

## Product Change Notice (PCN)

**Subject:** Transfer Assembly Location from OSET, Taiwan to Greatek, Taiwan on Select Packages

**Publication Date:** 2/27/2020

**Effective Date:** 5/27/2020

**Revision Description:**

Revision 1 is to add supplement information where select package outline dimensions for products assembled at Greatek, Taiwan will not meet JEDEC standard.

**Description of Change:**

OSET is discontinuing the SOJ28, 32, 36, 44 assembly manufacturing process and the affected products will transfer to Greatek, Taiwan (GEI).

The material sets of the current and new assembly locations are as shown in the below table. The package outline drawing for SOJ28 assembled at Greatek, Taiwan will not meet JEDEC on select dimensions. Refer Appendix C.

However, the footprint will remain unchanged as compared to the existing package assembled at OSET.

There will also be no change in the bonding wire type.

Package	Material Sets	Existing Assembly OSET Taiwan	New Assembly Greatek Taiwan
SOJ28,32	Die Attach	EN4900G	EN4900GC
	Bonding Wire	Gold wire	Gold wire
	Mold Compound	CEL-9240HF	G600F
SOJ36,44	Die Attach	EN4900G	EN4900GC
	Bonding Wire	Gold wire	Gold wire
	Mold Compound	CEL-9240HF	G700SLA

**Affected Product List:** Refer Appendix B

**Reason for Change:**

The current Assembly location, OSET is discontinuing the manufacturing process of the said packages.

**Impact on Fit, Form, Function, Quality & Reliability:**

The change will have no impact on the form, fit, function, quality, reliability and environmental compliance of the products.

**Product Identification:**

Assembly lot# with prefix “GR” denotes lot assembled in Greatek, Taiwan.

**Qualification Status:** Completed. Refer Appendix A  
**Sample Availability Date:** 4/21/2020  
**Device Material Declaration:** Available upon request

Note:

1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

**For additional information regarding this notice, please contact [idt-pcn@lm.renesas.com](mailto:idt-pcn@lm.renesas.com)**

**Appendix A - Qualification Results**

**Affected Packages:** SOJ28, 32

**Qual Vehicle:** SOJ32

**Assembly Material:** As shown in page 1

**Qual Plan & Results:** Tests are in accordance with JEDEC47 recommended tests.

Test Descriptions	Test Method	Test Results (Rej/SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Ball Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	MIL-STD-883 (Method 2011)	0/5	0/5	0/5
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 3, 260 °C	0/25	0/25	0/25

*\*Tests were subjected to Preconditioning per JESD22-A113 prior to stress test*

**Affected Packages:** SOJ36, 44

**Qual Vehicle:** SOJ44

**Assembly Material:** As shown in page 1

**Qual Plan & Results:** Tests are in accordance with JEDEC47 recommended tests.

Test Descriptions	Test Method	Test Results (Rej/SS)		
		Lot 1	Lot 2	Lot 3
* Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0/25	0/25	0/25
* HAST - biased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0/25	0/25	0/25
High Temperature Storage Bake (150°C, 1000 Hrs)	JESD22-A103	0/25	0/25	0/25
Ball Shear Test	JESD22-B116	0/5	0/5	0/5
Bond Pull Test	MIL-STD-883 (Method 2011)	0/5	0/5	0/5
Moisture Sensitivity Level, MSL	J-STD-20 / MSL 3, 260 °C	0/25	0/25	0/25

