To Customers

CST-R2-T672 Rev.1.1
January 8th, 2016

Renesas Electronics Corporation
General Purpose Analog and Power Solution Department 3
General Purpose Analog and Power Business Division
2nd Solution Business Unit

Transfer of Back-End Line for 4Mb Low Power SRAM TSOP products

Renesas announces the transfer of back-end line (assembly and final test site) for 4Mb Low Power SRAM TSOP products (RMLV0408EGSA-4S2, RMLV0408EGSB-4S2, RMLV0416EGSB-4S2, RMLV0414EGSB-4S2), in order to continue our long-term stable supply through dynamic, changing market conditions.
We greatly appreciate your kind understanding and early approval for this change.

1. Overview

(1) Transfer of back-end line from “Renesas Semiconductor Beijing (*)” to “Amkor Technology Malaysia (assembly site)” and “Powertech Technology Inc. (Final test site)”.
(*) Only for RMLV0408EGSA-4S2, assembly site is “Amkor Technology Taiwan”.

		RMLV0408EGSA-4S2	RMLV0408EGSB-4S2	RMLV0416EGSB-4S2 RMLV0414EGSB-4S2
Assembly site	Current	Amkor Technlogy Taiwan	Renesas Semiconductor Beijing	
	New	Amkor Technlogy Malaysia		
Final test site	Current	Renesas Semiconductor Beijing		
	New	Powertech Technology Inc.		

(2) Regarding this transfer,

(a) There is no change in the front-end line (wafer process site).

(b) There is no change in electrical characteristics (DC/AC).

(c) Package’s materials, dimensions and pin configurations are equivalent.

(d) Product’s reliability and quality level are equivalent.

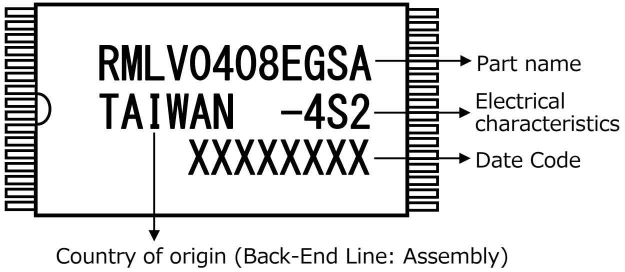
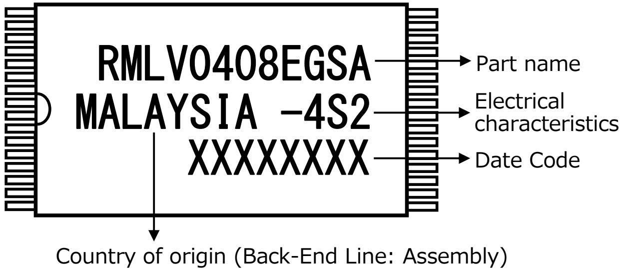
(e) There are several changes in the packing specification.

For more information, please refer to the pages 2-5.

2. Schedule

	RMLV0408EGSA-4S2	RMLV0408EGSB-4S2	RMLV0416EGSB-4S2 RMLV0414EGSB-4S2
Commercial samples	March, 2016	May, 2016	February, 2016
Mass production (New products)	June, 2016	June, 2016	March, 2016
End of production (Current products)	September, 2016	December, 2016	December, 2016

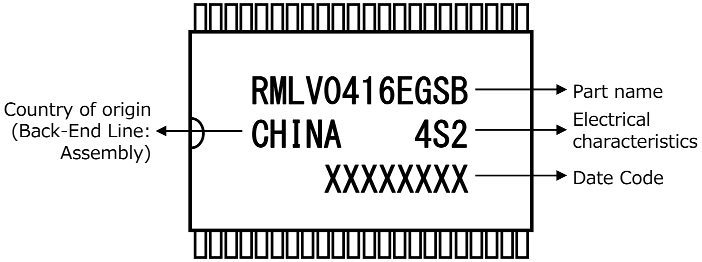
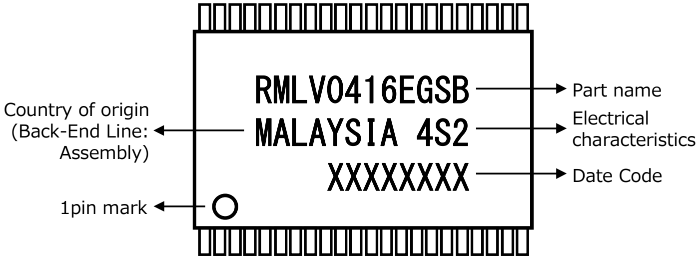
3-1. Comparison table (32pin sTSOP (I) package, Part name: RMLV0408EGSA-4S2)

