# Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions

Max-Eyth-Straße 1 · 74638 Waldenburg · Germany Tel. +49 7942 945-0 · Fax +49 7942 945-5000 eiSos@we-online.com · www.we-online.com



Product / Process Change Notification (PCN)		
<ul><li>☑ Major change</li><li>☐ Minor change</li></ul>		
PCN #:	PCN_WIRL-COMB_Setebos-I_20220915	Change Category:
Affected Series:	WIRL-COMB; 2611011024020, 2611129024021	<ul> <li>□ Equipment / Location</li> <li>□ General Data</li> <li>□ Material</li> <li>□ Process</li> <li>□ Product Design</li> <li>□ Shipping / Packaging</li> <li>□ Supplier</li> <li>☑ Software</li> </ul>
PCN Date:	June 15, 2022	
Effective Date:	September 15, 2022	
Contact:	Product Management	Data Sheet Change:  ☐ Yes ☐ No  Attachment:  ☐ Yes ☐ No
Phone:	+49 (0) 7942 - 945 5001	
Fax:	+49 (0) 7942 - 945 5179	
E-Mail:	pcn.eisos@we-online.com	
Description and purpose of change:  In order to meet current market demands, Würth Elektronik will include new functionalities in its module Setebos-I. Following products will also be affected by this change:  - Setebos-I mini evaluation board: 2611129024021.  All products with date code 2022-09-15 or later, will be affected by this change. Würth Elektronik recommends its customers to update the firmware version of existing modules to version 1.1.0., as per instructions in the user manual.		
For the mini-evaluation board, i.e. 2611129024021, the installed firmware version can be recalled from the last three digits of the lot number, i.e. xxxxxxxxxxxx101.		
For customer testing purposes, Würth Elektronik can provide the firmware images and the updated version of the user manual two months in advance, i.e. 15 <sup>th</sup> of July.		
In case a firmware freeze to the current version is required, please contact your local sales person or our support team at <a href="mailto:wireless-sales@we-online.com">wireless-sales@we-online.com</a> .		
There will be no change in form, fit, quality or reliability of the product		

## Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions

Max-Eyth-Straße 1 · 74638 Waldenburg · Germany Tel. +49 7942 945-0 · Fax +49 7942 945-5000 eiSos@we-online.com · www.we-online.com



### **Detail of Change:**

The new firmware version 1.4.0 of Proteus-III and firmware version 1.6.0 of Thyone-I will be used in Setebos-I.

#### Proteus-III part:

- The user setting "*RF\_ConnectionTiming*" will be updated, in order to better support most recent Android and iOS devices. There is no need to update the host controller firmware.
- The user setting "CFG\_Flags" will be updated with an option to disconnect in case the central device (i.e. mobile phone) does not respect the connection interval settings of the peripheral device. In firmware version 1.3.0, the Proteus-III disconnected in such case. In the new firmware version 1.4.0, the default value is to not disconnect.
- The UART command "CMD\_GETSTATE\_CNF" has been updated. This command has an additional byte at the time Proteus-III is connected to another Bluetooth® LE device. If this command is not used when a Bluetooth® connection is open, there is no need to update the host controller firmware.
- For the remote GPIO pins, the maximum PWM value (100 %) has been mapped from 0xFF to 0xFE. In case the host controller is still using 0xFF as PWM value, it is internally mapped to 0xFE in order to guarantee backward compatibility. If a PWM of 100 % is not used, there is no need to update the host controller firmware.
- New commands are available to read back the current PWM value.
- UART transmission is run without additional pauses between bytes. There is no need to update the host controller firmware.

#### Thyone-I part:

- For the remote GPIO pins, the maximum PWM value (100 %) has been mapped from 0xFF to 0xFE. In case the host controller is still using 0xFF as PWM value, it is internally mapped to 0xFE in order to guarantee backward compatibility. If a PWM of 100 % is not used, there is no need to update the host controller firmware.
- New commands are available to read back the current PWM value.
- UART transmission is run without additional pauses between bytes. There is no need to update the host controller firmware.
- The duplicate packet detection functionality has been improved. There is no need to update the host controller firmware.
- The maximum back-off time for clear channel assessment (CCA) has been reduced from 255 to 64 ms. There is no need to update the host controller firmware.

### Reliability / Qualification Summary:

Product approval is according to the specification criteria and is internally released by the Product Management and Engineering departments.

Würth Elektronik eiSos GmbH & Co. KG EMC & Inductive Solutions

Max-Eyth-Straße 1 · 74638 Waldenburg · Germany Tel. +49 7942 945-0 · Fax +49 7942 945-5000 eiSos@we-online.com · www.we-online.com

