



MICROCHIP

MRF24WB0MA/MRF24WB0MB

MRF24WB0MA/MRF24WB0MB RF Transceiver Module Errata and Data Sheet Clarification

The MRF24WB0MA/MRF24WB0MB RF Transceiver Module that you have received conform functionally to the current Device Data Sheet (DS70632A), except for the anomalies described in this document.

A detailed description and possible work around for each of the issues are available on [page 2](#), following the [Table 1](#) Module Issue Summary.

Data Sheet clarifications and corrections are available on [page 3](#), following the discussion of product issues. The product revision level can be identified by locating the seven digit manufacturing date code located on the module.

Note: For more information on extracting the product date code, refer to the product Data Sheet or contact your local Microchip sales office.

TABLE 1: MODULE ISSUE SUMMARY

Item Number	Issue Summary	Affected Date Code		
		<1039XXX	≥1039XXX	>1108XXX
1.	Power Save (PS) bit is set incorrectly in the PS-Poll frame.	X		
2.	If the WPA or WPA2 keys are incorrectly entered, the host code will hang waiting to connect.	X	X	

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Module Errata Issues

1. Incorrect PS bit handling

The Power Save (PS) bit is set incorrectly in the PS-Poll frame when the module comes out of Power Save (PS) mode. This causes some routers to revert the module back to PS mode disabling any data transfer.

Work around

This does not affect all routers; hence, there is no work around for those that respond to the PS bit within a PS-Poll frame.

Affected Silicon Revisions

<1039XXX	≥1039XXX						
X							

2. Incorrect WPA error handling

When the WPA or WPA2 keys are incorrectly entered, the module firmware asserts causing the host code to hang in a state waiting to connect to the module.

Work around

Detect a time-out condition when trying to connect through WPA or WPA2 and have the host code restart or send a failure message to the user.

Affected Silicon Revisions

<1039XXX	≥1039XXX	>1108XXX
X	X	

Some (older) 1108xxx date code parts do not have the fix.

Data Sheet Clarifications

The following typographic corrections and clarifications are to be noted for the latest version of the Device Data Sheet (DS70632A).

1. Operating temperature of part has been increased to -20°C to +85°C.
2. SPI mode 3 is CPOL=CPHA=1
3. Debug serial interface operates at 19200, 8, N, 1, N

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APPENDIX A: REVISION HISTORY

Revision A Document (December 2010)

This is the Initial release of the document.

Issue 1 – [Incorrect PS bit handling](#)

Issue 2 – [Incorrect WPA error handling](#)

Revision B Document (May 2011)

1. Updated [Table 1](#): Removed “Feature” column and added new column for Data Code.
2. Updated Issue 1. [Incorrect PS bit handling](#): Changed Affected Product Date Codes to Affected Silicon Revisions.
3. Updated Issue 2. [Incorrect WPA error handling](#): Changed Affected Product Date Codes to Affected Silicon Revisions, and added new data code.

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ISBN: 978-1-61341-175-9

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05/02/11