



# USER MANUAL

Daphnis-I Feather Wing 2618039381001

VERSION 1.0

AUGUST 6, 2025

WURTH ELEKTRONIK MORE THAN YOU EXPECT

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# **MUST READ**

# **Check for firmware updates**

Before using the product, make sure you use the most recent firmware version, data sheet, and user manual. This is especially important for Wireless Connectivity products that were not purchased directly from Würth Elektronik eiSos. A firmware update on these respective products may be required.

We strongly recommend including the possibility of a firmware update in the customer system design.



# **Revision history**

Manual version	HW version	Notes	Date
1.0	1.0	Initial version	August 2025



# **Abbreviations**

Abbreviation	Name	Description
CISPR	Comité International Spécial des Perturbations Radioélectriques	International Special Committee on Radio
EV	Evaluation	
ESD	Electro Static Discharge	
FW	Firmware	
EMC	Electro Magnetic Compatibility	
GND	Ground	Ground signal level that corresponds to 0 V
HIGH	High signal level	Digital voltage level that is detected as high by the module
IDE	Integrated development environment	
IEC	International Electrotechnical Commission	
IEEE	Institute for electrical and electronic engineers	
JTAG	Joint Test Action Group	Flash interface for the micro controller
LED	Light Emitting Diode	
Li-Po	Lithium-Polymer	
LOW	Low signal level	Digital voltage level that is detected as low by the module
P2P	Peer to Peer	
PC	Personal Computer	
PCB	Printed Circuit Board	
VCC	Voltage Common Collector	Supply voltage
VDD	Voltage Drain Drain	Supply voltage

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# 1 General description

### 1.1 Introduction

The Würth Elektronik eiSos Daphnis-I FeatherWing is a development board that enables easy creation and evaluation of LoRaWAN® and Proprietary (P2P, star, mesh) protocols. It is fully compatible with the popular Adafruit Feather line of development boards and offers a reliable hardware platform for rapid prototyping using FeatherWings.

The Daphnis-I FeatherWing consists of the Daphnis-I radio module, which is designed for LoRaWAN<sup>®</sup> and P2P applications and supports EU868 frequency band.

It has an AT-style command interface on the standard UART and hence can be connected to any of the Feather microcontroller boards. The Arduino (C/C++) drivers and examples (see chapter 4) made available make it easy to build a prototype to kick-start the application development.



Figure 1: The WE Daphnis-I FeatherWing (2618039381001)



# 1.2 Block diagram

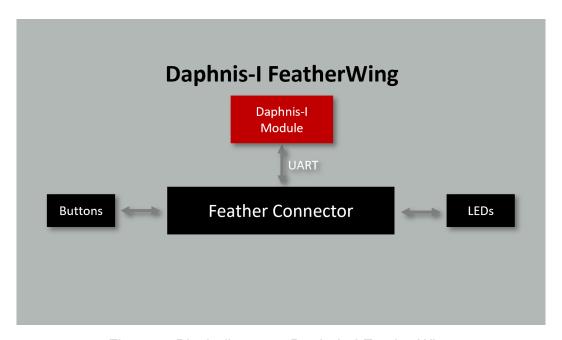


Figure 2: Block diagram - Daphnis-I FeatherWing

# 1.3 Contents

Description	Quantity
WE Daphnis-I FeatherWing	1
868 MHz dipole antenna (2600130081)	1
WR-UMRF SMA Bulkhead Jack to UMRF Right Angle Plug (636207100200)	1
Packaging: ESD safe bag	1

Table 1: Contents 2618039381001



# 2 Functional description

The Daphnis-I FeatherWing was designed with rapid prototyping in mind. Being fully compatible with the Adafruit ecosystem, this FeatherWing allows the user the flexibility to choose the preferred host microcontroller. The inherent modularity of the ecosystem allows the Feather-Wing to be easily integrated into any project.

The next sections provide a brief introduction to Adafruit's Feather ecosystem and details on the Daphnis-I LoRaWAN® module.

Feel free to check our YouTube channel:

www.youtube.com/user/WuerthElektronik/videos for video tutorials, hands-on and webinars relating to our products.

### 2.1 Adafruit Feather

The Adafruit Feather ecosystem consists of two types of boards apart from a host of accessories:

- **Feather:** Adafruit Feathers are a complete line of development boards from Adafruit that are standalone and stackable. They can be powered either over the on-board micro-USB plugs or using a Li-Po battery. Feathers are portable, flexible and light as their namesake.
- **FeatherWing:** FeatherWings are stackable boards that when used along with a Feather add a certain functionality to the system.

