Product Change Notice (PCN)

Subject: Site addition of Wafer Process and Wafer Test for RH850/F1K Series.

Publication Date: 1/17/2024
Effective Date: 8/30/2024
Revision Description: Initial Release

Description of Change:

Renesas plans to add the following Wafer Process and Wafer Test site for RH850/F1K Series whose assembly has been in mass-production at ATJ-Kumamoto.

1) Addition of Wafer Process Site: Renesas Semiconductor Manufacturing Co., Ltd. (Naka Factory)
2) Addition of Wafer Test Site: Renesas Semiconductor Manufacturing Co., Ltd. (Naka Factory)

For the combination of production sites (Production Flow) and detail product specifications, refer to “Appendix”
Renesas will determine production allocations based on each production capacity.
ATJ: Amkor Technology Japan, Inc.

Affected Product List:

Refer to “Product List” in “Appendix”

Reason for Change:

For the stable supply of products.

Impact on Fit, Form, Function, Quality & Reliability:

The change will have no impact on the form, fit, function, quality and reliability of the devices.

Product Identification:

You can identify each product by checking Mark or Label and refer to “Appendix”

Qualification Status:

Renesas will provide a report on product reliability after 3/8/2024.

Sample Availability Date:

4/26/2024

Device Material Declaration:

Contact Renesas sales representatives.

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.

2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.

3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

For additional information regarding this notice, please contact your Renesas sales representative.

Appendix
Product List
RH850/F1K Series

R7F7015423AFD-C#BA3	R7F7015623AFD-C#KA3	R7F7015824AFD-C#BA3	R7F7016104AFD-C#KA3
R7F7015423AFD-C#KA3	R7F7015624AFD-C#BA3	R7F7015824AFD-C#KA3	R7F7016113AFD-C#BA3
R7F7015424AFD-C#BA3	R7F7015624AFD-C#KA3	R7F7015833AFD-C#BA3	R7F7016113AFD-C#KA3
R7F7015424AFD-C#KA3	R7F7015633AFD-C#BA3	R7F7015833AFD-C#KA3	R7F7016114AFD-C#BA3
R7F7015433AFD-C#BA3	R7F7015633AFD-C#KA3	R7F7015834AFD-C#BA3	R7F7016114AFD-C#KA3
R7F7015433AFD-C#KA3	R7F7015634AFD-C#BA3	R7F7015834AFD-C#KA3	R7F7016123AFD-C#BA3
R7F7015434AFD-C#BA3	R7F7015634AFD-C#KA3	R7F7015863AFD-C#BA3	R7F7016123AFD-C#KA3
R7F7015434AFD-C#KA3	R7F7015663AFD-C#BA3	R7F7015863AFD-C#TA3	R7F7016124AFD-C#BA3
R7F7015463AFD-C#BA3	R7F7015663AFD-C#TA3	R7F7015864AFD-C#BA3	R7F7016124AFD-C#KA3
R7F7015463AFD-C#TA3	R7F7015664AFD-C#BA3	R7F7015864AFD-C#TA3	R7F7016133AFD-C#BA3
R7F7015464AFD-C#BA3	R7F7015664AFD-C#TA3	R7F7015873AFD-C#BA3	R7F7016133AFD-C#KA3
R7F7015464AFD-C#TA3	R7F7015673AFD-C#BA3	R7F7015873AFD-C#TA3	R7F7016134AFD-C#BA3
R7F7015473AFD-C#BA3	R7F7015673AFD-C#TA3	R7F7015874AFD-C#BA3	R7F7016134AFD-C#KA3
R7F7015473AFD-C#TA3	R7F7015674AFD-C#BA3	R7F7015874AFD-C#TA3	R7F7016203AFD-C#BA3
R7F7015474AFD-C#BA3	R7F7015674AFD-C#TA3	R7F7015973AFD-C#BA3	R7F7016203AFD-C#KA3
R7F7015474AFD-C#TA3	R7F7015773AFD-C#BA3	R7F7015973AFD-C#TA3	R7F7016204AFD-C#BA3
R7F7015573AFD-C#BA3	R7F7015773AFD-C#TA3	R7F7015974AFD-C#BA3	R7F7016204AFD-C#KA3
R7F7015573AFD-C#TA3	R7F7015774AFD-C#BA3	R7F7015974AFD-C#TA3	R7F7016213AFD-C#BA3
R7F7015574AFD-C#BA3	R7F7015774AFD-C#TA3	R7F7016023AFD-C#BA3	R7F7016213AFD-C#KA3
R7F7015574AFD-C#TA3	R7F7015803AFD-C#BA3	R7F7016023AFD-C#KA3	R7F7016214AFD-C#BA3
R7F7015603AFD-C#BA3	R7F7015803AFD-C#KA3	R7F7016024AFD-C#BA3	R7F7016214AFD-C#KA3
R7F7015603AFD-C#KA3	R7F7015804AFD-C#BA3	R7F7016024AFD-C#KA3	R7F7016223AFD-C#BA3
R7F7015604AFD-C#BA3	R7F7015804AFD-C#KA3	R7F7016033AFD-C#BA3	R7F7016223AFD-C#KA3
R7F7015604AFD-C#KA3	R7F7015813AFD-C#BA3	R7F7016033AFD-C#KA3	R7F7016224AFD-C#BA3
R7F7015613AFD-C#BA3	R7F7015813AFD-C#KA3	R7F7016034AFD-C#BA3	R7F7016224AFD-C#KA3
R7F7015613AFD-C#KA3	R7F7015814AFD-C#BA3	R7F7016034AFD-C#KA3	R7F7016233AFD-C#BA3
R7F7015614AFD-C#BA3	R7F7015814AFD-C#KA3	R7F7016103AFD-C#BA3	R7F7016233AFD-C#KA3
R7F7015614AFD-C#KA3	R7F7015823AFD-C#BA3	R7F7016103AFD-C#KA3	R7F7016234AFD-C#BA3
R7F7015623AFD-C#BA3	R7F7015823AFD-C#KA3	R7F7016104AFD-C#BA3	R7F7016234AFD-C#KA3

