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西新宿三井ビルディング

報告書番号：PCN#20100426000B
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お客様各位

日本テキサス・インスツルメンツ株式会社
営業・技術本部 カスタマドキュメント
マネージャ 牧 達郎 (牧)

PWR QFNパッケージ 一部製品 組立サイト追加/Cu(銅)線ボンディングワイア変更のご案内
(認定済 134 製品への追加認定 2 製品の連絡)

(初版 PCN20100426000 2010 年 5 月 7 日発行)

拝啓 貴社益々ご清栄の事とお喜び申し上げます。平素は弊社製品のご愛顧を賜り、厚く御礼申し上げます。さて、標題の件につきまして下記にご連絡させていただきます。ご査収の程、宜しくお願い申し上げます。

敬具

－ 記 －

通知タイプ	☐ Initial notice (Plan)	☒ Final notice		
変更概要	Design/Specification	☐ Design	☐ Electrical	☐ Mechanical
	Wafer Fab	☐ Site	☐ Process	☐ Material
	Wafer Bump	☐ Site	☐ Process	☐ Material
	☒ Assembly	☒ Site	☐ Process	☒ Material
	Test	☐ Site	☐ Process	
	☒ Others	☒ Packing/Shipping/Labeling ☐ -		
変更内容	下記変更について認定済 134 製品への追加認定 2 製品の連絡になります。 PWR QFN パッケージ 一部製品 組立サイト追加/Cu(銅)線ボンディングワイア 変更 現行 ：認定済みサイト, Au(金)線 ボンディングワイア 変更後：認定済みサイト, TI-Clark(フィリピン)サイト Au(金)線/Cu(銅)線ボンディングワイア(一部製品)			
対象製品	対象製品リスト参照			
変更時期	追加認定品は 11 月上旬の出荷より予定しています。 認定終了品は 6 月上旬の出荷より実施しています。			
品質認定試験	☐ 計画	☒ 終了		
製品表示	☐ 変更無し	☒ 変更あり		
備考	-			

尚、変更時期につきましては、在庫状況により異なりますので、担当営業にお問い合わせ下さい。
また、ご不明な点、ご質問等がございましたら、担当営業或いはpcn_tij@list.ti.comにお問い合わせ下さい。

以上

変更内容

内容：今回のお知らせは、下記変更について認定済 134製品への追加認定 2製品の連絡になります。弊社 PWR (パワーマネジメント) QFNパッケージ 一部製品の組立サイトについて、安定供給確保の為に、TI-Clark (フィリピン) サイトを追加し認定しました。また、対象製品の一部につきましては、現行 Au (金) 線 ボンディングワイアに替わり、Cu (銅) 線 ボンディングワイアへ移行します。下表をご参照下さい。本通知は、既報PCN20090529000及びその更新版に続く同種変更の通知になります。尚、今回の変更で、製品についての互換性 (寸法/公差)、外観、動作特性、品質、信頼性への影響はありません。

変更内容
組立サイト

現行
認定済サイト

変更後
認定済サイト
TI-Clark (フィリピン)
Au (金) 線
Cu (銅) 線 (一部製品)

ボンディングワイア

Au (金) 線

理由：安定供給確保の為

対象製品リスト

対象製品名 - Au (金) 線ボンディングワイア				
■: 追加認定品 □: 認定終了品				
BQ24730RGFR	BQ27010DRKRG4	HPA00242DRKR	SN1002034DRKR	TLV320DAC31201RHBR
BQ24730RGFRG4	BQ27200DRKR	HPA00374DRKR	TLV320A1C31001RHBR	TPS75003RHRLR
BQ24730RGFT	BQ27200DRKRG4	HPA00425DRKR	TLV320A1C31101RHBR	TPS75003RHRLRG4
BQ24730RGFTG4	BQ27210DRKR	HPA00571RHRLR	TLV320A1C31201RHBR	TPS75003RHRLT
BQ27000DRKR	BQ27210DRKRG4	HPA00599DRKR	TLV320DAC31001RHBR	TPS75003RHRLTG4
BQ27000DRKRG4	HPA00203DRKR	PGA308A1DRKR	TLV320DAC31001RHBT	
BQ27010DRKR	HPA00211DRKR	PGA308A1DRKT	TLV320DAC31011RHBR	

