

# RA8D1 Group

Evaluation Kit for RA8D1 Microcontroller Group  
EK-RA8D1  
Errata

Renesas RA Family  
RA8 Series

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TOYOSU FORESIA, 3-2-24 Toyosu,  
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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-RA8D1**

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## 1. Introduction

This Errata describes the known issues and exceptions to the functional specifications for the EK-RA8D1, Evaluation Kit for the RA8D1 MCU Group. For additional information on the kit, see the EK-RA8D1 user's manual.

## 2. Known Issues and Exceptions

### 2.1 USB High Speed port detection issues

Both data pins of the USB high speed port (J31) are connected to the MCU via 33 Ω resistors (R83 and R84). This has caused issues with connection to USB 3.0 ports. Replacing these resistors with 0 Ω resistors fixes this issue.

#### 2.1.1 Description

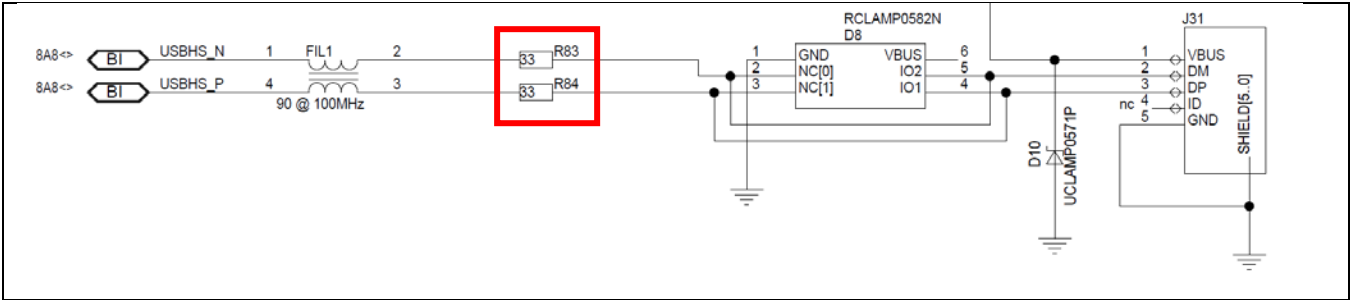


Figure 1. USB High Speed series 33 Ω resistors (R83 and R84)

#### 2.1.2 Corrective Action

##### [Affected Kits]

Please either use functional USB ports for USB High Speed (J31) or short resistors R83 and R84.

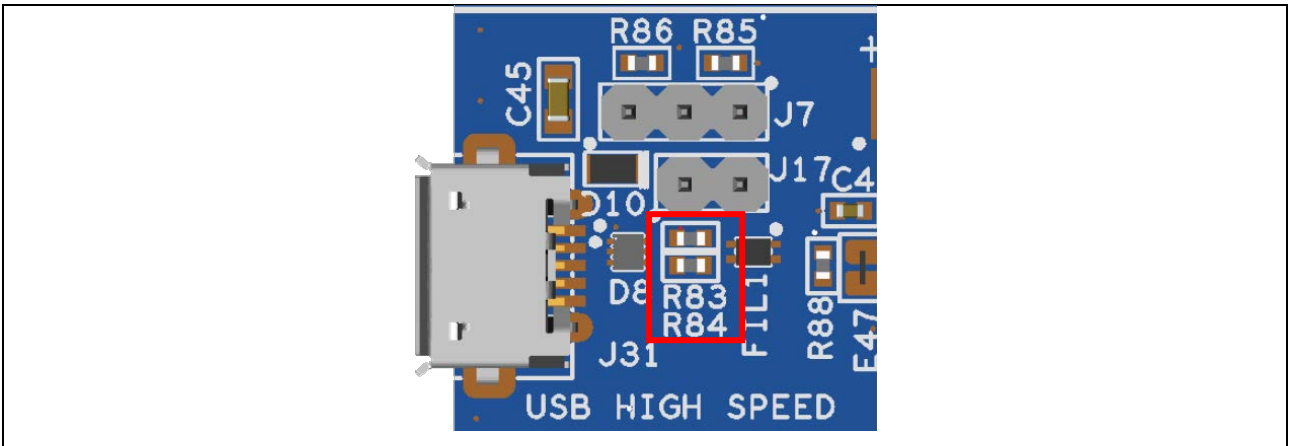


Figure 2. USB High Speed R83 and R84

##### [Future Kits]

For all new versions, R83 and R84 33 Ω resistors have been replaced with 0 Ω resistors.

