

<b>PCN Number:</b>	20151006001	<b>PCN Date:</b>	11/17/2015
<b>Title:</b>	14x14x1.4 LQFP Tray Change		
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	02/17/2016		
<b>Change Type:</b>			
<input 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 checked="" 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		

### PCN Details

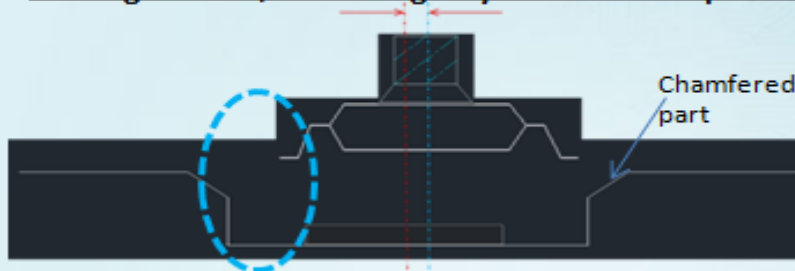
#### Description of Change:

Texas Instruments is pleased to announce the qualification of UBot tray for the devices listed below. A comparison summary is below:

#### 14x14 LQFP Tray Change:

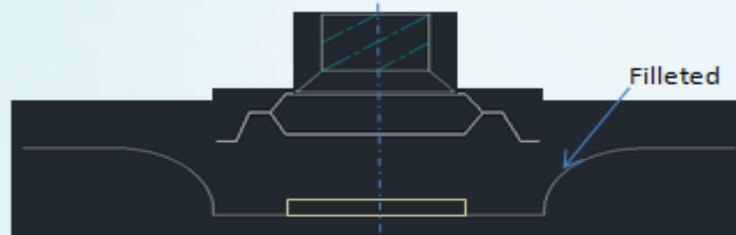
What	From	To
Stock #/Supplier	4203274/PEAK	4221057/UBot
Surface Resistivity, Ohms/Sq.	10 <sup>4</sup> to 10 <sup>8</sup>	10 <sup>5</sup> to 10 <sup>9</sup>
Raw Material	MPPE	MPPO
Tray Color	Black	Black
Temperature Rating	150 °C	150 °C

#### Existing 14x14 QFP Rotating Trays Unit Catch capability



Unit is at center seating position within 0.02" or 20 mils.  
Starts to misalign at X or Y Tray Center Position  $\pm 0.03"$  to 0.04" or 30 mils to 40 mils

#### New 14x14 QFP (UBoT) Trays Unit Catch Capability



Unit is at Center Seating position within 0.05" or 50 mils

### Dimensional Comparison:

ITEMS DESCRIPTION	EXISTING			PROPOSED			COMMENT
	4203274-0001 (PEAK)			4221057-0001 (UBot)			
	DIM	Upper Limits	Lower Limits	DIM	Upper Limits	Lower Limits	
Overall Length	322.6	322.85	322.35	322.6	322.85	322.35	NO CHANGE
Layout Length	315	315.26	314.75	315	315.26	314.75	NO CHANGE
Layout Width	135.9	136.15	135.65	135.9	136.15	135.65	NO CHANGE
Layout Length on Top Stack frame	311.15	311.4	311.02	311.15	311.4	311.02	NO CHANGE
Layout Width on Top Stack frame	132.08	132.33	131.95	132.08	132.33	131.95	NO CHANGE
Layout Length on Bottom Stack frame	311.66	311.91	311.53	311.66	311.91	311.53	NO CHANGE
Layout Width on Bottom Stack frame	132.59	132.84	132.46	132.59	132.84	132.46	NO CHANGE
End Tab Length	92.1	92.35	91.85	92.1	92.35	91.85	NO CHANGE
Overall Height	7.62	7.75	7.49	7.62	7.75	7.49	NO CHANGE
Stack Height	1.27	1.4	1.14	1.27	1.4	1.14	NO CHANGE
Tray Matrix No.	6x15			6x15			NO CHANGE
Ptich M	15.45	15.58	15.32	15.45	15.58	15.32	NO CHANGE
Ptich M3	21.00	21.13	20.87	21.00	21.13	20.87	NO CHANGE
Ptich M1	15.40	15.53	15.27	15.40	15.53	15.27	NO CHANGE
Ptich M2	20.30	20.43	20.17	20.30	20.43	20.17	NO CHANGE
Package seating height (Top)	2.20	2.28	2.12	1.70	1.78	1.62	CHANGE
Package seating height (Bottom)	0.60	0.68	0.52	1.07	1.15	0.99	CHANGE

