

SiWG917 SoC Module Errata



This document contains information on the SiWN917 SoC Module Errata. The latest available revision of this device is revision B. Errata that has been resolved remain documented and can be referenced for previous revisions of this device. The device datasheet explains how to identify the chip revision from the package marking.

Errata effective date: December 3rd, 2024.

Errata Summary

Designator	Title/Problem	Workarounds	Exists on Revision A	Exists on Revision B
OSC_32KHz_E401	Recommendation for External Oscillator as mandatory requirement.	No	X	X
OSC_32KHz_E402	Device hangs on Application reset and after FW upgrade by commander	Yes	X	X
OSC_32KHz_E403	Calendar time is inaccurate	No	X	X

1. OSC_32 kHz_401: Recommendation for an External Oscillator as Mandatory Requirement

Description of Errata:

SiWG917 Module Datasheet 0.5 and earlier provides an option for an external 32 kHz Oscillator on pin UULP_VBAT_GPIO_3. In future revisions of the datasheet, this external 32 kHz Oscillator will be mandatory for Wi-Fi, BLE, and Co-Ex power saving use cases and high accuracy MCU applications.

Affected Condition/Impacts:

Timing accurate ULP MCU applications and low power wireless use cases (Wi-Fi, BLE, and Co-Ex) will be impacted.

Workaround:

No available workaround.

Resolution:

Hardware Design Change- Use an external 32 KHz Oscillator on pin UULP_VBAT_GPIO_3 for high timing accuracy use cases.

2. OSC_32 kHz_402: Device Hangs on Application Reset and after FW Upgrade by Commander

Description of Errata:

When the SiWG917 module 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 FW Update via Simplicity Commander or programmatic reset by applications.

Affected Condition/Impacts:

SiWG917 Module 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 SDK 3.3.4 or later) and Commander version 1.17.0 or above.

3. OSC_32 kHz_403: ULP MCU Calendar Peripheral is Inaccurate

Description of Errata:

When SiWG917 module is designed with an external 32 kHz oscillator connected to UULP_VBAT_GPIO_3 pin, ULP MCU Calendar peripheral is inaccurate.

Affected Condition/Impacts:

Device cannot maintain accurate real-time calendar for MCU applications.

Workaround:

No available workaround.

Resolution:

No available resolution yet.

4. Revision History

Revision 0.1

December, 2024

- Initial release.

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