The Feather system with more than 50+ Wings, several different types of accessories and arduino/circuit python based code support provides a perfect ecosystem for rapid prototyping. Please refer to *adafruit.com/feather* for more details on the Adafruit Feather ecosystem.

# 2.2 Daphnis-I (2618011181000)

Daphnis-I is a low-power, long-range transceiver module designed for LoRaWAN® and P2P applications. This module is based on the STM32WLE5CCU6 chip.

### **User manual Daphnis-I FeatherWing**



It supports two primary modes of operation [1]:

- LoRaWAN® network end node mode.
  - In this mode, the LoRaWAN<sup>®</sup> gateway is required to use Daphnis-I. Refer to *Daphnis-I User Manual*, chapter 5.3, for more information about LoRaWAN<sup>®</sup> setup and selecting a compatible gateway.
  - Daphnis-I module complies with Class A, Class B, and Class C of LoRaWAN<sup>®</sup> 1.0.4 specifications.
- LoRa P2P mode.
  - In this mode of operation, module uses the pre-loaded WE-ProWare radio stack and offers the ability to communicate in different topologies such as point-to-point, star and mesh. Refer to *Daphnis-I User Manual*, *chapter 5.4*, for more information about P2P.

Compact 15 x 16 x 3 mm design allows the module to fit into small-size applications. The low power consumption of the Daphnis-I module makes it suitable for battery-powered applications.

The Daphnis-I module can be configured and taken into operation using AT commands via the Application UART interface.

## **Key features**

In this section, the features of the Daphnis-I module are summarized in the form of a table. Daphnis-I allows the user to configure and exploit its rich features through an easy-to-use command interface over UART.

Feature	Description
Physical dimensions	15 mm x 16 mm x 3 mm
Radio chipset	STM32WLE5CCU6
Supported protocol	LoRaWAN®, Proprietary
Module interfaces	UART
Supported frequency bands	EU868
Maximum power transmission	14 dBm
Sleep mode current consumption	63.9 nA
Operating voltage	2.0 V to 3.6 V
Operating temperature	-40 ℃ to 85 ℃
Supported LoRaWAN® specification	1.0.4 [2]
Supported regional parameters	2-1.0.1 [3]
Supported LoRaWAN® classes	Class A, Class B, Class C

Table 2: Module Key Features

Further details about Daphnis-I module can be found under www.we-online.de/daphnis-I



# 3 Hardware description

This sections contains a detailed description of the hardware features of the Daphnis-I FeatherWing. The design files for this hardware can be downloaded from <a href="mailto:github.com/WurthElektronik/FeatherWings/DaphnisILoRaWANFeatherWing">github.com/WurthElektronik/FeatherWings/DaphnisILoRaWANFeatherWing</a>.

### 3.1 Connectors

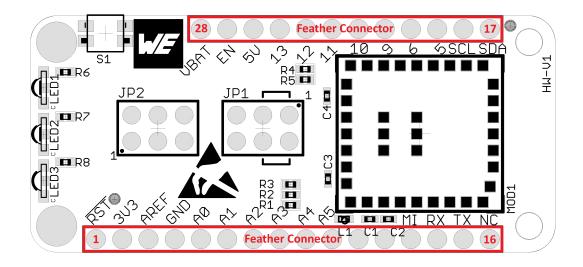


Figure 3: Feather connector

### 3.1.1 Feather connector

This is the standard set of connectors that is used across the Feather ecosystem. The table below describes the functions of each of the 28 pins as applicable to this FeatherWing.

Pin Number	Pin name	Function
1	$\overline{RST}$	Not connected
2	3V3	3.3 V power supply
3	AREF	Not connected
4	GND	Ground
5	A0	Not connected
6	A1	Not connected
7	A2	Not connected
8	A3	Not connected
9	A4	Daphnis-I /RESET pin
10	<b>A</b> 5	Not connected
11	SCK	Not connected
12	MOSI	Not connected



13	MISO	Not connected
14	URX	Daphnis-I <i>LPUTXD1</i> pin
15	UTX	Daphnis-I <i>LPURXD1</i> pin
16	NC	Not connected
17	SDA	Not connected
18	SCL	Not connected
19	5	Not connected
20	6	Not connected
21	9	Not connected
22	10	(Optional) <i>LPURXD1</i> pin via JP1
23	11	(Optional) LPUTXD1 pin via JP1
24	12	Not connected
25	13	Not connected
26	5 V	Not connected
27	EN	Not connected
28	VBAT	Not connected

