Dear Valued Customer

Issue date: March 2, 2026

Satoshi Fujitani
Director
LSIs Production Headquarters
ROHM Co., Ltd.

Notification of Product/Process Change

Doc. No.: 1026003

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: March 2, 2026

Title of change	Change in wafer factory from ROHM Wako to ROHM Hamamatsu and change in packaging materials and assembly factory due to production base reorganization.	
Affected product(s)	Manufacturer part number	Customer part number
	See Attachment.	See Attachment.
Detailed description of change	Before	After
	Front-End Process: ROHM Wako 0.6μm BiCDMOS / Bipolar. Back-End Process: See Attachment.	Front-End Process: ROHM Hamamatsu 0.6 μm BiCDMOS / Bipolar. Back-End Process: See Attachment.
Reason for change	We will restructure low-utilization, small-scale production lines and standardize materials to advance structural reforms that ensure a stable supply to our customers over the long term.	
Anticipated impact on quality	This change will have no impact on product quality.	
Identification of change	It can be identified by the internal model name on the product label.	

Planned first ship date	September 30, 2026	Sample available schedule :	March 2, 2026
Comments			
Supplier contact	Please contact the local ROHM sales office or the authorized distributor.		
Notes			

Electronics for the Future

No.1026003
Change in wafer factory from ROHM Wako to ROHM Hamamatsu and change in packaging materials and assembly factory due to production base

March 2, 2026
LSI Production Headquarters
LSI-WP Engineering Div.

1. Description of change (1/2)

・Issue Date:	March 2, 2026
・Doc. Number:	1026003
・Detailed description:	The production sites for wafer processes and packaging materials, as well as the assembly plant, will change. For wafer processes, two lines will move from ROHM Wako to Rohm Hamamatsu. For packaging processes, the wire materials, mold materials, lead frames, die attach materials, and assembly plant will change. There are no changes to the land patterns or functions for all related part numbers.
・Reason for change:	We will restructure low-utilization, small-scale production lines and standardize materials to advance structural reforms that ensure a stable supply to our customers over the long term.
・Schedule:	Sample available date: March 3, 2026 PCN Response required by: September 30, 2026 Planned First Ship Date: September 30, 2026
・ROHM contact:	Please contact our sales representative.

1. Description of change (2/2)

Changes	Before relocation	After relocation
Wafer Process	【Factory】 ・ROHM Wako 150mm Kasaoka City, Okayama Prefecture	【Factory】 ・ROHM Hamamatsu 200mm Hamamatsu City, Shizuoka Prefecture
	【Manufacturing Line】 0.6μm BiCDMOS 0.6μm Bipolar	
Assembly Process	【Materials, Factory】 To establish a stable supply system, we are standardizing materials, consolidating packaging, and changing factories. As a result, materials and factories will change for some products.	
Inspection Process	No change	

The target lines for the wafer process are two 0.6μm BiCDMOS/Bipolar lines, but there will be no changes to circuit design or chip size before and after relocation.

The packaging process varies depending on the product, so details are provided later.

2. Changes and Explanation Page

This page provides information on changes to the wafer/package process.

Item	Summary of Changes	Explanation Page
Wafer Process	ROHM Hamamatsu Overview	P.6～7
	BiCDMOS line	P.8～10
	Bipolar line	P.11～13
Assembly Process	Changes to Packaging Materials and Factory	P.14～28

Changes to the Wafer Process

3. ROHM Hamamatsu Overview （1/2）

3-1) ROHM Hamamatsu Plant Overview

Company Name : ROHM Hamamatsu Co.,Ltd.
Location : 10 Sanwa-cho, Chuo Ward, Hamamatsu City
Started Operation : July 1, 1999
Production Item : LSI/LED
Production Capacity : LSI 44,000wafers/mth 8”

3-2) 0.6μm BiCDMOS Production Results

Production Line : 200mm
Production Start : March 2008–
Production Volume : 13.8Bpcs (As of 2025)

3-3) 0.6μm Bipolar Production Results

Production Line : 200mm Line
Manufacturing Transfer : December 2025
Production Start : March 2026–

3. ROHM Hamamatsu Overview (2/2)

Environmental management (Clean room)

Item		Method	Units	ROHM Wako 150mm (Before relocation)		ROHM Hamamatsu 200mm (After relocation)	
				Control value	Result	Control value	Result
Temperature		Thermometer	ºC	22~24	22~24	22~24	22~24
Humidity		Hygrometer	%	35~55	41~50	35~55	40~50
Cleanliness	Passage	Particles Counter	pcs/cf	100 (0.1μm)	<80	35 (0.1μm)	<10
	Work Area				<50		<10
	Mask area				<12		<10

The air cleanliness level at ROHM Hamamatsu's 200 mm factory is higher than that at ROHM Wako and poses no issues.