*\*Tests were subjected to Preconditioning per JESD22-A113 prior to stress test*

**Appendix B – Affected Product List**

71016S12YG	71256SA15YG	71V016SA20YG8	71V416S10YG
71016S12YG8	71256SA15YG8	71V016SA20YGI	71V416S10YG8
71016S15YG	71256SA15YGI	71V016SA20YGI8	71V416S10YGI
71016S15YG8	71256SA15YGI8	71V124SA10TYG	71V416S10YGI8
71016S15YGI	71256SA20YG	71V124SA10TYG8	71V416S12YG
71016S15YGI8	71256SA20YG8	71V124SA12TYG	71V416S12YG8
71016S20YG	71256SA20YGI	71V124SA12TYG8	71V416S12YGI
71016S20YG8	71256SA20YGI8	71V124SA12TYGI	71V416S12YGI8
71016S20YGI	71256SA25YG	71V124SA12TYGI8	71V416S15YG
71016S20YGI8	71256SA25YG8	71V124SA15TYG	71V416S15YG8
71024S12TYG	7164L20YG	71V124SA15TYG8	71V416S15YGI
71024S12TYG8	7164L20YG8	71V124SA15TYGI	71V416S15YGI8
71024S12TYGI	7164L20YGI	71V124SA15TYGI8	71V424L10YG
71024S12TYGI8	7164L20YGI8	71V256S10YG	71V424L10YG8
71024S15TYG	7164L25YG	71V256S10YG8	71V424L10YGI
71024S15TYG5	7164L25YG8	71V256S12YG	71V424L10YGI8
71024S15TYG8	7164L25YGI	71V256S12YG8	71V424L12YG
71024S15TYGI	7164L25YGI8	71V256SA12YG	71V424L12YG8
71024S15TYGI8	7164S20YG	71V256SA12YG8	71V424L12YGI
71024S20TYG	7164S20YG8	71V256SA12YGI	71V424L12YGI8
71024S20TYG8	7164S20YGI	71V256SA12YGI8	71V424L15YG
71024S20TYGI	7164S20YGI8	71V256SA15YG	71V424L15YG8
71024S20TYGI8	7164S25YG	71V256SA15YG8	71V424L15YGI
71256L20YG	7164S25YG8	71V256SA15YGI	71V424L15YGI8
71256L20YG8	7164S25YGI	71V256SA15YGI8	71V424S10YG
71256L20YGI	7164S25YGI8	71V416L10YG	71V424S10YG8
71256L20YGI8	71V016SA10YG	71V416L10YG8	71V424S10YGI
71256L25YG	71V016SA10YG8	71V416L10YGI	71V424S10YGI8
71256L25YG8	71V016SA12YG	71V416L10YGI8	71V424S12YG
71256L25YGI	71V016SA12YG8	71V416L12YG	71V424S12YG8
71256L25YGI8	71V016SA12YGI	71V416L12YG8	71V424S12YGI
71256L35YG	71V016SA12YGI8	71V416L12YGI	71V424S12YGI8
71256L35YG8	71V016SA15YG	71V416L12YGI8	71V424S15YG
71256L35YGI	71V016SA15YG8	71V416L15YG	71V424S15YG8
71256L35YGI8	71V016SA15YGI	71V416L15YG8	71V424S15YGI
71256SA12YG	71V016SA15YGI8	71V416L15YGI	71V424S15YGI8
71256SA12YG8	71V016SA20YG	71V416L15YGI8	

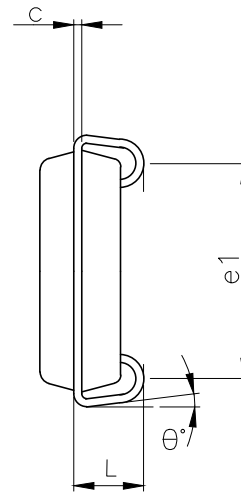
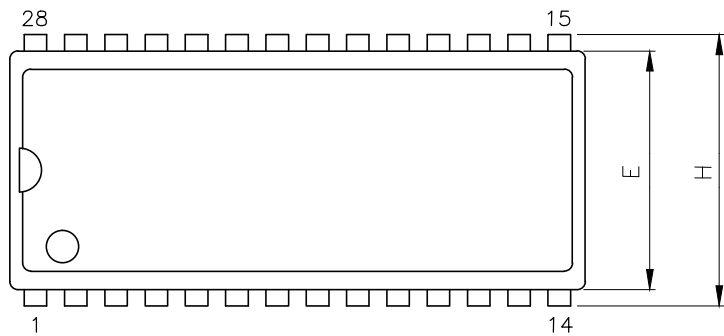
**Appendix C – Package Outline Drawing Comparizon, SOJ28**