Item		Current	After	Remarks
Orderable part number		RMLV0408EGSA-4S2#AA0 (Tray packing) RMLV0408EGSA-4S2#KA0 (Tape & Reel packing)	RMLV0408EGSA-4S2#AA1 (Tray packing) RMLV0408EGSA-4S2#KA1 (Tape & Reel packing)	
Assembly Line		Amkor Technology Taiwan (Taiwan)	Amkor Technology Malaysia (Malaysia)	
Country of origin display		TAIWAN	MALAYSIA	
JEITA Package Code		P-TSOP(1)32-8x11.8-0.50	P-TSOP(1)32-8x11.8-0.50	compatible mounting
Package Marking Specification				
Material	Lead frame material	Cu	Cu	material is equivalent
	Lead frame pattern	Current specification	No change in specification	
	Lead plating	Pure Tin	Pure Tin	material is equivalent
	Die bonding	Epoxy paste	Epoxy paste	material is equivalent
	Wire bonding	Au	Au	material is equivalent
	Mold	Epoxy resin	Epoxy resin	material is equivalent
Final test Line		Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
Tray packing	Packing Specification	Current specification	New specification	
	Tray	JEDEC Tray with Renesas Logo (TSOP I package size: 8mm x 11.8mm)	JEDEC Tray without Renesas Logo (TSOP I package size: 8mm x 11.8mm)	material is equivalent
	Storage number	234pcs/tray	234pcs/tray	
	Number of trays(Max.)	8 trays + 1 tray(cover)	10 trays + 1 tray(cover)	
	Inner box size (LxWxH)	330mm x 152mm x 75mm	351mm x 175mm x 104mm	
Tape & Reel packing	Packing Specification	Current specification	New specification	
	Embossed tape	Current specification	New specification	No change in dimension
	Storage number	1,000pcs/reel	1,000pcs/reel	
	Inner box size (LxWxH)	288mm x 273mm x 48mm	289mm x 264mm x 60mm	
Shipping label		Current specification	No change in specification	Changes in orderable part name and country of origin

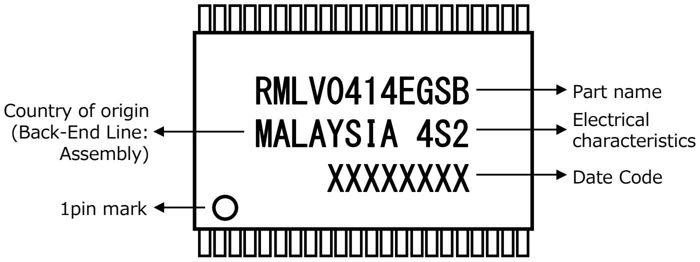
3-2. Comparison table (32pin TSOP (II) package, Part name: RMLV0408EGSB-4S2)

Item		Current	After	Remarks
Orderable part number		RMLV0408EGSB-4S2#AA0 (Tray packing) RMLV0408EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0408EGSB-4S2#AA1 (Tran packing) RMLV0408EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly Line		Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country of origin display		CHINA	MALAYSIA	
JEITA Package Code		P-TSOP(2)32-10.16x20.95-1.27	P-TSOP(2)32-10.16x20.95-1.27	compatible mounting
Package Marking Specification				
Material	Lead frame material	Cu	Cu	material is equivalent
	Lead frame pattern	Current specification	New specification(change in pattern)	
	Lead plating	Pure Tin	Pure Tin	material is equivalent
	Die bonding	Epoxy paste	Epoxy paste	material is equivalent
	Wire bonding	Au	Au	material is equivalent
	Mold	Epoxy resin	Epoxy resin	material is equivalent
Final test Line		Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
Tray packing	Packing Specification	Current specification	New specification	
	Tray	JEDEC Tray with Renesas Logo (TSOP II package size: 10.16mm x 20.95mm)	JEDEC Tray without Renesas Logo (TSOP II package size: 10.16mm x 20.95mm)	material is equivalent
	Storage number	117pcs/tray	117pcs/tray	
	Number of trays(Max.)	8 trays + 1 tray(cover)	10 trays + 1 tray(cover)	
	Inner box size (LxWxH)	330mm x 152mm x 75mm	351mm x 175mm x 104mm	
Tape & Reel packing	Packing Specification	Current specification	New specification	
	Embossed tape	Current specification	New specification	No change in dimension
	Storage number	1,000pcs/reel	1,000pcs/reel	
	Inner box size (LxWxH)	288mm x 273mm x 48mm	289mm x 264mm x 60mm	
Shipping label		Current specification	No change in specification	Changes in orderable part name and country of origin

3-3. Comparison table (44pin TSOP (II) package, Part name: RMLV0416EGSB-4S2)