4. 0.6μm BiCDMOS line 4M Change points

4M Change points

4M		ROHM Wako 150mm (Before relocation)	ROHM Hamamatsu 200mm (After relocation)	Comparison
Man	-	All operators are certified by the company to perform the tasks and work in accordance with the work standards.		Equal
Machine	Equipment in use Other than the same method	The same type of equipment is used with no differences.		Equal
	Factory Management	Comply with the QC Operation Manual.		Equal
	Management Method	Comply with the QC Operation Manual, and SPC control shall be applied.		Equal
	Conveying	Cart	Cart / Robot cart	Changes
Material	Wafer	150mm Si wafer	200mm Si wafer	Changes
	Materials/Gases	No change		Equal
Method	Manufacturing conditions	Comply with the QC Operation Manual.		Equal
	Out of Control Limits Lot Treatment	Comply with the quality abnormality measures rule.		Equal
	Inspection	Comply with the inspection standard.		Equal

Wafer transport and wafer size differ, but it has been confirmed that this is not an issue.

5. 0.6μm BiCDMOS line　Verification Results（1/2）

5-1）Basic Characteristics: Process Capability of Main Element Characteristics

Process capability of primary device characteristics of 0.6um BiCDMOS lines at ROHM Wako and ROHM Hamamatsu are compared.

Samples are from 100 mass production lots. All items show Cpk>1.67, ensuring excellent process capability.

Item	ROHM Wako (Before relocation)		ROHM Hamamatsu (After relocation)		Target
	Cp	Cpk	Cp	Cpk	
NPN Tr hFE	1.87	1.69	2.34	2.25	Cpk>1.67
PNP Tr hFE	2.81	2.67	5.61	4.47	
NMOS Tr Vth	2.47	1.96	2.74	1.76	
PMOS Tr Vth	1.90	1.73	3.81	3.05	
DMOS Tr Vth	2.35	1.78	2.71	2.59	
CONT CR	10.8	5.64	2.64	2.05	
1VIA CR	2.53	1.81	4.24	3.00	

5. 0.6μm BiCDMOS line　Verification Results（2/2）

5-2) Basic Characteristics : Chip Yield

ROHM Wako (Before relocation)	ROHM Hamamatsu (After relocation)
1.009	1.013

(arb.unit)

*Number of good chips after wafer inspection / Number of standard good chips

There are no apparent differences between the two factories, and chip yield is equivalent.

N=3Lot

5-3) Basic Characteristics ： Wafer-Level Reliability Test Results

Test Items	Test Symbol	Evaluation criteria	Results Judgment
Time Dependent Dielectric Breakdown	TDDB	Have a lifespan of more than 15 years	Pass
Negative Bias Temperature Instability	NBTI		Pass
Hot Carrier Injection	HCI		Pass
Electromigration	EM		Pass
Stressmigration	SM	Be able to judge that it has a lifespan of 1000 h or more.	Pass

Since each test item meets the pass/fail criteria, there is no problem.

6. 0.6μm Biploar line 4M Change points

4M Change points

4M		ROHM Wako 150mm (Before relocation)	ROHM Hamamatsu 200mm (After relocation)	Comparison
Man	-	All operators are certified by the company to perform the tasks and work in accordance with the work standards.		Equal
Machine	Equipment in use Other than the same method	The same type of equipment is used with no differences.		Equal
	Factory Management	Comply with the QC Operation Manual.		Equal
	Management Method	Comply with the QC Operation Manual, and SPC control shall be applied.		Equal
	Conveying	Cart	Cart / Robot cart	Changes
Material	Wafer	150mm Si wafer	200mm Si wafer	Changes
	Materials/Gases	Re-PAD AlSi	Re-PAD AlCu	Changes
Method	Manufacturing conditions	Comply with the QC Operation Manual.		Equal
	Out of Control Limits Lot Treatment	Comply with the quality abnormality measures rule.		Equal
	Inspection	Comply with the inspection standard.		Equal

Wafer transport and wafer size and Al materials differ, but it has been confirmed that this is not an issue.

