], India (IN), Russia (RU), China (CN), South Africa (EU), Middle East (EU) (908...917 MHz): America, excluding Brazil and Peru (US) [default], Israel (IL) (919...921 MHz): Australia/New Zealand/Brazil/Peru (ANZ), Hong Kong (HK), Japan (JP), Taiwan (TW), Korea (KR)

Blink Sample Code

- // initial period of the blink is 1 second
- byte dimmerValue = 100; // in 10 ms
- // add one Switch Multilevel channel
- ZUNO_SETUP_CHANNELS(ZUNO_SWITCH_MULTILEVEL(getter, setter));
- // this function runs once, when you press reset
- // or power the board
- void setup() {
- // set digital pin 13 (built-in LED) as an output.
- pinMode(LED_BUILTIN, OUTPUT);
- // this function loops consecutively forever

- void loop() {
- digital Write(LED_BUILTIN, HIGH); // turn the LED on
- delay(dimmerValue * 10); // wait for timeout
- digital Write(LED_BUILTIN, LOW); // turn the LED off
- delay(dimmerValue * 10); // wait for timeout
- }
- // callback function that runs
- // when a new value comes from Z-Wave Network
- // this is a setter referenced in channel creation
- void setter(byte new Value) {
- // save new value in a variable
- dimmerValue = new Value;
- }
- // callback function that runs when asked for the
- // current blink rate from Z-Wave Network
- // this is a getter referenced in channel creation
- byte getter(void) {
- // return previously saved value
- return dimmerValue;

FCC statement

Z-Uno FCC ID: 2ALIB-ZMEZUNO2

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the distance between the equipment and the receiver.
3. Connect the equipment into an outlet on a different circuit to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for assistance.

Use of the shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules. Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, it may be necessary to stop the operation of the equipment.

NOTE:

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.


Radiation Exposure Statement: This equipment complies with the set out FCC radiation exposure limits for

an uncontrolled environment.

Co-location warning: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

OEM integration instructions: This module has a LIMITED MODULAR APPROVAL, and is intended only for OEM integrators under the following conditions: As a single, non-colocated transmitter, this module has no restrictions in relation to a safe distance from any user. The module shall be only used with the antenna(s) that has/have been originally tested and certified with this module. As long as these conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements necessary for this installed module (for example, digital device emissions, PC peripheral requirements, etc.).

Documents / Resources

	SILICON LABS ZGM130S Z-Wave Transceiver [pdf] User Guide ZGM130S Z-Wave Transceiver, ZGM130S, Z-Wave Transceiver
---	---

References

- [WONEN • De beste keuzes voor huis & tuin](#)
- [Download Visual Studio Code - Mac, Linux, Windows](#)
- [Software | Arduino](#)
- [Installing Z-Uno environment for Arduino IDE](#)
- [Examples](#)
- [Getting Started](#)
- [Installing Z-Uno environment for VS Code](#)