Product Change Notice (PCN)

Subject: Site addition of package assembly and final test
Publication Date: 6/2/2022
Effective Date: 3/1/2023

Revision Description:
Initial release

Description of Change:
Renesas plans to add the site of assembly/final test for RZ/T1 320BGA to realize stable supply. Renesas would like to deliver product produced in the added site for your orders. However, booking part number is changed for identification because a part of package drawing is changed from current product. We would highly appreciate it if you could confirm the following items and approve our plan.

Table:

Items	Additional site	Current
Company	Assembly: Advanced Semiconductor Engineering, Inc. FT: King Yuan ELECTRONICS CO., LTD.	Amkor Technology Japan, Inc.
Location	Assembly: Kaohsiung, Taiwan FT: Chu-Nan, Taiwan	Assembly: Hakodate, Japan FT: Kumamoto, Japan
Packaging	Change	No change
Tester	No change	No change
Test program	No change	No change

Affected Product List:
Please refer to “Product list” in appendix.

Reason for Change:
For stable supply of the product.

Impact on Fit, Form, Function, Quality & Reliability:
Package total thickness (max.) is changed from 2.3 mm to 1.75 mm and coplanarity (max.) is changed from 0.10 mm to 0.12 mm, because of assembly site change.
No impact on the fit, function, quality, and reliability.

Product Identification:
The product can be identified through part number, package marking, and packing label.

Qualification Status: Completed
Sample Availability Date: 6/1/2022 (WS sample can be delivered for evaluation)
Device Material Declaration: Available upon request

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.

Product list:

R7S910002CBG#AC0	R7S910018CBG#AC0	R7S910045CBG#AC0	
R7S910006CBG#AC0	R7S910025CBG#AC0	R7S910046CBG#AC0	
R7S910007CBG#AC0	R7S910026CBG#AC0	R7S910047CBG#AC0	
R7S910011CBG#AC0	R7S910027CBG#AC0	R7S910048CBG#AC0	
R7S910013CBG#AC0	R7S910028CBG#AC0	R7S910051CBG#AC0	
R7S910015CBG#AC0	R7S910035CBG#AC0	R7S910052CBG#AC0	
R7S910016CBG#AC0	R7S910036CBG#AC0	R7S910055CBG#AC0	
R7S910017CBG#AC0	R7S910037CBG#AC0		

Added products:

R7S910002CB**A**#**B**C0	R7S910018CB**A**#**B**C0	R7S910045CB**A**#**B**C0	
R7S910006CB**A**#**B**C0	R7S910025CB**A**#**B**C0	R7S910046CB**A**#**B**C0	
R7S910007CB**A**#**B**C0	R7S910026CB**A**#**B**C0	R7S910047CB**A**#**B**C0	
R7S910011CB**A**#**B**C0	R7S910027CB**A**#**B**C0	R7S910048CB**A**#**B**C0	
R7S910013CB**A**#**B**C0	R7S910028CB**A**#**B**C0	R7S910051CB**A**#**B**C0	
R7S910015CB**A**#**B**C0	R7S910035CB**A**#**B**C0	R7S910052CB**A**#**B**C0	
R7S910016CB**A**#**B**C0	R7S910036CB**A**#**B**C0	R7S910055CB**A**#**B**C0	
R7S910017CB**A**#**B**C0	R7S910037CB**A**#**B**C0		

MOQ: 672 pcs

Package outline:

Current product

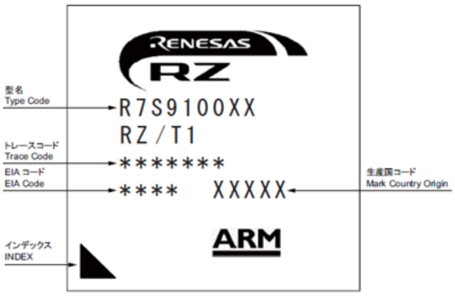
	Symbol	Dimension in Millimeters		
		Min.	Nom.	Max.
Package size	D	16.80	17.00	17.20
Package size	E	16.80	17.00	17.20
Total thickness	A	-	-	2.30
Stand off	A1	0.35	0.40	0.45
Ball pitch	e	-	0.80	-
Ball width	b	0.45	0.50	0.55
Ball offset (Package)	x1	-	-	0.20
Ball offset (Ball)	x2	-	-	0.08
Coplanarity	y	-	-	0.10
Mold parallelism	y1	-	-	0.20

