Product Change Notice (PCN)

Subject: Site addition of package assembly and final test
Publication Date: 7/21/2022
Effective Date: 3/31/2023

Revision Description:
Initial release

Description of Change:
Renesas plans to add the site of assembly/final test for RZ/T1-M and EC-1 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.

Please refer the following comparison between current product and additional site's one.

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:
For RZ/T1-M, package size (min.) is changed from 5.80mm to 5.85mm and (max.) is changed from 6.20mm to 6.15mm, and package total thickness (max.) is changed from 1.70mm to 1.35mm, because of assembly site change. For EC-1, package size (min.) is changed from 11.92mm to 11.85mm and (max.) is changed from 12.08mm to 12.15mm, and package total thickness (max.) is changed from 1.60mm to 1.50mm.
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: Available upon request
Sample Availability Date: 8/31/2022 (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.

Appendix

Product list:

R7S910020CBG#AC0	R7S910022CBG#AC0	R9A06G043GBG#AC0	
R7S910021CBG#AC0	R7S910023CBG#AC0		

Added products:

R7S910020CB**A#B**C0	R7S910022CB**A#B**C0	R9A06G043GB**B#B**C0	
R7S910021CB**A#B**C0	R7S910023CB**A#B**C0		

MOQ: 3,920 pcs (RZ/T1-M), 1,344 pcs (EC-1)

Package outline:

Current product

RZ/T1-M (112BGA)

	Symbol	Dimension in Millimeters		
		Min.	Nom.	Max.
Package size	D	5.80	6.00	6.20
Package size	E	5.80	6.00	6.20
Total thickness	A	-	-	1.70
Stand off	A1	0.20	0.25	0.30
Ball pitch	e	-	0.50	-
Ball width	b	0.25	0.30	0.35
Ball offset (Package)	x1	-	-	0.20
Ball offset (Ball)	x2	-	-	0.05
Coplanarity	y	-	-	0.08
Mold parallelism	y1	-	-	0.20

Additional product

	Symbol	Dimension in Millimeters		
		Min.	Nom.	Max.
Package size	D	**5.85**	6.00	**6.15**
Package size	E	**5.85**	6.00	**6.15**
Total thickness	A	-	-	**1.35**
Stand off	A1	0.20	0.25	0.30
Ball pitch	e	-	0.50	-
Ball width	b	0.25	0.30	0.35
Ball offset (Package)	x1	-	-	**0.15**
Ball offset (Ball)	x2	-	-	0.05
Coplanarity	y	-	-	0.08
Mold parallelism	y1	-	-	0.20

Current product

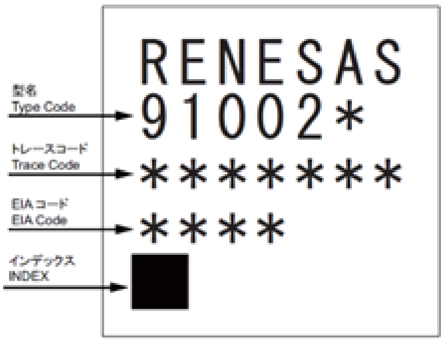
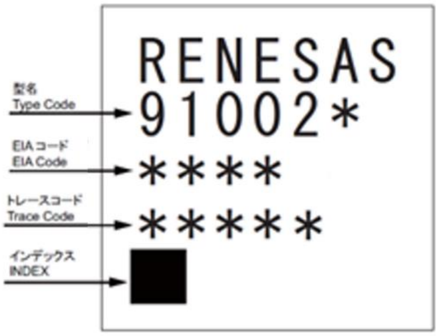
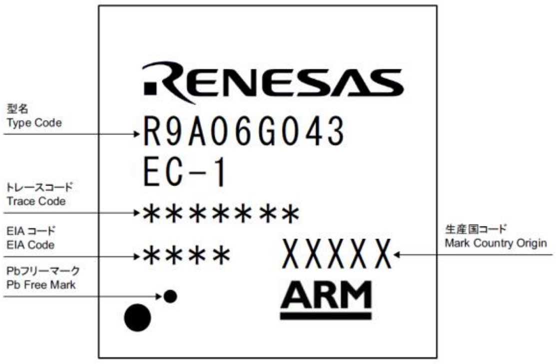
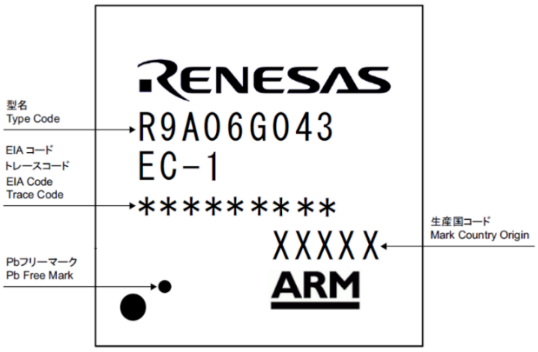
EC-1 (196BGA)