7. 0.6μm Bipolar line　Verification Results（1/2）

7-1） Basic Characteristics: Process Capability of Main Element Characteristics

Process capability of primary device characteristics of 0.6um Bipolar lines at ROHM Wako and ROHM Hamamatsu are compared.

Samples are from 10 mass production lots. All items show Cpk>1.67, ensuring excellent process capability.

Item	ROHM Wako (Before relocation)		ROHM Hamamatsu (After relocation)		Target
	Cp	Cpk	Cp	Cpk	
NPN Tr hFE	2.73	2.03	5.54	5.39	Cpk>1.67
LPNP Tr hFE	4.99	3.32	4.24	3.28	
Sub-PNP Tr hFE	3.38	2.30	2.58	2.30	
CONT CR	1.84	1.72	2.53	2.46	

7. 0.6μm Bipolar line　Verification Results（2/2）

7-2) Basic Characteristics : Chip Yield

ROHM Wako (Before relocation)	ROHM Hamamatsu (After relocation)
1.015	1.055

(arb.unit)

*Number of good chips after wafer inspection / Number of standard good chips

There are no apparent differences between the two factories, and chip yield is equivalent.

N=6Lot

7-3) Basic Characteristics ： Wafer-Level Reliability Test Results

Test Items	Test Symbol	Evaluation criteria	Results Judgment
Time Dependent Dielectric Breakdown	TDDB	Have a lifespan of more than 15 years	Pass

Since each test item meets the pass/fail criteria, there is no problem.

Changes to the Packaging Process

8. Changing Points on back-end process （1/2） 0.6μm BiCDMOS Line

To ensure a stable supply to our customers in the future, we will standardize materials. So, there are changing point on some package material.

Part number	Internal part number	Package type	Changing points	Pattern
BD6222FP-E2	BD6222FP-BZE2 / BD6222FP-BZRE2	HSOP25	**There are no changing points on back-end process.**	-
BD6290EFV-E2	BD6290EFV-BZE2	HTSSOP-B24		
BD6290EFV-TE2	BD6290EFV-BZTE2	HTSSOP-B24		
BD6967FVM-TR	BD6967FVM-BZTR	MSOP10		
BD69730FV-GE2	BD69730FV-GE2	SSOP-B16		
BD6973FV-E2	BD6973FV-BZE2	SSOP-B16		
BD6222FP-E2	BD6222FP-E2	HSOP25	**Wire Material**	A
BD6290EFV-E2	BD6290EFV-E2	HTSSOP-B24		
BD6290EFV-TE2	BD6290EFV-TE2	HTSSOP-B24		
BD63843EFV-E2		HTSSOP-B28		
BD63847EFV-E2		HTSSOP-B28		
BD6967FVM-TR	BD6967FVM-TR	MSOP10		
BD6961F-E2	BD6961F-E2	SOP8		
BD6971FS-E2		SSOP-A16		
BD6971FS-GE2		SSOP-A16		
BD6971FV-E2	BD6971FV-E2	SSOP-B14		
BD6973FV-E2	BD6973FV-E2	SSOP-B16		
BD6973FV-GE2	BD6973FV-GE2	SSOP-B16		
BD6974FV-E2		SSOP-B16		
BD6220F-E2	BD6220F-BZE2	SOP8	**Lead Frame** **Mold Material**	B
BD6221F-E2	BD6221F-BZE2 / BD6221F-BZME2	SOP8		
BD6961F-E2	BD6961F-BZE2	SOP8		
BD6220F-E2	BD6220F-E2	SOP8	**Lead Frame** **Wire Material** **Mold Material**	C
BD6221F-E2	BD6221F-E2	SOP8		
BD69730FV-GE2	BD69730FV-GZE2	SSOP-B16K	**Lead Frame** **Die attach** **Mold Material** **Dimensions**	H

Note: For products with an internal part number, the details of the changes may differ depending on the internal part number, even if the part number is the same.

8. Changing Points on back-end process （1/2） 0.6μm Bipolar Line

To ensure a stable supply to our customers in the future, we will standardize materials. So, there are changing point on some package material.