Additional product

	Symbol	Dimension in Millimeters		
		Min.	Nom.	Max.
Package size	D	16.80	17.00	17.20
Package size	E	16.80	17.00	17.20
Total thickness	A	-	-	**1.75**
Stand off	A1	0.35	0.40	0.45
Ball pitch	e	-	0.80	-
Ball width	b	0.45	0.50	0.55
Ball offset (Package)	x1	-	-	0.20
Ball offset (Ball)	x2	-	-	0.08
Coplanarity	y	-	-	**0.12**
Mold parallelism	y1	-	-	0.20

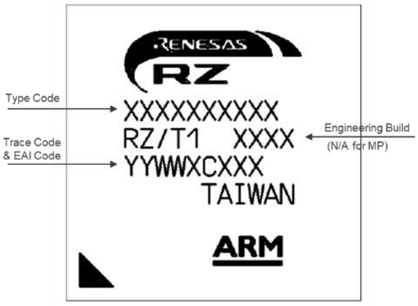
Package marking:

Current product



JAPAN

Additional product

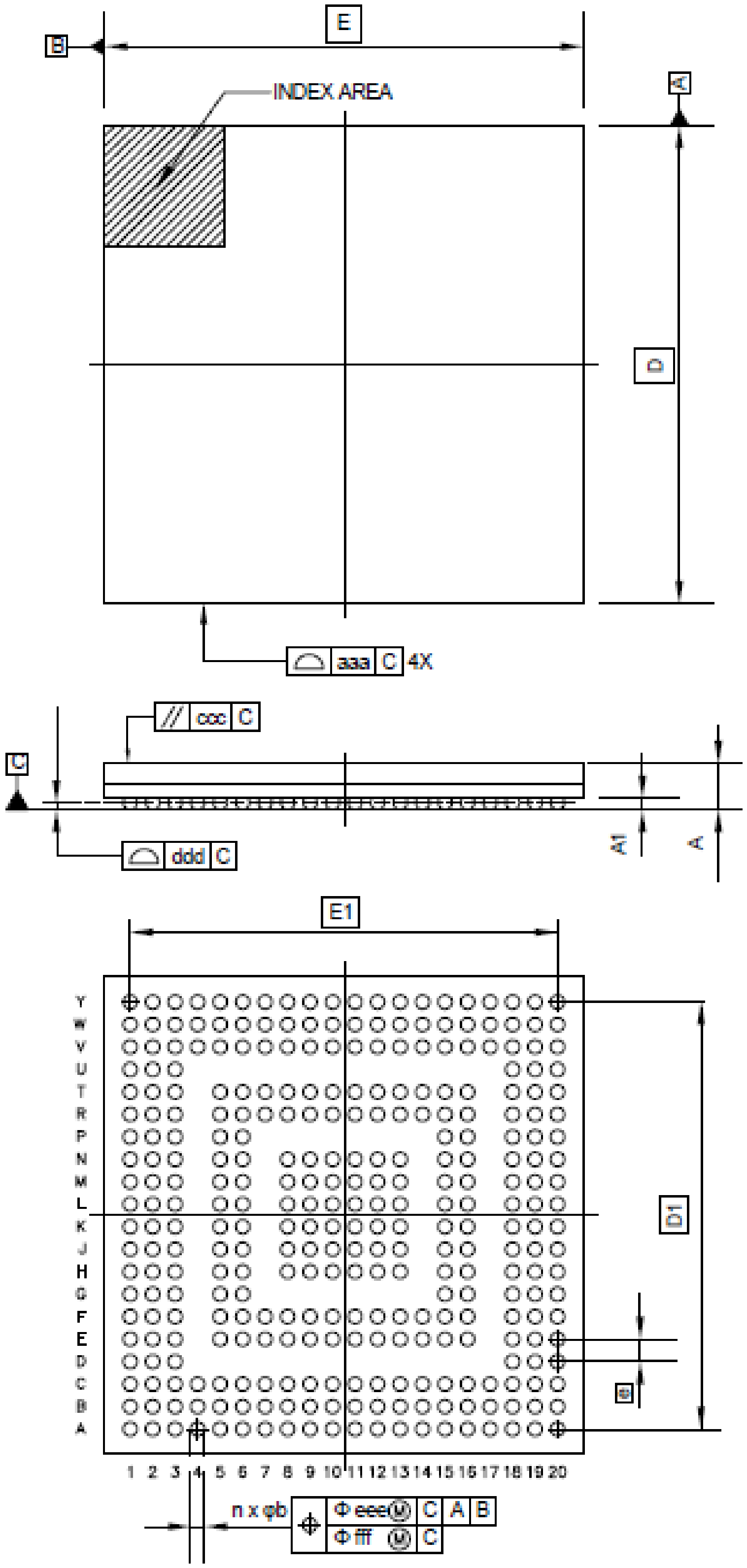


Packing label：

Current product	Additional product
