

MCXW236xUIK

Mask set Errata

Rev. 1.0 — 30 June 2025

Errata

1 Product identification

The MCX W23 WLCSP37 package has the following top-side marking :

- NXP logo
- First line : Part Number x236B
 - X=P: PK part
 - X= W: MK part
- Second line : [DBSN][ASID]
 - Part number
- Third line : ESD[YWW]
 - YWW: Date code with Y = year and WW = week

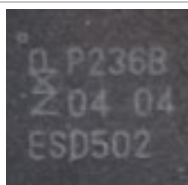


Figure 1. Package marking of the MCX W236xUIK samples

2 Errata overview

[Table 1](#) gives an overview of the known problems on MCX W236xUIK samples.

Table 1. Functional problems table

Table 1.

Reference	Short description	Applicable to	Fixed from
NA	NA		

On MCX W23UK/A4 R samples, there are some known limitations as listed in [Table 2](#).

Table 2. Errata notes table

Table 2.

Reference	Short description	Applicable to	Fixed from
Section 4.1	Tx modulation performance	A4 silicon in WLCSP package	No fix



3 Functional problems detail

Not applicable

4 Errata notes detail

4.1 Radio Errata: Tx modulation performance limited on 2 channels for higher power

4.1.1 Description

The Tx modulation specification as per Bluetooth SIG RFPHY Test Specification (RFPHY.TS) with subsection related to LE coded mode PFPHY/TRM/BV – 13-C is meant to check interoperability between different devices.

This is especially critical for the advertising channels and the BLE compliance test channels, i.e. channels 0 (2402 MHz), 12 (2426 MHz), 19 (2440 MHz) and 39 (2480 MHz).

Potentially violated Tx modulation specification

- Bluetooth SIG RFPHY Test Specification (RFPHY.TS)
- RFPHY/TRM/BV-13-C [Modulation Characteristics, LE Coded (S=8)]

Tx modulation performance may be potentially violated on 2 data channels, namely channel 15 (2432 MHz) and channel 31 (2464 MHz) for WLCSP packaged devices in Bluetooth Low Energy (BLE) Long Range PHY modes for high Tx power outputs. To minimize this violation, the power output on these 2 channels is reduced to max 2dbm by default settings in the firmware of the device. Tx modulation performance can be marginal on these 2 channels and is not guaranteed over the entire output power range.

All other channels including channels 0 (2402 MHz), 12 (2426 MHz), 19 (2440 MHz) and 39 (2480 MHz) are guaranteed by design.

4.1.2 Work-around

Customers can use manual BLE channel delisting and the LE channel classification feature to remove channels 15 and 31 from the channel map. Customers can override the power settings via application SW on devices that do not show this limitation. Please refer to [Application Note] for more details.

No silicon revisions fix is planned.

5 References

Table 3.

Abbreviation	Description
[Application Note]	MCXW23_AN99999_Transmitter_MaxOutputPower_Override

Ultra-low Power, small footprint BLE solution with integrated flash and security for IoT

6 Revision history

Table 4. Revision history

Document ID	Release date	Description
ES_MCXW236XUIKv.1.0	30 June 2025	<ul style="list-style-type: none">Initial version

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