



Colibri VFxx

Errata Document

Document Revision History

Date	Doc. Rev.	Notes
2017-11-07	Rev. 1.0	Initial Release
2019-04-24	Rev. 1.1	Added Errata #2: Ethernet can become unusable after power save mode

Overview

Errata #1: Secure Boot Vulnerabilities (NXP ERR010872 and ERR010873)	4
Errata #2: Ethernet can become unusable after power save mode	5

Errata #1: Secure Boot Vulnerabilities (NXP ERR010872 and ERR010873)

Affected Version: **Colibri VF50 128MB (IT) V1.2B and earlier**
Colibri VF61 256MB IT V1.2B and earlier
Fixed in: not defined yet

1.1 Description

These errata are actually NXP errata affecting all i.MX and Vybrid processors. There are two issues in the boot rom when using the processors in a security enabled configuration (SEC_CONFIG[1] eFUSE is programmed). **By default, this fuse is not programmed on Toradex modules. Customers not fusing this setting are therefore not affected by these issues.**

Customers using the security enabled configuration are affected by these issues. More information can be found in the respective NXP errata documents:

<https://docs1.toradex.com/104705-err010872-secure-boot-vulnerability-erratum-preliminary-rev0.pdf>

<https://docs1.toradex.com/104706-err010873-secure-boot-vulnerability-erratum-preliminary-rev0.pdf>

At the time of adding this errata to this document, NXP didn't intend to fix the issues in their Vybrid system on chips but only in their i.MX products.

1.2 Workaround

Please refer to the above-mentioned documents for workarounds.

Errata #2: Ethernet can become unusable after power save mode

Affected Version: **All VF61 and VF50 versions**
Fixed in: no fix planed

2.1 Description

Due to an errata of the Microchip KSZ8041NL Ethernet PHY, the Ethernet can become unusable after exiting the power save mode. The Ethernet PHY is powering down the PLL during software power down which can create problems. The issues only appear under certain circumstances and in certain temperature ranges. This issue can not be reproduced with all modules.

2.2 Workaround

Microchip is recommending not using the software power down of the Ethernet PHY. This means, the Ethernet PHY should be left running even in the power save (suspend) mode of the module. However, this increases the power consumption of the module in power save state.

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