D/N: R7S910XXXCBG AC0WL01000 SPN: R7S910XXXCBG#AC0 AC0WL01000 or D/N: R7S910XXXCBG AC0WL02000 SPN: R7S910XXXCBG#AC0 AC0WL02000	D/N: R7S910XXXCBA U03L SPN: R7S910XXXCBA#BC0 BC0M503000

Outline Drawing for additional product:

JEITA Package code	RENESAS code	MASS(TYP.)[g]
P-LFBGA320-17x17-0.80	PRBG0320GB-A	0.92



Reference Symbol	Dimension in Millimeters		
	Min.	Nom.	Max.
D	—	17.00	—
E	—	17.00	—
D1	—	15.20	—
E1	—	15.20	—
A	—	—	1.75
A1	0.35	—	—
b	0.45	0.50	0.55
e	—	0.80	—
aaa	—	—	0.20
ccc	—	—	0.20
ddd	—	—	0.12
eee	—	—	0.20
fff	—	—	0.08
n	—	320	—

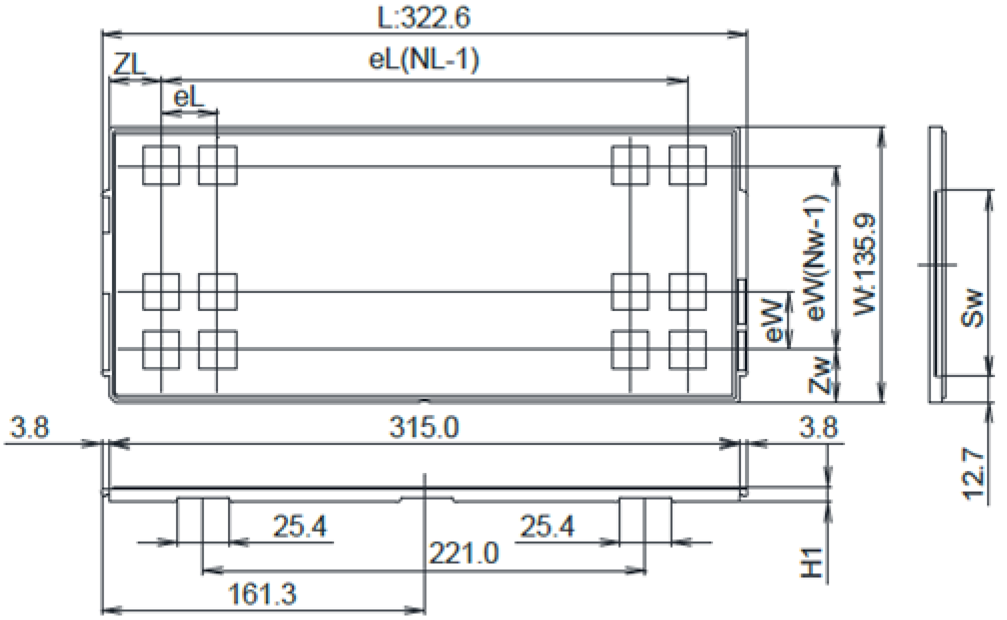
Packing Specification for additional product:

