

RA2L1 Group

Evaluation Kit for RA2L1 Microcontroller Group
EK-RA2L1 v1
Errata

Renesas RA Family
RA2 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-RA2L1 v1

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1. Introduction

This Errata describes the known issues and exceptions to the functional specifications for the EK-RA2L1 v1, Evaluation Kit for the RA2L1 MCU Group. For additional information on the kit, see the EK-RA2L1 v1 user's manual.

2. Known Issues and Exceptions

2.1 Breakout Pin Headers J1, J2, J3, J4 for RA2L1 MCU

2.1.1 Description

The breakout pin headers J1, J2, J3, and J4 on the EK-RA2L1 board should align to a 0.1" grid to enable the easy placement of any compatible piggyback board.

With reference to the dimensional drawing, it can be seen that J2 and J4 are not aligned to the grid along one axis.

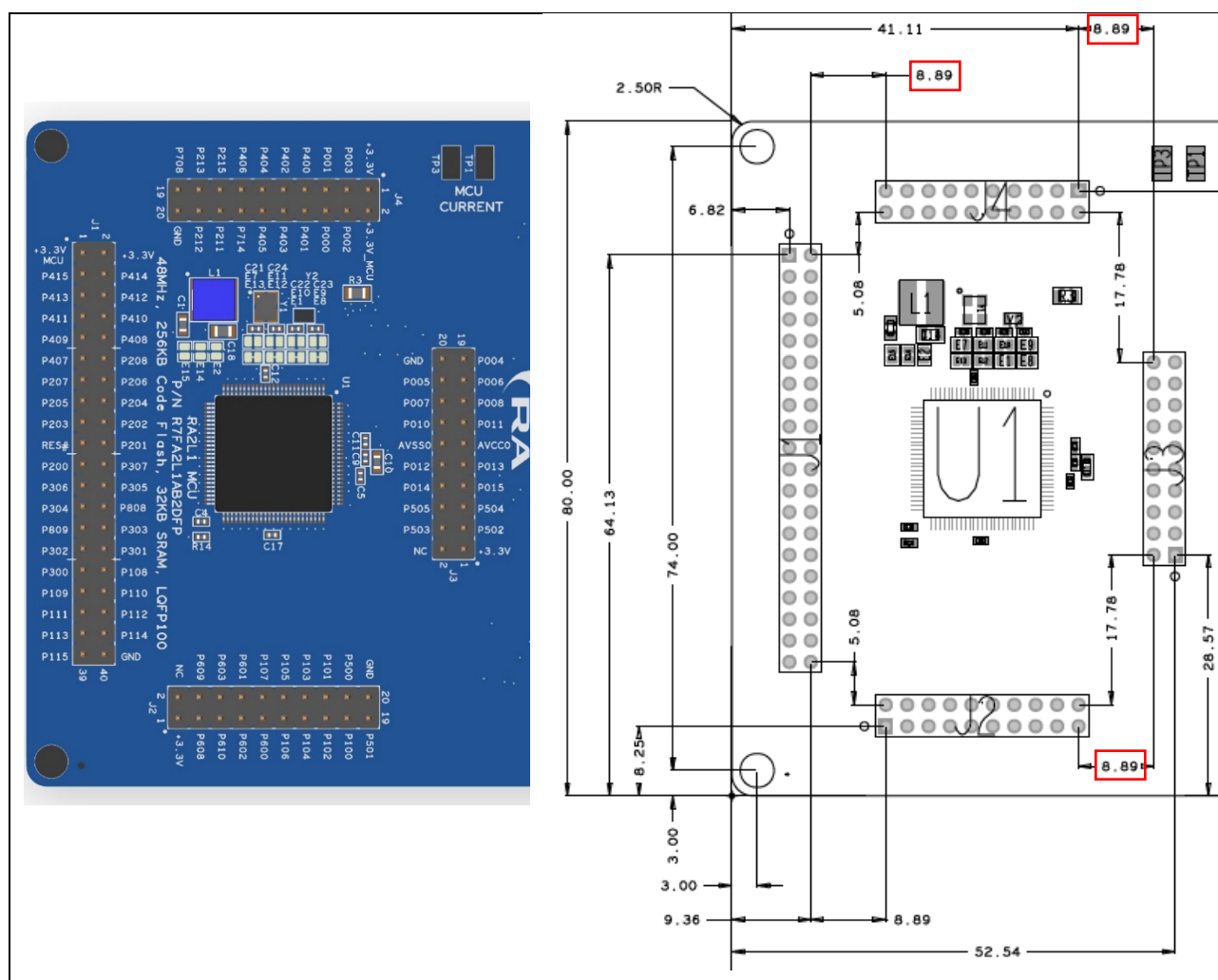


Figure 1. Breakout Pin Headers J1, J2, J3, J4

2.1.2 Corrective Action

None. The breakout pin headers have been moved to align with the 0.1" grid on later builds of the board.

