

USER MANUAL

EVALUATION BOARD FOR RADIO
MODULE DAPHNIS-I

2618011181000

VERSION 1.0

MARCH 26, 2024

WÜRTH ELEKTRONIK MORE THAN YOU EXPECT

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 to include in the customer system design, the possibility for a firmware update of the product.

Revision history

Manual version	HW version	Notes	Date
1.0	1.1	<ul style="list-style-type: none">Initial version	March 2024

Abbreviations

Abbreviation	Name
COM port	Communication port
EJTAG	Embedded Joint Test Action Group
EV	Evaluation
ESD	Electro Static Discharge
FEM	Front End Modem
FTDI	Future Technology Devices International
FW	Firmware
GND	Ground
HIGH	High signal level
IC	Integrated Circuit
IO	Input & Output
LED	Light Emitting Diode
LOW	Low signal level
LPUART	Low-power Universal Asynchronous Receiver Transmitter
MCU	Micro Controller Unit
PC	Personal Computer
PCB	Printed Circuit Board
RF	Radio Frequency
SWD	Serial Wire Debug
THT	Through Hole Technology
UART	Universal Asynchronous Receiver Transmitter
UMRF	Ultra Miniature Radio Frequency
USB	Universal Serial Bus
VDD	Voltage Drain Drain

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1 Supported radio modules

The EV board described in this manual can be used to evaluate the following products:

Order code	Product name	Description
2618011181000	Daphnis-I	868MHz Long-Range-WAN module

Table 1: Compatibility

Order code	Product name
2618019381001	Daphnis-I EV-kit

Table 2: Order codes

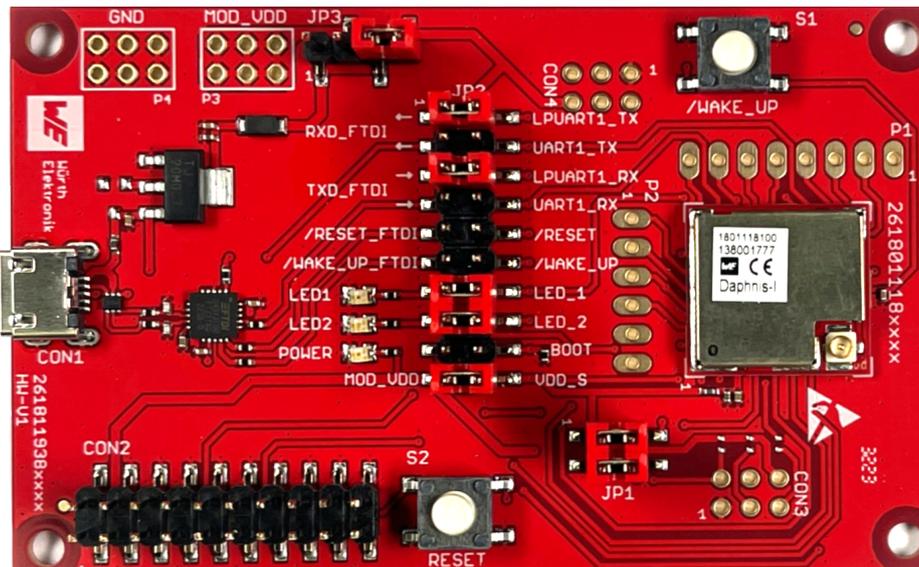


Figure 1: Product image

Kit content	Quantity
EV board with Daphnis-I Module (80mmx50mmx1.6mm)	1
868 MHz dipole antenna	1
USB-2.0-Typ-A to USB-2.0-Micro-B cable	1
WR-UMRF SMA Bulkhead Jack to UMRF Right Angle Plug	1
Packaging: Cardboard Box (230mmx230mmx78mm), ESD safe cover	1

Table 3: Content Daphnis-I EV-kit

2 Functional description

The EV board offers the user the possibility to develop hard- and software for the compatible radio module. It can be connected to a USB port of a PC.

For the connection to a MCU system, the EV board is equipped with a multi-pin connector which is connected to all pins of the RF module. Jumpers allow to disconnect unused components, such as the USB interface, from the module when not used.

Feel free to check our youtube channel:

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

2.1 Taking into operation

- Step 1: Install or update the corresponding FTDI driver package on your PC .
(www.ftdichip.com/Drivers/VCP.htm)
- Step 2: Place the jumpers on default location, as shown in figure 4.
- Step 3: Connect the EV board to the PC using a USB-cable. A COM port will be detected and installed on your PC. Check the device manager to acquire the COM port name of the EV board. A typical name is "COM12" in Windows systems or /dev/ttyUSB0 in Linux systems.
- Step 4: Run the WE-SmartCommander [2] or any other serial terminal program (like hterm for Windows). Open the corresponding COM port using the default settings of the mounted radio module: 9600 Baud, 8 Data Bits, 1 Stop Bit and Parity set to none (8n1).
- Step 5: After the module is powered through the USB jack or an external power supply, the reset button should be pressed to ensure a clean start-up of the module. After pressing the reset button, the module sends the message +SYSNOTF: READY.