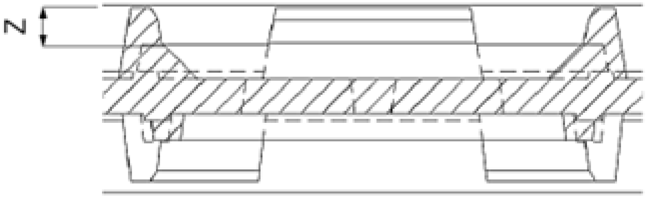
包装仕様 Packing Specification
トレイ包装図 TrayOutlineDrawing
BJ-E103

1/1

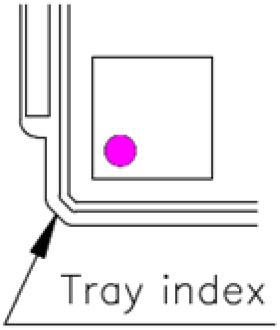
ルネサスエレクトロニクス株式会社
Renesas Electronics Corporation

Unit:mm



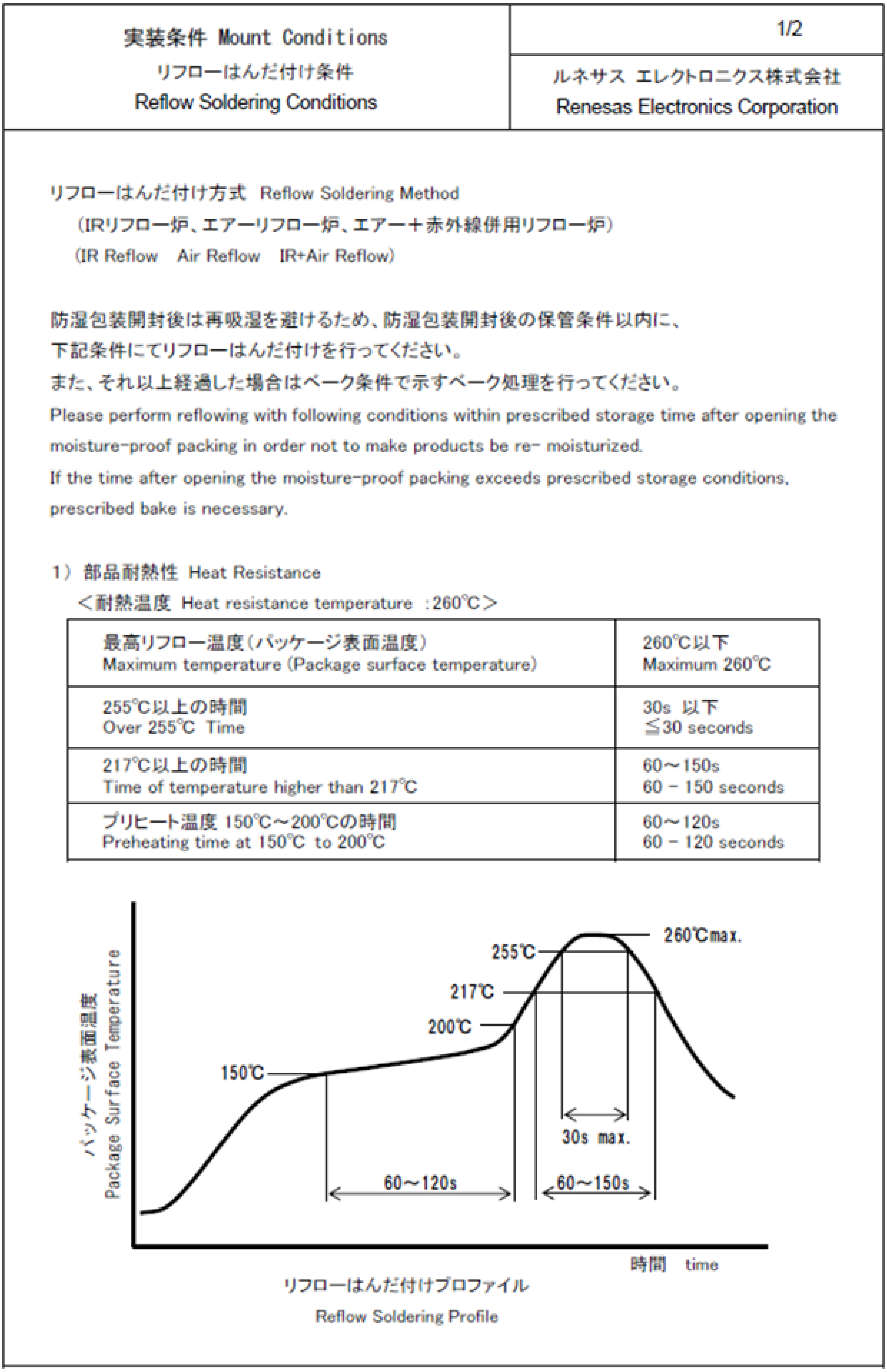


The pin1 is located in the hatching portion.



tray Code		BJ-E103
Position dimension of cells	Z	1.65
	Zw	14.45
	ZL	14.50
	eW	21.40
	eL	22.00
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	6
	NL	14
Maximum storage Pcs. IC/Tray		84
Maximum storage Pcs. IC/Inner box		672
Material		Carbon PPE
Heat resistant temperature		150°CMAX 4h
JEDECorCustom		JEDEC
Surface resistance		1.0x10^4≦R＜1.0x10^11Ω

Reflow Soldering Conditions for additional product:



実装条件 Mount Conditions リフローはんだ付け条件 Reflow Soldering Conditions	1/2 ルネサス エレクトロニクス株式会社 Renesas Electronics Corporation

リフローはんだ付け方式 Reflow Soldering Method
（IRリフロー炉、エアーリフロー炉、エアー＋赤外線併用リフロー炉）
（IR Reflow　Air Reflow　IR+Air Reflow）

防湿包装開封後は再吸湿を避けるため、防湿包装開封後の保管条件以内に、下記条件にてリフローはんだ付けを行ってください。
また、それ以上経過した場合はベーク条件で示すベーク処理を行ってください。

Please perform reflowing with following conditions within prescribed storage time after opening the moisture-proof packing in order not to make products be re- moisturized.

If the time after opening the moisture-proof packing exceeds prescribed storage conditions, prescribed bake is necessary.

1）部品耐熱性 Heat Resistance

＜耐熱温度 Heat resistance temperature ：260℃＞

最高リフロー温度（パッケージ表面温度） Maximum temperature (Package surface temperature)	260℃以下 Maximum 260℃
255℃以上の時間 Over 255℃ Time	30s 以下 ≦30 seconds
217℃以上の時間 Time of temperature higher than 217℃	60～150s 60 – 150 seconds
プリヒート温度 150℃～200℃の時間 Preheating time at 150℃ to 200℃	60～120s 60 – 120 seconds

