



Dear Valued Customer

Issue date:

Taro Nishioka
General Manager

LSIs Package Engineerings Div.
LSIs Production Headquarters
ROHM Co., Ltd.

Notification of Product/Process Change
Doc. No.: 102500F

This letter intends as a formal notification of change to products which are currently supplied by ROHM Co., Ltd.

ROHM Co., Ltd. requires customers to provide acknowledgment of the receipt of this notification within 30 days from the date of this notice. Lack of acknowledgment of this notice within 30 days is considered as acceptance of the change.

After acknowledgement of the customer, lack of additional response within 90 day period constitutes acceptance of the change according to JEDEC Standard J-STD-046.

Your understanding and cooperation would be highly appreciated.

Issue Date: November 28, 2025

Issue Date: November 25, 2025			
Title of change	LSI bonding wire material change from gold to copper March 2027		
Affected product(s)	Manufacturer part number		Customer part number
	Refer to the attachment.		
Detailed description of change	Before		After
	Wire Material : Gold (Au)		Wire Material : Copper (PdCu) For some models, materials other than wire will also be changed. Please refer to the attached document for further details.
Reason for change	In order to ensure stable supply of our products, we intend to submit a PCN to change the bonding wire material from gold to copper.		
Anticipated impact on quality	There are no impact on the quality.		
Identification of change	Identification is possible using the internal part number on the product label.		
Planned first ship date		October 1, 2027	Sample available schedule : Mar,1,2027
Comments			
Supplier contact	Please contact the local ROHM sales office or the authorized distributor.		
Notes			



Electronics for the Future

Control Number : 102500F

PCN Description

LSI bonding wire material change from gold to copper

(March 2027)

Nov. 28th, 2025

LSIs Package Engineerings Div.

LSIs Production Headquarters

ROHM Co., Ltd.

< Report contents >

1. Background
2. Object Parts List
3. Comparison of 4M
4. Comparison of products
5. Comparison of product label
6. Verification for changing point
7. Reliability tests

Separate detailed documents will be provided for the product-specific 4M comparison and for change point verification.

1. Background

< Background and Purpose of change >

The price of gold has been rising in recent years, and this trend continues. In order to ensure stable supply of our products, we will submit a PCN to change the bonding wire material from gold (Au) to copper (PdCu).

Furthermore, to establish a stable supply system, we are implementing material standardization and package consolidation, which will lead to changes in package materials for certain products.

< Schedule >

Reply due : Mar. 31, 2028

Planned first ship date : Oct 1, 2027

(We will implement the change after receiving your approval.)

2. Object Parts List (1)

Depending on the product, packaging materials as well as wire materials may be subject to changes.

Part number	Package type	Changing points	Pattern
BD83740HFP-MTR	HRP7	Wire Material	A
BD3965EKV-ME2	HTQFP64V		
BD00FC0UEFJ-ME2 BD5030MUEFJ-CE2 BD750U2EFJ-CE2	HTSOP-J8		
BD8381AEFV-ME2	HTSSOP-B28		
BD3960AFS-CE2	SSOP-A16		
BD16805FV-ME2 BD16805PFV-ME2	SSOP-B40		
BD00FC0EFP-MGE2 BD00C0AWFP-CE2	TO252-5		
BD3360KV-ME2 BD3375KV-CE2	VQFP48C		
BM1Q001FJ-E2 BM1P061FJ-E2 BM1Q104FJ-E2	SOP-J8	Wire Material	B
BM6104FV-CE2 BM6104RFV-CE2 BM6101FV-CE2 W001-CXE2 BM6108FV-LBE2	SSOP-B20W	Wire Material Lead Frame Mold Material	C
BD35395FJ-ME2▲	SOP-J8	Wire Material Lead Frame Die attach Mold Material	D

▲ : refer to page 10

2. Object Parts List (2)

Depending on the product, packaging materials as well as wire materials may be subject to changes.

For the following products, the part numbers will be changed to differentiate the product lines.

