



PCN Number:	20210511000.1A	PCN Date:	May 27, 2021												
Title:	Qualification of Amkor Korea K4 as an Additional Assembly Location for Select Devices														
Customer Contact:	PCN Manager	Dept:	Quality Services												
Proposed 1st Ship Date:	Aug 13, 2021	Estimated Sample Availability:	Date provided upon request												
Change Type:															
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design												
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change												
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site												
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process												
		<input type="checkbox"/>	Wafer Bump Site												
		<input type="checkbox"/>	Wafer Bump Material												
		<input type="checkbox"/>	Wafer Bump Process												
		<input type="checkbox"/>	Wafer Fab Site												
		<input type="checkbox"/>	Wafer Fab Materials												
		<input type="checkbox"/>	Wafer Fab Process												
PCN Details															
Description of Change:															
<p>Revision A is to announce the <u>addition</u> of new devices that were not included on the original PCN notification. These new devices are highlighted and bolded in the Product affected section below. The expected first shipment date for these new devices will be 90 days from this notice (Aug 27, 2021) for these newly added devices only. The proposed 1st ship date of Aug 13, 2021 still applies for the original set of devices.</p> <p>Texas Instruments is pleased to announce the qualification of Amkor Korea K4 as an additional Assembly location for the devices listed below. Device construction materials differences are noted in the table below:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">Shinko</th> <th style="text-align: center;">Amkor K4</th> </tr> </thead> <tbody> <tr> <td>Stud Bump material</td> <td style="text-align: center;">Au Bump</td> <td style="text-align: center;">Cu Pillar Bump</td> </tr> <tr> <td>Underfill</td> <td style="text-align: center;">U8437-48</td> <td style="text-align: center;">101388679</td> </tr> <tr> <td>Mold compound</td> <td style="text-align: center;">CV8710</td> <td style="text-align: center;">101355509</td> </tr> </tbody> </table>					Shinko	Amkor K4	Stud Bump material	Au Bump	Cu Pillar Bump	Underfill	U8437-48	101388679	Mold compound	CV8710	101355509
	Shinko	Amkor K4													
Stud Bump material	Au Bump	Cu Pillar Bump													
Underfill	U8437-48	101388679													
Mold compound	CV8710	101355509													
Reason for Change:															
Continuity of Supply															
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):															
None															
Anticipated impact on Material Declaration															
<input type="checkbox"/>	No Impact to the Material Declaration	<input checked="" type="checkbox"/>	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained at the site link below http://www.ti.com/quality/docs/materialcontentsearch.tsp												
Changes to product identification resulting from this PCN:															
<i>Assembly Site</i>															
Shinko	Assembly Site Origin (22L)	ASO: SHJ													
Amkor Korea K4	Assembly Site Origin (22L)	ASO: AK4													
Sample product shipping label (not actual product label)															

 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q: MSL 2 / 260C/1 YEAR SEAL DT MSL 1 / 235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750		(1P) SN74LS07NSR (Q) 2000 (D) 0336 (31T) LOT: 3959047MLA (4W) TKY (1T) 7523483SI2 (P) (2P) REV: (V) 0033317 (20L) CS0: SHE (21L) CCO:USA (22L) AS0: MLA (23L) ACO: MYS
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Product Affected

3530ECUSAGRM	OMAP3515ECBB	OMAP3525ECUS	OMAP3530ECBBLPD
OMAP3503ECBB	OMAP3515ECBBA	OMAP3525ECUSA	OMAP3530ECUS
OMAP3503ECBBA	OMAP3515ECUS	OMAP3530ECBB	OMAP3530ECUS72
OMAP3503ECBBALPD	OMAP3515ECUS72	OMAP3530ECBB72	OMAP3530ECUSA
OMAP3503ECUS	OMAP3515ECUSA	OMAP3530ECBBA	
OMAP3503ECUS72	OMAP3525ECBB	OMAP3530ECBBALPD	
OMAP3503ECUSA	OMAP3525ECBBA	OMAP3530ECBBAR	

Qualification Report

Approve Date 20-May-2021

Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: DM3730CBC	Qual Device: DM3730CBP	Qual Device: DM3730CUS	Qual Device: OMAP35xxCUS	Qual Device: OMAP35xxCBB	Qual Device: WL1285QAAP
PC	Preconditioning	MSL3 / 260C	3/900/0	1/100/0	1/100/0	-	1/100/0	3/780/0
PC	Preconditioning	MSL4/260C				1/100/0		
SAM	CSAM/TSAM study after Preconditioning	Delamination inspection	3/30/0	1/20/0	1/20/0	1/20/0	1/20/0	3/36/0
THB	Biased Temperature and Humidity 85C/85%RH	1000 hours	3/75/0					
UHA	Unbiased HAST 110C/85%RH	264 hours	3/75/0					3/231/0
TC	Temperature Cycle, -55/125C	700cyc	3/75/0					3/231/0
HTSL	High Temp Storage Bake 150C	1000hrs	3/75/0					3/231/0
MQ	Manufacturability qualification	TI internal procedure	Pass	Pass	Pass	Pass	Pass	Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

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