	Symbol	Dimension in Millimeters		
		Min.	Nom.	Max.
Package size	D	11.92	12.00	12.08
Package size	E	11.92	12.00	12.08
Total thickness	A	-	-	1.60
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	-	-	0.15
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	**11.85**	12.00	**12.15**
Package size	E	**11.85**	12.00	**12.15**
Total thickness	A	-	-	**1.50**
Stand off	A1	**0.36**	**0.41**	**0.46**
Ball pitch	e	-	0.80	-
Ball width	b	0.45	0.50	0.55
Ball offset (Package)	x1	-	-	0.15
Ball offset (Ball)	x2	-	-	0.08
Coplanarity	y	-	-	0.10
Mold parallelism	y1	-	-	0.20

Package marking:

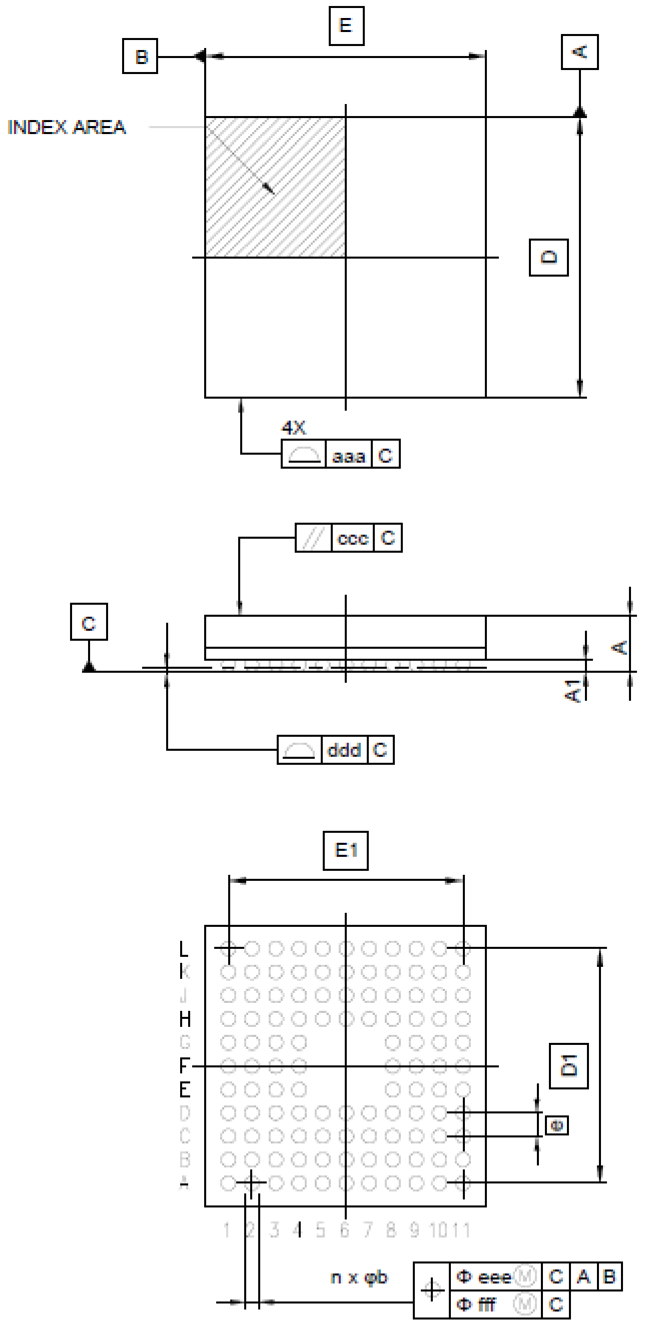
Current product	Additional product
RZ/T1-M (112BGA)  	RZ/T1-M (112BGA) 
EC-1 (196BGA)  	EC-1 (196BGA) 