### Reason for Change:

Business Continuity

### 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 <a href="#">TI ECO website</a> .
-------------------------------------	---------------------------------------	--------------------------	--

### Changes to product identification resulting from this PCN:

Not Applicable

### Product Affected:

5962-9557701NXD	MSP430F5635IPZ	MSP430F67481AIPZ	MSP430FR6879IPZ
5962-9557801NXD	MSP430F5636IPZ	MSP430F67481IPZ	MSP430FR6887IPZ
5962-9560901NXD	MSP430F5637IPZ	MSP430F6748AIPZ	MSP430FR6888IPZ
MSP430A155IPZ	MSP430F5638IPZ	MSP430F6748IPZ	MSP430FR68891IPZ
MSP430BT5190IPZ	MSP430F5658IPZ	MSP430F67491AIPZ	MSP430FR6889IPZ
MSP430F4351IPZ	MSP430F5659IPZ	MSP430F67491IPZ	MSP430FR6977IPZ
MSP430F435IPZ	MSP430F6433IPZ	MSP430F6749AIPZ	MSP430FR69791IPZ
MSP430F4361IPZ	MSP430F6435IPZ	MSP430F6749IPZ	MSP430FR6979IPZ
MSP430F436IPZ	MSP430F6436IPZ	MSP430F67621AIPZ	MSP430FR6987IPZ
MSP430F4371IPZ	MSP430F6438IPZ	MSP430F67621IPZ	MSP430FR6988IPZ
MSP430F437IPZ	MSP430F6458IPZ	MSP430F67641AIPZ	MSP430FR69891IPZ
MSP430F447IPZ	MSP430F6459IPZ	MSP430F67641IPZ	MSP430FR6989IPZ
MSP430F4481IPZ	MSP430F6630IPZ	MSP430F67651AIPZ	MSP430V109IPZ
MSP430F448IPZ	MSP430F6631IPZ	MSP430F67651IPZ	MSP430V169IPZ
MSP430F4491IPZ	MSP430F6632IPZ	MSP430F6765AIPZ	MSP430V250IPZ
MSP430F449IPZ	MSP430F6633IPZ	MSP430F6765IPZ	MSP430V254IPZR
MSP430F46161IPZ	MSP430F6634IPZ	MSP430F67661AIPZ	MSP430V257IPZR
MSP430F4616IPZ	MSP430F6635IPZ	MSP430F67661IPZ	MSP430V586IPZ
MSP430F46171IPZ	MSP430F6636IPZ	MSP430F6766AIPZ	SN74ABT3612-20PCB