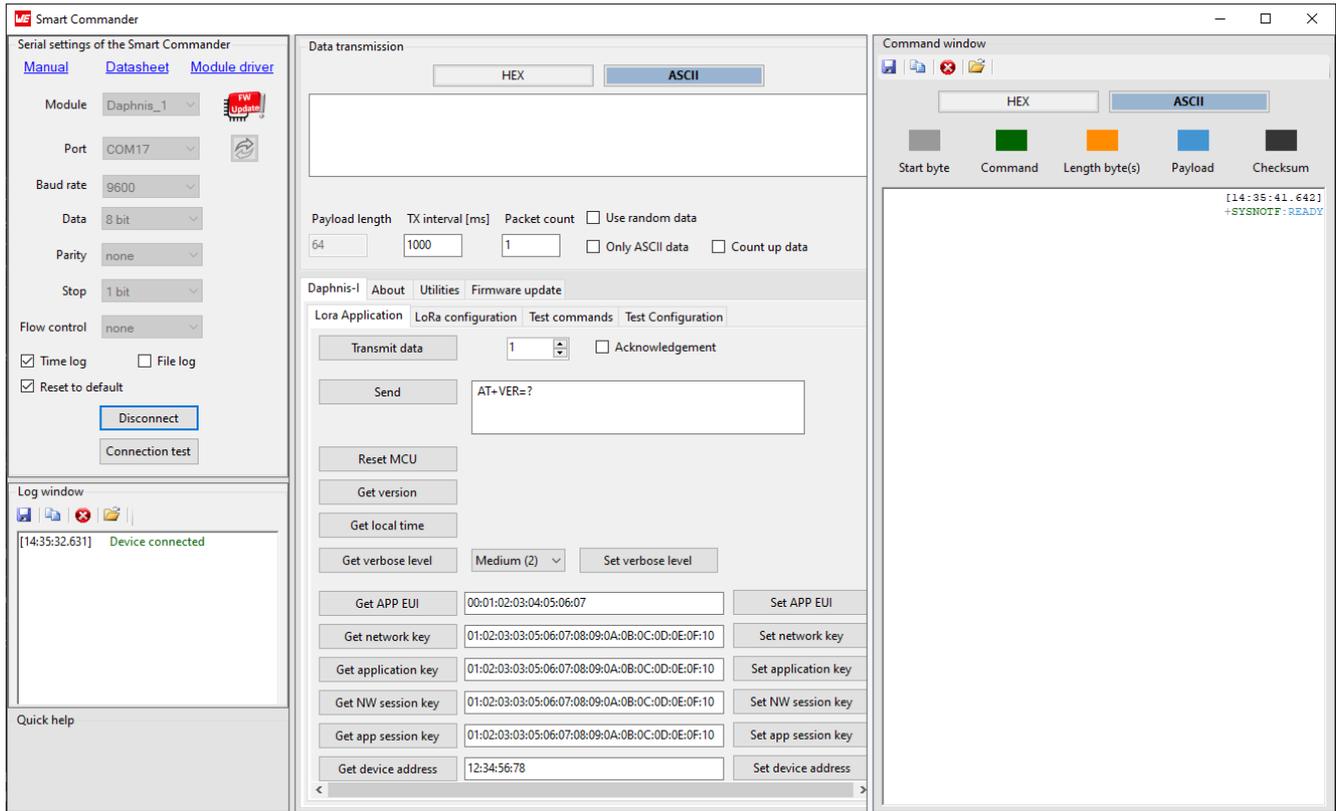


Figure 2: Smart Commander +SYSNOTF event

For more detailed module-specific quick start instructions, refer to the modules user manual. [1].

3 Development board

3.1 Block diagram

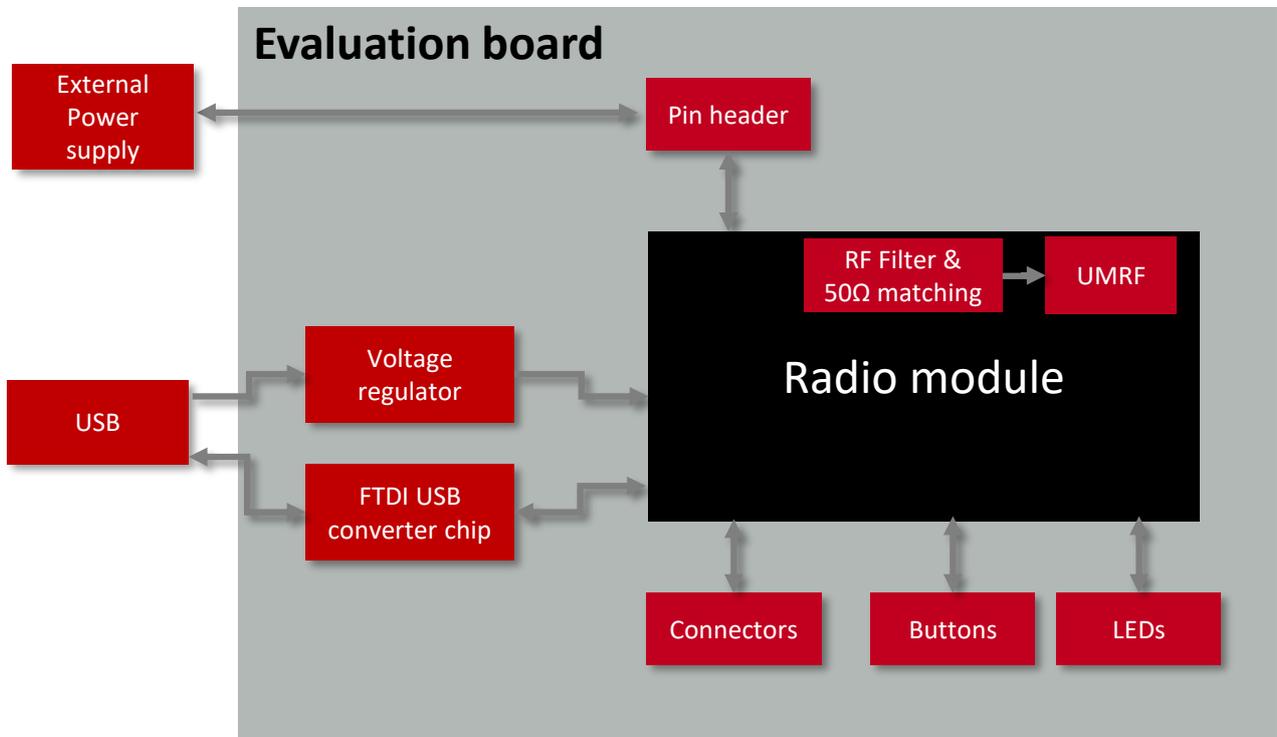


Figure 3: Block diagram

3.2 Jumpers

The following figure shows the default positioning (marked in red) of all jumpers on the EV board. This section also contains the details to any jumper connection that is supported by the EV board.