Item		Current	After	Remarks
Orderable part number		RMLV0416EGSB-4S2#AA0 (Tray packing) RMLV0416EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0416EGSB-4S2#AA1 (Tray packing) RMLV0416EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly Line		Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country of origin display		CHINA	MALAYSIA	
JEITA Package Code		P-TSOP(2)44-10.16x18.41-0.80	P-TSOP(2)44-10.16x18.41-0.80	compatible mounting
Package Marking Specification				
Material	Lead frame material	Cu	Cu	material is equivalent
	Lead frame pattern	Current specification	New specification(change in pattern)	
	Lead plating	Pure Tin	Pure Tin	material is equivalent
	Die bonding	Epoxy paste	Epoxy paste	material is equivalent
	Wire bonding	Au	Au	material is equivalent
	Mold	Epoxy resin	Epoxy resin	material is equivalent
Final test Line		Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
Tray packing	Packing Specification	Current specification	New specification	
	Tray	JEDEC Tray with Renesas Logo (TSOP II package size: 10.16mm x 18.41mm)	JEDEC Tray without Renesas Logo (TSOP II package size: 10.16mm x 18.41mm)	material is equivalent
	Storage number	135pcs/tray	135pcs/tray	
	Number of trays(Max.)	8 trays + 1 tray(cover)	10 trays + 1 tray(cover)	
	Inner box size (LxWxH)	330mm x 152mm x 75mm	351mm x 175mm x 104mm	
Tape & Reel packing	Packing Specification	Current specification	New specification	
	Embossed tape	Current specification	New specification	No change in dimension
	Storage number	1,000pcs/reel	1,000pcs/reel	
	Inner box size (LxWxH)	288mm x 273mm x 48mm	289mm x 264mm x 60mm	
Shipping label		Current specification	No change in specification	Changes in orderable part name and country of origin

3-4. Comparison table (44pin TSOP (II) package, Part name: RMLV0414EGSB-4S2, Chip-select terminal: 1-pin type)

Item		Current	After	Remarks
Orderable part number		RMLV0414EGSB-4S2#AA0 (Tray packing) RMLV0414EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0414EGSB-4S2#AA1 (Tray packing) RMLV0414EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly Line		Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country of origin display		CHINA	MALAYSIA	
JEITA Package Code		P-TSOP(2)44-10.16x18.41-0.80	P-TSOP(2)44-10.16x18.41-0.80	compatible mounting
Package Marking Specification				
Material	Lead frame material	Cu	Cu	material is equivalent
	Lead frame pattern	Current specification	New specification(change in pattern)	
	Lead plating	Pure Tin	Pure Tin	material is equivalent
	Die bonding	Epoxy paste	Epoxy paste	material is equivalent
	Wire bonding	Au	Au	material is equivalent
	Mold	Epoxy resin	Epoxy resin	material is equivalent
Final test Line		Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
Tray packing	Packing Specification	Current specification	New specification	
	Tray	JEDEC Tray with Renesas Logo (TSOP II package size: 10.16mm x 18.41mm)	JEDEC Tray without Renesas Logo (TSOP II package size: 10.16mm x 18.41mm)	material is equivalent
	Storage number	135pcs/tray	135pcs/tray	
	Number of trays(Max.)	8 trays + 1 tray(cover)	10 trays + 1 tray(cover)	
	Inner box size (LxWxH)	330mm x 152mm x 75mm	351mm x 175mm x 104mm	
Tape & Reel packing	Packing Specification	Current specification	New specification	
	Embossed tape	Current specification	New specification	No change in dimension
	Storage number	1,000pcs/reel	1,000pcs/reel	
	Inner box size (LxWxH)	288mm x 273mm x 48mm	289mm x 264mm x 60mm	
Shipping label		Current specification	No change in specification	Changes in orderable part name and country of origin

3-5. Packing specification

(1) Change the specification of the JEDEC tray

- The package seat position in tray pocket is to be changed (see below).
- No change in outline dimensions and pocket pitch for JEDEC tray.

	Package type	Pre Change		Post Change	
		Tray type name	PKG seat position (mm)	Tray type name	PKG seat position (mm)
JEDEC tray	32pin-sTSOP	L196-10	2.0	EA50813	1.85
	32pin-TSOP(II)	L196-93	2.0	EA80817	2.0
	44pin-TSOP(II)	L196-92	2.0	EA80815	2.0

Cross section of tray pocket

(2) Change the specification of the Tape & Reel

- The package seat position in taping pocket is to be changed (see below).
- No change in width and pitch of embossed carrier tape.
- No change in reel diameter.

