

Errata TR-7xD

**For IQRF transceivers TR-7xD
and IQRF OS v4.00D and higher**

Errata sheet



Smarter Wireless. Simply.

The functionality of all TR-72D, TR-75D, TR-76D, TR-77D, and TR-78D IQRF transceiver series differs from the one described in the regular IQRF documentation on the following limitation.

RF IC issue

There is a silicon issue in some pieces of RF IC Spirit 1 which is used in the transceivers. According to the Spirit 1 manufacturer:

In sporadic cases, the VCO calibrator sets an inaccurate calibration word. This can cause an error, the inability to communicate, during the carrier frequency.

Refer to the manufacturer's [Errata sheet](#).

Workaround

It is not possible to prevent this in HW design. Therefore, the IQRF OS function `wasRFICrestarted()` has been designed to fix this issue for IQRF OS v4.00D and higher. It detects the erroneous state, resets the RF IC and the return value informs the user that the failure occurred. In this case, the user should restore all non-default RF parameters.

It is recommended to include this function in every RF loop in the user application. **Under DPA, it is automatically arranged within the DPA plug-ins.** Thus, in IQMESH, the user should use this **workaround** only if **RF loop** is implemented in the **Custom DPA Handler**. See [CustomDpaHandler-Bonding.c](#) for example.

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