

Product Change Notification

(Notification - P1607035-AVT)

(PC-WRP-A001A/E)

July 29, 2016

To: *Our Valued Avnet, Inc. Customer*

Overview: The purpose of this notification is to communicate product change of select Renesas Electronics America, Inc. (REA) devices. There is no change to the part number, electrical characteristics, or product reliability.

This notification announces a standardization of JEDEC trays and carrier tape specifications. The following is a list of the changes (see the appendices for the specific change and additional details)...

1. Change in the specification for the carrier tape.
2. Unification of the model of the JEDEC tray.
3. Unification of the storing order of iC in the JEDEC tray.
4. Unification of numbers of strapping band for JEDEC trays.

Affected Products: The accompanying letter, provided by Avnet, Inc., lists the products which 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:

Shipments from REA of products using the new specification begins. Cross shipments between the original and new specification may continue for a period of time.
--

March 15th, 2017

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.

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

Thank you for your attention.

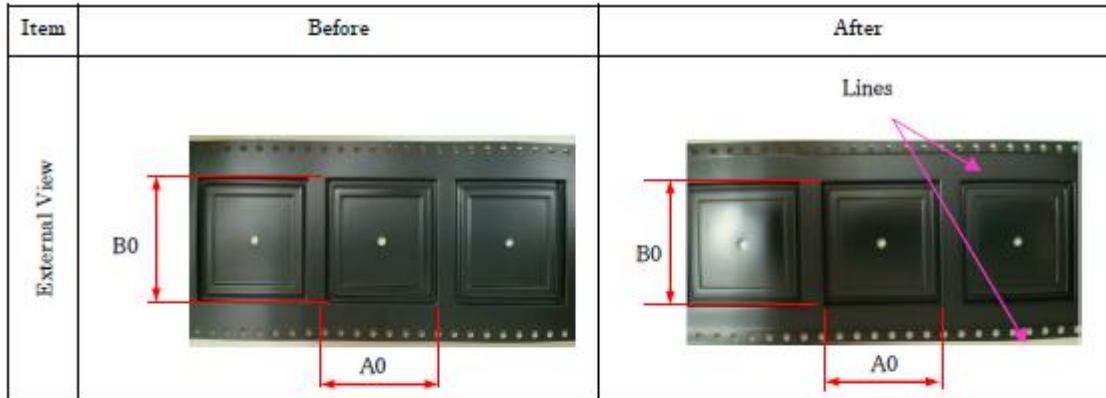
Sincerely,

Renesas Electronics America, Inc.

Appendix 1:

1. Change the specification of the carrier tape.

The pocket dimension of designated products shall be changed as such: however, there is no change to a stored quantity, a tape width, and a pocket pitch.

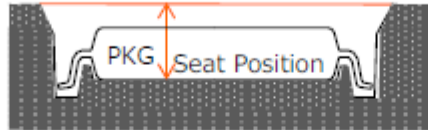


Applied Package	Applied Products	Before			After		
		Old tape model	A0/B0 (mm)	PKG Seat position (mm)	New tape model	A0/B0 (mm)	PKG Seat position (mm)
LQFP 7x7	APPENDIX 1-A	E16x12-B1CA	9.95	0	E1612Q07RA	9.50	0
		E16x12-DFCA	9.95	0			
		TE1612-34P	9.5/10.8	0			
		TE1612-32P6U	9.95	0			
		MTE1612H-QFP(FP)-7X7	10.36	0.25			
LQFP 10x10	APPENDIX 1-B	E24x16-B2CA	13.45	0	E2416Q10RA	12.50	0
		MTE2416H-64P6Q-A	13.00				
LQFP 12x12	APPENDIX 1-C	E24*20-B3CA	15.45	0	E2420Q12RA	14.50	0
		MTE2420H-80P6Q-A	15.00				
LQFP 14x14	APPENDIX 1-D	E24*24-AKCA	16.50	0	E2424Q14RA	16.50	0
		E24*24-DGCA	16.50				
LQFP 16x16	APPENDIX 1-E	TE3224-17P	19.45	0	E3224Q16RA	18.50	0
LQFP 20x20	APPENDIX 1-F	E44*32-B5CA	23.45	0	E4432Q20RA	22.50	0
		MTE4432H-144P6Q-A	23.3				
LQFP 24x24	APPENDIX 1-G	E44*32-AZCA	27.45	0	E4432Q24RA	26.50	0
		TE4432-6P	27.45				

Appendix 2:

2. Unification of the JEDEC Tray for LQFP Package.

The products shipped by an old model tray shall be changed to a new model tray. A JEDEC specified size (External size, Pocket Pitch, etc.) shall not be changed by this unification, but the seat position may be differed between old and new. The products has already shipped by the new model shall not be changed the tray model. There are a plural pocket shapes (Shape of the pocket hole) at the new tray.





Tray Pocket cross section

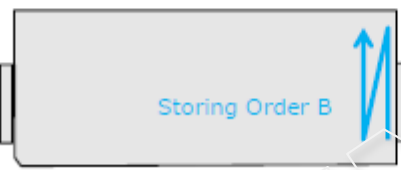
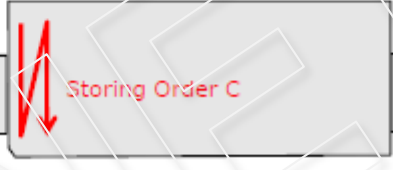
Applied Package	Applied Products	Before		After	
		Old Tray Model	PKG Seat position(mm)	New Tray Model	PKG seat position(mm)
LQFP 7x7	APPENDIX 2-A	L196-56	2.0	LQFP7x7x1.4	2.0
LQFP 10x10	APPENDIX 2-B	L196-49	2.0	LQFP10x10x1.4	1.5
LQFP 12x12	APPENDIX 2-C	JNB-121214	1.5	LQFP12x12x1.4	2.0
LQFP 14x14	APPENDIX 2-D	L196-05	1.5	TQFP14x14x1.4	2.0
LQFP 16x16	APPENDIX 2-E	PTB83C	1.8	LQFP16x16x1.4	1.8
LQFP 20x20	APPENDIX 2-F	L196-65A	2.0	LQFP20x20x1.4	1.6
LQFP 24x24	APPENDIX 2-G	L196-06A	1.5	LQFP24x24x1.4	1.5

Appendix 3:

3. Unification of the storing order of IC in the JEDEC Tray

The package storing order to JEDEC tray shall be unified to one direction (Storing Order C) from a plural direction.

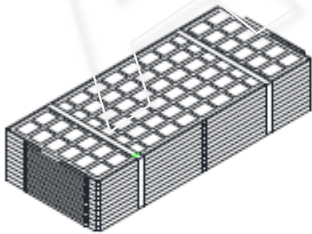

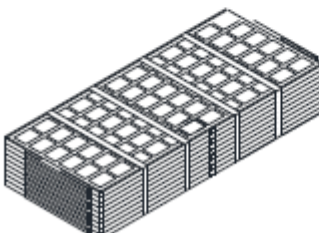
Item	Before	After
Storing Order A in the tray		
Applicable products	APPENDIX 3-A	

Item	Before	After
Storing Order B in the tray		
Applicable products	APPENDIX 3-B	

Appendix 4:

4. Unification of the strapping band for JEDEC Tray

The numbers of strapping band used to tight the JEDEC Tray shall be unified to three bands.

Item	Before	After
Two Strapping Bands		 ※Several color of bands are available.
Four Strapping Bands		
Applicable Products	APPENDIX 4	