- ## Packing label：

Current product	Additional product
RZ/T1-M (112BGA) D/N: R7S910XXXCBG ACOWL01000 SPN: R7S910XXXCBG#AC0 ACOWL01000 or D/N: R7S910XXXCBG ACOWL02000 SPN: R7S910XXXCBG#AC0 ACOWL02000	D/N: R7S910XXXCBA U03L SPN: R7S910XXXCBA#BC0 BC0M503000
EC-1 (196BGA) D/N: R9A06G043GBG ACOWL01000 SPN: R9A06G043GBG#AC0 ACOWL01000 or D/N: R9A06G043GBG ACOWL02000 SPN: R9A06G043GBG #AC0 ACOWL02000	D/N: R9A06G043GBB U03L SPN: R9A06G043GBB#BC0 BC0M503000

Outline Drawing for additional product:
RZ/T1-M (112BGA)

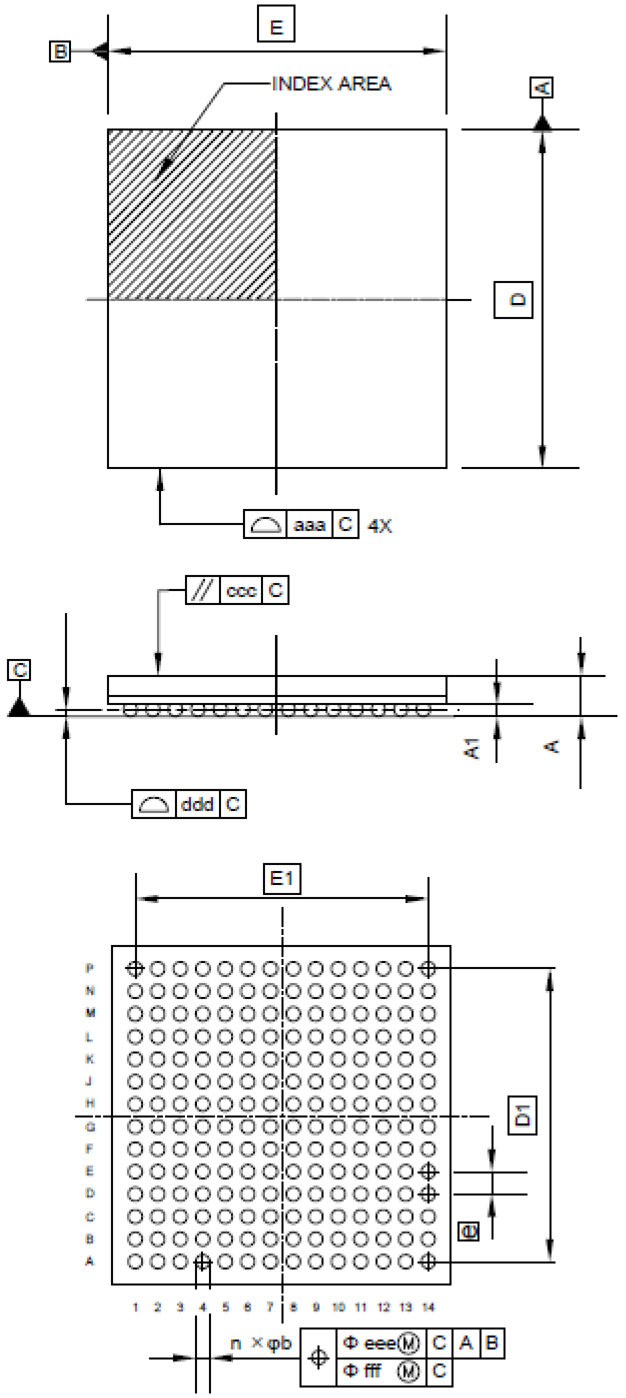
JEITA Package code	RENESAS code	MASS(TYP.)[g]
P-LFBGA112-6x6-0.50	PLBG0112KB-A	0.09