POD Comparison Table, SOJ28

Symbols	JEDEC			exIDT POD			Greatek POD			Remark
	MO-088			MO-088			NA			
	MIN	NOR.	MAX	MIN	NOR.	MAX	MIN	NOR.	MAX	
A	0.120	-	0.140	0.120	0.130	0.140	0.120	-	0.140	Greatek meet JEDEC/exIDT
A1	-	-	-	0.078	0.086	0.095	0.820	-	-	Greatek not meet exIDT
A2	0.025	-	-	0.025	-	-	0.025	-	-	Greatek meet JEDEC/exIDT
b	0.014	-	0.020	0.014	-	0.020	0.016	0.018	0.022	Greatek not meet JEDEC/exIDT
c	0.008	-	0.013	0.008	-	0.013	0.008	0.010	0.014	Greatek not meet JEDEC/exIDT
D	0.697	-	0.712	0.700	0.706	0.712	-	0.710	0.730	Greatek not meet JEDEC/exIDT
H	0.335	-	0.347	0.335	0.340	0.347	0.327	0.337	0.347	Greatek not meet JEDEC/exIDT
E	0.292	-	0.300	0.292	0.296	0.300	0.295	0.300	0.305	Greatek not meet JEDEC/exIDT
e1	0.262	-	0.272	0.262	0.267	0.272	0.245	0.265	0.285	Greatek not meet JEDEC/exIDT
e	-	0.050	-	-	0.050	-	0.044	0.050	0.056	Greatek meet JEDEC/exIDT

Note: 1. unit in inch

2. OSET package comply with exIDT POD

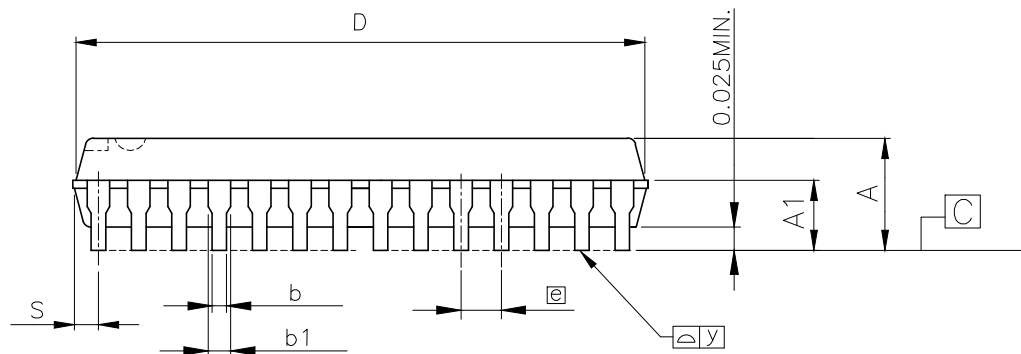


SYMBOLS	MIN.	NOM.	MAX.
A	0.120	—	0.140
A1	0.082	—	—
b1	0.026	0.028	0.032
b	0.016	0.018	0.022
c	0.008	0.010	0.014
D	—	0.710	0.730
E	0.295	0.300	0.305
Ⓞ	0.044	0.050	0.056
e1	0.245	0.265	0.285
H	0.327	0.337	0.347
L	0.077	0.087	0.097
S	—	—	0.045
y	—	—	0.004
θ°	0°	—	10°

UNIT : INCH

NOTES :

- 1.TO BE DETERMINED AT SEATING PLANE [C] .
- 2.DIMENSIONS D1 AND E1 DO NOT INCLUDE MOLD PROTRUSION. MOLD PROTRUSION SHALL NOT EXCEED .152mm.(.006 IN.) PER SIDE.
- 3.DIMENSIONS D1 AND E1 INCLUDE MOLD MISMATCH AND ARE DETERMINED AT THE MOLD PARTING LINE.



超豐電子股份有限公司  
GREATEK ELECTRONICS INC.

		比例 SCALE:	材質 MTRL:	製程 FINISH:	數量 QTY:
繪圖: DWN: 施佩杏	日期: DATE: 2/26/20	圖名: TITLE: PLASTIC SMALL OUTLINE J-LEAD DATA SHEET 28 LEADS 0.300" BODY WIDTH (FOR IDT)			
審核: CHK:	日期: DATE:	圖號: DWG# RT-20200226-02			
核准: APPL:	日期: DATE:	圖檔: FILE: RT-20200226-02	版別: DATE: A	張數: DATE: 1	數量: QTY: 1