Table 3: Pin description of Daphnis-I FeatherWing connector

# 3.2 Jumpers

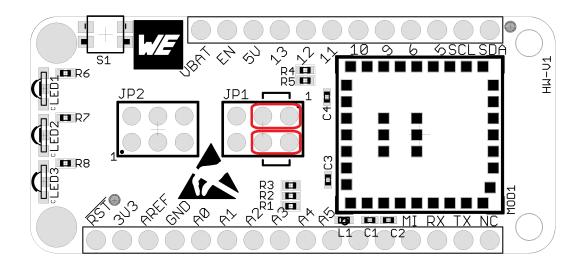


Figure 4: Default jumper configuration

### 3.2.1 JP1

JP1 enables the user to choose the connection between the LPUART interface of the module and the feather connector. By default the LPUART interface is connected to pin 14 and 15 of



the feather connector.

JP1	Function	Jumper set (default)
1,3	GPIOTX pin connected to LPURXD1 pin	Yes
3,5	GPIO10 pin connected to LPURXD1 pin	No
2,4	GPIORX pin connected to LPUTXD1 pin	Yes
4,6	GPIO11 pin connected to LPUTXD1 pin	No

Table 4: Jumper JP1

### 3.2.2 JP2

This jumper allows FW updates via Daphnis-I UART bootloader. These jumpers are not set by default. Refer to *Daphnis-I User Manual, chapter 12*, for more information about FW update.

JP2	Function	Jumper set (default)
1,2	BOOT pin set to high	No
3,4	GPIO11 pin connected to UTXD1	No
5,6	GPIO10 pin connected to URXD1	No

Table 5: Jumper JP2

# 3.3 Push buttons

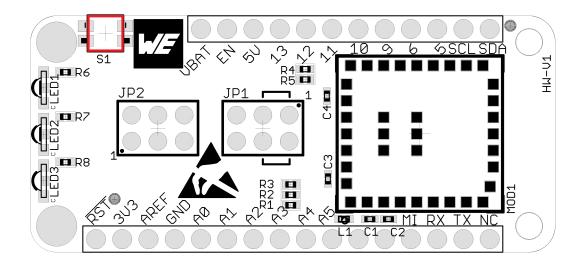


Figure 5: Push button

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### 3.3.1 S1

This push button is connected to the /RESET pin of the Daphnis-I module. Pressing this button resets the module.