Reference Symbol	Dimension in Millimeters		
	Min.	Nom.	Max.
D	—	6.00	—
E	—	6.00	—
D1	—	5.00	—
E1	—	5.00	—
A	—	—	1.35
A1	0.20	—	—
b	0.25	0.30	0.35
e	—	0.50	—
aaa	—	—	0.15
ccc	—	—	0.20
ddd	—	—	0.08
eee	—	—	0.15
fff	—	—	0.05
n	—	112	—

EC-1 (196BGA)

JEITA Package code	RENESAS code	MASS(TYP.)[g]
P-LFBGA196-12x12-0.80	PLBG0196GB-A	0.43



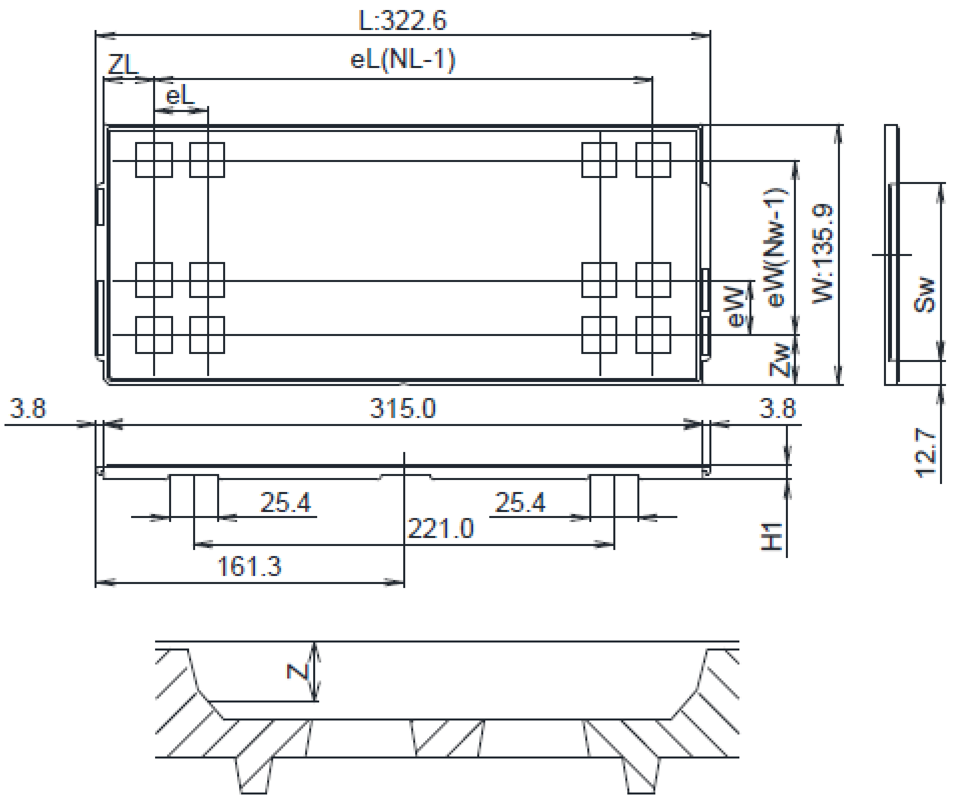
Reference Symbol	Dimension in Millimeters		
	Min.	Nom.	Max.
D	—	12.00	—
E	—	12.00	—
D1	—	10.40	—
E1	—	10.40	—
A	—	—	1.50
A1	0.36	—	—
b	0.45	0.50	0.55
e	—	0.80	—
aaa	—	—	0.10
ccc	—	—	0.20
ddd	—	—	0.10
eee	—	—	0.15
fff	—	—	0.08
n	—	196	—

Packing Specification for additional product:
RZ/T1-M (112BGA)

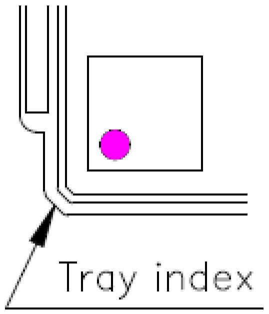
包装仕様 Packing Specification
トレイ包装図 TrayOutlineDrawing
BJ-R105

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.