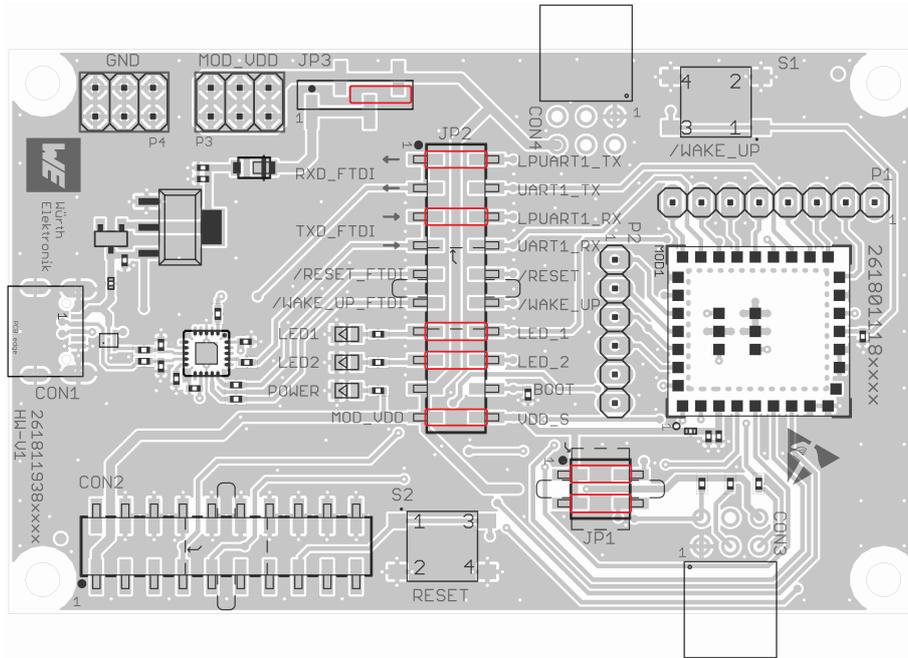


Figure 4: Jumpers, default

JP1	Function	Jumper set (default)
1,2	Power rail bridge. Remove to connect an external voltage reference to <i>VDDA</i>	Yes
3,4	Power rail bridge. Remove to connect an external voltage reference to <i>VBAT</i>	Yes

Table 4: Jumper JP1. *VDDA* and *VBAT* connection to *VDD*

JP2	Function	Jumper set (default)
1,2	FTDI <i>RXD</i> to Module UART <i>LPUTXD1</i> Application UART	Yes
3,4	FTDI <i>RXD</i> to Module UART <i>UTXD1</i> Bootloader UART	No
5,6	FTDI <i>TXD</i> to Module UART <i>LPURXD1</i> Application UART	Yes
7,8	FTDI <i>TXD</i> to Module UART <i>URXD1</i> . Bootloader UART	No
9,10	FTDI <i>CBUS0</i> to Module UART <i>/RESET</i>	No
11,12	FTDI <i>CBUS1</i> to Module UART <i>/WAKE_UP</i>	No
13,14	Yellow LED1 to pin <i>LED_1</i>	Yes
15,16	Blue LED2 to pin <i>LED_2</i>	Yes
17,18	MOD_VDD to pin <i>BOOT</i> . When set, it starts the bootloader mode after a reset event	No
19,20	MOD_VDD to VDD_S. Current consumption measurement bridge	Yes

Table 5: Jumper JP2

JP3	Function	Jumper set (default)
1,2	LDO supplies the module	No
3,4	LDO supplies the module	Yes

Table 6: Jumper JP3



By default pin 3 is connected to pin 4 to provide power to the module via internal LDO power supply. Likewise, pin 1 can be linked to pin 2 for internal power supply.



When sourcing the module via an external power supply, the jumper on JP3 shall be removed. Pin headers P3 and P4 shall be used to source the EV board.

3.3 Connectors and pin headers

This section explains all connectors and pin headers on the EV board.

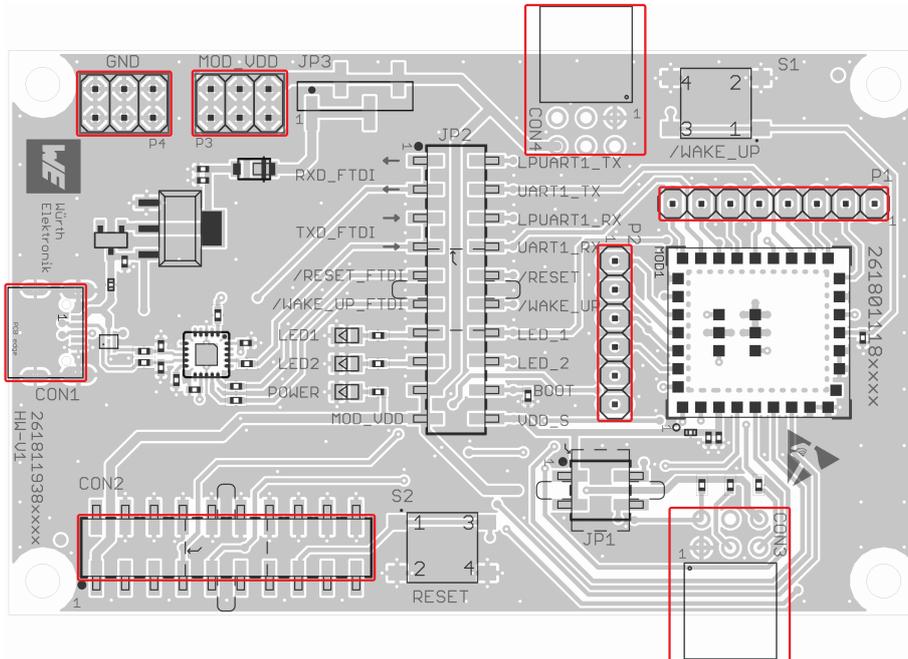


Figure 5: Connector and pin headers

Pin header	Function	WE article number
CON1	Micro-USB connector for host connection and VDD bus supply	629105150521
CON2	EJTAG debug	61302021121

Table 7: Default assembled connectors and pin headers

Additionally, the following connectors can be assembled, if needed.

