

# **Product Change Notification**

(Notification - P1808048h-DIGI) (CST-R2-AJ129/130 / DCY001)

August 20, 2018

To: Our Valued Digi-Key Electronics Customer

#### Overview:

The purpose of this notification is to communicate a product change of select Renesas Electronics America, Inc. (REA) devices.

This notification announces the change in assembly site and materials for select SRAM products. There is a part number change. There is no change to electrical specifications or product reliability.

One or more of following items will change (please see the Appendix for specific details).

- 1. Assembly site from Renesas Semiconductor (Beijing, China) to Greatek Electronics Inc. (Taiwan)
- 2. Base Metal of Lead Frame from 42Alloy to Cu
- 3. Lead Plating from Sn-Cu to Cu
- 4. Die thickness
- 5. Magazine (Tube) specification, or Tape and Reel specification
- 6. Moisture Sensitivity Level from MSL2 to MSL3
- 7. Inner lead pattern
- 8. Molding compound to halogen free
- 9. Die bonding from epoxy film to epoxy paste

Affected Products: A review of our records indicates the products listed in Appendix 1 may affect your company.

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

### **Key Dates:**

Final last time buy (LTB) orders placed to REA or to a franchised REA distributor.	Dec. 15 <sup>th</sup> , 2019
Planned date for last time shipment (LTS) from REA.	Jun. 15 <sup>th</sup> , 2020
Replacement parts sample availability	Aug. 2019
Replacement parts mass production	Nov. 2019

#### Response:

Please place last time buy (LTB) orders in a timely manner prior to the key dates listed to avoid product availability issues. If you anticipate volumes beyond your regular rate, please contact your REA sales representative with a forecast of your requirements. Shipments between the LTB and LTS dates are Non-Cancelable and Non-Returnable (NCNR).

Please work with your REA sales representative and/or FAE to transition to the replacement devices.

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

Thank you for your attention.

Sincerely,

Renesas Electronics America, Inc.



Appendix 1: Affected Part Numbers and Replacements for Digi-Key

Booking Part Number	Replacement PN
DOOKING Fart Number	Replacement 11
R1LP0108ESN-5SI#B0	R1LP0108ESN-5SI#B1
R1LP0108ESN-5SI#S0	R1LP0108ESN-5SI#S1
R1LP0408DSP-5SI#B0	R1LP0408DSP-5SI#B1
R1LP0408DSP-5SI#S0	R1LP0408DSP-5SI#S1
R1LP5256ESP-5SI#B0	R1LP5256ESP-5SI#B1
R1LP5256ESP-5SI#S0	R1LP5256ESP-5SI#S1
R1LV0108ESN-5SI#B0	R1LV0108ESN-5SI#B1
R1LV0108ESN-5SI#S0	R1LV0108ESN-5SI#S1
R1LV5256ESP-5SI#B0	R1LV5256ESP-5SI#B1
R1LV5256ESP-5SI#S0	R1LV5256ESP-5SI#S1
RMLV0408EGSP-4S2#CA0	RMLV0408EGSP-4S2#CA1
RMLV0408EGSP-4S2#HA0	RMLV0408EGSP-4S2#HA1



Appendix 2: Change Details [28pin-SOP 256Kb(5V) Part name: R1LP5256ESP-5SI]

Item	Pre change (EOL product)		Post change (Successor product)	
Ouderable next nexts		R1LP5256ESP-5SI#B0 (Magazine packing)	R1LP5256ESP-5SI#B1 (Magazine packing)	
Orderable part name		R1LP5256ESP-5SI#S0 (Tape & Reel packing)	R1LP5256ESP-5SI#S1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pac	kage Code	P-SOP28-8.4x17.5-1.27	<b>←</b>	
Package n specificatio		R1LP5256ESP Part name -5S1 Electrical characteristics	<b>←</b>	
	Lead frame material	42Alloy	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
	Lead plating	Sn-Cu	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-included)	Epoxy resin (Halogen-free)	
Die thickn	ess	Current thickness	Changed	
Final test line		Powertech Technology Inc. (Taiwan)	←	
	Magazine	Magagine code : MP024PC	New specification	
Magazine	Storage number	30pcs/magazine	←	
packing	Number of magazines (Max.)	40 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tane &	Embossed tape	Emboss type name : MTE2416H-28P2W-C	←	
Tape & Reel packing	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	347mm x 368mm x 54mm	←	
	oisture-proof erformance MSL 2 MSL 3			
Shipping label		Current specification	No change in format (Changes in orderable part name, country of origin and MSL display)	



Appendix 3: Change Details [28pin-SOP 256Kb(3V) Part name: R1LV5256ESP-5SI]