MSP430F4617IPZ	MSP430F6637IPZ	MSP430F6766IPZ	SN74ABT3614-20PCB
MSP430F46181IPZ	MSP430F6638IPZ	MSP430F67671AIPZ	SN74ABT3614-30PCB
MSP430F4618IPZ	MSP430F6658IPZ	MSP430F67671IPZ	SN74ABTH32245PZ
MSP430F46191IPZ	MSP430F6659IPZ	MSP430F6767AIPZ	SN74ABTH32245PZG4
MSP430F4619IPZ	MSP430F6720AIPZ	MSP430F6767IPZ	SN74ABTH32501PZ
MSP430F47126IPZ	MSP430F6720IPZ	MSP430F67681AIPZ	SN74ABTH32543PZ
MSP430F47127IPZ	MSP430F6721AIPZ	MSP430F67681IPZ	SN74ACT3622-15PCB
MSP430F47163IPZ	MSP430F6721IPZ	MSP430F6768AIPZ	SN74ACT3622-30PCB
MSP430F47166IPZ	MSP430F6723AIPZ	MSP430F6768IPZ	SN74ACT3631-15PCB
MSP430F47167IPZ	MSP430F6723IPZ	MSP430F67691AIPZ	SN74ACT3631-20PCB
MSP430F47173IPZ	MSP430F6724AIPZ	MSP430F67691IPZ	SN74ACT3632-15PCB
MSP430F47176IPZ	MSP430F6724IPZ	MSP430F6769AIPZ	SN74ACT3632-20PCB
MSP430F47177IPZ	MSP430F6725AIPZ	MSP430F6769IPZ	SN74ACT3641-20PCB
MSP430F47183IPZ	MSP430F6725IPZ	MSP430F67751AIPZ	SN74ACT3651-15PCB
MSP430F47186IPZ	MSP430F6726AIPZ	MSP430F67751IPZ	SN74ACT3651-20PCB
MSP430F47187IPZ	MSP430F6726IPZ	MSP430F6775AIPZ	SN74FB1650PCA
MSP430F47193IPZ	MSP430F6730AIPZ	MSP430F6775IPZ	SN74FB1651PCA
MSP430F47196IPZ	MSP430F6730IPZ	MSP430F67761AIPZ	SN74FB1653PCA
MSP430F47197IPZ	MSP430F6731AIPZ	MSP430F67761IPZ	SN74V263-15PZA
MSP430F4783IPZ	MSP430F6731IPZ	MSP430F6776AIPZ	SN74V263-6PZA
MSP430F4784IPZ	MSP430F6733AIPZ	MSP430F6776IPZ	SN74V263-7PZA
MSP430F4793IPZ	MSP430F6733IPZ	MSP430F67771AIPZ	SN74V273-10PZA
MSP430F4794IPZ	MSP430F6734AIPZ	MSP430F67771IPZ	SN74V273-15PZA
MSP430F5333IPZ	MSP430F6734IPZ	MSP430F6777AIPZ	SN74V273-6PZA
MSP430F5335IPZ	MSP430F6735AIPZ	MSP430F6777IPZ	SN74V273-7PZA
MSP430F5336IPZ	MSP430F6735IPZ	MSP430F67781AIPZ	SN74V283-10PZA
MSP430F5338IPZ	MSP430F6736AIPZ	MSP430F67781IPZ	SN74V283-15PZA
MSP430F5358IPZ	MSP430F6736IPZ	MSP430F6778AIPZ	SN74V283-6PZA
MSP430F5359IPZ	MSP430F67451AIPZ	MSP430F6778IPZ	SN74V283-7PZA
MSP430F5419AIPZ	MSP430F67451IPZ	MSP430F67791AIPZ	SN74V293-10PZA
MSP430F5419IPZ	MSP430F6745AIPZ	MSP430F67791IPZ	SN74V293-15PZA
MSP430F5436AIPZ	MSP430F6745IPZ	MSP430F6779AIPZ	SN74V293-15PZAG4
MSP430F5436IPZ	MSP430F67461AIPZ	MSP430F6779IPZ	SN74V293-6PZA
MSP430F5438AIPZ	MSP430F67461IPZ	MSP430FG4616IPZ	SN74V293-7PZA
MSP430F5438IPZ	MSP430F6746AIPZ	MSP430FG4617IPZ	TSB12LV32PZ
MSP430F5630IPZ	MSP430F6746IPZ	MSP430FG4618IPZ	TSB12LV32PZG4
MSP430F5631IPZ	MSP430F67471AIPZ	MSP430FG4619IPZ	TUSB5052PZ
MSP430F5632IPZ	MSP430F67471IPZ	MSP430FG6626IPZ	
MSP430F5633IPZ	MSP430F6747AIPZ	MSP430FR6877IPZ	
MSP430F5634IPZ	MSP430F6747IPZ	MSP430FR68791IPZ	

## Qualification Data



Revision: A

EQ# : \_\_\_\_\_  
A/T Site: TIPI

### JEDEC Tray Qualification Summary

Reference (QSS 003-008, 009-006, 014-102)

Supplier:	UBoT	
Vendor Part No:	UQ14141.40615XD	
TI Part No:	_____	(If available)
Weight/tray (g):	158g	
Material:	150C MPPO	
Package Description	LQFP 14X14X1.4	
Package Designator:	PZ / PZA / PBK	
Result:	Pass	
Date:	9/4/2013	

<b>I. First Article Inspection Test</b>	Pass	(Pass/Fail)
<b>II. Dimensional Test</b>	Pass	
<b>III. Manufacturability Test</b>	Pass	
<b>IV. Bake &amp; Surface Resistivity Test</b>	Pass	
<b>V. Fit Analysis</b>	Pass	
<b>VI. Drop Test</b>	Pass	

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>