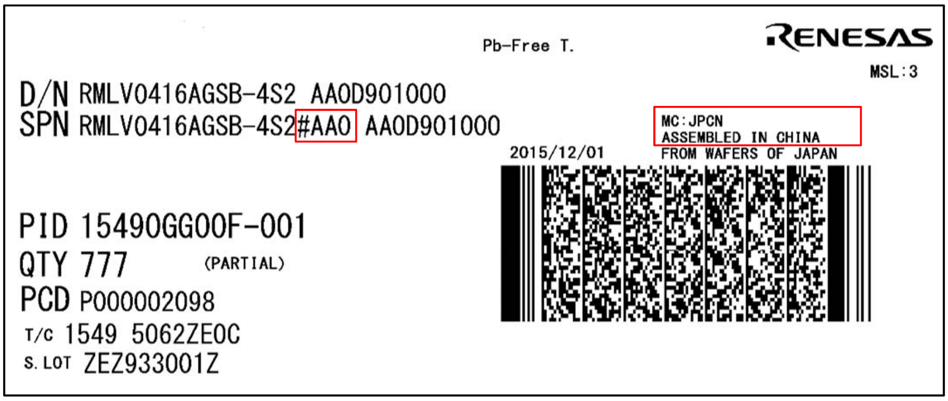
	Package type	Pre Change		Post Change	
		Emboss type name	PKG seat position (mm)	Emboss type name	PKG seat position (mm)
Embossed carrier tape	32pin-sTSOP	MTE2412H-28P2C-A	1.3	TSOP28	1.4
	32pin-TSOP(II)	MTE3216H-50P3W	1.2	TSOP32-6	1.3
	44pin-TSOP(II)	MTE3216H-28P3Y	1.2	TSOP44-3	1.3

Cross section of taping pocket

4. Method of Identification

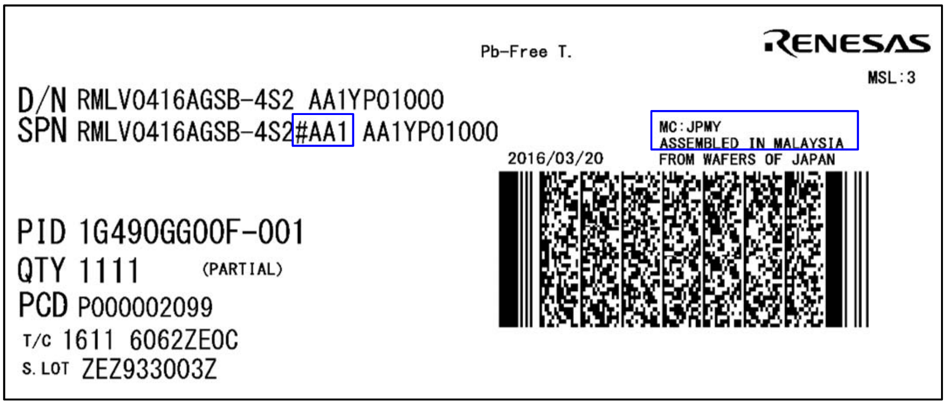
Current/new product can be identified by the country of origin in the package marking. You can also identify them by the ordering part name and the country of origin in the shipping label as described below.

Current Product



Pb-Free T.
RENESAS
MSL:3
D/N RMLV0416AGSB-4S2 AA0D901000
SPN RMLV0416AGSB-4S2#AA0 AA0D901000
MC:JPCN
ASSEMBLED IN CHINA
FROM WAFERS OF JAPAN
2015/12/01
PID 15490GG00F-001
QTY 777 (PARTIAL)
PCD P000002098
T/C 1549 5062ZE0C
S.LOT ZEZ933001Z

New Product



Pb-Free T.
RENESAS
MSL:3
D/N RMLV0416AGSB-4S2 AA1YP01000
SPN RMLV0416AGSB-4S2#AA1 AA1YP01000
MC:JPMY
ASSEMBLED IN MALAYSIA
FROM WAFERS OF JAPAN
2016/03/20
PID 1G490GG00F-001
QTY 1111 (PARTIAL)
PCD P000002099
T/C 1611 6062ZE0C
S.LOT ZEZ933003Z

5.Site information

<Assembly Site>

■Company Name	Amkor Technology Malaysia Sdn,Bhd. (Malaysia)
■Company Address	15km, Jalan Klang-Banting, 42507 Telok Panglima Garang, Kuala Langat, Selangor,Malaysia

<Final Test Site>

■Company Name	Powertech Technology Inc. (Taiwan)
■Company Address	No.10, Datong Rd., Hsinchu Industrial Park, Hukou, Hsinchu 30352, Taiwan

For additional information regarding this change, contact your local sales representative or Renesas Electronics Corporation distributors.

Sincerely Yours.