PCN Number:		201	20140303000								PCN D	03/03/2014		
Title: Qualification of Amkor Philippines as Alternate Assembly/Test site for select PQFN Devices														
Customer Contact:		PCN	PCN Manager			Phone: +1(214)480-6			0-60				uality ervices	
Propose	d 1 st Ship Da	ite:	te: 06/03/2014			Estim	mated Sample Avai			vaila	bility: 03/03/2014			
Change '	Change Type:													
Asse	mbly Site	Assembly			Process					Assembly Materials				
Desig	gn			Electrical	Sp	ecificati	on			Mech	nanical	Spec	ification	
				J, 11 J, J = =						Proces				
	r Bump Site	[er Bum					
Wafe	r Fab Site							Wafe	er Fab I	Proce	SS			
			Part number change											
					P	CN De	tails							
Descript	ion of Chang	je:												
Amkor Philippines is being qualified as an additional Assembly/Test site for the devices listed below. There are no BOM differences between devices assembled at Amkor Philippines versus the current Assembly site. Reason for Change:														
	y of Supply													
			_				•••							
_	ted impact o	n Fi	t, F	orm, Fun	cti	on, Qua	ality o	r Reli	abi	lity (positiv	e / r	iegative):	
None														
Changes to product identification resulting from this PCN:														
Assembi	v Site													
PSi				Assembly Site Origin (22				(221)	ASO: PAC					
Amkor Philippines							nbly Si					ASO: AP3		
Texas Instruments G4 G4 G4 G4 G4 G4 G4 G														

Topside Device marking:Assembly site code for PAC= E
Assembly site code for AP3= 3