# 3.4 Schematics

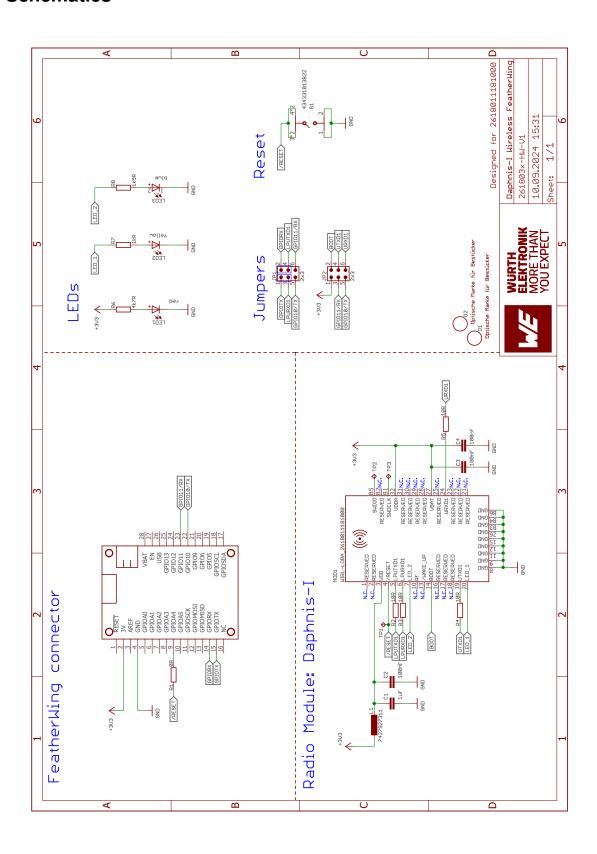


Figure 6: Schematics



# 3.5 Layout

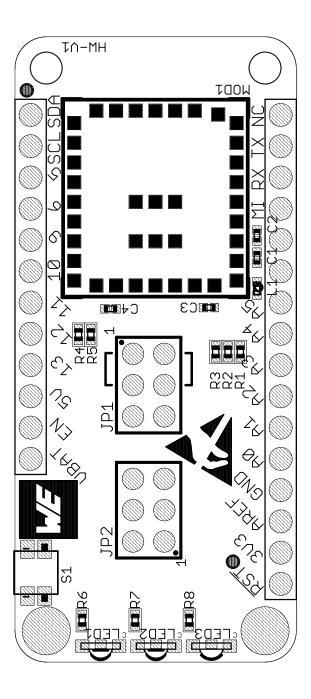


Figure 7: Assembly diagram



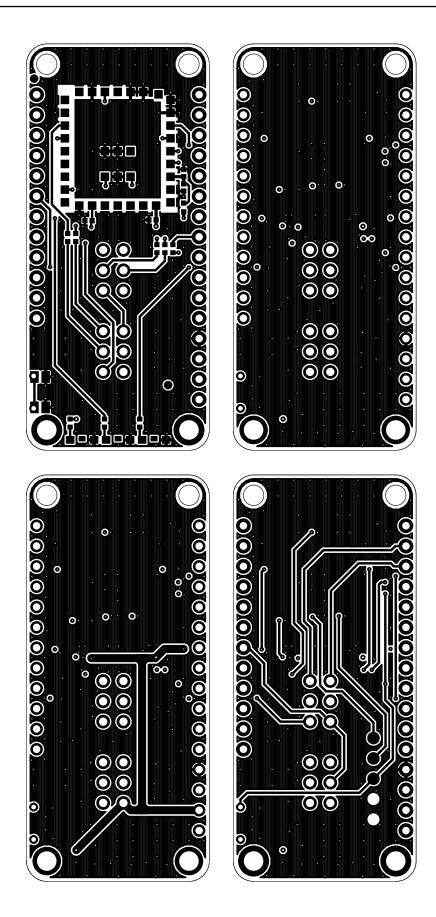


Figure 8: Top layer (upper left), second layer (upper right), third layer (bottom left), fourth layer (bottom right)



# 3.6 Bill of material

Part	Value	Pack	Manufacturer	NR
C1	1 $\mu$ F	0402	Würth Elektronik eiSos	885012105012
C2	100nF	0402	Würth Elektronik eiSos	885012205037
C3	100nF	0402	Würth Elektronik eiSos	885012205037
C4	100nF	0402	Würth Elektronik eiSos	885012205037
JP1	2x3	THT	Würth Elektronik eiSos	61300621121
JP2	2x3	THT	Würth Elektronik eiSos	61300621121
L1	7427927311	SMT	Würth Elektronik eiSos	7427927311
LED1	Red	SMT	Würth Elektronik eiSos	155124RS73200
LED2	Yellow	SMT	Würth Elektronik eiSos	155124YS73200
LED3	Blue	SMT	Würth Elektronik eiSos	155124BS73200A
MOD1	DAPHNIS-I	SMT	Würth Elektronik eiSos	2618011181000
MS1	header:1 x 12 & 1 x 16	THT	Adafruit	2830
R1	0 Ω	0402	Würth Elektronik eiSos	560112110001
R2	10 Ω.	0402	Würth Elektronik eiSos	560112110034
R3	10 Ω.	0402	Würth Elektronik eiSos	560112110034
R4	10 Ω.	0402	Würth Elektronik eiSos	560112110034
R5	10 Ω.	0402	Würth Elektronik eiSos	560112110034
R6	4.7 k $\Omega$	0402	Würth Elektronik eiSos	560112110245
R7	1 kΩ	0402	Würth Elektronik eiSos	560112110012
R8	1.5 k $\Omega$	0402	Würth Elektronik eiSos	560112110095
S1	434331013822	SMT	Würth Elektronik eiSos	434331013822

Table 6: Bill of materials



# 4 Software description

Würth Elektronik eiSos provides a software development kit (SDK) with examples to support all the WE FeatherWings. Here are the salient features of the WE FeatherWing SDK.

- The SDK is open-source and well documented.
- It uses popular open-source tool chain including an IDE.
- The examples are written in Arduino-styled C/C++ for quick prototyping.
- The core components of the SDK are written in pure C to enable easy porting to any microcontroller platform.
- Development platform independent (Windows, Linux or MAC).
- Modular structure of the software stack makes it easy to integrate into any project.

The SDK can be accessed on Github at github.com/WurthElektronik/FeatherWings.

### 4.1 Software architecture

The WE FeatherWing SDK is built up in a modular way using a set of open-source tools to enable complete flexibility for the user.

The figure 9 shows the architecture of the WE FeatherWing SDK.