Pin header	Function	WE article number
CON3	I ² C interface (reserved)	613006243121
CON4	SPI interface (reserved)	613006243121
P1	Direct access to the reserved pins of the radio module	61300811121
P2	Direct access to the reserved pins of the radio module	61300611121
P3	Positive connection for the power supply (MOD_VDD)	61300621121
P4	Ground connection for the external power supply (GND)	61300621121

Table 8: Optional connectors



By default, P1, P2, P3 and P4 are not mounted.



By default, CON3 and CON4 are not mounted.



CON3 and CON4 are suited to connect *WSEN-EVAL* by mounting the corresponding headers.

3.3.1 CON1

Connector CON1 is a micro-USB connector that enables connection to PC via standard micro-USB cable.

CON1	Function
-	Micro-USB connector for host connection and VDD bus supply

Table 9: Micro-USB connector

3.3.2 CON2

Connector CON2 is the EJTAG debug interface.

CON2	Module pin	Function
1	MOD_VDD	VDD reference output voltage
7	SWDIO	JTAG data input/output
9	SWDCLK	JTAG clock
15	/RESET	Reset pin for the JTAG probe
4,6,8,10,12,14,16,18,20	-	GND
2,3,5,11,13,17,19	-	Not Connected

Table 10: 2x10 EJTAG connector

3.3.3 CON3

Connector CON3 is compatible with the WE sensor EV boards via I²C interface. This feature is subjected to a customized firmware and not supported by standard firmware.

CON3	Module pin	Function
1	-	GND
2	2	Reserved(suitable for SCL)
3	1	Reserved(suitable for SDA)
4	-	GND
5	23	Reserved(suitable for GPIO)
6	-	MOD_VDD

Table 11: 2x3 right angle socket

3.3.4 CON4

Connector CON4 is compatible with the WE sensor EV boards via SPI interface. This feature is subjected to a customized firmware and not supported by standard firmware.

CON4	Module pin	Function
1	-	GND
2	31	ReservedReserved(suitable for CLK)
3	30	Reserved(suitable for MOSI)
4	28	Reserved(suitable for GPIO)
5	29	Reserved(suitable for MISO)
6	-	MOD_VDD

Table 12: 2x3 socket

3.3.5 P1

P1	Module pin	Function
1	B2	Reserved
2	16	Reserved
3	17	Reserved
4	18	Reserved
5	21	Reserved
6	22	Reserved
7	23	Reserved
8	25	Reserved

Table 13: Pin header P1

On P1 non-categorized module pins are available.

3.3.6 P2

P1	Module pin	Function
1	28	Reserved
2	29	Reserved
3	30	Reserved
4	31	Reserved
5	1	Reserved
6	2	Reserved

Table 14: Pin header P2

On P2 non-categorized module pins are available.



In case of customized FW, *RESERVED* pins can be used. Refer to manual of the module [1], to see module's pin to IC's pin connection.

3.3.7 P3

Pin header P3 can be used to provide the positive output of an external power supply to the board. This pin header is not populated by default.

P3	Function
1-6	MOD_VDD (2V to 3.6 V)

Table 15: External power connection (MOD_VDD)

3.3.8 P4

Pin header P4 can be used to provide the negative output of an external power supply to the board. This pin header is not populated by default.

P4	Function
1-6	GND

Table 16: External power connection (GND)

3.4 Buttons

3.4.1 Reset button

Internally, the reset input of the MCU is connected via an RC combination with the power supply to ensure a proper startup of the module. The */RESET* pin is connected to this button which restarts the module when pressed and released. The module provides an internal pull-up resistor. Refer to the module specific manual for detailed information.

3.4.2 Wake-up button

The active low wake-up input of the MCU is connected via an RC combination to ensure a proper wake-up of the module. This button enables the user to exit from the sleep mode. Refer to the module specific manual for detailed information.

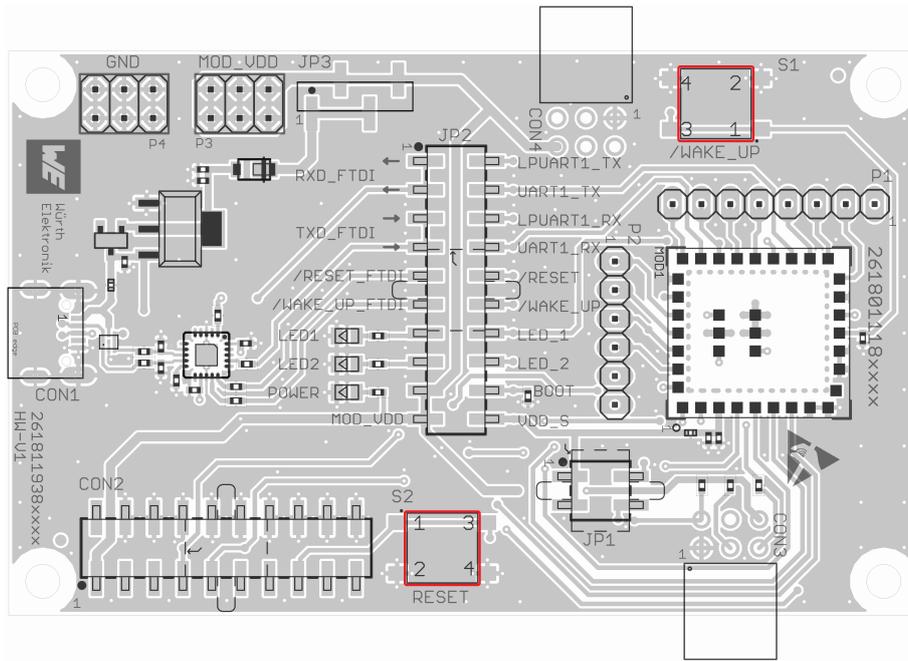


Figure 6: Push buttons

3.5 Function blocks

3.5.1 Power supply

3.5.1.1 Bus powered, power supply through USB

The EV board can be operated via USB. The integrated voltage regulator regulates the connected 5 V down to 3.3 V and supplies the remaining parts of the circuit. If the EV board is powered up, the power LED lights up.



