

# SiWG917 SoC Errata



This document contains information on the SiWG917 SoC Errata. The latest available revision of this device is revision B. Errata that have been resolved remain documented and can be referenced for previous revisions of this device. The device datasheet explains how to identify the chip revision either from the package marking or electronically.

Errata effective date: December 3<sup>rd</sup>, 2024.

## **Errata Summary**

Designator	Title/Problem	Workarounds	Exists on Revision A	Exists on Revision B
OSC_32kHz_E301	Recommendation for an external XTAL as a mandatory require- ment	No	X	x
OSC_32kHz_E302	Device hangs on application reset and after FW upgrade by commander	Yes	Х	X
OSC_32kHz_E303	Calendar Timer is inaccurate	No	Х	x

## 1. OSC\_32kHz\_301: Recommendation for External XTAL as Mandatory Requirement

## Description

The SiWG917 datasheet 0.7 and earlier revisions provide options for two types of external clock, an external 32 kHz oscillator or an external 32 kHz XTAL. In future revisions of the datasheet, an external 32 kHz XTAL will be mandatory for Wi-Fi, BLE, and Coex Power saving use-cases and ULP MCU applications with accurate timing requirements.

## Affected Condition/Impacts

Timing accurate ULP MCU applications and wireless power consumption will be impacted.

#### Workaround

No workaround available.

## Resolution

Hardware Design Change: Use an external 32 kHz XTAL for high timing accuracy use-case on pins XTAL\_32KHz\_P and XTAL\_32KHz\_N.

## 2. OSC\_32kHz\_302: Device Hangs on Application Reset and After FW Upgrade by Commander

## Description

When the SiWG917 is designed with an external 32 kHz oscillator connected to the UULP\_VBAT\_GPIO\_3 pins and used with SW SDK versions 3.3.2 or before, hardware hang issues have been observed during the FW update via Simplicity Commander or programmatic reset by applications.

## Affected Condition/Impacts

The SiWG917 will hang and will not reset after FW upgrade via JTAG or Serial Wire Debug (SWD), or application-based reset.

### Workaround

In the affected condition, the device will need an externally triggered power cycle or hard reset (POC\_IN).

#### Resolution

This issue is resolved by upgrading to the latest SiSDK (with WiSeConnect SDK 3.3.4 or above) and Commander version 1.17.0 or above.

## 3. OSC\_32kHz\_303: ULP MCU Calendar Peripheral is Inaccurate

## Description

When the SiWG917 is designed with an external 32 kHz oscillator connected to the UULP\_VBAT\_GPIO\_3 pin, the ULP MCU Calendar peripheral is inaccurate.

## Affected Condition/Impacts

The device cannot maintain accurate real-time calendar for MCU applications.

## Workaround

No workaround available.

## Resolution

Hardware Design Change: Use a 32 kHz XTAL for high timing accuracy use-case on pins XTAL\_32KHz\_P and XTAL\_32KHz\_N.

# 4. Revision History

## **Revision 0.1**

December, 2024

· Initial release.





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