



RISAF limitation about PCIe region protection on STM32MP25xx

Overview

This security bulletin pertains to the RISAF limitation about PCIe memory map region protection on STM32MP25xx.

IOActive (Andrew D. Zonenberg of IOActive, Inc.) published the following content concerning STM32MP25xx:

<https://github.com/azonenberg/stm32mp2-baremetal-tests>

It indicates a potential issue that may have a potential functional impact on some applications or use cases.

Description

On STM32MP25xx, the PCIe controller uses an internal memory map area while connecting devices. RISAF is used to control the access to the device in this area to the correct requester. Thanks to the IOActive analysis, it has been shown that some unauthorized requests are incorrectly filtered, and end up with a 0 data transaction to the requested address on the bus. The transaction is reported by the RISAF as an error that can be handled by the IAC manager which can react to the incorrect request.

Due to potential functional impacts, users must assess this impact case by case, depending on their application requirements and architecture.

Contact information

psirt@st.com

Revision history

Table 1. Document revision history

Date	Version	Changes
06-May-2026	1	Initial version.

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") place a high value on product security, and strive to continuously improve its products. However, no level of security certification and/or built-in security measures can guarantee that ST products are resistant to all forms of attack including, for example, advanced attacks that have not been tested, new or unidentified forms of attack, or any form of attack when using an ST product outside of its specification or intended use, or in conjunction with other components or software that are used by the purchasers to create their end product or application. As such, regardless of the incorporated security features and/or any information or support that may be provided by ST, the purchasers are responsible for determining whether the level of security protection in an ST product meets their needs, both in relation to the ST product alone and when incorporated into the purchasers' end product or application.

ST technical notes, security bulletins, security advisories, and the like (including suggested mitigations), and security features of ST products (inclusive of any hardware, software, documentation, and the like), together with any enhanced security features added by ST and any technical assistance and/or recommendations provided by ST, are provided on an "AS IS" BASIS. AS SUCH, TO THE EXTENT PERMITTED BY APPLICABLE LAW, ST DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, unless the applicable written and signed contract terms specifically provide otherwise.

ST reserves the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice.

In the event of any conflict between the provisions of this document and the provisions of any contractual arrangement in force between the purchasers and ST, the provisions of such contractual arrangement shall prevail.

The purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgment.

The purchasers are solely responsible for the choice, selection, and use of ST products, and ST assumes no liability for application assistance or the design of the purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

If the purchasers identify an ST product that meets their functional and performance requirements, but that is not designated for the purchasers' market segment, the purchasers shall contact ST for more information.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2026 STMicroelectronics – All rights reserved