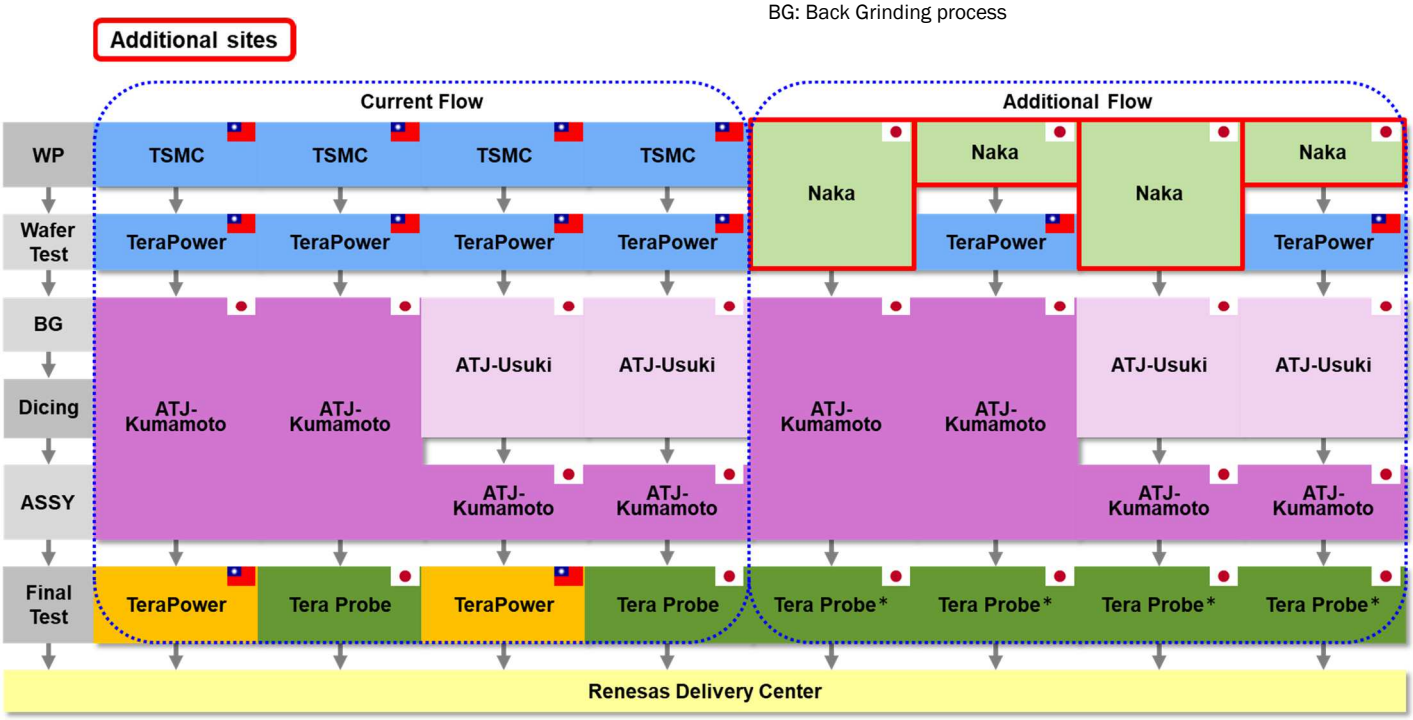
Product Specification

Items		Current	After site addition
Part Number		No change	
Outline		LQFP-100pin, 144pin, 176pin	<--(No change)
Wafer and Wafer Test Process	Wafer Process Site	TSMC	TSMC and Naka
	Wafer Test Site	TeraPower	TeraPower and Naka
Assembly Process	Assembly Site	ATJ-Kumamoto	<--(No change)
Mark		Change (Refer to “Mark Specification”)	
Label		Change (Refer to “Label Specification”)	

Items		TSMC	Naka	Remarks
Wafer Process	Wafer	TSMC Wafer	Naka Wafer	
	Process	RV40F(40nm) Process A (TiN/SiO2/SiN)	RV40F(40nm) Process B (SiON/SiO2/SiN)	The material change of TOP-Metal
Assembly Process	Die-Bonding Material	Die-Bonding material A	<--	
