

Product Change Notification

Topic EMMY-W1 NFC and SDIO speed specification changes
UBX-17005747

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1 Affected Products

Product Name	Ordering Code	Type No	Remarks
EMMY-W161-A	EMMY-W161-00A	EMMY-W161-00A-00	
EMMY-W161	EMMY-W161-00B	EMMY-W161-00B-00	
EMMY-W163-A	EMMY-W163-00A	EMMY-W163-00A-00	
EMMY-W163	EMMY-W163-00B	EMMY-W163-00B-00	
EMMY-W165-A	EMMY-W165-00A	EMMY-W165-00A-00	
EMMY-W165	EMMY-W165-00B	EMMY-W165-00B-00	
EVK-EMMY-W161	EVK-EMMY-W161-A	EVK-EMMY-W161-A-01	Evaluation kit for EMMY-W161/165
EVK-EMMY-W163	EVK-EMMY-W163-A	EVK-EMMY-W163-A-01	Evaluation kit for EMMY-W163

2 Type of Change

- Hardware modification
- Firmware update
- Documentation update
- Others, change of specification

3 Description of Change

The supplier of the radio chip used in EMMY-W1, Marvell, has decided to modify the specification for the NFC feature and the SDIO maximum clock frequency. This forces us to make similar changes to the EMMY-W1 specification.

3.1 NFC

Current designs with EMMY-W1 that use the NFC feature can continue to use NFC, but NFC will not be available for new customers and the firmware/driver from Marvell will not be updated with respect to NFC.

- There are no changes to the EMMY-W1 hardware or production test procedures.
- The NFC features are frozen from the following Marvell firmware releases, and will remain unchanged after that:
 - 8887-FC18-MMC 15.68.7.p62 15.29.7.p62
 - 8887-U14-MMC 15.44.7.p82 15.28.7.p82
- In firmware releases newer than the above, system tests or QA tests will not be performed for the NFC features. Any new Wi-Fi or Bluetooth issue will be resolved from the firmware releases defined above, but the impact to the NFC functionality is unknown. The NFC performance due to the Wi-Fi or Bluetooth fixes is not guaranteed.

- The latest EMMY-W1 documentation will not include NFC information. Existing customers who use NFC will have to refer to the document revisions mentioned below regarding NFC information:
 - EMMY-W1 Data Sheet [1], revision R05
 - EMMY-W1 System Integration Manual [2], revision R03
 - EVK-EMMY-W1 User Guide [3], revision R04
- The evaluation kits will not include any NFC antenna

3.2 SDIO speed

The maximum supported SDIO clock frequency is lowered from 208 MHz to 150 MHz. The new maximum SDIO clock frequency is still enough to support the highest air data rates without any performance impact.

3.3 Documentation updates

The documentation has been updated to reflect the above changes:

- EMMY-W1 series Data Sheet [1]
- EMMY-W1 series System Integration Manual [2]
- EVK-EMMY-W1 User Guide [3]

4 Schedule

The updated documentation is available now.

5 Customer Impact and Recommended Action

Customers who are using NFC are advised to verify that the NFC performance and NFC features of the above specified firmware version fulfils their requirements, since there will not be any further updates for NFC.

Customers using an SDIO clock frequency higher than 150 MHz are advised to change their implementation to maximum 150 MHz, to ensure maximum communication stability.

6 Reference Documents

- [1] [EMMY-W1 series Data Sheet, u-blox document UBX-15011785](#)
- [2] EMMY-W1 series System Integration Manual, u-blox document UBX-15024929 *
- [3] [EVK-EMMY-W1 User Guide, u-blox document UBX-15012713](#)

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