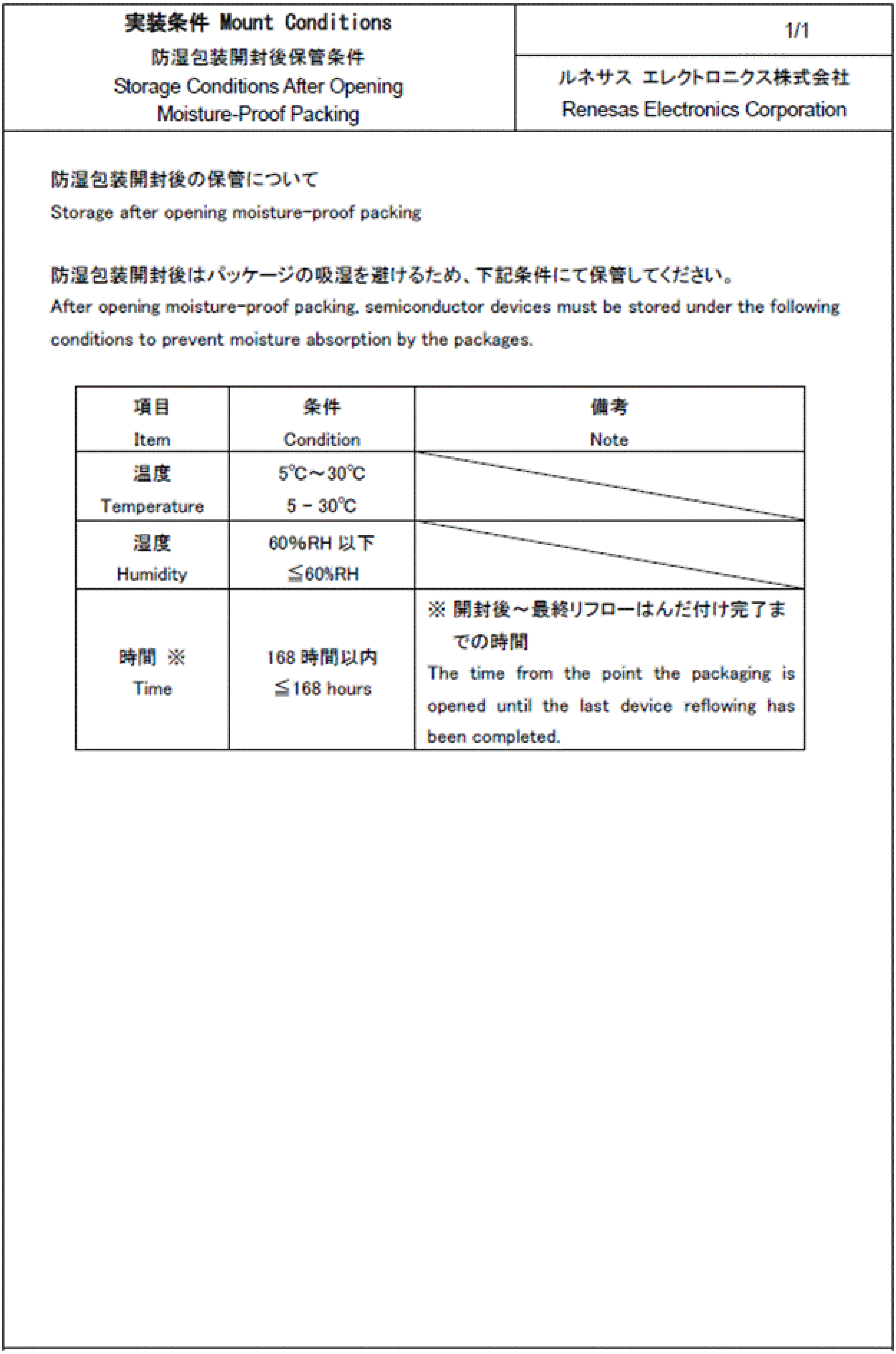
リフローはんだ付けプロファイル

Reflow Soldering Profile

2)リフロー回数 ： 3回以下 （防湿包装開封後の保管条件以内）
Reflowing times：Maximum 3 times (Within prescribed time after opening moisture-proof packing.)

3) リフロー雰囲気：エアーもしくは窒素（N2）
Reflowing atmosphere: Air or nitrogen atmosphere(N2)

Storage Conditions After Opening Moisture-Proof Packing for additional product:



実装条件 Mount Conditions 防湿包装開封後保管条件 Storage Conditions After Opening Moisture-Proof Packing	1/1 ルネサス エレクトロニクス株式会社 Renesas Electronics Corporation

防湿包装開封後の保管について

Storage after opening moisture-proof packing

防湿包装開封後はパッケージの吸湿を避けるため、下記条件にて保管してください。

After opening moisture-proof packing, semiconductor devices must be stored under the following conditions to prevent moisture absorption by the packages.

項目 Item	条件 Condition	備考 Note
温度 Temperature	5℃～30℃ 5 - 30℃	
湿度 Humidity	60%RH 以下 ≦60%RH	
時間 ※ Time	168 時間以内 ≦168 hours	※ 開封後～最終リフローはんだ付け完了までの時間 The time from the point the packaging is opened until the last device reflowing has been completed.