	Lead Frame	Lead Frame A	<--	
	Wire	Cu-wire A	<--	
	Mold Resin	Mold resin A for Cu-wire	<--	
	Plating	Pure Sn	<--	

Production Flow

TSMC: Taiwan Semiconductor Manufacturing Co., Ltd
WP: Wafer Process
BG: Back Grinding process

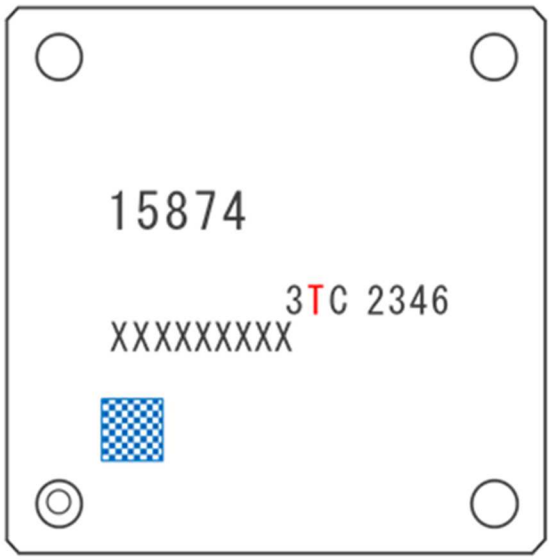
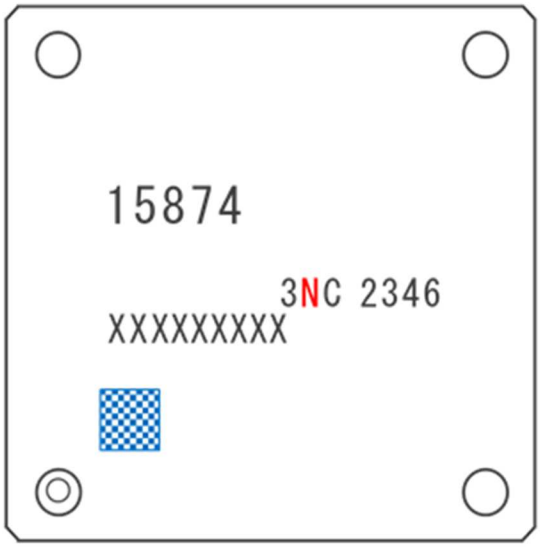


*TeraPower is not used as FT site in the additional flow.

Mark Specification:

Mark Example: R7F7015874AFD-C#BA3 (F1K 176pin)

The red character is different between TSMC and Naka.

TSMC Mark Image	Naka Mark Image
	

Label Specification:

Label Example: R7F7015874AFD-C#BA3 (F1K 176pin)

The red characters are different between TSMC and Naka.

TSMC Label Image

Naka Label Image