







PCN Number:	20171031001		PCN Date:	Nov 09, 2017												
Title:	Qualification of AP3 as an additional Assembly & Test site for select devices															
Customer Contact:	PCN Manager	Dept:	Quality Services													
Proposed 1st Ship Date:	Feb 09, 2018	Estimated Sample Availability:	Date Provided at Sample request													
Change Type:																
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site											
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material											
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process											
<input type="checkbox"/>	Mechanical Specification	<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site											
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials											
				<input type="checkbox"/>	Wafer Fab Process											
PCN Details																
Description of Change:																
Texas Instruments Incorporated is announcing the qualification AP3 as Additional Assembly and Test Site for select devices listed in the "Product Affected" Section. No material differences between sites.																
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>PSI Technologies</td> <td>PSI</td> <td>PHL</td> <td>Calamba</td> </tr> <tr> <td>Amkor P3</td> <td>AP3</td> <td>PHL</td> <td>Biñan</td> </tr> </tbody> </table>					Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	PSI Technologies	PSI	PHL	Calamba	Amkor P3	AP3	PHL	Biñan
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City													
PSI Technologies	PSI	PHL	Calamba													
Amkor P3	AP3	PHL	Biñan													
Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.																
Reason for Change:																
Continuity of supply.																
Anticipated impact on Form, Fit, 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-Info website . There is no impact to the material meeting current regulatory compliance requirements with this PCN change.													
Changes to product identification resulting from this PCN:																
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Sample product shipping label (not actual product label)																
<table border="0"> <tr> <td style="vertical-align: top;">  <p>TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL '2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750</p> </td> <td style="vertical-align: top; text-align: center;">  </td> <td style="vertical-align: top;"> <p>(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</p> </td> </tr> </table>					 <p>TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 20: MSL '2 /260C/1 YEAR SEAL DT MSL 1 /235C/UNLIM 03/29/04 OPT: ITEM: 39 LBL: 5A (L)T0:1750</p>		<p>(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</p>									
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ASSEMBLY SITE CODES: PSI= F, AP3 = 3																

Product Affected:

CSD16401Q5

CSD16401Q5T

CSD58869Q5D

Qualification Report

Amkor Q5 & Q3 Discrete Qualification Summary

CSD17312Q5 Qualification Test Summary

Stress	Conditions	Test Duration	Sample Size	Results
HTRB	150°C/80% Rated Vds	1K hrs	3 lots x 77 units	Pass
HTGB	150°C/80% Rated Vgs	1K hrs	3 lots x 77 units	Pass
THB	85°C/85%R.H./80% Rated Vds	1K hrs	3 lots x 77 units	Pass
Autoclave	121°C/100% RH	96 hrs	3 lots x 77 units	Pass
Intermittent Op Life	Delta Tj = 100°C 2 min on/2 min off	10K cycles	3 lots x 77 units	Pass
Temp Cycle	-40°C to 125°C	1K cycles	3 lots x 77 units	Pass

CSD16325Q5 Qualification Test Summary

Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

CSD17304Q3 Qualification Test Summary

Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

CSD16322Q5 Qualification Test Summary

Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

CSD17311Q5 Qualification Test Summary

Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

CSD16409Q3 Qualification Test Summary				
Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

CSD17309Q3 Qualification Test Summary				
Stress	Conditions	Test Duration	Sample Size	Results
Temp Cycle	-40°C to 125°C	1K cycles	1 lot x 77 units	Pass

MSL1 preconditioning performed on devices prior to THB, Autoclave, & Temp Cycle stresses

- Bake: 24 hours @ 125°C
- Damp Heat: 168 hours @ 85°C/85% RH (Level 1)
- 3X reflow + flux + rinse, 260°C Pb free reflow temp

Note: The CSD16321Q5, CSD16407Q5, CSD16408Q5, CSD16411Q5, CSD16414Q5, CSD16401Q5, CSD16415Q5, CSD17303Q5, CSD17559Q5 and CSD18502Q5B are qualified by similarity to the tests performed in the table above on the CSD17312Q5 and subsequent larger die in TMCL.

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