

<b>PCN Number:</b>	20171220000B		<b>PCN Date:</b>	Feb. 1 2018	
<b>Title:</b>	Assembly site (AP3) transfer for select Devices				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services		
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Mar 21 2018		<b>Estimated Sample Availability:</b>	Provided upon Request	
<b>Change Type:</b>					
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<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
		<input type="checkbox"/>	Part number change		
<b>PCN Details</b>					
<b>Description of Change:</b>					
<p><b>Revision B</b> 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 <b>bolded</b> in the device list below. The expected first shipment date for these new devices will be 90 days from this notice for these newly added devices only.</p> <p>Texas Instruments is pleased to announce the qualification of subcontractor Amkor P3 as a new Assembly site for the list of devices shown below. There are no material construction differences between the 2 sites.</p>					
<b>Reason for Change:</b>					
Continuity of Supply					
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>					
None					
<b>Anticipated impact on Material Declaration</b>					
<input checked="" type="checkbox"/>	No Impact to the Material Declaration	<input 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 from the <a href="#">TI ECO website</a> .		

<b>Changes to product identification resulting from this PCN:</b>			
<b>Assembly Site</b>	<b>Assembly Site Origin (22L)</b>	<b>Assembly Country Code (21L)</b>	<b>Assembly City</b>
Amkor K4	AMP	KOR	Gwangju
<b>Amkor P3</b>	<b>AP3</b>	<b>PHL</b>	<b>Binan</b>
Sample product shipping label (not actual product label)			



MADE IN: Malaysia  
2DC: 2Q:

MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

OPT:  
ITEM:

LBL: 5A (L)T0:1750



(1P) SN74LS07NSR  
(Q) 2000 (D) 0336  
(31T) LOT: 3959047MLA  
(4W) TKY (1T) 7523483SI2  
(P)  
(2P) REV: (V) 0033317  
(20L) CSO: SHE (21L) CCO:USA  
(22L) ASO: MLA (23L) ACO: MYS

### Product Affected

AFE8406IZDQ	<b>MM9618-UCB/S7001631</b>	TNETV1051EACLZDW	TNETV1052ACLZDW
<b>DAC5670IGDJ</b>	SM320F28335GJZMEP	TNETV1051INZDW	TNETV1053ZDW
GC5018IZDL	TNETV1051DAACLZDW	TNETV1051ZDW	V62/09624-01XE



TI Information  
Selective Disclosure

## Qualification Report

Transfer of assembly of K4 PBGA products

Approve Date 13-Nov-2017

### Product Attributes

Package Attributes	Qual Device: MM9760UFG-SCD/S1	Qual Device: TLK4015IZPV	Qual Device: TMS320C6211BGFN150	Qual Device: TNETV1051EACLZDW	Qual Device: TNETV2021AZDS
Assembly Site	AP3	AP3	AP3	AP3	AP3
Package Family	BGA	BGA	PBGA	PBGA	PBGA
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MFAB	ANAM-1	DP1DM5	DMOS6	DP1DM5
Wafer Process	CMOS7	C10	1833C07	1533C035.1	1533C05.A

- QBS: Qual By Similarity
- Qual Device MM9760UFG-SCD/S1 is qualified at LEVEL4-220C
- Qual Device TLK4015IZPV is qualified at LEVEL3-260C
- Qual Device TMS320C6211BGFN150 is qualified at LEVEL4-220C
- Qual Device TNETV1051EACLZDW is qualified at LEVEL4-260C
- Qual Device TNETV2021AZDS is qualified at LEVEL3-260C
- Device TLK4015IZPV contains multiple dies.

## Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: MM9760UFG- SCD/S1	Qual Device: TLK4015IZPV	Qual Device: TMS320C6211BG FN150	Qual Device: TNETV1051EACLZ DW	Qual Device: TNETV2021AZDS
HTSL	High Temp. Storage Bake, 150C	1000 Hours	3/231/0	3/231/0	-	-	-
MQ	Manufacturability	(per mfg. site specification)	3/Pass	3/Pass	3/Pass	3/Pass	3/Pass
MSL	Moisture Sensitivity	Level 3-260C	-	3/36/0	-	-	3/36/0
MSL	Moisture Sensitivity	Level 4-220C	3/36/0	-	3/36/0	-	-
MSL	Moisture Sensitivity	Level 4-260C	-	-	-	3/36/0	-
PKG	Warpage (Shadow Moiré)	-	Pass	Pass	-	-	Pass
TC	Temperature Cycle, -55/125C	1000 Cycles	3/231/0	3/231/0	3/231/0	-	3/231/0
TC-SAM	Post Temp Cycle SAM	700 Cycles	3/36/0	3/36/0	3/36/0	-	3/36/0
UHAST	Unbiased HAST, 110C/85%RH	264 Hours	3/231/0	3/231/0	-	-	3/231/0
YLD	FTY and Bin Summary	-	3/Pass	3/Pass	3/Pass	3/Pass	3/Pass

- Preconditioning was performed for Unbiased HAST, Temperature Cycle, and HTSL, as applicable.

- The following are equivalent HTSL options based on an activation energy of 0.7eV: 150C/1000 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/>

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>