Part number (Before)	Part number (After)	Package type	Changing points				Pattern
BD750L2EFJ-CE2	BD750 U 2EFJ-CE2	HTSOP-J8	Wire Material	Lead Frame		Mold Material	
BD00FC0EEFJ-ME2	BD00FC0 U EFJ-ME2	HTSOP-J8	Wire Material	Lead Frame	Die attach	Mold Material	
BD5030MEFJ-CE2	BD5030M U EFJ-CE2	HTSOP-J8					

3-1. Comparison of 4M

This page provides information
about products in patterns A to F.



Au wire products and PdCu wire products will be produced with the equivalent Machine and Method.

			Before change / Au wire products		After change / PdCu wire products	Changing point
Package Name			Refer to Parts List		Refer to Parts List	No change
Factory	Assembly	Production Site	ROHM Electronics Philippines, Inc.	Rohm Integrated Systems Thailand Co., Ltd	Same as the left	No change
		Country	Philippines	Thailand	Same as the left	
		personnel	Approximately 4,000 people	Approximately 1,300 people	Same as the left	
		Cleanroom Design	Below		Below	
		DB – WB process	Class 10,000		Same as the left	
		Molding process	Class 100,000		Same as the left	
	Test	Production Site	ROHM Electronics Philippines, Inc.	Rohm Integrated Systems Thailand Co., Ltd	Same as the left	No change
		Country	Philippines	Thailand	Same as the left	
Man	Assembly		Qualified operators		Same as the left	No change
	Test		Qualified operators		Same as the left	
Machine	Assembly	Die bonding process	Fully automatic die bonding machine		Same (Some machine is different type)	Although the equipment type will change for some packages, we will use fully automated production equipment equivalent to that of the existing production line.
		Wire bonding process	Fully automatic wire bonding machine		Same (Some machine is different type)	
		Molding process	Fully automatic molding machine		Same (Some machine is different type)	
		Tie bar cutting process	Fully automatic tie bar cutting machine		Same (Some machine is different type)	
		Plating process	Fully automatic plating machine		Same (Some machine is different type)	
		Marking process	Fully automatic laser marking machine		Same (Some machine is different type)	
		Lead forming process	Fully automatic forming machine		Same (Some machine is different type)	
	Test	Test handler	Fully automatic handler		Same as the left	No change
		Tester	Fully automatic tester		Same as the left	
	Taping	Taping process	Fully automatic taping machine		Same as the left	No change
Method	Assembly	Die bonding process	Ag paste dispensing		Same as the left	In each process step, the method remains the same, and there are no changes. ※ Since PdCu wire is used, production conditions have been modified and forming gas has been introduced at the processing point.
		Wire bonding process	Thermo-sonic bonding		Same as the left ※	
		Molding process	Transfer molding		Same as the left	
		Plating process	Electroplating		Same as the left	
	Test	Test process	Socket contact		Same as the left	No change
Material	Assembly		Please see next page		Please see next page	-

3-2. Comparison of 4M (Material)

This page provides information
about products in patterns A.



The only difference between the Au wire products and the PdCu wire products is the wire material.
We have verified this change and confirmed there are no impact on quality.

		Before change Au wire products	After change PdCu wire products	Changing point
Lead Frame	Frame size	ROHM Standard design	Same as the left	No change
	Inner design	ROHM Standard design	Same as the left	
	Base Material	Cu alloy	Same as the left	
	Surface plating	Ag plating	Same as the left	
Die attach		Ag paste / Solder	Same as the left	No change
Wire material		Au	PdCu	Wire material has been changed
Mold compound		Halogen free resin	Same as the left	No change
Outer plating		100%Sn	Same as the left	No change
Marking		Laser marking	Same as the left	No change
Carrier tape		ROHM standard material	Same as the left	No change
Reel		ROHM standard material	Same as the left	No change
Box		ROHM standard material	Same as the left	No change

3-2. Comparison of 4M (Material)

This page provides information
about products in patterns B.



The only difference between the Au wire products and the PdCu wire products is the wire material.
We have verified this change and confirmed there are no impact on quality.

