

RA4L1 Group

Evaluation Kit for RA4L1 Microcontroller Group
EK-RA4L1 v1
Errata

Renesas RA Family
RA4 Series

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Precautions

This Evaluation Kit is only intended for use in a laboratory environment under ambient temperature and humidity conditions. A safe separation distance should be used between this and any sensitive equipment. Its use outside the laboratory, classroom, study area, or similar such area invalidates conformity with the protection requirements of the Electromagnetic Compatibility Directive and could lead to prosecution.

The product generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off or on, you are encouraged to try to correct the interference by one or more of the following measures:

- Ensure attached cables do not lie across the equipment.
- Reorient the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Power down the equipment when not in use.
- Consult the dealer or an experienced radio/TV technician for help.

Note: It is recommended that wherever possible shielded interface cables are used.

The product is potentially susceptible to certain EMC phenomena. To mitigate against them it is recommended that the following measures be undertaken:

- The user is advised that mobile phones should not be used within 10 m of the product when in use.
- The user is advised to take ESD precautions when handling the equipment.

The Evaluation Kit does not represent an ideal reference design for an end product and does not fulfill the regulatory standards for an end product.

Renesas RA Family

EK-RA4L1 v1

Contents

Corporate Headquarters	2
Contact information.....	2
Trademarks.....	2
1. Introduction.....	5
2. Known Issues and Exceptions.....	5
2.1 Port Expander Pull-up Resistor R57	5
2.1.1 Corrective Action	5
2.1.2 Boards Affected	5
2.2 Board Silkscreen	5
2.2.1 Corrective Action	5
2.2.2 Boards Affected	6
2.3 Secure Factory Programming	6
2.3.1 Corrective Action	6
2.3.2 Boards Affected	6
3. Appendix – Board Identification.....	6
3.1 Board Version.....	6
3.2 Serial Number.....	7
4. Website and Support	7
Revision History	8

Figures

Figure 1. Debug in Connector	5
Figure 2. P/N silkscreen issue	5
Figure 3. Identification of the Kit Version Number on the EK-RA4L1 Kit Packaging	6
Figure 4. Identification of the Kit Version Number on the EK-RA4L1 Board.....	6
Figure 5. Identification of the Serial Number on the EK-RA4L1 Kit Packaging.....	7
Figure 6. Identification of the Serial Number on the EK-RA4L1 Board	7

1. Introduction

This Errata describes the known issues and deviations to the functional specifications for the EK-RA4L1 v1, the Evaluation Kit for the RA4L1 MCU Group. For additional information on the kit, see the EK-RA4L1 v1 User’s Manual.

2. Known Issues and Exceptions

2.1 Port Expander Pull-up Resistor R57

The interrupt pin on the port expander (U15), is pulled up by +3.3V. While in low power mode (MCU Voltage < +3.3V), current will flow towards the interrupt pin.

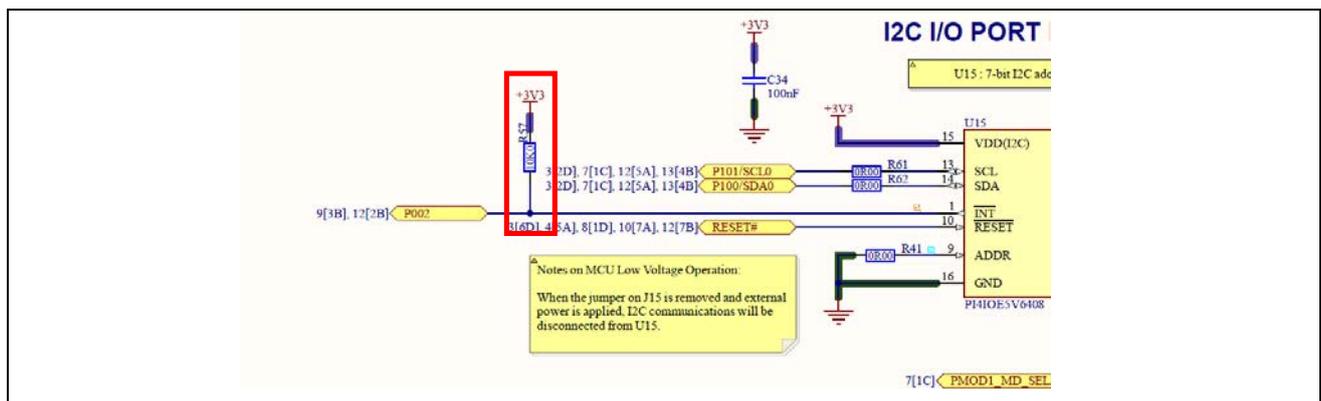


Figure 1. Debug in Connector

2.1.1 Corrective Action

[Affected Kits]

Please remove R57 before running the EK-RA4L1 in low power mode.

[Future Kits]

This will be corrected on later versions of the kit.

2.1.2 Boards Affected

Version : 1

Serial number : 291505 to 291804 and 26439 to 27438

2.2 Board Silkscreen

The MCU P/N in silkscreen is incorrect. The P/N should be R7FA4L1BD4CFP.



Figure 2. P/N silkscreen issue

2.2.1 Corrective Action

[Affected Kits]

Please refer to the P/N on the physical MCU rather than the silkscreen.

[Future Kits]

The silkscreen will be corrected on later versions of the kit.

2.2.2 Boards Affected

Version : 1
 Serial number : 291505 to 291804 and 26439 to 27438

2.3 Secure Factory Programming

The RA4L1 MCU device fitted to a limited number of boards does not support secure factory programming.

2.3.1 Corrective Action

[Affected Kits]
 None.

[Future Kits]
 The RA4L1 MCU device fitted to later versions of the kit will support secure factory programming.

2.3.2 Boards Affected

Version : 1
 Serial number : 291505 to 291804

3. Appendix – Board Identification

3.1 Board Version

The board version can be found on the EK-RA4L1 board packaging label and EK-RA4L1 board as described in this section. The board version is the last digit in the orderable part number as shown in the Figure 3. In the example below, the board version number is “1” as shown in both Figure 3 and Figure 4.



Figure 3. Identification of the Kit Version Number on the EK-RA4L1 Kit Packaging



Figure 4. Identification of the Kit Version Number on the EK-RA4L1 Board.

3.2 Serial Number

In addition to the kit version number, the kit serial number is used to uniquely identify a kit.

The serial number is located on the packaging label identified as S.LOT and on the bar code sticker on the back/bottom side of EK-RA4L1 board. In the example in Figure 5 and Figure 6, the serial number is “291685”



Figure 5. Identification of the Serial Number on the EK-RA4L1 Kit Packaging



Figure 6. Identification of the Serial Number on the EK-RA4L1 Board

4. Website and Support

Visit the following URLs to learn about the kit and the RA family of microcontrollers, download tools and documentation, and get support.

- EK-RA4L1 Resources renesas.com/ek-ra4l1
- RA Kit Information renesas.com/ra/kits
- RA Product Information renesas.com/ra
- RA Product Support Forum renesas.com/ra/forum
- RA Videos renesas.com/ra/videos
- Renesas Support renesas.com/support

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jan.27.25	—	Initial release
1.10	Mar.10.25	6	Added restriction for secure factory programming

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