When powering the EV board via USB connector, place a jumper link on any of the possible pin-pairs in JP3.

3.5.2 Current measurement

As shown in table 5, pin 19 and pin 20 of JP2 are bridged for normal operation. Connect a current meter in place of the jumper to measure power consumption.

If the meter is not attached and the jumper link is not set, the module will not receive a supply voltage. However, the power LED may be active, because it is connected before to the current measurement bridge in order not to distort the module's power consumption.



To achieve the stated low power current, the module pins must be terminated as stated in the module specific manual.

3.5.3 UART / USB

The UART interface of the module can be connected to the USB converter by setting the corresponding jumper links in JP2. Thus, the module can be connected directly to a PC via the USB jack. Using the FTDI driver, the PC will show a virtual COM port which can be used to communicate with the module.

Interface	Jumper link position	Function
Application UART	1 to 2, 5 to 6	Application UART is converted to USB
Bootloader UART	3 to 4, 7 to 8	Bootloader UART is converted to USB. Only for FW update purposes

Table 17: Jumper link position for different UART to USB conversion

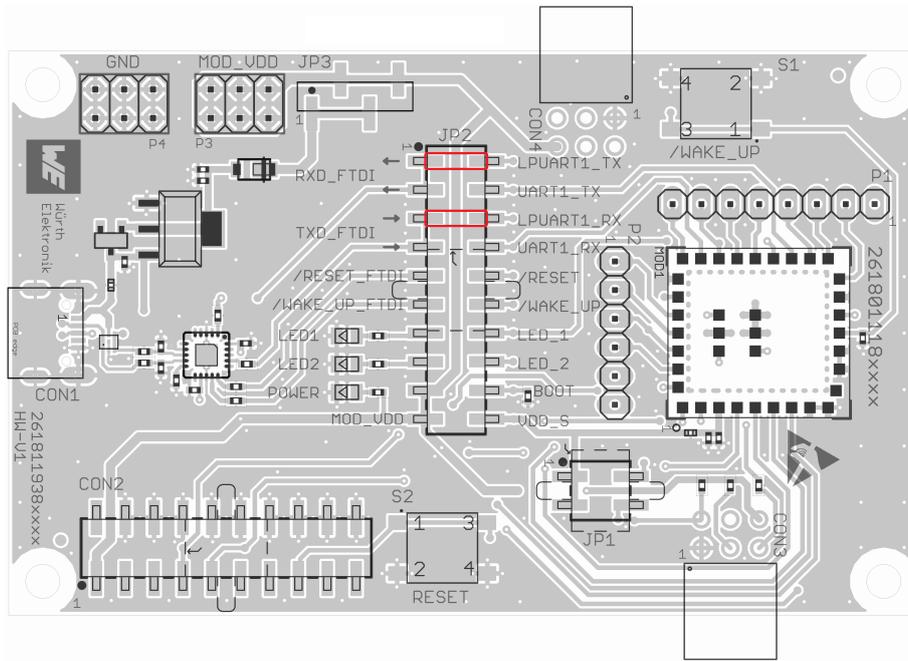


Figure 7: Application UART connected to USB communication

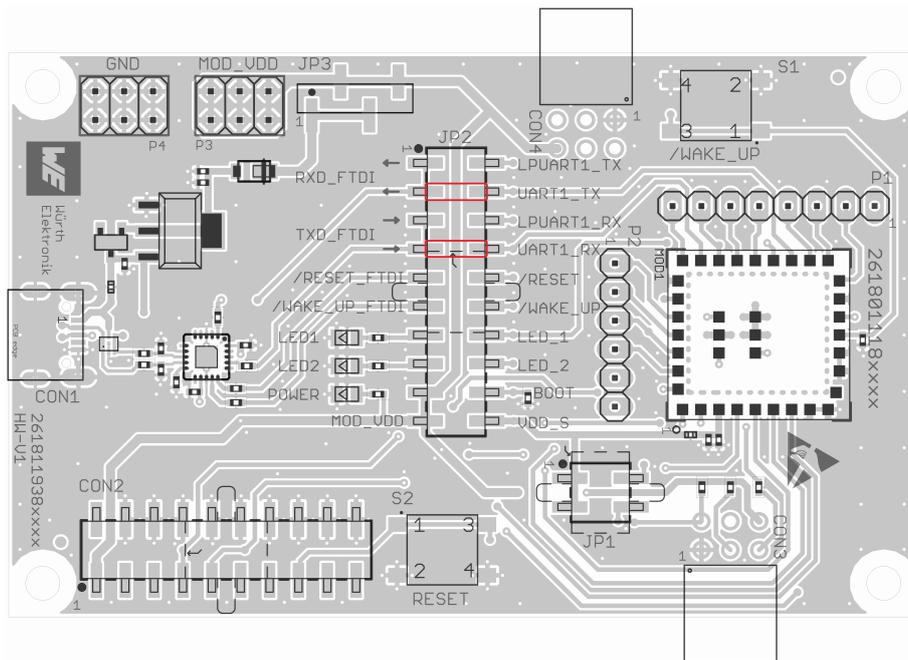


Figure 8: Bootloader UART converted to USB communication



Only one UART can be converted to USB at the same time.