- **PlatformIO:** is a cross-platform, cross-architecture, multiple framework professional tool for embedded software development. It provides the tool chain necessary for the software development including building, debugging, code-upload and many more. PlatformIO works well on all the modern operating systems and supports a host of development boards including the Feathers from Adafruit. Further details about PlatformIO can be found under *platformio.org*
- Platform interface: This layer provides abstraction to the peripheral drivers for the platform being used. Currently, this SDK implements an abstraction to the Arduino peripheral drivers for the Feather M0 express platform.
- **WE SDK:** This is a layer of platform-independent pure C drivers for sensors and wireless connectivity modules from Würth Elektronik eiSos. These drivers implement all the necessary functions to utilize full feature set of the sensors and wireless connectivity modules. More details on the SDK and downloads under, we-online.com/wcs-software.
- Board files: This layer provides abstraction at a board level and provides functions to configure and control individual FeatherWings from WE.
- User application: The SDK currently implements a quick start example for each of the FeatherWings.



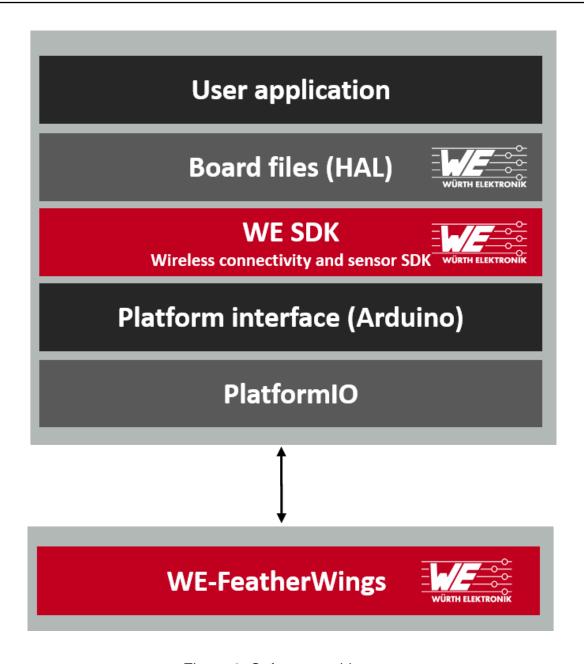


Figure 9: Software architecture

# 4.2 Installing the tools

#### 4.2.1 IDE

Although PlatformIO provides a versatile command line interface for development, the SDK provides quick start projects for the Visual Studio Code. This popular IDE makes for better code organization as well as code editing. Visual Studio Code is available on all modern operating systems. Support for extensions, built-in Git and a versatile code editor make it a well rounded tool for embedded software development. Please refer to *code.visualstudio.com* for more details on Visual Studio Code.

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### 4.2.2 Installation steps

- Install Visual Studio Code on the platform of your choice following the instructions under code.visualstudio.com/docs
- Follow the instructions under *platformio.org/install/ide?install=vscode* to install PlatformIO IDE extension.

## 4.3 Hardware Setup

The quick start examples in the SDK are written to be run on *Adafruit's Feather M0 express*. The hardware setup is as simple as stacking up the FeatherWing on top of the M0 Feather and powering up the board.

## 4.4 Running the quick start example

- Clone or download the WE FeatherWing SDK from Github. github.com/WurthElektronik/FeatherWings
- Open the workspace of interest with the filename <FeatherWing>.code-workspace in Visual Studio code.
- Build and upload the code from the PlatformIO tab as shown in the Figure 10
- After successful upload, click on Monitor to view the debug logs in the serial terminal (see Figure 10).