Part number	Internal part number	Package type	Changing points	Pattern
LM2903EZFVM-CTR		MSOP8	**There are no changing points on back-end process.**	-
LM2904EZFVM-CTR		MSOP8		
LM2901F-E2		SOP14		
LM2902F-E2		SOP14		
LM2903EYFJ-CE2	LM2903EYFJ-BZCE2	SOP-J8		
LM2903EZFJ-CE2		SOP-J8		
LM2904EYFJ-CE2	LM2904EYFJ-BZCE2	SOP-J8		
LM2904EZFJ-CE2		SOP-J8		
LM8391EZG-CTR		SSOP5		
LM2901EZFV-CE2		SSOP-B14		
LM2901FV-E2		SSOP-B14		
LM2902EZFV-CE2		SSOP-B14		
LM2902FV-E2		SSOP-B14		
LM2903EYFJ-CE2	LM2903EYFJ-CE2	SOP-J8	**Wire Material**	D
LM2904EYFJ-CE2	LM2904EYFJ-CE2	SOP-J8		
LM2901EYFV-CE2		SSOP-B14		
LM2902EYFV-CE2		SSOP-B14		
LM2903FVM-TR		MSOP8	**Die attach**	E
LM2904FVM-GTR		MSOP8		
LM8391G-LBTR		SSOP5		
LM2903EYFVM-CTR		MSOP8	**Die attach** **Wire Material**	F
LM2904EYFVM-CTR		MSOP8		
LM8391EYG-CTR		SSOP5		
LM2903FJ-E2		SOP-J8	**Lead Frame** **Die attach** **Mold Material**	G
LM2904FJ-E2		SOP-J8		
LM2903FVT-E2		TSSOP-B8		
LM2904FVT-E2		TSSOP-B8		

Note: For products with an internal part number, the details of the changes may differ depending on the internal part number, even if the part number is the same.

9. Comparison of 4M on back-end (1/2)

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

A B C D E F G

ROHM SEMICONDUCTOR

Products before relocation and products after relocation will be produced with the equivalent Machine and Method.

			Before relocation		After relocation	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. **Production conditions have been adjusted due to material change.**
		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	-

9. Comparison of 4M on back-end (2/2)

This page provides information about products in patterns H.

H

ROHM SEMICONDUCTOR

Products before relocation and products after relocation will be produced different site, but with the equivalent Machine and Method.

			Before relocation	After relocation	Changing point
Package Name			Refer to Parts List	Refer to Parts List	No change
Factory	Assembly	Production Site	**Greatek Electronics Inc.**	**ROHM Electronics Philippines, Inc.**	**Assembly Site has been changed.**
		Country	**Taiwan**	**Philippines**	
		personnel	**Approximately 2,000 people**	**Approximately 4,000 people**	
		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.	Same as the left	No change
		Country	Philippines	Same as the left	
Man	Assembly		**Greatek Qualified operators**	**ROHM Qualified operators**	**Operator on assembly site has been changed.**
	Test		ROHM 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, 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. **Production conditions have been adjusted due to material change.**
		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	-

10. Comparison of 4M (Package Material) (1/8)

This page provides information about products in patterns A.

A

The only difference between Products before relocation and products after relocation is the wire material.
We have verified this change and confirmed there are no impact on quality.

		Before relocation	After relocation	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**	**Cu**	**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

10. Comparison of 4M (Package Material) (2/8)

This page provides information about products in patterns B.

B

For Products before relocation and products after relocation, lead frame and molding compound will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before relocation	After relocation	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		Cu	Cu	No change
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

10. Comparison of 4M (Package Material) (3/8)

This page provides information about products in patterns C.

C

For Products before relocation and products after relocation, lead frame, wire material and molding compound will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before relocation	After relocation	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**	**Cu**	**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

10. Comparison of 4M (Package Material) (4/8)

This page provides information about products in patterns D.

D

ROHM SEMICONDUCTOR

The only difference between Products before relocation and products after relocation is the wire material.
We have verified this change and confirmed there are no impact on quality.

		Before relocation	After relocation	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

10. Comparison of 4M (Package Material) (5/8)

This page provides information about products in patterns E.

E

The only difference between Products before relocation and products after relocation is the die attach material.
We have verified this change and confirmed there are no impact on quality.

		Before relocation	After relocation	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 (A)**	**Ag paste (B)**	**Ag paste has been changed**
Wire material		Cu	Cu	No change
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

10. Comparison of 4M (Package Material) (6/8)

This page provides information about products in patterns F.

F

For Products before relocation and products after relocation, die attach material and wire material will be changed. We have verified these changes and confirmed that they have no impact on quality.

		Before relocation	After relocation	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（A）**	**Ag paste（B）**	**Ag paste has been changed**
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

10. Comparison of 4M (Package Material) (7/8)

This page provides information about products in patterns G.