Item		Pre change (EOL product)	Post change (Successor product)	
Orderable part name		R1LV5256ESP-5SI#B0 (Magazine packing)	R1LV5256ESP-5SI#B1 (Magazine packing)	
		R1LV5256ESP-5SI#S0 (Tape & Reel packing)	R1LV5256ESP-5SI#S1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pac	kage Code	P-SOP28-8.4x17.5-1.27	<b>←</b>	
Package n specification	-	R1LV5256ESP Part name  -5SI Electrical characteristics	<b>←</b>	
	Lead frame material	42Alloy	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
i ideei idi	Lead plating	Sn-Cu	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-included)	Epoxy resin (Halogen-free)	
Die thickn	ess	Current thickness	Changed	
Final test I	inal test line Powertech Technology Inc. (Taiwan)		←	
	Magazine	Magagine code : MP024PC	New specification	
Magazine	Storage number	30pcs/magazine	←	
packing	Number of magazines (Max.)	40 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tape & Reel packing	Embossed tape	Emboss type name : MTE2416H-28P2W-C	←	
	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	347mm x 368mm x 54mm	←	
Moisture-p performar		MSL 2	MSL 3	
Shipping I	Shipping label		No change in format (Changes in orderable part name, country of origin and MSL display)	



Appendix 4: Change Details [32pin-SOP 1Mb(5V) Part name: R1LP0108ESN-5SI]

Item		Pre change (EOL product)	Post change (Successor product)	
Orderable nart name		R1LP0108ESN-5SI#B0 (Magazine packing)	R1LP0108ESN-5SI#B1 (Magazine packing)	
Orderable part name		R1LP0108ESN-5SI#S0 (Tape & Reel packing)	R1LP0108ESN-5SI#S1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pack	kage Code	P-SOP32-11.4x20.75-1.27	←	
Package m		TO Date code  R1LP0108ESN Part name  -5SI Electrical characteristics	←	
	Lead frame material	Cu	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
	Lead plating	Sn (pure tin)	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-free)	Epoxy resin (Halogen-free)	
Die thickne	ess	Current thickness	Changed	
Final test I	ine	Powertech Technology Inc. (Taiwan)	←	
	Magazine	Magagine code : MP525PC	New specification	
Magazine	Storage number	25pcs/magazine	←	
packing	Number of magazines (Max.)	36 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tane &	Embossed tape	Emboss type name: MTE3216H-32P2M-A	New specification	
Tape & Reel packing	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	362mm x 340mm x 60mm	←	
Moisture-p performan		MSL 3	<b>←</b>	
		No change in format (Changes in orderable part name, country of origin display)		



Appendix 5: Change Details [32pin-SOP 1Mb(3V) Part name: R1LV0108ESN-5SI]

Item		Pre change (EOL product)	Post change (Successor product)	
0		R1LV0108ESN-5SI#B0 (Magazine packing)	R1LV0108ESN-5SI#B1 (Magazine packing)	
Orderable part name		R1LV0108ESN-5SI#S0 (Tape & Reel packing)	R1LV0108ESN-5SI#S1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pac	kage Code	P-SOP32-11.4x20.75-1.27	←	
Package n specificatio		TOTAL DATE CODE  **NOTION TO THE CODE  **NOT	<b>←</b>	
	Lead frame material	Cu	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
	Lead plating	Sn (pure tin)	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-free)	Epoxy resin (Halogen-free)	
Die thickn	ess	Current thickness	Changed	
Final test I	ll test line Powertech Technology Inc. (Taiwan) ←		←	
	Magazine	Magagine code : MP525PC	New specification	
Magazine	Storage number	25pcs/magazine	←	
packing	Number of magazines (Max.)	36 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tano %	Embossed tape	Emboss type name : MTE3216H-32P2M-A	New specification	
Tape & Reel packing	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	362mm x 340mm x 60mm	←	
Moisture-p performar		MSL 3	<b>←</b>	
ISDIDDING TABEL		No change in format (Changes in orderable part name, country of origin display)		



Appendix 6: Change Details [32pin-SOP 4Mb(5V) Part name: R1LP0408DSP-5SI]