2.1.3 Kits Affected

Version : 1
Serial number : 216943 to 217742


2.2 MCU Unique ID

Description

The Flash memory register UIDRn is a read-only register that stores a 16-byte ID code (Unique ID, UID) for identifying the individual MCU.

In certain cases the Quick Start Software programmed into the board may incorrectly display the device UID.

The UID is displayed in 'Kit Information' as a series of 4-byte values *bbbb-bbbb-bbbb-bbbb* as can be seen in the following example. If any single byte is of the form '0000nnnn', that is, has a leading zero, it will not be displayed.



```
1. KIT INFORMATION

a) Kit name:                      EK-RA2L1
b) Kit ordering part number:      RTK7EKA2L1S00001BE
c) RA Device part number:        R7FA2L1AB2DFP
d) RA MCU 128-bit Unique ID (hex): 18260a37-30303837-39335fec-6f28574b
e) RA MCU Die temperature (F/C):  82.63/28.08
f) Blue LED blinking frequency (Hz): 1
g) Blue LED blinking intensity (%): 10

> Press space bar to return to Menu
```

Figure 2. MCU UID Leading Zero Not Displayed

2.2.1 Corrective Action

The Quick Start Software programmed into later boards has been updated to show the correct device UID. The latest sample software can be downloaded from the following link:

https://github.com/renesas-ra-fsp-examples/tree/master/example_projects

2.2.2 Kits Affected

Version : 1
Serial number : 216943 to 217742

2.3 Breakout Pin Header J4 for RA2L1 MCU

2.3.1 Description

The silkscreen for the breakout pin header J4 on the EK-RA2L1 board has two pins which are mislabeled.

J4-11 (P404 is mislabeled as P401) and J4-16 (P214 is mislabeled as P211).

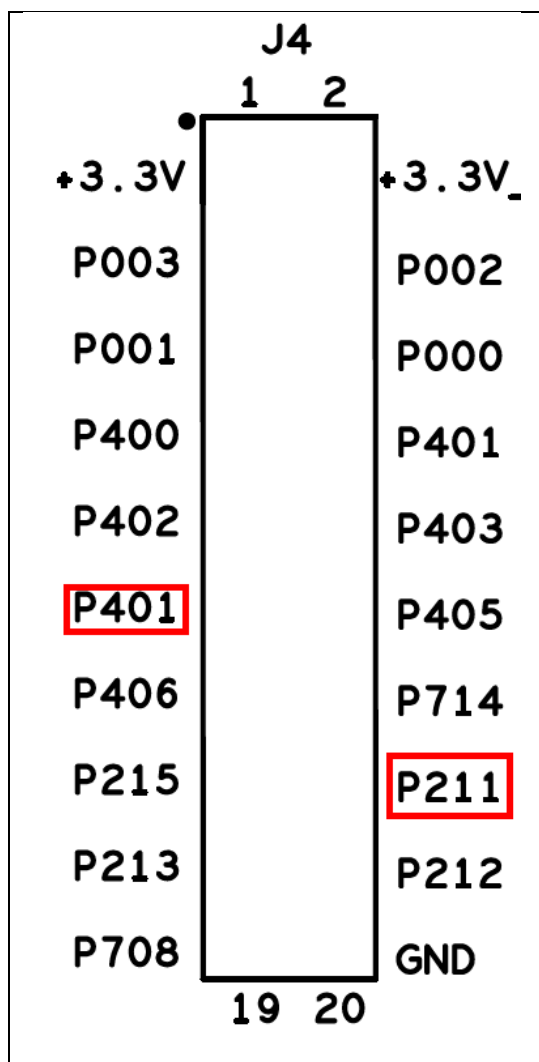


Figure 3. Breakout Pin Header J4

2.3.2 Corrective Action

None. The breakout pin header J4 silkscreen has been corrected on later builds of the board.

2.3.3 Kits Affected

Version : 1
Serial number : 216943 to 217742

3. Appendix – Kit Identification

3.1 Kit Version

The kit version can be found on the EK-RA2L1 kit packaging and EK-RA2L1 board as described in this section. The kit version is the last digit in the orderable part number as shown in the second box in Figure 3. In the example below, the kit version number is “1” as shown in both Figure 3 and Figure 4.

