

## Product Change Notification

(Notification - P1903018-DIGI)

(MCP-AC-19-0012 / DPE005 / MCP-AB-19-0012 / 3)

March 18, 2019

**To:** *Our Valued Digi-Key Electronics Customer*

**Overview:** The purpose of this notification is to communicate a product change of select Renesas Electronics America, Inc. (REA) devices.

This notification announces various changes to changes select RL78 G13 devices. See Appendix 1 for a list of affected part numbers and changes. Appendix 2 provides additional change details.

There is a part number change. There is no change in product specifications and/or characteristics. There is no impact to quality and/or reliability.

**Affected Products:** A review of our records indicates the list of products in Appendix 1 may affect your company.

Part numbers given in this list are for active part numbers in REA database at the time of this notification.

**Key Dates:**

Shipments from REA of replacement products begins.
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<b>Aug. 1<sup>st</sup>, 2019</b>
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**Response:** No response is required. REA will consider this notification approved 30 days after its issue. If you anticipate volumes beyond your regular rate prior to the transition date, please contact your REA sales representative with a forecast of your requirements.

You are encouraged to sample the suggested replacement device and begin qualification as soon as possible. Please contact you REA sales representative to obtain samples.

If the customer provides a timely acknowledgement, the customer shall have 90 days (an additional 60 days) from the date of receipt of this notification in which to make any objections to the notification. If the customer does not make any objections to this notification within 90 days of the receipt of the notification, then Renesas will consider the notification as approved. If customer cannot accept the notification, then the customer must provide Renesas with a last time buy demand and purchase order.

Please contact your REA sales representative for any questions or comments.

Thank you for your attention.

Sincerely,

Renesas Electronics America, Inc.

**Appendix 1: Digi-Key Affected Part Number List**

Booking PN	Replacement PN	Change
R5F100JKAF#V0	R5F100JKAF#30	1. Die Mount Material Change 2. Mold Resin Material Change 3. Bonding Wire Change from Au to Cu
R5F100JKAF#X0	R5F100JKAF#50	
R5F100JKDF#V0	R5F100JKDF#30	
R5F100JKDF#X0	R5F100JKDF#50	
R5F100JLAF#V0	R5F100JLAF#30	
R5F100JLAF#X0	R5F100JLAF#50	
R5F100JLDF#V0	R5F100JLDF#30	
R5F100JLDF#X0	R5F100JLDF#50	
R5F101JKAF#V0	R5F101JKAF#30	
R5F101JKAF#X0	R5F101JKAF#50	
R5F101JLAF#V0	R5F101JLAF#30	
R5F101JLAF#X0	R5F101JLAF#50	

## Appendix 2: Change Details

### DIFFERENCE OF SPECIFICATION (RL78/G13)

**ASSEMBLY : RSB , SORTING : RSB**

**BONDING WIRE : Au → Cu**

BROAD-BASED SOLUTION BUSINESS UNIT  
RENESAS ELECTRONICS CO., LTD.

MCP-AB-19-0012

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 (Note 2) "Renesas Electronics product(s)" means any product developed or manufactured by or for Renesas Electronics

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## Appendix 2: Change Details (cont.)

### Outline

- Assembly factory: No change  
Renesas Semiconductor (Beijing) Co., Ltd. (RSB)
- Sorting factory: No change  
Renesas Semiconductor (Beijing) Co., Ltd. (RSB)
- Change of material:  
1) Bonding wire, 2) Resin, 3) Die mount material \*1  
\*1: Ag epoxy paste is unified.  
R5F104BxxFP  
R5F100JxxFA, R5F101JxxFA, R5F104JxxFA, R5F104LxxFP
- Change of ordering Part Number:  
The products which are changed the bonding wire from Gold (Au) to Copper (Cu) are changed the ordering Part Number as follows.  
Current part number: R5F1\*\*\*\*\*#V0, R5F1\*\*\*\*\*#X0  
New part number: R5F1\*\*\*\*\*#30, R5F1\*\*\*\*\*#50
- Specification and characteristics of product:  
No change
- Quality and reliability:  
No change

### Difference of specification

Item		Current	New
Assembly factory		RSB	
Sorting factory		RSB	
Package	Outline	No change	
Lead frame	Material	No change	
	Inner pattern	No change	
Die mount material	Material	No change (Ag epoxy paste)	Change (Ag epoxy paste) *1
Bonding wire	Material	No change (Au)	Change Cu (Pd coating)
Resin	Material	No change (halogen-free )	Change (halogen-free )
Plating	Material	No change	
Marking	Font	No change	
	Digit number	No change	
Packing	Tray / Emboss tape	No change	

\*1: Ag epoxy paste is unified.  
R5F104BxxFP  
R5F100JxxFA, R5F101JxxFA, R5F104JxxFA, R5F104LxxFP

Appendix 2: Change Details (cont.)

### 4M changing points

(Change of material)

Item	Check Result	Judgement
<b>Machine</b>	Copper wire products are produced by same wire-bonding machine applied gold wire. To prevent copper wire oxidization, inert gas is used to wire-bonding process. There are production of similar copper wire products and we have already checked the additional products have no risk on the production.	<b>No risk</b>
<b>Method</b>	Bonding method (thermosonic bonding) and process flow for the Cu wiring are same as the Au wiring.	<b>No risk</b>
<b>Man</b>	No change.	<b>No risk</b>
<b>Material</b>	Using only certificated copper wire. And furthermore certificated materials for the Cu wiring products are applied. The products has been certificated by reliability test same as gold wire products and have no risk.	<b>No risk</b>

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