RTA-OS RCarX3A5X/ARM

Release Note - Version 5.0.0 (18-06-2018)

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Safety Notice

This ETAS product fulfills standard quality management requirements. If requirements of specific safety standards (e.g. IEC 61508, ISO 26262) need to be fulfilled, these requirements must be explicitly defined and ordered by the customer. Before use of the product, customer must verify the compliance with specific safety standards.

Contents

1 Introduction

RTA-OS is an AUTOSAR compliant Operating System and associated tooling. This document provides release information for the RTA-OS RCarX3A5X/ARM port plug-in that customizes the RTA-OS development tools for the Renesas R-Car x3 Cortex-A5x with the ARM_DS_5_V6 compiler. It supplements the more general information you can find in the *Release Note*.

1.1 Version Information

This is Version 5.0.0 of the RTA-OS RCarX3A5X/ARM plug-in.

1.2 Installation

The installation process is covered in detail in the *RCarX3A5XARM Port Guide*.

2 Open EHI Calls

Open issues are referred to by their call number in the ETAS Helpdesk International (EHI) system.

No EHI calls are open.

3 Change History

3.1 Version 5.0.0

Additional Features

The following features have been added to this release:

- First full release.

Modified Features

The following features have been modified in this release:

- Support for the RCarV3HA53 variant now tested on silicon.

Removed Features

No features have been removed from this release.

3.2 Version 4.99.2 (Preview Release)

Additional Features

The following features have been added to this release:

- Third Early Access release.
- Support for Trusted-with-Protection.
- Macros to enable, disable and clear GIC interrupts without corrupting the priority.
- Macros to enable and disable all GIC interrupts on a CPU without corrupting the priority.
- Support for the Autosar ISR source API functions (i.e. ClearPendingInterrupt(), DisableInterruptSource() and EnableInterruptSource()).
- MISRA compliance to conform to the MISRA2012 standard.
- Support for aligning stack to memory protection regions.
- Support for untrusted stack testing at the start of ISRs.
- Target option to detect the Core ID in applications with untrusted code using a GIC register as an alternative to using an SVC call.
- Support for the RCarV3HA53 variant (data sheet only).

Modified Features

The following features have been modified in this release:

- The interrupt vector table labels update to match the Rev.0.80 user manual.
- The cross core interrupts update for the v5.6.x RTA-OS tools.
- The inner ISR wrappers are now core specific.
- Lauterbach Trace32 debug scripts updated for use with Build 92037.
- Core ID detection uses an inline macro rather than a callout function.
- RCarH3A53 variant now fully tested.

Removed Features

No features have been removed from this release.

3.3 Version 4.99.1 (Preview Release)

Additional Features

The following features have been added to this release:

- Second Early Access release.
- Support for untrusted code (i.e. ISRs, Tasks and functions).
- CPU interrupt support.
- Spurious interrupt support.
- Non-secure EL0/EL1 support (IPL16).
- Interrupt configuration macros.
- Lauterbach ORTI support.
- Support function Os_InitializeGICGroup() to set GIC interrupt group to 1 for non-secure code.

Modified Features

The following features have been modified in this release:

- Improved internal OS test coverage - more tests applied and passing.

8 Change History

Removed Features

No features have been removed from this release.

3.4 Version 4.99.0 (Preview Release)

Additional Features

The following features have been added to this release:

- Initial Early Access release.
- Support for BCC1/2 and ECC1/2 tasks and Category 1 and 2 GIC interrupts only (CPU exceptions and spurious interrupt handler not yet supported).
- Multi-core applications.
- SC1 Autosar conformance only.
- Support for ARM Compiler 6.6.
- Preliminary interrupt support (tested on Renesas R-Car H3 Salvator-X Evaluation Board).

Modified Features

No features have been modified in this release.

Removed Features

No features have been removed from this release.

4 Fixed EHI Calls

Bugs that have been fixed are referred to by their call number in the ETAS Helpdesk International (EHI) system.

No EHI calls have been fixed in this release.

5 Limitations

5.1 Installer

There are the following limitations for the installer:

Limitation	None.
Workaround	None.

5.2 RCarX3A5XARM DLL

There are no known limitations.

6 Contacting ETAS

6.1 Technical Support

Technical support is available to all users with a valid support contract. If you do not have a valid support contract, please contact your regional sales office (see Section 6.2.2).

The best way to get technical support is by email. Any problems or questions about the use of the product should be sent to:

rta.hotline.uk@etas.com

If you prefer to discuss your problem with the technical support team, you call the support hotline on:

+44 (0)1904 562624.

The hotline is available during normal office hours (0900-1730 GMT/BST).

In either case, it is helpful if you can provide technical support with the following information:

- Your support contract number
- Your `.xml`, `.arxml`, `.rtaos` and/or `.stc` files
- The command line which caused the error
- The version of the ETAS tools you are using
- The version of the compiler tool chain you are using
- The error message you received (if any)
- The file `Diagnostic.dmp` if it was generated

6.2 General Enquiries

6.2.1 ETAS Global Headquarters

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6.2.2 ETAS Local Sales & Support Offices

Contact details for your local sales office and local technical support team (where available) can be found on the ETAS web site:

ETAS subsidiaries	www.etas.com/en/contact.php
ETAS technical support	www.etas.com/en/hotlines.php