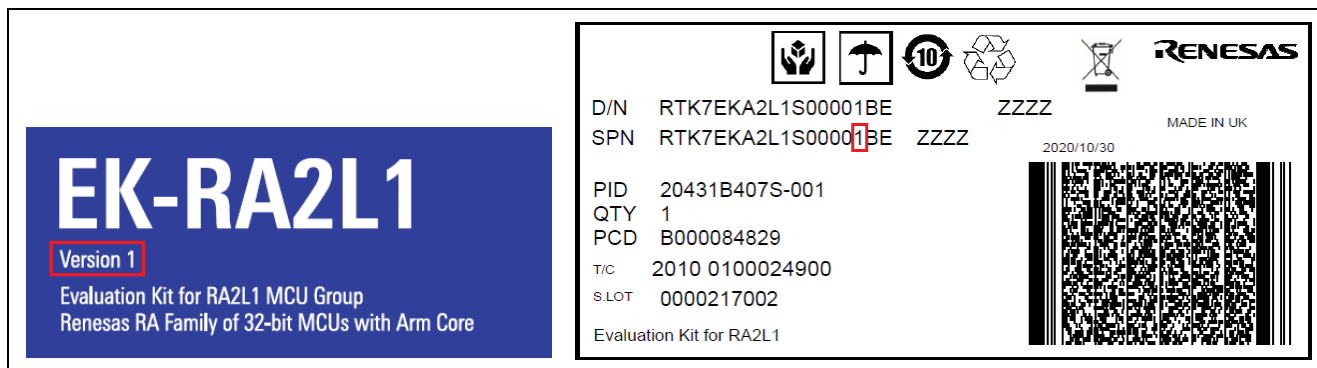


Figure 4. Identification of the Kit Version Number on the EK-RA2L1 Kit Packaging



Figure 5. Identification of the Kit Version Number on the EK-RA2L1 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-RA2L1 board. In the example in Figure 5 and Figure 6, the serial number is “217002.”

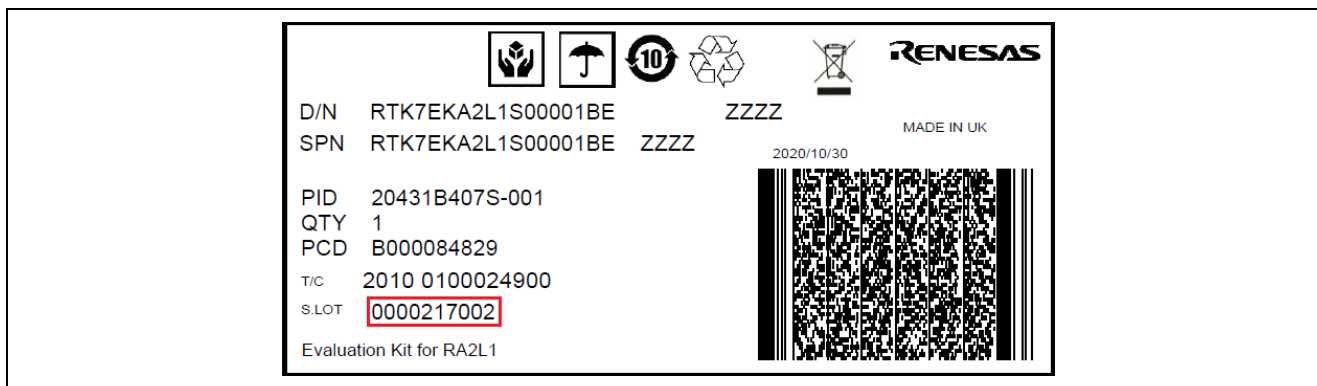


Figure 6. Identification of the Serial Number on the EK-RA2L1 Kit Packaging



Figure 7. Identification of the Serial Number on the EK-RA2L1 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-RA2L1 Resources | renesas.com/ra/ek-ra2l1 |
| RA Product Information | renesas.com/ra |
| RA Product Support Forum | renesas.com/ra/forum |
| Renesas Support | renesas.com/support |

Revision History

| Rev. | Date | Description | |
|------|-----------|-------------|------------------------------|
| | | Page | Summary |
| 1.00 | Nov.23.20 | — | Initial release |
| 1.10 | Jan.12.21 | 6 | Added MCU Unique ID. |
| 1.20 | Nov.11.21 | 7 | Added silkscreen information |

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