

PCN Number:	20201117000.1	PCN Date:	Dec. 11, 2020
Title:	New Tray for Select Devices		
Customer Contact:	PCN Manager	Dept:	Quality Services
Proposed 1st Ship Date:	Mar. 11, 2021		
Change Type:			
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change
<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"/>		<input type="checkbox"/>	Wafer Bump Site
<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 Site
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Materials
<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process

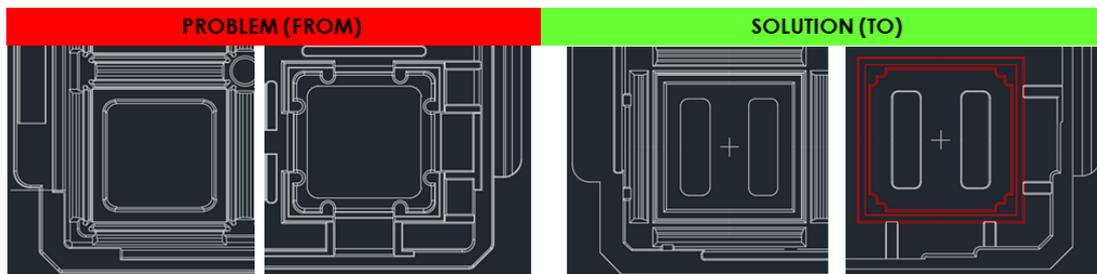
PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of a new tray for the devices listed below. A comparison summary of the tray differences as follows:

Tray Comparison Tables:

Description of Change/Change Proposal: 20x20x1.4 LQFP



	4221582-0001	4225805-0001
Supplier	UBOT	Peak
Floor design	Square circular edge	Square with 2 oblong
Cavity size	22.30 +/- 0.1 (Top) 20.60 +/- 0.1 (Bottom)	22.25 +/- 0.08 (Top) 20.40 +/- 0.1 (Bottom)
Seating ht	2.00 +/- 0.1 (Top) 0.77 +/- 0.1 (Bottom)	1.70 +/- 0.1 (Top) 1.10 +/- 0.1 (Bottom)

Items Description	4221582-0001 (UBOT)			4225805-0001 (Peak)			COMMENT
	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	315.0	315.25	314.75	315.0	315.25	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	311.40	311.02	311.15	311.40	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	1.40	1.14	1.27	1.40	1.14	NO CHANGE
Distance of tray singulation from corner of tray	34.3	34.55	34.05	34.3	34.55	34.05	NO CHANGE
Tray singulation width	25.4	25.65	25.15	25.4	25.65	25.15	NO CHANGE
Tray Lifting surface height	2.54	2.67	2.41	2.54	2.67	2.41	NO CHANGE
Pitch M	17.55	17.68	17.42	17.55	17.68	17.42	NO CHANGE
Pitch M3	25.20	25.33	25.07	25.20	25.33	25.07	NO CHANGE
Pitch M1	17.80	17.93	17.67	17.80	17.93	17.67	NO CHANGE
Pitch M2	25.40	25.53	25.27	25.40	25.53	25.27	NO CHANGE
Live bug fence to fence	22.30	22.40	22.20	22.25	22.33	22.17	CHANGE
Dead bug fence to fence	20.60	20.70	20.50	20.40	20.50	20.30	CHANGE
Package seating height (Top)	2.00	2.08	1.92	1.70	1.80	1.60	CHANGE
Package seating height (Bottom)	0.77	0.85	0.69	1.10	1.20	1.00	CHANGE

Reason for Change:

New tray offers improvement on tray warpage, chipping, stuck up caused by current tray

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

None

Changes to product identification resulting from this PCN:

New tray

Product Affected:

D36780PGE100	SM320C50PGEA57UT	TMS320LC542PGE2-50	TMS320VC5506PGE
DSG5402PGE100	SM470R1B1MPGES	TMS320LC548PGE-66	TMS320VC5507PGE
DVC5416PGE160IDWLD	TM4C1231H6PGEI	TMS320LC548PGE-80	TMS320VC5509APGE
PCI1510PGE	TM4C1231H6PGEI7	TMS320LF2407APGEA	TMS470R1A288PGEA
PCI1510PGE G4	TM4C1233H6PGEI	TMS320LF2407APGEG4	TMS470R1A288PGET
PCI2040PGE	TM4C1233H6PGEI7	TMS320LF2407APGES	TMS470R1A384PGET
RM44L520APGET	TM4C1237H6PGEI	TMS320UC5402PGE-80	TMS470R1B1MPGEA
RM44L920APGET	TM4C1237H6PGEI7	TMS320VC33PGE120	TMS470R1B512PGET
RM46L430CPGET	TM4C123BH6PGEI	TMS320VC33PGE120G4	TMS470R1B768PGET
RM46L430PGET	TM4C123BH6PGEI7	TMS320VC33PGE150	TMSDVC5402PGE100G4
RM46L440CPGET	TM4C123GH6PGEI	TMS320VC33PGEA120	TNETV2507ANPGE
RM46L450CPGET	TM4C123GH6PGEI7	TMS320VC5401PGE50	TSB43AA82APGE
RM46L830CPGET	TM4C123GH6PGET	TMS320VC5402APGE16	TSB43AA82APGEG4
RM46L840CPGET	TM4C123GH6PGET7	TMS320VC5402PGE100	TSB43AB23PGE
RM46L850CPGET	TMC320BRD01PGE	TMS320VC5404PGE	TSB82AA2BIPGE

RM46L852CPGET	TMS320C54CSTPGE	TMS320VC5407PGE	TSB82AA2BPGE
RM46L852PGET	TMS320C54V90BPGE	TMS320VC5409APGE12	TSB82AA2PGE
RM48L530DPGET	TMS320DA105PGE160	TMS320VC5409APGE16	TSB82AA2PGE4
RM48L540DPGET	TMS320DA150PGE160	TMS320VC5410APGE12	TX5416PGE
RM48L950DPGET	TMS320DA150PGE16AD	TMS320VC5410APGE16	VC55GPSPGE
RM48L952DPGET	TMS320DA150PGE16D	TMS320VC5416PGE120	
SM320C50PGEA57	TMS320DA255PGE	TMS320VC5416PGE160	
SM320C50PGEA57L3	TMS320LC542PGE2-40	TMS320VC5503PGE	

Device Fit Analysis:

PACKAGE	NOMINAL TRAY vs NOMINAL PACKAGE	TRAY MINIMUM vs PACKAGE MAXIMUM	TRAY MAXIMUM vs PACKAGE MINIMUM
PBL, PGE			
REMARKS: <ul style="list-style-type: none"> X and Y clearance is less than 0.5 mm Rotation angle is less than 10 degrees 			

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