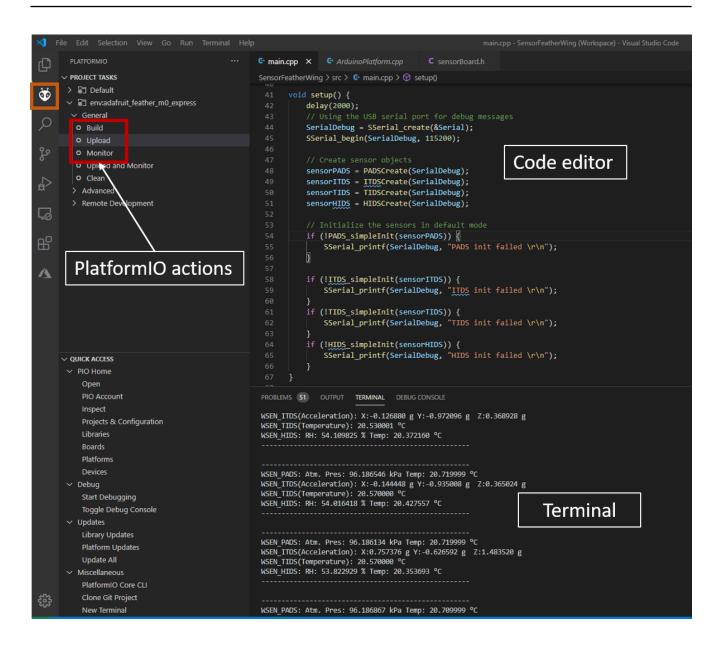


Figure 10: Running the quick start example



## 5 References

- [1] Würth Elektronik. Daphnis-I user manual. https://www.we-online.de/katalog/de/manual/2618011181000.
- [2] LoRa Alliance<sup>©</sup>. LoRaWAN<sup>®</sup> L2 1.0.4 Specification. https://resources.lora-alliance.org/technical-specifications/ts001-1-0-4-lorawan-12-1-0-4-specification.
- [3] LoRa Alliance<sup>©</sup>. LoRaWAN<sup>®</sup> RP002-1.0.1 LoRaWAN Regional Parameters. https://resources.lora-alliance.org/technical-specifications/rp2-1-0-1-lorawan-regional-parameters.



# 6 Regulatory compliance information

Pursuant to Article 1 (2.) of the EU directive 2014/53/EU, Article 1 (2.) the directive does not apply to equipment listed in Annex I (4.): custom-built EV-Kits destined for professionals to be used solely at research and development facilities for such purposes.

Nevertheless this EV-Board has been tested to satisfy general EMC requirements. Following standards have been applied:

- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-6
- CISPR 16-2-1
- CISPR 16-2-3

## 6.1 Exemption clause

Relevant regulation requirements are subject to change. Würth Elektronik eiSos does not guarantee the accuracy of the before mentioned information. Directives, technical standards, procedural descriptions and the like may be interpreted differently by the national authorities. Equally, the national laws and restrictions may vary with the country. In case of doubt or uncertainty, we recommend that you consult with the authorities or official certification organizations of the relevant countries. Würth Elektronik eiSos is exempt from any responsibilities or liabilities related to regulatory compliance.

Not with standing the above, Würth Elektronik eiSos makes no representations and warranties of any kind related to their accuracy, correctness, completeness and/or usability for customer applications. No responsibility is assumed for inaccuracies or incompleteness.

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# 7 Important notes

The following conditions apply to all goods within the wireless connectivity and sensors product range of Würth Elektronik eiSos GmbH & Co. KG:

#### General customer responsibility

Some goods within the product range of Würth Elektronik eiSos GmbH & Co. KG contain statements regarding general suitability for certain application areas. These statements about suitability are based on our knowledge and experience of typical requirements concerning the areas, serve as general guidance and cannot be estimated as binding statements about the suitability for a customer application. The responsibility for the applicability and use in a particular customer design is always solely within the authority of the customer. Due to this fact, it is up to the customer to evaluate, where appropriate to investigate and to decide whether the device with the specific product characteristics described in the product specification is valid and suitable for the respective customer application or not. Accordingly, the customer is cautioned to verify that the documentation is current before placing orders.

#### Customer responsibility related to specific, in particular safety-relevant applications

It has to be clearly pointed out that the possibility of a malfunction of electronic components or failure before the end of the usual lifetime cannot be completely eliminated in the current state of the art, even if the products are operated within the range of the specifications. The same statement is valid for all software source code and firmware parts contained in or used with or for products in the wireless connectivity and sensor product range of Würth Elektronik eiSos GmbH & Co. KG. In certain customer applications requiring a high level of safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health, it must be ensured by most advanced technological aid of suitable design of the customer application that no injury or damage is caused to third parties in the event of malfunction or failure of an electronic component.

#### Best care and attention

Any product-specific data sheets, manuals, application notes, PCNs, warnings and cautions must be strictly observed in the most recent versions and matching to the products revisions. These documents can be downloaded from the product specific sections on the wireless connectivity and sensors homepage.

#### Customer support for product specifications

Some products within the product range may contain substances, which are subject to restrictions in certain jurisdictions in order to serve specific technical requirements. Necessary information is available on request. In this case, the Business Development Engineer (BDM) or the internal sales person in charge should be contacted who will be happy to support in this matter.

#### Product improvements

Due to constant product improvement, product specifications may change from time to time. As a standard reporting procedure of the Product Change Notification (PCN) according to the JEDEC-Standard, we inform about major changes. In case of further queries regarding the PCN, the Business Development Engineer (BDM), the internal sales person or the technical support team in charge should be contacted. The basic responsibility of the customer as per section 7 and 7 remains unaffected.

All software like "wireless connectivity SDK", "Sensor SDK" or other source codes as well as all PC software tools are not subject to the Product Change Notification information process.