The USB cable length must not exceed 3 meters.

3.5.4 UART direct

If an MCU is to be connected to the module, remove the jumper links on pin 1 - 2 and pin 5 - 6 in JP2. The UART can be connected directly on the pin strip. The module RXD line must be handled accordingly by your host (i.e. pulled up while inactive and during module boot-up).

Beware of IO level incompatibility. The host must match the values stated in the manual of the module. Especially the IO level restrictions must be implemented by a host system (i.e. using a level shifter to use the required IO levels).

3.5.5 Programming interface

The EV board provides a 2*10 pin connector to connect directly to a JTAG flash adapter used for development. Consider the correct mounting of the flash adapter (pin 1 marking). Depending on your flasher, an additional adapter may be required.

The recommended flash adapter is one of the "Segger J-Link" family.

3.6 Schematic

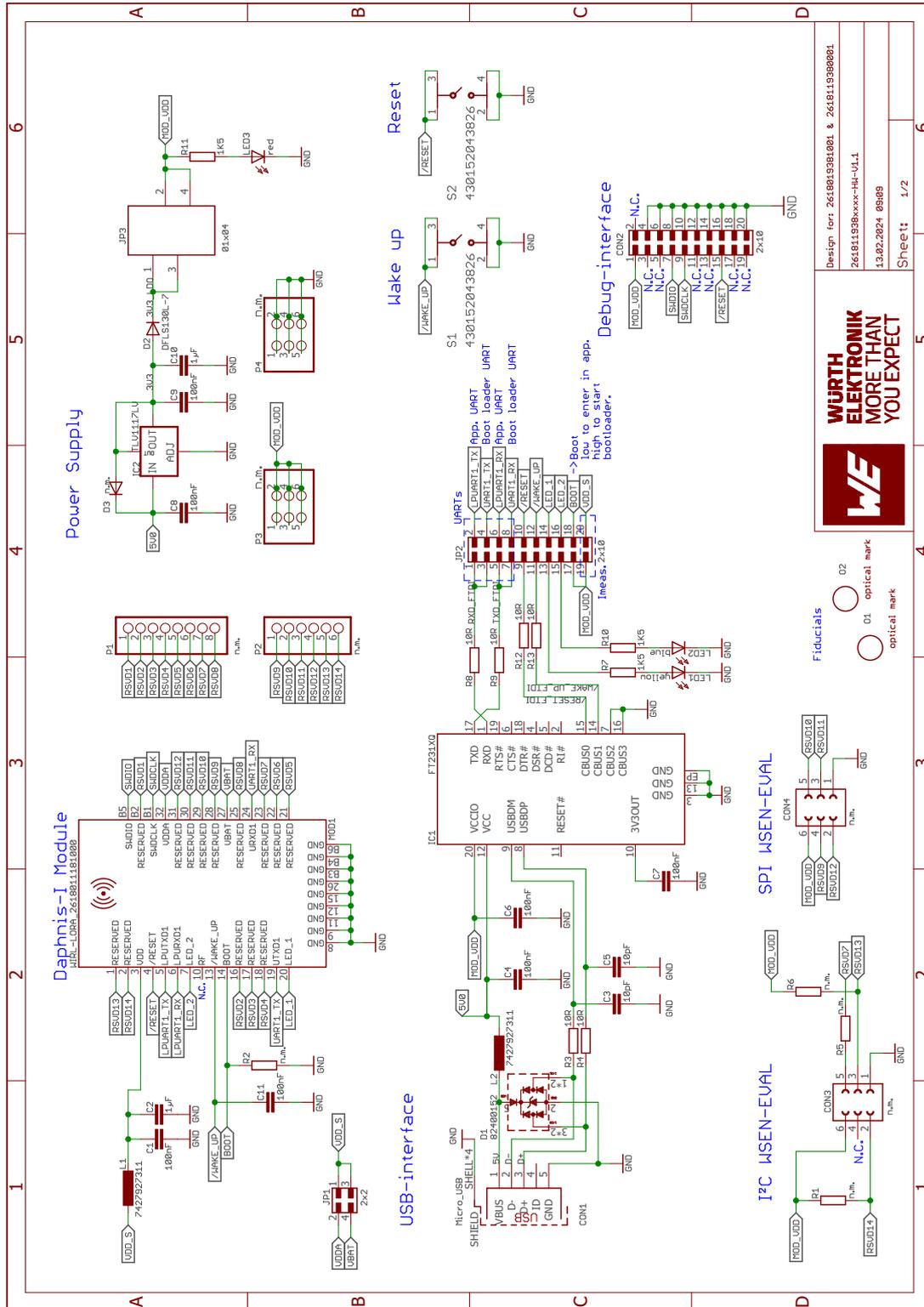


Figure 9: Reference design: Schematic diagram

3.6.1 Layout

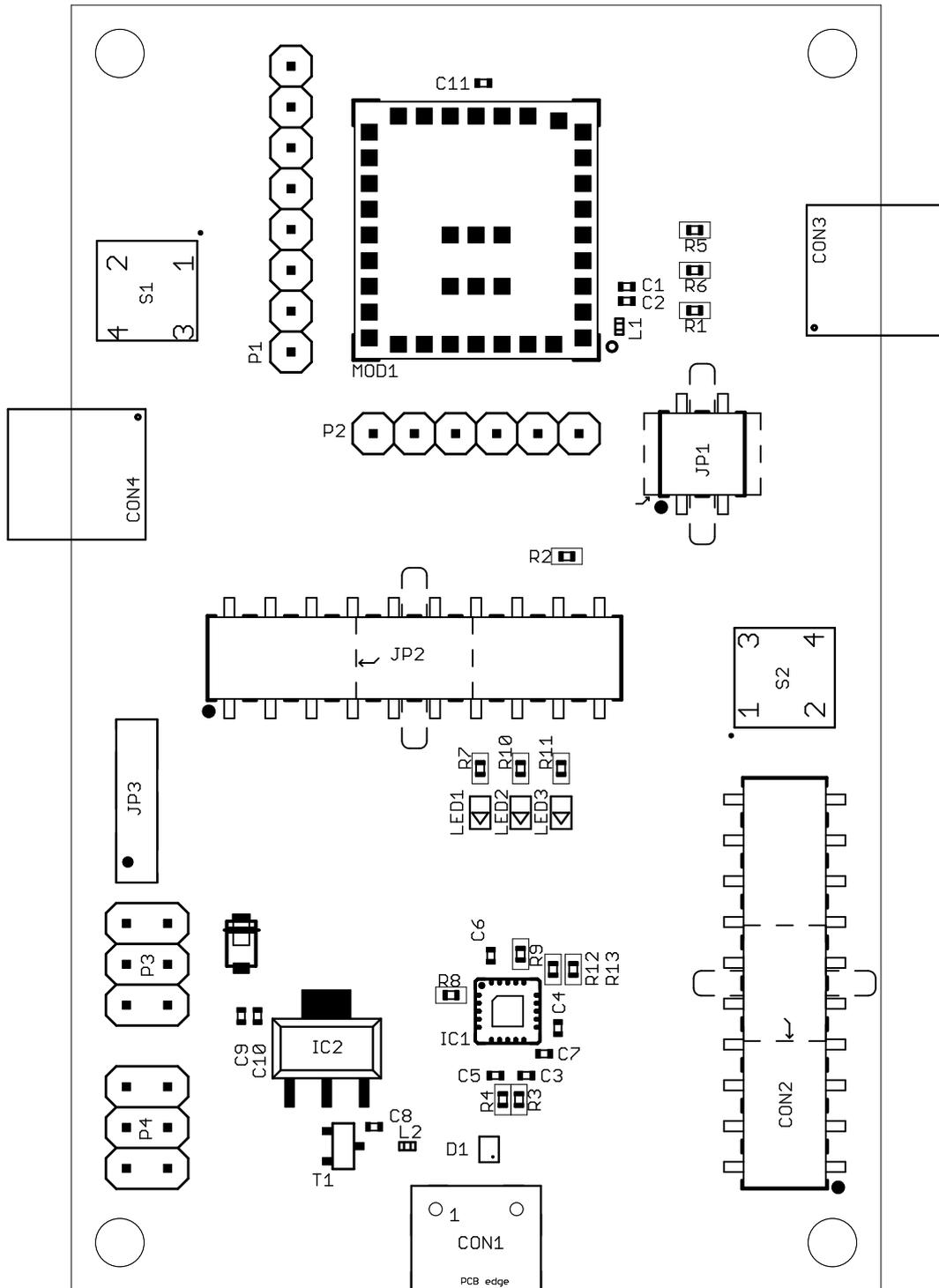


Figure 10: Reference design: Assembly diagram

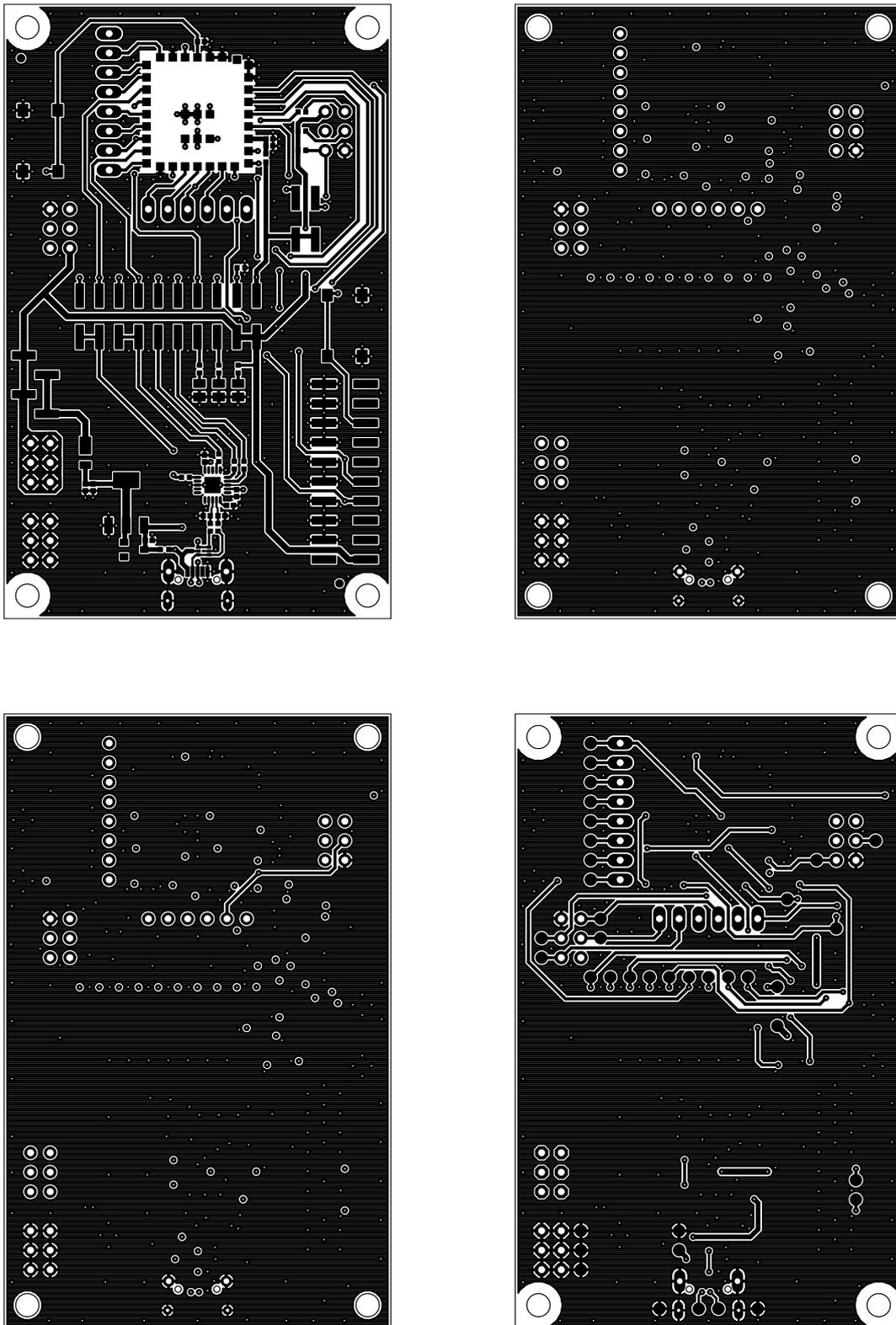


Figure 11: Top layer (upper left), second layer (upper right), third layer (bottom left), fourth layer (bottom right)

3.7 Bill of materials

Part	Value	Pack	Manufacturer	NR
C1	100nF	0402	Würth Elektronik eiSos	885012205037
C2	1µF	0402	Würth Elektronik eiSos	885012105012
C3	10pF	0402	Würth Elektronik eiSos	885012005055
C4	100nF	0402	Würth Elektronik eiSos	885012205037
C5	10pF	0402	Würth Elektronik eiSos	885012005055
C6	100nF	0402	Würth Elektronik eiSos	885012205037
C7	100nF	0402	Würth Elektronik eiSos	885012205037
C8	100nF	0402	Würth Elektronik eiSos	885012205037
C9	100nF	0402	Würth Elektronik eiSos	885012205037
C10	1µF	0402	Würth Elektronik eiSos	885012105012
C11	100nF	0402	Würth Elektronik eiSos	885012205037
CON1	Micro USB 2.0	SMT-THT	Würth Elektronik eiSos	629105150521
CON2	2x10	THT	Würth Elektronik eiSos	61032021121
