

PCN Number:	20160321000	PCN Date:	3/21/2016
Title:	Qualify TI Philippines (Clark) as an additional Bump Site and TI Philippines (TIPI) as an additional Assembly Site for select devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	6/21/2016	Estimated Sample Availability:	Provided upon Request
Change Type:			
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process
<input type="checkbox"/>	Design	<input type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Electrical Specification
<input checked="" type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Mechanical Specification
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Packing/Shipping/Labeling
<input type="checkbox"/>		<input type="checkbox"/>	Test Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Material
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Bump Process
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process
<input type="checkbox"/>		<input type="checkbox"/>	Part number change
PCN Details			
Description of Change:			
Texas Instruments is pleased to announce the qualification TI Philippines (Clark) as an additional Bump site and (TIPI) as an additional Assembly site for the list of devices shown below. There are no construction differences between devices built at 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			
<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 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
TI Philippines	PHI	PHL	Baguio City
Sample product shipping label (not actual product label)			
Topside Device marking: Assembly site code for AMP= 9 Assembly site code for PHI= W			

Product Affected

66AK2H06BAAW2	66AK2H14BXAAW24	TCI6636K2HBXAAW24T	TCI6638K2KBXAAW24T
66AK2H06BAAW24	66AK2HHP0BXAAW	TCI6636K2HBXAAW2T	TCI6638K2KBXAAW2H
66AK2H06BAAWA2	66AK2HHP0BXAAW2	TCI6636K2HBXAAWA2	TCI6638K2KBXAAW2L
66AK2H06BAAWA24	CI6636K2HBXAAWA24T	TCI6636K2HBXAAWA24	TCI6638K2KBXAAW2T
66AK2H06BXAAW2	CI6638K2KBXAAWA24T	TCI6636K2HBXAAWA2T	TCI6638K2KBXAAWA2
66AK2H12BAAW2	ERI6636K2HBSAAW2L	TCI6636K2HDEV	TCI6638K2KBXAAWA24
66AK2H12BAAW24	TCI6636K2HBAAWA2	TCI6636K2HDEV2	TCI6638K2KBXAAWA2T
66AK2H12BAAWA2	TCI6636K2HBAAWA24	TCI6636K2HPROD	X66AK2H12BXAAW
66AK2H12BAAWA24	TCI6636K2HBAAWA24T	TCI6636K2HPROD2	X66AK2H14BAAWA24E
66AK2H12BXAAW	TCI6636K2HBAAWA2T	TCI6638K2KBAAW2	X66AK2HHP0BXAAW2
66AK2H12BXAAW2	TCI6636K2HBDAAW2	TCI6638K2KBAAWA2	XCI6638K2KBXAAWA24
66AK2H14BAAW2	TCI6636K2HBSAAW2	TCI6638K2KBAAWA2T	XTCI6638K2KBDAAW24
66AK2H14BAAW24	TCI6636K2HBSAAW2L	TCI6638K2KBXAAW2	XTCI6638K2KBXAAW2
66AK2H14BAAWA24	TCI6636K2HBXAAW2	TCI6638K2KBXAAW22H	XTCI6638K2KBXAAW2H
66AK2H14BXAAW	TCI6636K2HBXAAW24	TCI6638K2KBXAAW24	

**Qualification Report for Device Families 66AK2H*AAAW*, TCI6638*AAAW, TCI6636*AAAW
in Clark Bump with TI-Philippines Assembly**

Product Attributes

Attributes	Qual Device: 66AK2H* / TCI66*
Assembly Site	AMKOR-K4 or TIPI
Package Family	FC-BGA
Flammability Rating	UL 94 V-0
Wafer Fab Site	TSMC15
Wafer Fab Process	C28.P

Qualification Results for Qualification Device 66AK2H* / TCI66*

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

Type	Test Name / Condition	Duration	Result	Pass / Fail
UHAST ¹	Unbiased HAST, 130C/85%RH	96 hrs	3 / 231 / 0	Pass
TC ¹	Temp Cycle, -40 / 125C	850 Cycles	3 / 231 / 0	Pass
TC ¹	Temp Cycle, -55 / 125C	700 Cycles	3 / 78 / 0	Pass
THB ¹	Bias. Temp & Humidity, 85C/85%RH @ Vdd	1000 hrs	3 / 75 / 0	Pass
HTSL ¹	Bake 150C	1000 hrs Bake	3 / 231 / 0	Pass
HTOL ²	HTOL, Tj=125C	1000 hrs	3 / 356 / 0	Pass
HBM ²	ESD - HBM	±1000V	1 / 3 / 0	Pass
CDM ²	ESD - CDM	±250V	1 / 3 / 0	Pass
LU ²	Latch-up, High Temp	±100 mA, 1.5 * Vmax @ 105C	1 / 3 / 0	Pass
BLR	0/100C BLR TC, IPC-9701	Cycles to fail / IPC-9701	1 / 42 / 0 thru 3500 cycles	Pass

Notes:

1. Preconditioning to MSL-4 was performed for devices denoted with (1) in the Type column of the table above. Specifically, preconditioning was performed for unbiased HAST, THB, Temperature Cycle, and storage bake.
2. Data reported for the tests noted with (2) in the "Type" column in the table above are qualified by similarity (QBS) to the original qualification from site Amkor K4. All other tests have equivalent tests and results for both assembly sites.

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