Item		Pre change (EOL product)	Post change (Successor product)	
Oud-weble week week		R1LP0408DSP-5SI#B0 (Magazine packing)	R1LP0408DSP-5SI#B1 (Magazine packing)	
Orderable part name		R1LP0408DSP-5SI#S0 (Tape & Reel packing)	R1LP0408DSP-5SI#S1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pacl	kage Code	P-SOP32-11.4x20.75-1.27	<b>←</b>	
Package n specificatio		TOTAL DATE CODE  **NOTICE**  *	<b>←</b>	
	Lead frame material	Cu	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
	Lead plating	Sn (pure tin)	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-free)	Epoxy resin (Halogen-free)	
Die thickn	ess	Current thickness	Changed	
Final test line Powertech Technology Inc. (Taiwan)		←		
	Magazine	Magagine code : MP525PC	New specification	
Magazine	Storage number	25pcs/magazine	←	
packing	Number of magazines (Max.)	36 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tano 9	Embossed tape	Emboss type name : MTE3216H-32P2M-A	New specification	
Tape & Reel packing	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	362mm x 340mm x 60mm	←	
Moisture-p performar		MSL 3	←	
IShinning label   Current specification		No change in format (Changes in orderable part name, country of origin display)		



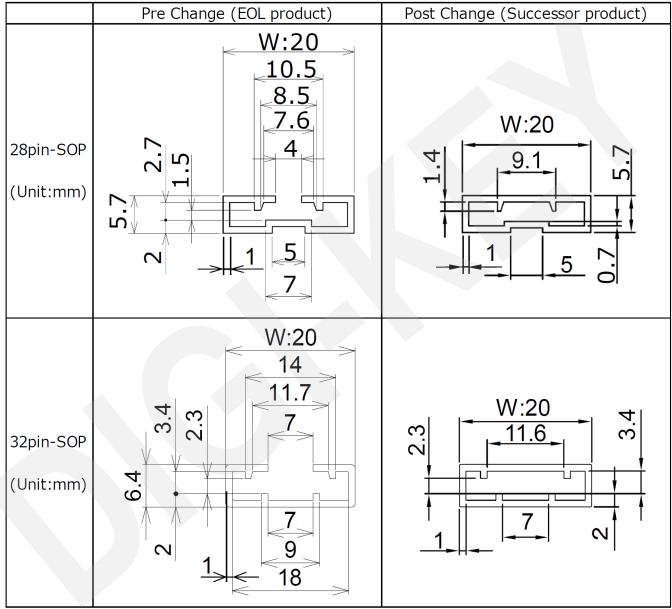
Appendix 7: Change Details [32pin-SOP 4Mb(3V) Part name: RMLV0408EGSP-4S2]

Item		Pre change (EOL product)	Post change (Successor product)	
0	RMLV0408EGSP-4S2#CA0 (Magazine packing)		RMLV0408EGSP-4S2#CA1 (Magazine packing)	
Orderable part name		RMLV0408EGSP-4S2#HA0 (Tape & Reel packing)	RMLV0408EGSP-4S2#HA1 (Tape & Reel packing)	
Assembly line		Renesas Semiconductor Beijing (China)	Greatek Electronics Inc. (Taiwan)	
JEITA Pac	kage Code	P-SOP32-11.4x20.75-1.27	<b>←</b>	
Package n specificatio		RMLV0408EGSP — Part name Electrical characteristics	<b>←</b>	
	Lead frame material	Cu	Cu	
	Inner lead pattern	Current pattern	Changed	
Assembly Material	Outer lead pattern	Current pattern	Unchanged	
	Lead plating	Sn (pure tin)	Sn (pure tin)	
	Die bonding	Epoxy paste	Epoxy paste	
	Wire bonding	Au	Au	
	Mold	Epoxy resin (Halogen-free)	Epoxy resin (Halogen-free)	
Die thickn	ess	Current thickness	Changed	
Final test line		Powertech Technology Inc. (Taiwan)	←	
	Magazine	Magagine code : MP525PC	New specification	
Magazine	Storage number	25pcs/magazine	←	
packing	Number of magazines (Max.)	36 magazines	←	
	Inner box size (LxWxH)	595mm x 170mm x 72mm	←	
Tape & Reel packing	Embossed tape	Emboss type name : MTE3216H-32P2M-A	New specification	
	Storage number	1,000pcs/reel	←	
	Inner box size (LxWxH)	362mm x 340mm x 60mm	←	
Moisture-լ performar		MSL 3	←	
		Current specification	No change in format (Changes in orderable part name, country of origin display)	



# Appendix 8: Magazine (Tube) Specification Change

- a. The cross-sectional shape of magazine is to be changed (see below).
- b. No change in the length of magazine (L=550mm).





## Appendix 9: Tape & Reel Specification Change (32pin-SOP)

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

Package		nange Post Change roduct) (Successor produ	
type	Emboss type name	PKG seat position (mm)	PKG seat position (mm)
32pin-SOP	MTE3216H-32P2M-A	3.0	3.0



Cross section of taping pocket