CON3	n.m.	THT	n.m.	n.m.
CON4	n.m.	THT	n.m.	n.m.
D1	82400152	SMT	Würth Elektronik eiSos	82400152
D2	DFLS130L-7	SMT	Diodes incorporated	DFLS130L-7
D3	n.m.	THT	n.m.	n.m.
IC1	FT231XQ	SMT	FTDI	FT231XQ
IC2	TLV1117LV33DCY	SMT	Texas Instruments	TLV1117LV33DCY
JP1	2x2	THT	Würth Elektronik eiSos	61030421121
JP2	2x10	THT	Würth Elektronik eiSos	61032021121
JP3	2x10	THT	Würth Elektronik eiSos	61000418221
L1	7427927311	0402	Würth Elektronik eiSos	7427927311
L2	7427927311	0402	Würth Elektronik eiSos	7427927311
LED1	Yellow	0805	Würth Elektronik eiSos	150080YS75000
LED2	Blue	0805	Würth Elektronik eiSos	150080BS75000
LED3	Red	0805	Würth Elektronik eiSos	150080RS75000
MOD1	WIRL-LORA	SMT	Würth Elektronik eiSos	2618011181000
P1	n.m.	THT	n.m.	n.m.
P2	n.m.	THT	n.m.	n.m.
P3	n.m.	THT	n.m.	n.m.
P4	n.m.	THT	n.m.	n.m.

Table 18: Bill of materials part 1

Part	Value	Pack	Manufacturer	NR
R1	n.m.	0402	n.m.	n.m.
R2	n.m.	0402	n.m.	n.m.
R3	10R	0402	Yageo	RC0402FR-0710RL
R4	10R	0402	Yageo	RC0402FR-0710RL
R5	n.m.	0402	n.m.	n.m.
R6	n.m.	0402	n.m.	n.m.
R8	10R	0402	Yageo	RC0402FR-0710RL
R9	10R	0402	Yageo	RC0402FR-0710RL
R10	1.5k	0402	Yageo	RC0402FR-071K5L
R11	1.5k	0402	Yageo	RC0402FR-071K5L
R12	10R	0402	Yageo	RC0402FR-0710RL
R13	10R	0402	Yageo	RC0402FR-0710RL
S1	WS-TASV	SMT	Würth Elektronik eiSos	<i>430152043826</i>
S2	WS-TASV	SMT	Würth Elektronik eiSos	<i>430152043826</i>

Table 19: Bill of materials part 2

4 Regulatory compliance information

4.1 European Conformity

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 evaluation kits designed for professionals to be used solely at research and development facilities for such purposes.

4.2 FCC

Pursuant to §2.803 (c) of Title 47 Chapter I Subchapter A Part 2 Subpart I, the evaluation kit falls under the FCC exception. Therefore it is marked as "For evaluation only; not FCC approved for resale".

4.3 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.

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5 References

- [1] Würth Elektronik. Daphnis-I user manual. <https://www.we-online.de/katalog/de/manual/2618011181000>.
- [2] Würth Elektronik. Smart Commander PC tool. <https://www.we-online.com/SmartCommander>.

6 Important notes

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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, PCN's, warnings and cautions must be strictly observed in the most recent versions and matching to the products revisions. This 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 field sales engineer or the internal sales person in charge should be contacted who will be happy to support in this matter.

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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 field sales engineer, the internal sales person or the technical support team in charge should be contacted. The basic responsibility of the customer as per section 6 and 6 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 field sales engineer 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 evaluation boards. Evaluation boards may be changed without any notification.

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Evaluation board user manual

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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/manual) 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@we-online.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 its 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.

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As the EVB is not a finished product, it may not comply with applicable regulatory, safety or certification standards that are normally associated 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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We recommend you to be updated about the status of new firmware and software, which is available on our website or in our data sheet and manual, and to implement new software in your device where appropriate.

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