		Before change Au wire products	After change PdCu wire products	Changing point
Lead Frame	Frame size	ROHM Standard design	Same as the left	No change
	Inner design	ROHM Standard design	Same as the left	
	Base Material	Cu alloy	Same as the left	
	Surface plating	Ag plating	Same as the left	
Die attach		Ag paste	Same as the left	No change
Wire material		Au	Au, PdCu	The wire material has been changed, and both Au and PdCu will be used (Chip-to-chip: Au / Chip-to-lead: PdCu).
Mold compound		Halogen free resin	Same as the left	No change
Outer plating		100%Sn	Same as the left	No change
Marking		Laser marking	Same as the left	No change
Carrier tape		ROHM standard material	Same as the left	No change
Reel		ROHM standard material	Same as the left	No change
Box		ROHM standard material	Same as the left	No change

3-2. Comparison of 4M (Material)

This page provides information
about products in patterns C.



For Au wire products and PdCu wire products, the wire material, lead frame and molding compound will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before change Au wire products	After change PdCu wire products	Changing point
Lead Frame	Frame size	ROHM Standard design	Same as the left	The base Material has been changed. And the frame manufacturing method has also been changed (from etching to punching).
	Inner design	ROHM Standard design	Same as the left	
	Base Material	Cu alloy (A)	Cu alloy (B)	
	Surface plating	Ag plating	Same as the left	
Die attach		Ag paste	Same as the left	No change
Wire material		Au	Au, PdCu	Wire material has been changed, and both Au and PdCu will be used (Chip-to-chip: Au / Chip-to-lead: PdCu).
Mold compound		Halogen free resin (A)	Halogen free resin (B)	Mold compound has been changed
Outer plating		100%Sn	Same as the left	No change
Marking		Laser marking	Same as the left	No change
Carrier tape		ROHM standard material	Same as the left	No change
Reel		ROHM standard material	Same as the left	No change
Box		ROHM standard material	Same as the left	No change

3-2. Comparison of 4M (Material)

This page provides information
about products in patterns D and F.



For Au wire products and PdCu wire products, the wire material, lead frame, die attach material, and molding compound will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before change Au wire products	After change PdCu wire products	Changing point
Lead Frame	Frame size	ROHM Standard design (A)	ROHM Standard design (B)	The lead frame size has been enlarged to improve production efficiency. ※ For ▲ products, Inner design has also been changed
	Inner design	ROHM Standard design (A)	ROHM Standard design (A) ※ROHM Standard design (B)	
	Base Material	Cu alloy	Same as the left	
	Surface plating	Ag plating	Same as the left	
Die attach		Ag paste (A)	Ag paste (B)	Ag paste has been changed
Wire material		Au	PdCu	Wire material has been changed
Mold compound		Halogen free resin (A)	Halogen free resin (B)	Mold compound has been changed
Outer plating		100%Sn	Same as the left	No change
Marking		Laser marking	Same as the left	No change
Carrier tape		ROHM standard material	Same as the left	No change
Reel		ROHM standard material	Same as the left	No change
Box		ROHM standard material	Same as the left	No change

3-2. Comparison of 4M (Material)

This page provides information
about products in patterns E.



For Au wire products and PdCu wire products, the wire material, lead frame and molding compound will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before change Au wire products	After change PdCu wire products	Changing point
Lead Frame	Frame size	ROHM Standard design (A)	ROHM Standard design (B)	Lead frame size has been enlarged to improve production efficiency.
	Inner design	ROHM Standard design	Same as the left	
	Base Material	Cu alloy	Same as the left	
	Surface plating	Ag plating	Same as the left	
Die attach		Solder	Same as the left	No change
Wire material		Au	PdCu	Wire material has been changed
Mold compound		Halogen free resin (A)	Halogen free resin (B)	Mold compound has been changed
Outer plating		100%Sn	Same as the left	No change
Marking		Laser marking	Same as the left	No change
Carrier tape		ROHM standard material	Same as the left	No change
Reel		ROHM standard material	Same as the left	No change
Box		ROHM standard material	Same as the left	No change

4. Comparison of products

This page provides information
about products in patterns A to D.



There are no changes to external dimensions or product characteristics between the Au wire products and PdCu wire products.

Item	Comparison of Au wire products (Before change) and PdCu products (After change)
Part number	No change
External dimensions	No change
Internal structures	No change
Reference land pattern	No change
Marking	No change
Product characteristics	There are no changes to the characteristic specified listed in the datasheet.

