



PCN Number:	20150316001		PCN Date:	03/18/2015	
Title:	Qualification of PTI as an alternate Assembly/Test site for the Sipario RKG Family of Devices				
Customer Contact:	PCN Manager	Dept:	Quality Services		
Proposed 1st Ship Date:	06/18/2015	Estimated Sample Availability:	Date provided upon request		
Change Type:					
<input checked="" 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 checked="" type="checkbox"/>	Test Site	<input 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:					
<p>Texas Instruments is pleased to announce the qualification of Powertech Technology (PTI) as an alternate Assembly and test site for the family of Sipario RKG devices listed below. The material set will be the same between the 2 sites.</p> <p>Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ.</p>					
Reason for Change:					
Continuity of Supply					
Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):					
None					

Changes to product identification resulting from this PCN:		
Assembly Site		
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA
Powertech Technology (PTI)	Assembly Site Origin (22L)	ASO: PT2
Sample product shipping label (not actual product label)		
 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		(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
Topside Device marking:		
Assembly site code for MLA= K		
Assembly site code for PT2= C		

Product Affected				
LMZ30602RKGR	LMZ30606RKGT	TPS84210RKGR	TPS84259RKGT	
LMZ30602RKGT	LMZ34002RKGR	TPS84210RKGT	TPS84410RKGR	
LMZ30604RKGR	LMZ34002RKGT	TPS84250RKGR	TPS84410RKGT	
LMZ30604RKGT	LMZ35003RKGR	TPS84250RKGT	TPS84610RKGR	
LMZ30606RKGR	LMZ35003RKGT	TPS84259RKGR	TPS84610RKGT	

Qualification Report

Qualify Power Tech (PTI) for assembly of IPS TPS84410RKG
Approved 01/27/2015

Product Attributes

Attributes	Qual Device: TPS84410RKG	QBS Process: BQ24730RGF	QBS Package: TPS84620RUQ
Assembly Site	PTI-TAIWAN	MLA	PTI-TAIWAN
Package Family	QFN	QFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	DMOS5	DMOS5	MIHO 8
Wafer Fab Process	LBC7	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device TPS84410RKG is qualified at LEVEL3-260C
- QBS Device TPS84620RUQ is qualified at LEVEL3-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS84410RKG	QBS Process: BQ24730RGF	QBS Package: TPS84620RUQ
PC	PreCon Level 3	260C	1/308/0	-	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 hours	1/77/0	-	1/77/0
UHAST	Unbiased HAST 110C/85%RH	264 hours	1/77/0	-	3/231/0
TC	Temperature Cycle, -65/150C	500 cycles	1/77/0	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hours	1/77/0	-	1/77/0
HTOL	Life Test, 155C	240 Hours	-	3/348/0	-
HTOL	Life Test, 125C	1000 hours	1/77/0	-	1/77/0
ELFR	Early Life Failure Rate, 155C	48 Hours	-	3/1833/0	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours

- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours

- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles

Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

Qualification Report

Qualify Power Tech (PTI) for assembly of IPS TPS84250RKG
Approved 03/09/2015

Product Attributes

Attributes	Qual Device: TPS84250RKG	QBS Product: TPS84410RKG	QBS Package: TPS84620RUQ
Assembly Site	PTI-TAIWAN	PTI-TAIWAN	PTI-TAIWAN
Package Family	QFN	QFN	QFN
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Site	DMOS5	DMOS5	MIHO 8
Wafer Fab Process	LBC5X	LBC7	LBC7

- QBS: Qual By Similarity
- Qual Device TPS84520RKG is qualified at LEVEL3-260C
- Qual Device TPS84410RKG is qualified at LEVEL3-260C
- QBS Device TPS84620RUQ is qualified at LEVEL3-260C

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TPS84250RKG	QBS Package: TPS84410RKG	QBS Package: TPS84620RUQ
PC	PreCon Level 3	260C	1/308/0	1/308/0	3/231/0
THB	Biased Temperature and Humidity, 85C/85%RH	1000 hours	1/77/0	1/77/0	1/77/0
UHASt	Unbiased HAST 110C/85%RH	264 hours	1/77/0	1/77/0	3/231/0
TC	Temperature Cycle, -65/150C	500 cycles	1/77/0	1/77/0	3/231/0
HTSL	High Temp Storage Bake 150C	1000 hours	1/77/0	1/77/0	1/77/0
HTOL	Life Test, 155C	240 hours	-	-	-
HTOL	Life Test, 125C	1000 hours	-	1/77/0	1/77/0
HTOL	Life Test, 105C	3000 hours	1/77/0	-	-
PTC	Power Cycle, 25C/70C	1000 cycles	1/77/0	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable
- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
- The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
- The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

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
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