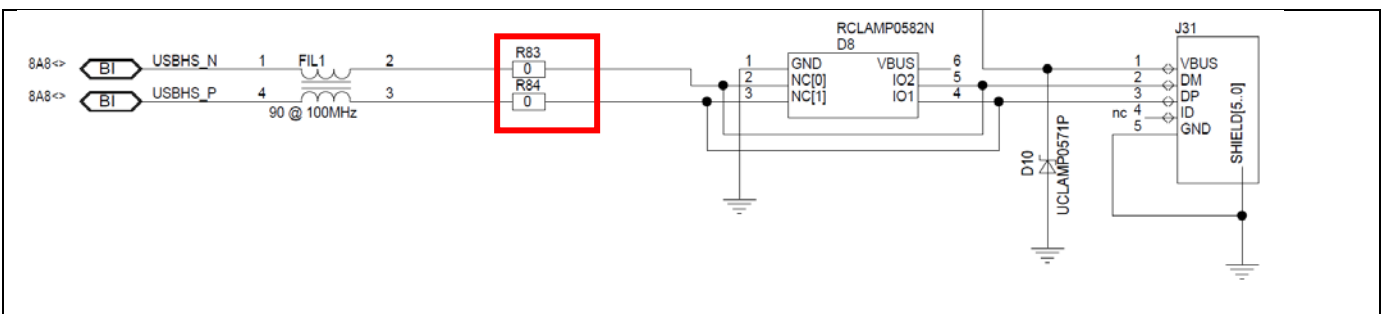


Figure 3. USB High Speed series 0 Ω resistors (R83 and R84)

### 2.1.3 Kits Affected

Version : 1  
 Serial number : 242717 – 242726 , 249434 – 249583 , 266342 – 266591 , 273949 – 274248 , 282423 – 283422

## 2.2 Incorrect default state of Jumper on J6

### 2.2.1 Description

The jumper on J6 is closed by default. It is recommended to remove the jumper so the connection between J6 is open for all debugging configurations. Place the jumper on J6 to close the connection if the debugger you are using requires serial boot to set the state of the DLM (Device Life Cycle Management).