#### Product life cycle

Due to technical progress and economical evaluation, we also reserve the right to discontinue production and delivery of products. As a standard reporting procedure of the Product Termination Notification (PTN) according to the JEDEC-Standard we will inform at an early stage about inevitable product discontinuance. According to this, we cannot ensure that all products within our product range will always be available. Therefore, it needs to be verified with the Business Development Engineer (BDM) or the internal sales person in charge about the current product availability expectancy before or when the product for application design-in disposal is considered. The approach named above does not apply in the case of individual agreements deviating from the foregoing for customer-specific products. The approach named above does not apply in the case of EV-Boards. EV-Boards may be changed without any notification.

#### Property rights

All the rights for contractual products produced by Würth Elektronik eiSos GmbH & Co. KG on the basis of ideas, development contracts as well as models or templates that are subject to copyright, patent or commercial protection supplied to the customer will remain with Würth Elektronik eiSos GmbH & Co. KG. Würth Elektronik eiSos GmbH & Co. KG does not warrant or represent that any license, either expressed or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, application, or process in which Würth Elektronik eiSos GmbH & Co. KG components or services are used.

#### General terms and conditions

Unless otherwise agreed in individual contracts, all orders are subject to the current version of the "General Terms and Conditions of Würth Elektronik eiSos Group", last version available at www.we-online.com.

# 8 Terms of Use for Würth Elektronik eiSos GmbH & Co. KG EV-Boards, evaluation kits and evaluation modules

Würth Elektronik eiSos GmbH & Co. KG provide you as a user with technical data (including data sheets), design resources (including reference designs), recommendations for use or other design recommendations, web tools, safety information and other information in the form of evaluation-boards, -kits or -modules (hereinafter jointly referred to as "EVB") in accordance with the terms and conditions contained here. The EVB is provided in the "as is" state. WE disclaims all express and implied warranties, in particular those concerning the suitability for a certain purpose, the absence of defects or non-violation of third-party rights. The EVB is intended for experienced developers to develop

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their application with WE components. As a user, you are solely responsible for: (1) selection of the appropriate WE components for the application, (2) design, validation and testing the application, and (3) assurance that the application meets the applicable standards and all other safety requirements and other applicable requirements. WE may change the EVB without prior notice. WE grants you permission to use the EVB only for developing an application suitable for using WE components. Any other duplication, representation or transfer of the EVB is expressly prohibited. WE does not grant any licenses for the use of the intellectual property rights from WE or third parties. WE is fully indemnified from all claims, damages, costs, losses and liabilities arising from the misuse of this EVB The WE components are provided in accordance with WE's conditions of sale or other applicable conditions available either at <a href="https://katalog.we-online.com">https://katalog.we-online.com</a> or in conjunction with such WE components. WE's provision of the EVB does not constitute an extended warranty in relation to the WE components.

#### General warnings

Do not touch the EVB when it is live, and allow charged components, such as capacitors, to discharge completely before handling the EVB. Depending on the individual application, high voltages can occur on the EVB and some components can reach temperatures above 50 °C. Even after disconnecting the EVB from the power source, these conditions remain for a significant time. Please ensure that the appropriate safety precautions are taken when installing and operating this EVB, as one of the following may occur if you handle or use this EVB without observing the relevant safety precautions: - Death - Serious injury - Electric shock - Electric burns - Severe heat burns -

When using the EVB, you undertake to read the instructions for use in full together with the relevant information supplied and/or available on the homepage www.we-online.de/wcs-manuals before putting this EVB into operation. The following points have to be observed in particular:

- Do not touch the EVB while it is live.
- The EVB must be fully assembled and all devices to be tested must be connected before voltage is applied to the EVB.
- The EVB should never be left unattended during operation.
- Capacitors must be completely discharged. The capacitors must be actively discharged using a suitable resistor.

#### Protection against static electricity

Use the unpackaged product only in ESD protected areas. Wear the ESD personal protective equipment prescribed for these areas. Ground all conductive components, including personnel, as prescribed in ESD protected areas. Ensure that the product is only used by trained personnel.

#### Purpose and use

The EVB is not a finished product and is not intended for general use by the consumer. The EVB is intended exclusively for use in the evaluation of WE components in the lab or in development environments by highly qualified technicians or engineers, familiar with the risks involved in handling electrical or mechanical components, systems and subsystems. The use of the EVB is your full and independent responsibility. The EVB is expressly not intended to be installed in a terminal device or to be part of a terminal device in whole or in part. WE reserves the right, at its own discretion, to make corrections, improvements, adjustments or other changes to the EVB or to discontinue the EVB. The EVB is not intended for use in devices and applications for which a higher safety and reliability standard is prescribed. It is also not approved for use in safety-relevant applications or where personal injury or fatal consequences must be expected in the event of failure.