G

For Products before relocation and products after relocation, 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 relocation	After relocation	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 LM2903FJ-E, LM2904FJ-E2 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		Cu	Cu	No change
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

10. Comparison of 4M (Package Material) (8/8)

This page provides information about products in patterns H.

H

For Products before relocation and products after relocation, 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 relocation	After relocation	Changing point
Lead Frame	Frame size	**Greatek Standard design**	**ROHM Standard design**	**Lead frame has been changed**
	Inner design	**Greatek Standard design**	**ROHM Standard design**	
	Base Material	**Cu alloy (A)**	**Cu alloy (B)**	
	Surface plating	Ag plating	Same as the left	
Die attach		**Ag paste (A)**	**Ag paste (B)**	**Ag paste has been changed**
Wire material		Cu	Cu	No change
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

11. Comparison of products (1/2)

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

A B C D E F G

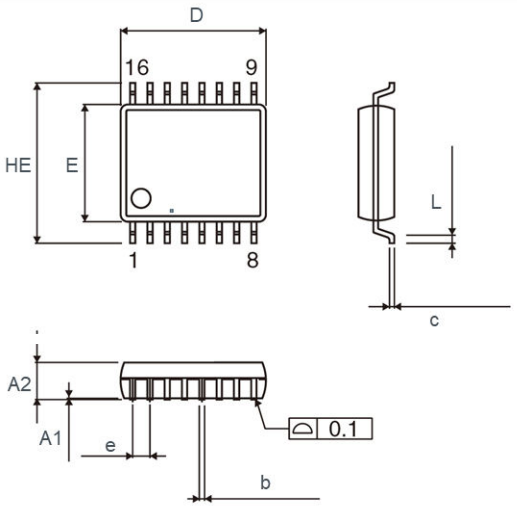
There are no changes to external dimensions or product characteristics between Products before relocation and products after relocation.

Item	Comparison of Products before relocation and products after relocation
External dimensions	No change
Internal structures	No change
Reference land pattern	No change
Product characteristics	There are no changes to the characteristic specified listed in the datasheet.

11. Comparison of products (2/2)

This page provides information about products in patterns H.

There are changes in external dimensions between Products before relocation and products after relocation.
However, There are no changes in reference land pattern.

Item	Comparison of Products before relocation and products after relocation
External dimensions	

		Before relocation	After relocation
HE	Total Width	6.4±0.3	6.4±0.3
E	PKG Body Width	4.4±0.2	4.4±0.2
D	Total Length	5.0±0.2 (5.35max include Burr)	5.0±0.2 (5.35max include Burr)
A1	Stand off Height	0.1	0.1
A2	**Body Height**	**1.00 +0.05/-0.20**	**1.15±0.1**
L	Flat Length of Lead	0.3min	0.3min
b	Lead Width	0.22±0.1	0.22±0.1
c	Lead Thickness	0.15±0.1	0.15±0.1
e	Lead Pitch	0.65	0.65
	Coplanarity	0.1	0.1

Only body height has been changed

Internal structures	No change
Reference land pattern	No change
Product characteristics	There are no changes to the characteristic specified listed in the datasheet.

Electronics for the Future

ROHM Co.,Ltd.

Public (External) PN
BD6220F-E2
BD6220F-E2
BD6221F-E2
BD6221F-E2
BD6221F-E2
BD6222FP-E2
BD6222FP-E2
BD6222FP-E2
BD6290EFV-E2
BD6290EFV-TE2
BD6290EFV-E2
BD6290EFV-TE2
BD63843EFV-E2
BD63847EFV-E2
BD6961F-E2
BD6961F-E2
BD6961F-E2
BD6961F-E2
BD6967FVM-TR
BD6967FVM-TR
BD6971FS-E2
BD6971FS-GE2
BD6971FV-E2
BD6971FV-E2
BD69730FV-GE2
BD69730FV-GE2
BD6973FV-E2
BD6973FV-GE2
BD6973FV-E2
BD6973FV-GE2
BD6974FV-E2
BD6974FV-GE2
LM2901EYFV-CE2
LM2901EZFV-CE2
LM2901F-E2
LM2901FV-E2
LM2902EYFV-CE2
LM2902EZFV-CE2
LM2902F-E2
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LM2904EZFJ-CE2
LM2904EZFVM-CTR
LM2904FJ-E2
LM2904FVM-GTR
LM2904FVT-E2
LM8391EYG-CTR
LM8391EZG-CTR
LM8391G-LBTR