PCN Number:	20171220000	**PCN Date:**	Dec 21 2017
Title:	Assembly site (AP3) transfer for select Devices		
Customer Contact:	PCN Manager	**Dept:**	Quality Services
Proposed 1st Ship Date:	Mar 21 2018	**Estimated Sample Availability:**	Provided upon Request

Change Type:

☒	Assembly Site	☐	Assembly Process	☐	Assembly Materials
☐	Design	☐	Electrical Specification	☐	Mechanical Specification
☐	Test Site	☐	Packing/Shipping/Labeling	☐	Test Process
☐	Wafer Bump Site	☐	Wafer Bump Material	☐	Wafer Bump Process
☐	Wafer Fab Site	☐	Wafer Fab Materials	☐	Wafer Fab Process
		☐	Part number change		

PCN Details

Description of Change:

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.

Reason for Change:

Continuity of Supply

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

None

Anticipated impact on Material Declaration

☒	No Impact to the Material Declaration	☐	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 TI ECO website.

Changes to product identification resulting from this PCN:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (21L)	Assembly City
Amkor K4	AMP	KOR	Gwangju
Amkor P3	**AP3**	**PHL**	**Binan**

Sample product shipping label (not actual product label)

Product Affected			
AFE8406IZDQ	SM320F28335GJZMEP	TNETV1051INZDW	TNETV1053ZDW
GC5018IZDL	TNETV1051DACLZDW	TNETV1051ZDW	V62/09624-01XE
SM320F28335GBS	TNETV1051EACLZDW	TNETV1052ACLZDW	V62/09624-02XE
SM320F28335GHHAEP			

TI Information
Selective Disclosure

Qualification Report

1) Transfer of assembly of K4 PBGA products using corner gate mold to P3; 2) Change of core material to HL832NXA, 3) Change of substrate supplier to Kinsus for those devices which have used Semco

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: TMS320C6211BGFN150	Qual Device: TNETV1051EACLZDW	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.

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