#### Operation of the EVB

The EVB may only be operated within the specifications and environmental parameters recommended by WE, as described in the instructions for use. Exceeding the specified parameters (including, but not limited to, input and output voltage, current, power, and ambient conditions) may result in damage to property. If you have questions about these electrical parameters, please contact WE at (regulatory-compliance@weonline.com) prior to connecting peripheral electronics (including the input voltage and intended loads). Any load outside a certain power range may lead to negative consequences, including, but not limited to, unintended or inaccurate evaluations or possibly permanent damage to the EVB or the electronics connected to it. Please ensure that the appropriate safety precautions are taken when working with the EVB, as serious injuries, including severe or even fatal injuries from electric shock or electric burns, may occur if you do not follow the appropriate safety precautions. Under no circumstances should the EVB be touched while live. When the EVB is connected to a power source, some of tis components are electrically charged and/or have temperatures above 50 °C. This condition also applies for a short time after disconnecting from the supply voltage until the capacitors are completely discharged and hot components have cooled down. These components include connectors, linear regulators, switching transistors, heat sinks, resistors, diodes, inductors and other components, which can be identified from the documentation in the instructions for use. As with all electronic lab work, only qualified persons with knowledge of electronic performance evaluation, measurement and diagnostic tools, should use the EVB.

#### Hazards and warnings

Before putting the EVB into operation, please read the instructions for use and especially the various hazards and warnings described therein. The instructions for use contain important safety information on voltages and temperatures. You take full responsibility and liability for the proper and safe handling of the EVB. You agree to comply with all safety requirements, rules and regulations related to the use of the EVB. You also take full responsibility for: (1) establishing safeguards to ensure that the use of the EVB does not cause damage to property, personal injury or death, even if the EVB does not function as described, intended or expected, (2) the test setup in which the EVB is integrated, all safety requirements, rules and regulations and also that no damage to property, personal injury or other hazardous situation occurs even if the EVB fails, and (3) ensuring the safety of all activities performed by you or your employees when using the EVB. In particular, this means that the technical rules VDE [German Electrical Engineering, Electronic and Information Technology Association] 0105-100 and BGI [German trade association information] 891 (or corresponding applicable safety regulations outside Germany) for the operation of electrical test setups must be observed, the test area is protected against unauthorized access or accidental touching, current limitations, and emergency stop mechanisms are functional and test setups are never operated unattended. If you have any questions about the safe use of the EVB, please contact WE at *regulatory-compliance@we-online.com* for more information.

#### Your responsibility with regard to the applicable laws

- You are responsible for being sufficiently informed about and complying with all international, national, state and local applicable laws, rules and regulations that apply to the handling or use of the EVB by you or your employees.
- The EVB generates, uses and radiates radio frequency energy, but has not been tested for conformity with the limits applicable to the product category, which are applicable according to the European Union regulations for protection against radio frequency interference. Operation of the EVB may cause interference with radio communication. In this case, the costs incurred for necessary measures to remedy the interference are to be borne by the user.

As the EVB is not a finished product, it may not comply with applicable regulatory, safety or certification standards that are normally as-

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sociated with other products, such as Directive 2011/65/EC of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of hazardous substances and Directive 2002/96/EC on waste electrical and electronic equipment (WEEE). You take full responsibility for compliance with such standards that apply to the EVB. You also take responsibility for the proper disposal of the components and materials of the EVB.

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#### Warranty of EVB

WE ensures that the EVB meets the specifications given in the instructions for use (within the deviations stated therein) for a period of 12 months from the date of purchase and functions in accordance with the instructions for use. On the basis of the underlying statutory provisions, WE shall rectify defects or offer free replacement of the EVB to which damage occurs that is evidently attributable to a defect for which WE is responsible and is at fault. A warranty claim is subject to the user having complied with the statutory duties of inspection and notification of defects and that the EVB has been received by WE no later than ten (10) days after expiry of the warranty period. This warranty is not transferable to others. This warranty does not apply to defects or impairments in performance resulting from incorrect use, use contrary to WE's instructions, improper installation, improper operation or misuse. WE accepts no liability whatsoever for the failure of equipment or other items not manufactured by or for WE, including, but not limited to, equipment or items to which the EVB is attached or for which the EVB is used. WE DOES NOT GRANT ANY WARRANTIES OR ASSURANCES WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE EVB, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MARKETABILITY OR SUITABILITY FOR A PARTICULAR PURPOSE.

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