4. Comparison of products

This page provides information
about products in patterns E.



There are no changes to external dimensions or product characteristics between the Au wire products and PdCu wire products. However, Part number and marking have been changed.

Item	Comparison of Au wire products (Before change) and PdCu products (After change)
Part number	Part number is changed
External dimensions	No change
Internal structures	No change
Reference land pattern	No change
Marking	The marking appearance will remain the same, but the characters indicating the part number will be changed.
Product characteristics	There are no changes to the characteristic specified listed in the datasheet.

4. Comparison of products

This page provides information
about products in patterns F.



There are no changes to the package dimensions between the Au wire products and the PdCu wire products.
The characteristic values specified in the datasheet remain unchanged,
however, change in thermal resistance have been observed.

Item	Comparison of Au wire products (Before change) and PdCu products (After change)
Part number	Part number is changed
External dimensions	No change
Internal structures	No change
Reference land pattern	No change
Marking	The marking appearance will remain the same, but the characters indicating the part number will be changed.
Product characteristics	There are no changes to the characteristic values specified in the datasheet. However, comparative measurements have confirmed that, due to a change in the Ag paste, the thermal resistance value could increase by as much as 2.5° C/W. Please confirm that this change will not affect your application.

5. Comparison of product label

This page provides information
about products in patterns A to F.

A

B

C

D

E

F



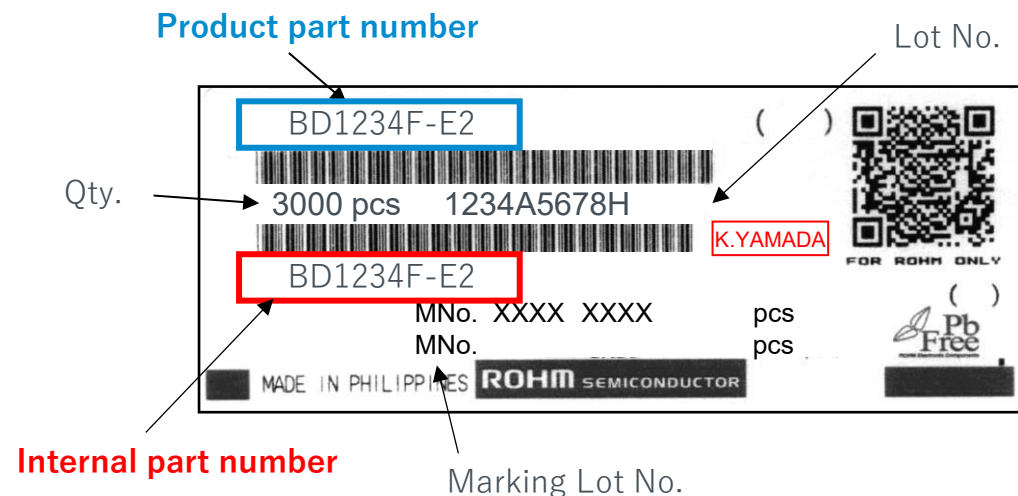
There are no changes to product part numbers before and after the change, although identification is possible using the internal part number on the product label.

<How to identify>

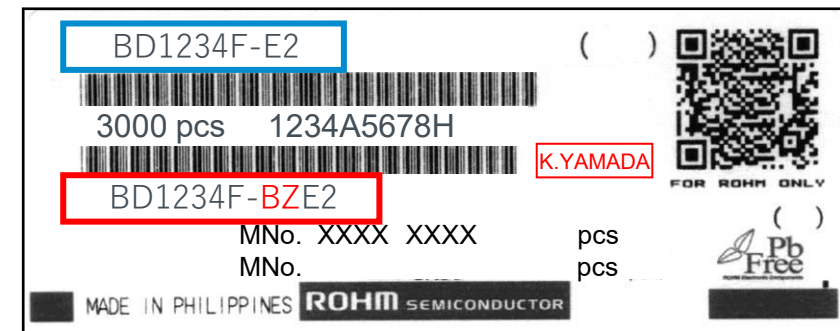
For Rohm's internal product control purposes, the internal part number differs between Au wire products (before change) and PdCu wire products (after change). The internal part number can be found on the product label on shipping packages and reeling wheels. For pattern **E** **F** products, part n**E** **F** also differs between Au wire products and PdCu wire products.

