### Product Change Notification (Notification - P1602009-DIGI) (CST-R2-T672)

March 15, 2016

#### To: Our Valued Digi-Key, Inc. Customer

**Overview:** The purpose of this notification is to communicate a product change for select Renesas Electronics America, Inc. (REA) devices. These devices have replacement part numbers.

This notification announces the change assembly and final test sites for certain 4Mb Low Power SRAM TSOP products. The table below describes the site changes.

	Current Site	New Site
Assembly Site	Renesas Semiconductor Beijing	Amkor Technology Malaysia
Final Test Site	Renesas Semiconductor Beijing	Powertech Technology Inc.

There are **no changes** to the wafer fabrication site, electrical characteristics (DC/AC), package materials, package dimensions, pin configurations, or product reliability & quality.

There are some changes to the packing specification. See the Appendix for details.

Affected Products: A review of our shipment records to your company indicate the attached list of products is affected by this notification.

Booking Part Number	Replacement Part Number	Replacement Part Number	
RMLV0408EGSB-4S2#AA <mark>0</mark>	RMLV0408EGSB-4S2#AA <mark>1</mark>		
RMLV0408EGSB-4S2#HA <mark>0</mark>	RMLV0408EGSB-4S2#HA <mark>1</mark>		
RMLV0414EGSB-4S2#AA <mark>0</mark>	RMLV0414EGSB-4S2#AA <mark>1</mark>		
RMLV0414EGSB-4S2#HA <mark>0</mark>	RMLV0414EGSB-4S2#HA <mark>1</mark>		
RMLV0416EGSB-4S2#AA <mark>0</mark>	RMLV0416EGSB-4S2#AA <mark>1</mark>		
RMLV0416EGSB-4S2#HA <mark>0</mark>	RMLV0416EGSB-4S2#HA <mark>1</mark>		

Part numbers given in this list are for active part numbers in REA database at the time of this notification.

Key Dates:	Mass production shipments of the replacement part	Jun. 15 <sup>th</sup> , 2016
	number begin from REA.	Juli. 13, 2010

**Response:** No response is required. REA will consider this notification approved 30 days after its issue. If you anticipate volumes beyond your regular rate prior to the transition date, please contact your REA sales representative with a forecast of your requirements.

You are encouraged to sample the replacement device and begin qualification as soon as possible. Please contact you REA sales representative to obtain samples.

Please contact your REA sales representative for any questions or comments.

Thank you for your attention.

Sincerely,

Renesas Electronics America, Inc.



# Appendix A: RMLV0408EGSB-4S2 Comparison Table (32pin TSOP (II) package)

Item		Current	After	Remarks
Orderable part number		RMLV0408EGSB-4S2#AA0 (Tray packing)	RMLV0408EGSB-4S2#AA1 (Tran packing)	
Jruerable	part number	RMLV0408EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0408EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly	Line	Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country o	f origin display	CHINA	MALAYSIA	
IEITA Pac	kage Code	P-TSOP(2)32-10.16x20.95-1.27	P-TSOP(2)32-10.16x20.95-1.27	compatible mounting
Package N	farking Specification	Country of origin (Back-End Line: Assembly) Country of origin (Back-End Line: Assembly) CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA COUNTRY OF ORIGINAL CHINA CHINA CHINA COUNTRY OF ORIGINAL CHINA CHINA COUNTRY OF ORIGINAL CHINA CHINA CHINA COUNTRY OF ORIGINAL CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA CHINA COUNTRY OF ORIGIN CHINA	Country of origin (Back-End Line: Assembly) Country of origin (Back-End Line: Assembly) MALAYSIA 4S2 XXXXXXX Date Code	
	Lead frame material	Cu	Cu	material is equivalent
	Lead frame pattern	Current specification	New specification(change in pattern)	
Material	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
inal test	Line	Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
	Packing Specification	Current specification	New specification	
ray	Tray	JEDEC Tray (TSOP II package size: 10.16mm x 20.95mm)	JEDEC Tray (TSOP II package size: 10.16mm x 20.95mm)	material is equivalent
acking	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	
ape &	Packing Specification	Current specification	New specification	
Reel	Embossed tape	Current specification	New specification	No change in dimension
backing	Storage number	1,000pcs/reel	1,000pcs/reel	
	Inner box size (LxWxH)	288mm x 273mm x 48mm	340mm x 360mm x 60mm	
Shipping I	abel	Current specification	No change in specification	Changes in orderable part name and country of origin

#### Appendix B: RMLV0416EGSB-4S2 Comparison Table (44pin TSOP (II) package)

Item		Current After		Remarks
Orderable part number		RMLV0416EGSB-4S2#AA0 (Tray packing)	RMLV0416EGSB-4S2#AA1 (Tray packing)	
		RMLV0416EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0416EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly	Line	Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country o	f origin display	CHINA	MALAYSIA	
EITA Pac	kage Code	P-TSOP(2)44-10.16x18.41-0.80	P-TSOP(2)44-10.16x18.41-0.80	compatible mounting
Package N	1arking Specification	Country of origin (Back-End Line: Assembly) Country of origin (Back-End Line: Assembly) CHINA	Country of origin (Back-End Line: Assembly) 1pin mark	
	Lead frame material	Cu	Cu	material is equivalent
Material	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
inal test	Line	Renesas Semiconductor Beijing (China) Powertech Technology Inc. (Taiwan)		
	Packing Specification	Current specification	New specification	
ray	Tray	JEDEC Tray (TSOP II package size: 10.16mm x 18.41mm)	JEDEC Tray (TSOP II package size: 10.16mm x 18.41mm)	material is equivalent
acking	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	
ape &	Packing Specification	Current specification	New specification	
packing	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	340mm x 360mm x 60mm	
Shipping I	abel	Current specification	No change in specification	Changes in orderable part name and country of origin



# Appendix C: RMLV0414EGSB-4S2, Chip-select terminal: 1-pin type Comparison Table (44pin TSOP (II) package)

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Item		Current	After	Remarks
Orderable part number		RMLV0414EGSB-4S2#AA0 (Tray packing)	RMLV0414EGSB-4S2#AA1 (Tray packing)	
Jiderable	part number	RMLV0414EGSB-4S2#HA0 (Tape & Reel packing)	RMLV0414EGSB-4S2#HA1 (Tape & Reel packing)	
Assembly Line		Renesas Semiconductor Beijing (China)	Amkor Technology Malaysia (Malaysia)	
Country o	f origin display	CHINA	MALAYSIA	
EITA Pac	kage Code	P-TSOP(2)44-10.16x18.41-0.80	P-TSOP(2)44-10.16x18.41-0.80	compatible mounting
Package N	Marking Specification	Country of origin (Back-End Line: Assembly) CHINA 4S2 CHINA 4S2	Country of origin (Back-End Line: Assembly) 1pin mark	
	Lead frame material	Cu	Cu	material is equivalent
Material	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
inal test	Line	Renesas Semiconductor Beijing (China)	Powertech Technology Inc. (Taiwan)	
	Packing Specification	Current specification	New specification	
ray	Tray	JEDEC Tray (TSOP II package size: 10.16mm x 18.41mm)	JEDEC Tray (TSOP II package size: 10.16mm x 18.41mm)	material is equivalent
acking	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	
ape &	Packing Specification	Current specification	New specification	
eel	Embossed tape	Current specification	New specification	No change in dimensio
acking	Storage number	1,000pcs/reel	1,000pcs/reel	
_	Inner box size (LxWxH)	288mm x 273mm x 48mm	340mm x 360mm x 60mm	
Shipping I	abel	Current specification	No change in specification	Changes in orderable part name and country of origin