CSD16321Q5	Product Affected								
CSD16322Q5	CSD16321Q5	CSE)16407Q5	CSD17304Q3	CS	SD18502Q5B			
CSD16323Q3 CSD16419Q3 CSD17309Q3 CSD58887Q3 CSD16325Q5 CSD16411Q3 CSD17311Q5 CSD86330Q3D CSD16327Q3 CSD16414Q5 CSD17312Q5 CSD95372BQ5MC CSD16401Q5 CSD16415Q5 CSD17559Q5 CSD95373BQ5MC CSD16406Q3 CSD17303Q5 CSD17509Q5 CSD95373BQ5MC CSD16406Q3 CSD17303Q5 CSD17509Q5 CSD95373BQ5MC CSD16406Q3 CSD17303Q5 CSD1731Q5 CSD1731Q5		CSE)16408Q5						
CSD16327Q3	CSD16323Q3	CSE)16409Q3	CSD17309Q3					
CSD16401Q5	CSD16325Q5	CSE)16411Q3	CSD17311Q5	CS	•			
CSD16406Q3	CSD16327Q3	CSE)16414Q5	CSD17312Q5	CS	D95372E	3Q5MC		
Qualification Data - Approved February, 2014 This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD16323Q3 (MSL 1-260C)	CSD16401Q5	CSE)16415Q5	CSD17559Q5	D95373E	3Q5MC			
This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD16323Q3 (MSL 1-260C)	CSD16406Q3	CSE)17303Q5				<u> </u>		
validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD16323Q3 (MSL 1-260C) Package Construction Details AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQG, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan X Test Results Sample Size/Fail Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 <t< td=""><td colspan="5"></td><td></td></t<>									
Package Construction Details									
Assembly Site:						nical spe	cification	ns.	
# Pins-Designator, Family:				16323Q3 (MSL 1-260	C)				
# Pins-Designator, Family: 8-DQG, VSON	Package Construction De	tails	5	1					
Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification:	Assembly Site:		AK3	Mold Compound:	SI	D#20282	28		
Qualification:	# Pins-Designator, Famil	y:	8-DQG, VSON	Mount Solder:	D#200757				
Reliability Test Conditions	Lead Finish		Matte Sn	Bond Wire:	2n	nil, Au			
Conditions	Qualification:	n	☐ Test Results						
**Autoclave	B !! ! !!!! = .		1			Sample Size/Fail			
**Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 <t< td=""><td>Reliability Test</td><td>Со</td><td>nditions</td><td></td><td></td><td></td><td></td><td></td></t<>	Reliability Test	Со	nditions						
**T/C -40C/125C	**Autoclave	12	1°C/100% RH (96	Hrs)					
**THB									
HTRB									
HTGB									
Intermittent Op Life Delta Tj = 100°C 2 min on/2 min off (10K Cyc) 77/0 77/0 77/0 Notes **- Preconditioning sequence: Level 1-260C. Qualification Data − Approved February, 2014									
Notes **- Preconditioning sequence: Level 1-260C. Qualification Data – Approved February, 2014 This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD17312Q5 (MSL 1-260C) Package Construction Details Assembly Site: AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan X Test Results Reliability Test Conditions Sample Size/Fail Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 77/0 77/0 77/0 77/0 77/0 77/0 77/0 77/0 <th colsp<="" td=""><td colspan="2"></td><td></td><td></td><td></td><td></td></th>	<td colspan="2"></td> <td></td> <td></td> <td></td> <td></td>								
Qualification Data – Approved February, 2014 This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD17312Q5 (MSL 1-260C) Package Construction Details Assembly Site: AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan ☑ Test Results Reliability Test Conditions Sample Size/Fail Lot#1 Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 77/0					7770				
This qualification has been developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD17312Q5 (MSL 1-260C)									
validates that the proposed change meets the applicable released technical specifications. Qual Vehicle#1: CSD17312Q5 (MSL 1-260C) Package Construction Details Assembly Site: AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan Yest Results Sample Size/Fail Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 77/0									
Qual Vehicle#1: CSD17312Q5 (MSL 1-260C) Package Construction Details Assembly Site: AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan Test Results Sample Size/Fail Lot#1 Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0									
Package Construction Details Assembly Site: AK3 Mold Compound: SID#202828 # Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan X Test Results Sample Size/Fail Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0									
# Pins-Designator, Family: 8-DQH, VSON Mount Solder: SID#200757 Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan Test Results Reliability Test Conditions Sample Size/Fail Lot#1 Lot#2 Lot#3 **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0									
Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan Test Results Reliability Test Conditions Sample Size/Fail **Autoclave 121°C/100% RH (96 Hrs) 77/0	Assembly Site:		AK3	Mold Compound:	SI	SID#202828			
Lead Finish Matte Sn Bond Wire: 2mil, Au Qualification: Plan Test Results Reliability Test Conditions Sample Size/Fail **Autoclave 121°C/100% RH (96 Hrs) 77/0			8-DQH, VSON	Mount Solder:		SID#200757			
Sample Size/Fail Reliability Test Conditions Sample Size/Fail **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0									
Sample Size/Fail Reliability Test Conditions Sample Size/Fail **Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0	Qualification: Pla	n	☐ Test Results						
Reliability Test Conditions **Autoclave 121°C/100% RH (96 Hrs) 77/0 7						Sample Size/Fail			
**Autoclave 121°C/100% RH (96 Hrs) 77/0 77/0 77/0 **T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0	Reliability Test	Conditions							
**T/C -40C/125C -40C/+125C (1000 Cyc) 77/0 77/0 77/0 **THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0	**Autoclave	12	1°C/100% RH (96	/100% RH (96 Hrs)					
**THB 85°C/85%R.H./80% Rated Vds (1000 Hrs) 77/0 77/0 77/0 HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0	· · · · · · · · · · · · · · · · · · ·			-					
HTRB 150°C/80% Rated Vds (1000 hrs) 77/0 77/0 77/0 HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0									
HTGB 150°C/80% Rated Vgs (1000 hrs) 77/0 77/0 77/0			· · · · · · · · · · · · · · · · · · ·						
	Intermittent Op Life		· · · · · · · · · · · · · · · · · · ·		'C)	77/0	77/0	77/0	
Notes **- Preconditioning sequence: Level 1-260C.					-,	, , -	, , -	, -	

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