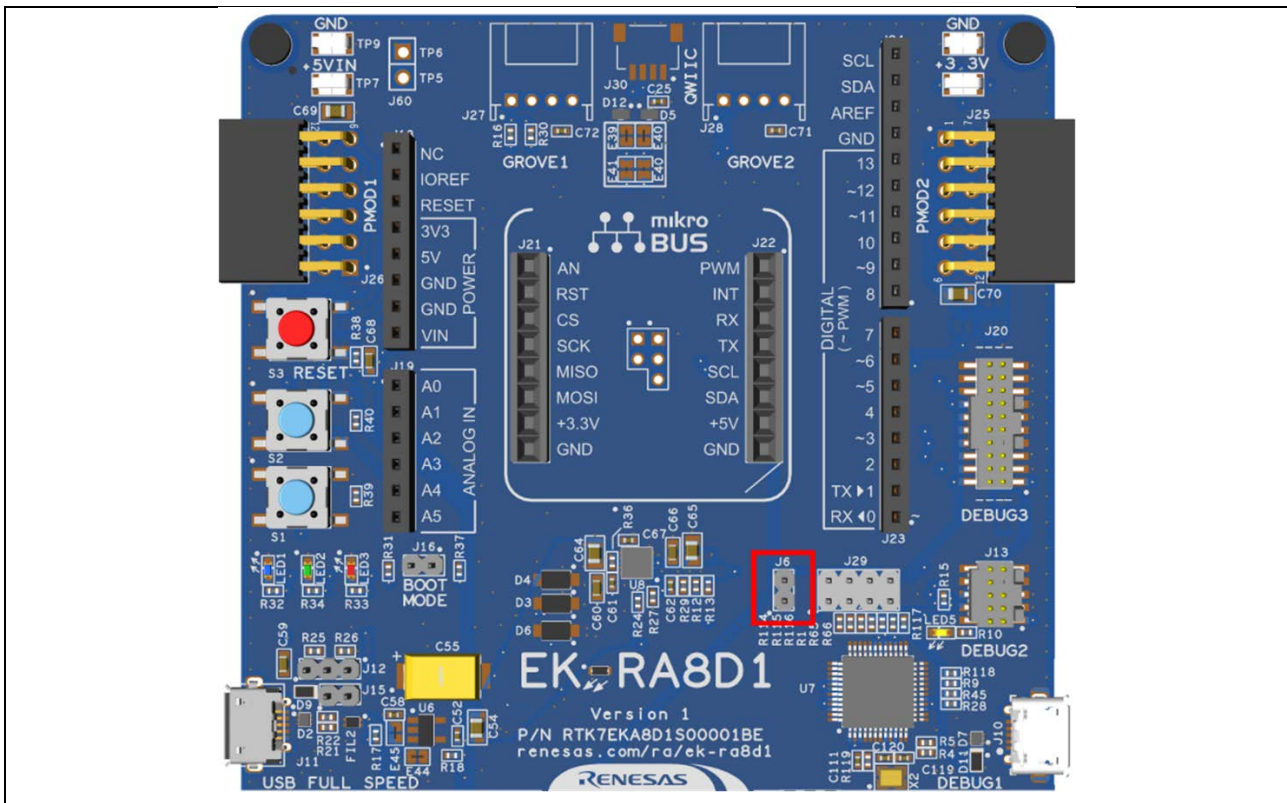


Figure 4. Position of J6 in EK-RA8D1 board

### 2.2.2 Corrective Action

Remove the Jumper on J6 for all debug configurations unless the debugger you are using requires it to be closed.

### 2.2.3 Kits Affected

Version : 1  
 Serial number : 242717 – 242726 , 249434 – 249583 , 266342 – 266591 , 273949 – 274248 , 282423 – 283422

### 3. Appendix – Kit Identification

#### 3.1 Kit Version

The kit version can be found on the EK-RA8D1 kit packaging label as described in this section. The kit version is the last digit in the orderable part number as shown in Figure 5. In the following example the kit version number is “1”.



Figure 5. Identification of the Kit Version Number on the EK-RA8D1 Kit Packaging



Figure 6. Identification of the Kit Version Number on the EK-RA8D1 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 serial number sticker on the back/bottom side of EK-RA8D1 board. In the example in Figure 7 and Figure 8, the serial number is “0000283359”.



Figure 7. Identification of the Serial Number on the EK-RA8D1 Kit Packaging

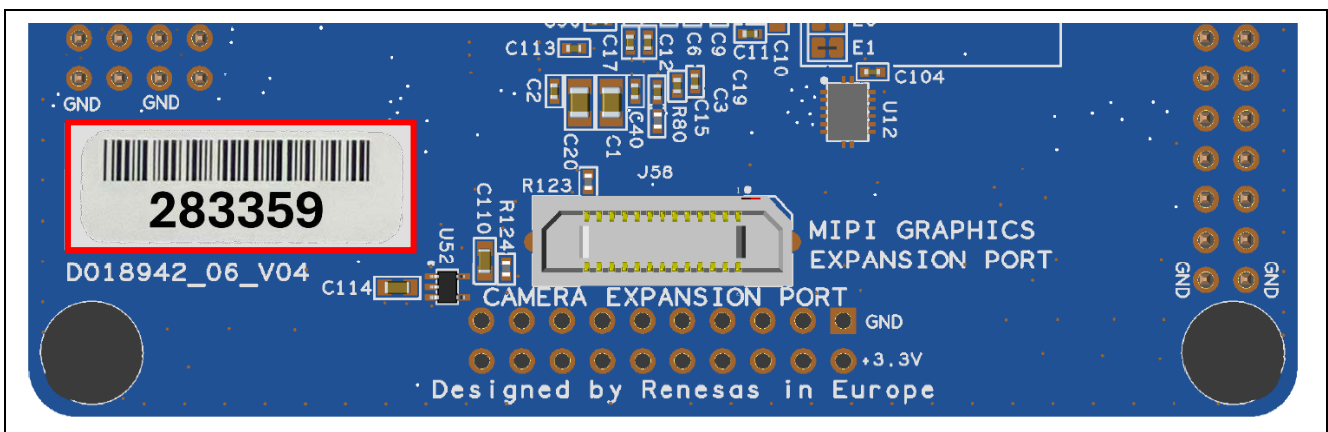


Figure 8. Identification of the Serial Number on the EK-RA8D1 Board

#### 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-RA8D1 Resources       | <a href="https://renesas.com/ek-ra8d1">renesas.com/ek-ra8d1</a> |
| RA Product Information   | <a href="https://renesas.com/ra">renesas.com/ra</a>             |
| RA Product Support Forum | <a href="https://renesas.com/ra/forum">renesas.com/ra/forum</a> |
| Renesas Support          | <a href="https://renesas.com/support">renesas.com/support</a>   |

**Revision History**

Rev.	Date	Description	
		Page	Summary
1.00	Aug.28.24	—	Initial release
1.01	Mar.21.25	Pg 7	Added section 2.2

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