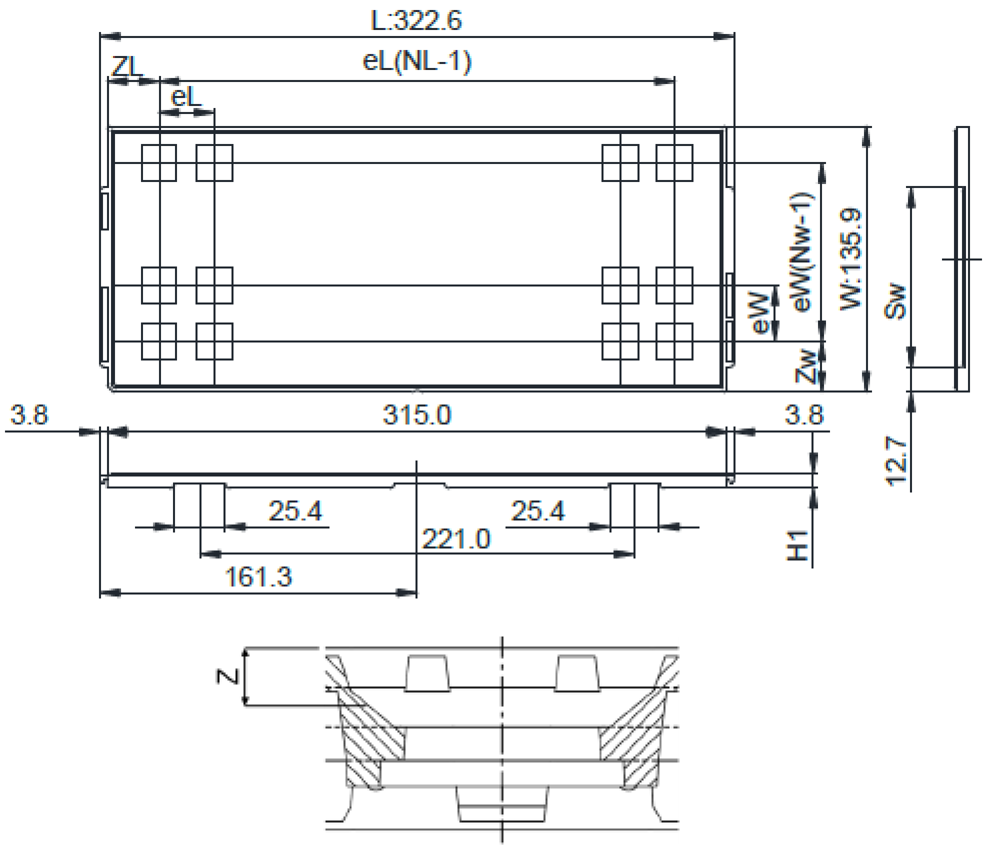
tray Code		BJ-R105
Position dimension of cells	Z	1.65
	Zw	8.15
	ZL	7.90
	eW	9.20
	eL	8.80
	Sw	92.10
Thickness (mm)	H1	7.62
Number of cells	Nw	14
	NL	35
Maximum storage Pcs. IC/Tray		490
Maximum storage Pcs. IC/Inner box		3920
Material		Carbon PPE
Heat resistant temperature		135°CMAX
JEDECorCustom		JEDEC
Surface resistance		1.0x10^4≦R<1.0x10^11Ω

EC-1 (196BGA)

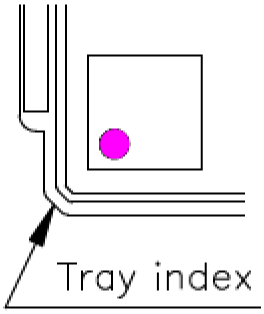
包装仕様 Packing Specification
トレイ包装図 TrayOutlineDrawing
EA7121224-10 REV.A

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		EA7121224-10 REV.A
Position dimension of cells	Z	2.01
	Zw	11.95
	ZL	11.00
	eW	16.00
	eL	14.65
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	8
	NL	21
Maximum storage Pcs. IC/Tray		168
Maximum storage Pcs. IC/Inner box		1344
Material		Carbon PPE
Heat resistant temperature		135℃MAX
JEDECorCustom		JEDEC
Surface resistance		1.0x10^4≦R＜1.0x10^11Ω