

RF430FRL15xH Device Errata Sheet

1 Revision History

✓ The check mark indicates that the issue is present in the specified silicon revision.

Errata	Rev A
ROM_SINGLE_SD14_CHANNEL	✓
ROM_ISO15693_4_BYTE_BLOCK_LOCK	✓
ROM_ISO15963_SELECTED_STATE	✓

2 Package Markings

RGE24

VQFN (RGE), 24 Pin

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+-----+
! O      !      TI = TI LETTERS
! RF430  !      YM = YEAR MONTH DATE CODE
! FRL15xH !     LLLL = ASSEMBLY LOT CODE
! TI YMS  !      S = ASSEMBLY SITE CODE
! LLLL #  !      # = DIE REVISION
+-----+
O = PIN 1

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3 Detailed Bug Description

ROM_SINGLE_SD14_CHANNEL

Devices Affected	RF430FRL152H RF430FRL153H
Description	<p>The SD14 is not configured properly by the ROM firmware under these conditions:</p> <ul style="list-style-type: none"> • Only one SD14 channel is selected (ADC0, ADC1, ADC2, or internal temperature sensor) • CIC filter is selected • Number of passes > 1 <p>With these conditions are met, the first result will be correct. Subsequent results will be inaccurate.</p>
Workaround	<p>If it is possible to change one of the conditions that are listed, the errata does not manifest itself. If this is not possible or undesired, a patch is available.</p> <p>Example projects with this errata patched are available for download from http://www.ti.com/lit/zip/slac691. Patches are in the <i>Default Projects</i> and <i>SensorHub</i> examples. The <i>NFC</i> project does not exhibit this behavior, because it does not use the ROM support for the SD14.</p>

ROM_ISO15693_4_BYTE_BLOCK_LOCK

Devices Affected	RF430FRL152H RF430FRL153H RF430FRL154H
Description	<p>The ROM RF stack does not properly lock blocks in 4-byte block mode. The expected locking behavior is described in the RF430FRL15xH Firmware Users Guide in the <i>ISO/IEC 15693 Lock Block Commands Behavior</i> section.</p> <p>The 8-byte block locking functionality works as expected.</p>
Workaround	<p>Example projects with this errata patched are available for download from http://www.ti.com/lit/zip/slac691. Patches are available in <i>Default</i>, <i>SensorHub</i>, and <i>NFC</i> projects.</p>

ROM_ISO15963_SELECTED_STATE

Devices Affected	RF430FRL152H RF430FRL153H RF430FRL154H
Description	<p>According to the ISO15963 specifications, if a tag has been selected with the 'Select' command and put into the Selected state, it should leave the Selected state when receiving a 'Select' command that contains a UID that does not match the tag's UID.</p> <p>The ROM RF stack does not properly leave the Selected state when receiving a 'Select' command that contains a UID that does not match the device's UID. Instead, the device remains in the Selected state.</p> <p>The 'Select' Command is an optional ISO15963 command.</p>
Workaround	Use the Reset to Ready command to force the device to leave the Selected state.

Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from July 25, 2016 to July 3, 2018

Page

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- Added the ROM_ISO15963_SELECTED_STATE errata [2](#)
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