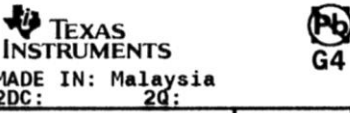


PCN Number:	20120208003A		PCN Date:	Nov 12, 2018	
Title:	Qualification of AMKOR as Additional Assembly Site for 8-DDA Package Devices				
Customer Contact:	PCN Manager		Dept:	Quality Services	
Change Type:					
☒	Assembly Site	☐	Assembly Process	☒	Assembly Materials
☐	Design	☐	Electrical Specification	☐	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
PCN Details					
Description of Change:					
Revision A is to remove select devices in the Product Affected Section (in bold characters with strikethrough) and highlighted in yellow. These devices were inadvertently added and not affected by this change.					
Qualification of AMKOR AP1 (AKR) as Additional Assembly Site to ASE Shanghai (ASH) for 8-DDA package devices. Assembly differences are shown below:					
		ASESH (ASH)	AMKOR AP1 (AKR)		
	LeadFrame	LF1000002	101370895		
	LF Finish	NiPdAuAg	NiPdAu		
	Mount compound	EY1000063	101306338		
	Mold compound	EN2000509	101323396		
Reason for Change:					
Continuity of Supply					
Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):					
None					
Changes to product identification resulting from this PCN:					
Sample Product Shipping Label (not actual product label)					
Assembly Site					
ASE Shanghai		Assembly Site Origin (22L)		ASO: ASH	
Amkor (AP1)		Assembly Site Origin (22L)		ASO: AKR	
Sample product shipping label to show code location only - not actual product label)					
  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) CSO: SHE (21L) CCO:USA (22L) ASO: MLA (23L) ACO: MYS					

Device Marking:

54327
TI YMZ
LLLLS <u>G4</u>
- PIN 1 STRIP

TI = TI LETTERS
 YM = YEAR MONTH DATE CODE
 Z = SECONDARY CODE FOR AP1
 LLLL = ASSEMBLY LOT CODE
S = ASSEMBLY SITE CODE
G4 = JEDEC Pb-Free/Green terminal finish 'G4' preplated (NiPdAu)

Assembly site code for ASE Shanghai = A

Assembly Site Code for Amkor AP1 = 4

Product Affected:

HPA01069DDAR	SN1101003DDAR	TPS54327DDAR	TPS54329DDAR
SN1101002DDA	TPS54227DDA	TPS54328DDA	TPS54329EDDA
SN1101002DDAR	TPS54227DDAR	TPS54328DDAR	TPS54329EDDAR
SN1101003DDA	TPS54327DDA	TPS54329DDA	

Qualification Data Approved 11/10/2011

This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.

Qual Vehicle: TPS54327DDA (MSL2-260C)**Package Construction Details**

Assembly Site:	AMK P1	Mold Compound:	101323396
# Pins-Designator, Family:	8-DDA, HSOP	Mount Compound:	101306338
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire (Mils):	2.0 mil, Cu

Qualification: ☐ Plan ☒ **Test Results**

Reliability Test	Conditions	Sample Size / Fail		
		Lot#1	Lot#2	Lot#3
Electrical Characterization	--	30/0	30/0	30/0
**Biased Temp. Humidity	85C/85%RH (1000 Hrs)	26/0	26/0	26/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**T/C -65C/150C	-65C/+150C (500 Cyc)	77/0	77/0	77/0
Bond Pull	76 Wire, 3 units min	76/0	76/0	76/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	-	-
X-ray	(top side only)	5/0	5/0	5/0
Moisture Sensitivity	(level 2 @ 260C +5/-0C)	12/0	12/0	12/0

Notes: ** Tests require preconditioning sequence: MSL2-260C

Qualification Plan

This qualification has been developed for the validation of this change. The qualification data will validate that the proposed change meets the applicable released technical specifications.

Qual Vehicle #1: TPS54227DDA (MSL2-260C)

Package Construction Details

Assembly Site:	AMK P1	Mold Compound:	101323396
# Pins-Designator, Family:	8-DDA, HSOP	Mount Compound:	101306338
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire (Mils):	2.0 mil, Cu

Qualification Schedule: **Start:** **02/2012** **End:** **03/2012**

Qualification: ☒ **Plan** ☐ **Test Results**

Reliability Test	Conditions	Sample Size / Fail
Manufacturability (Assembly)	(per mfg. Site specification)	Pass
Yield Evaluation	(per mfg. Site specification)	Pass

Notes: ** Tests require preconditioning sequence: MSL2-260C

Qual Vehicle #2: TPS54329DDA (MSL2-260C)

Package Construction Details

Assembly Site:	AMK P1	Mold Compound:	101323396
# Pins-Designator, Family:	8-DDA, HSOP	Mount Compound:	101306338
Leadframe (Finish, Base):	NiPdAu, Cu	Bond Wire (Mils):	2.0 mil, Cu

Qualification Schedule: **Start:** **02/2012** **End:** **03/2012**

Qualification: ☒ **Plan** ☐ **Test Results**

Reliability Test	Conditions	Sample Size / Fail
Manufacturability (Assembly)	(per mfg. Site specification)	Pass
Yield Evaluation	(per mfg. Site specification)	Pass

Notes: ** Tests require preconditioning sequence: MSL2-260C

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	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com