	Part number	Internal part number	Remark
Before change / Au wire products	BD1234F-E2	BD1234F-E2	
After change / PdCu wire products		BD1234F-BZE2	We add "BZ" on internal part number

< Before change / Au wire products >



< After change / PdCu wire products >



6. Verification for changing point

This page provides information
about products in patterns A to F.

A

B

C

D

E

F



ROHM verifies the changes in the wire material to confirm that there is no impact on quality.

Change point	Concerns	Evaluation items	Evaluation Results	Judgement
Melting point Au:1064→Cu:1084, Pd:1555°C	There is a concern about changes in bonding performance due to changes in material properties and mechanical properties.	Wire bonding (1st bond)	Results will be provided after the evaluation. (March 2027)	
Tensile strength 100→210MPa		Wire bonding (2nd bond)		
Elastic modulus 78→130GPa				
Vickers hardness 45→70Hv	There is a concern about cracks under the pad due to increased impact on the pad during the first bonding, because of a harder first ball.	Wire bonding (under-pad cracks)		
Diffusion rate with aluminum $1.1 \times 10^{-4} \rightarrow 1.9 \times 10^{-16} \text{cm}^2/\text{s}$	There is a concerns about bonding failure and a decrease in bond strength due to low bonding performance.	Wire bonding (Shear strength, NSOP alarms)		
	There is a concern about wire breakage caused by Kirkendall voids between the wire and pad.	HTSL		
Coefficient of Thermal Expansion 14.2→16.5ppm	There is a concern about cracks at the second bond caused by increased thermal stress.	TC		
High Ionization tendency	There is a concern that the wire may become open caused by oxidation or corrosion.	AC		
		THB		
Using forming gas	There is a concern that there may be a decrease in wire bonding quality due to temperature drops caused by forming gas or abnormal gas flow rates.	Wire bonding (1st bond)		
		Wire bonding (2nd bond)		

7. Reliability tests

This page provides information
about products in patterns A to F.

A

B

C

D

E

F



Standard reliability tests will be performed.

【Pre conditions】

MSL	JEDEC LEVEL 1	JEDEC LEVEL 2a	JEDEC LEVEL 3
Drying	125°C 24h		
Moisture soaking	85°C 85% 168h	60°C 60% 120h	30°C 70% 192h
Reflow profiles	Pb free reflow profiles (260°C) 3times		

■ Reliability test results

Items	Standards	Conditions	Duration	Sample Qty.	Fail	Judgement
Resistance to soldering heat PC	J-STD-020	MSL 2a	-	77 pcs x 3 Lot	Results will be provided after the evaluation. (March 2027)	
Temperature Humidity Bias THB	JESD22-A101	85°C 85% w/bias	2000h	77 pcs x 3 Lot		
Autoclave AC	JESD22-A102	121°C 100% 2atm	192h	77 pcs x 3 Lot		
Temperature Cycling TC	JESD22-A104	-65°C⇔150°C	1000cyc	77 pcs x 3 Lot		
High Temperature Storage Life HTSL	JESD22-A103	150°C	2000h	77 pcs x 3 Lot		
High Temperature Operating Life HTOL	JESD22-A108	125°C w/bias	1000h	77 pcs x 3 Lot		



Electronics for the Future

Public (External) PN

BD00C0AWFP-CE2

BD00FC0EFP-MGE2

BD00FC0UEFJ-ME2

BD16805FV-ME2

BD16805PFV-ME2

BD3360KV-ME2

BD3375KV-CE2

BD35395FJ-ME2

BD3960AFS-CE2

BD3965EKV-ME2

BD5030MUEFJ-CE2

BD750U2EFJ-CE2

BD83740HFP-MTR

BD8381AEFV-ME2

BM1P061FJ-E2

BM1Q001FJ-E2

BM1Q104FJ-E2

BM6101FV-CE2

BM6104FV-CE2

BM6104RFV-CE2

BM6108FV-LBE2

W001-CXE2