

<b>PCN Number:</b>	20140218001		<b>PCN Date:</b>	02/24/2014	
<b>Title:</b>	Qualify Au wire as Alternative Wire Base Metal for Selected WSON Device(s)				
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Phone:</b>	+1(214)480-6037	<b>Dept:</b>	Quality Services
<b>Proposed 1<sup>st</sup> Ship Date:</b>	05/24/2014	<b>Estimated Sample Availability:</b>	Date provided at sample request		
<b>Change Type:</b>					
<input type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Assembly Materials
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>	Mechanical Specification
<input 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		
<b>PCN Details</b>					
<b>Description of Change:</b>					
Texas Instruments is pleased to announce the qualification of Au as an additional bond wire option for devices listed in "Product affected" section below. Devices will remain in current assembly facility and there will be no other piece part changes.					
<b>Reason for Change:</b>					
Manufacturing flexibility.					
<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>					
None.					
<b>Changes to product identification resulting from this PCN:</b>					
None.					
<b>Product Affected:</b>					
TPS51604DSGR		TPS51604DSGT			
<b>Qualification Data</b>					
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.					
<b>Qual Vehicle : TPS51604DSG (MSL 2-260C)</b>					
Package Construction Details					
Assembly Site:	TI-Clark	Mold Compound:	4208625		
# Pins-Designator, Family:	8-DSG, WSON	Mount Compound:	4207768		
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.96 Mil Dia., Au		
<b>Qualification:</b>	<input type="checkbox"/> Plan	<input checked="" type="checkbox"/> Test Results			
Reliability Test	Conditions	Sample Size/Fail			
Electrical Characterization	-	Pass			
Manufacturability (Assembly)	(per mfg. Site specification)	Pass			
Notes ** - Preconditioning sequence: Level 2-260C.					

## Reference Qualification Data

<b>Qual Vehicle 1 : T5A33403ARVC (MSL 2-260C)</b>				
Package Construction Details				
Assembly Site:	TI-Clark	Mold Compound:	4208625	
# Pins-Designator, Family:	20-RVC, WQFN	Mount Compound:	4207768	
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.3 Mil Dia., Au	
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 2-260C	12/0	12/0	12/0
Notes    ** - Preconditioning sequence: Level 2-260C.				
<b>Qual Vehicle 2 : TLV70028DSE (MSL 1-260C)</b>				
Package Construction Details				
Assembly Site:	TI-Clark	Mold Compound:	4208625	
# Pins-Designator, Family:	6-DSE, WSON	Mount Compound:	4207768	
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	0.8 Mil Dia., Au	
<b>Qualification:</b> <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results				
Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Salt Atmosphere	-	22/0	22/0	22/0
Surface Mount Solderability	8 Hours Steam Age-Pb Free	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 1-260C	12/0	12/0	12/0
Notes    ** - Preconditioning sequence: Level 1-260C.				

<b>Qual Vehicle 3 : TPS61161DRV (MSL 2-260C)</b>				
Package Construction Details				
Assembly Site:	TI-Clark	Mold Compound:	4208625	
# Pins-Designator, Family:	6-DRV, WSON	Mount Compound:	4207768	
Lead frame (Finish, Base):	NiPdAu, Cu	Bond Wire:	1.31 Mil Dia., Au	
<b>Qualification:</b>	<input type="checkbox"/> Plan	<input checked="" type="checkbox"/> Test Results		
Reliability Test	Conditions	Sample Size Pass/Fail		
		Lot# 1	Lot# 2	Lot# 3
**High Temp. Storage Bake	170C (420hrs)	77/0	77/0	77/0
**Autoclave 121C	121C, 2 atm (96 Hrs)	77/0	77/0	77/0
**Temperature Cycle	-65/150C (500 cycles)	77/0	77/0	76/0
Salt Atmosphere	-	22/0	22/0	22/0
Surface Mount Solderability	8 Hours Steam Age-Pb Free	22/0	22/0	22/0
Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass
Moisture Sensitivity	Level 2-260C	12/0	12/0	12/0
Notes ** - Preconditioning sequence: Level 2-260C.				

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

<b>Location</b>	<b>E-Mail</b>
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>
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