対象製品名 - Cu (銅) 線ボンディングワイア				
□: 認定終了品				
BQ24030RHRLR	BQ24070RHRLTG4	BQ24109RHRLT	BQ24125RHRLTG4	TPS2501DRCT
BQ24030RHRLRG4	BQ24071RHRLR	BQ24109RHRLTG4	HPA00138RHRLR	TPS40074RHRLR
BQ24031RHRLR	BQ24071RHRLRG4	BQ24113ARHRLR	HPA00152RHRLR	TPS40074RHRLRG4
BQ24031RHRLRG4	BQ24071RHRLT	BQ24113ARHRLRG4	HPA00172RHRLR	TPS40074RHRLT
BQ24031RHRLT	BQ24071RHRLTG4	BQ24113ARHRLT	HPA00186ARHRLR	TPS40074RHRLTG4
BQ24031RHRLTG4	BQ24100RHRLR	BQ24113ARHRLTG4	HPA00227RHRLRG4	TPS40075RHRLR
BQ24032ARHRLR	BQ24100RHRLRG4	BQ24113RHRLR	HPA00240RHRLR	TPS40075RHRLRG4
BQ24032ARHRLRG4	BQ24103ARHRLR	BQ24113RHRLRG4	HPA00241RHRLR	TPS40075RHRLT
BQ24032ARHRLT	BQ24103ARHRLRG4	BQ24115RHRLR	HPA00248RHRLR	TPS40075RHRLTG4
BQ24032ARHRLTG4	BQ24103ARHRLT	BQ24115RHRLRG4	HPA00610RHRLR	TPS40195RGYR
BQ24032RHRLR	BQ24103ARHRLTG4	BQ24120RHRLR	SN0601103RHRLR	TPS40195RGYRG4
BQ24032RHRLRG4	BQ24103RHRLR	BQ24120RHRLRG4	SN0601103RHRLRG4	TPS40195RGYT
BQ24035RHRLR	BQ24103RHRLRG4	BQ24120RHRLT	SN0803030RHRLR	TPS40195RGYTG4
BQ24035RHRLRG4	BQ24104RHRLR	BQ24120RHRLTG4	SN0803030RHRLRG4	TPS40197RGYR
BQ24038RHRLR	BQ24104RHRLT	BQ24123RHRLR	SN412005RHRLR	TPS40197RGYT
BQ24038RHRLRG4	BQ24105RHRLR	BQ24123RHRLRG4	SN412005RHRLRG4	TPS51511RHRLR
BQ24038RHRLT	BQ24105RHRLRG4	BQ24123RHRLT	SN65HVD33RHRLR	TPS51511RHRLRG4
BQ24038RHRLTG4	BQ24108RHRLR	BQ24123RHRLTG4	SN65HVD33RHRLT	TPS51511RHRLT
BQ24070RHRLR	BQ24108RHRLRG4	BQ24125RHRLR	TPS2500DRCR	TPS51511RHRLTG4
BQ24070RHRLRG4	BQ24109RHRLR	BQ24125RHRLRG4	TPS2500DRCT	
BQ24070RHRLT	BQ24109RHRLRG4	BQ24125RHRLT	TPS2501DRCR	

製品表示

今回の変更に伴い、製品捺印上で組立サイトを示すサイトコードが、TI-Clark サイトについては、“I”となり、出荷ラベルに記載の原産地(ラベル箇所:22L)が下記のようになります。

	組立サイト	組立サイトコード(22L)
追加認定	TI-Clark	QAB



図1 出荷ラベルの例

日本テキサス・インスツルメンツ株式会社

信頼性試験

信頼性試験結果

信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 - 試料構成詳細				
Qual Device:MSC1202Y3RHHR				
Die Size (mm):	4.11 X 4.11	Die Protective Coating:	SiO2/Si3N4	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RHH/36	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.0 Mil Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L3-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	82/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-3/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-3/260C				

信頼性試験結果

信頼性試験期間	開始	—	終了	2009 年 9 月 9 日	
信頼性試験 - 試料構成詳細					
Qual Device:ONET4291VARGPR					
Die Size (mm):	1.5 X 1.5	Die Protective Coating:	6KA DHP/1K TEOS/ 8KAOXY		
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RGP/20		
Mount Compound:	4207768	Mold Compound:	4208625		
Bond Wire:	0.96 Mil. Dia, Au	Leadframe (Finish, Base):	NiPdAu, Cu		
MSL:	JEDEC,L3-260C	-	-		
信頼性試験結果					
Reliability Test	Condition / Duration	Sample Size/ Fails			Notes
		Lot#1	Lot#2	Lot#3	
**High Temp Operating Life	140C,480Hrs	116/0	-	-	-
**Biased HAST	130C/85%RH,96Hrs	77/0	-	-	-
**T/C	-65C/150C,500Cyc	82/0	-	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-	-
Backgrind Characterization	-	Approved	-	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-	-
Die Shear	-	10/0	-	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-	-
X-ray	top side only	5/0	-	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/4	-	-	(1)
Moisture Sensitivity	JEDEC Level-3/260C	12/0	-	-	-
Notes:					
** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C					
(1) Device saw delamination between the die pad and mold compound in the die bond area. Actions are being addressed to correct the problem.					

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信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 - 試料構成詳細				
Qual Device : SH6966ACC0RGCRG4 (Au-Wire)				
Die Size (mm):	2.78 X 2.78	Die Protective Coating:	10KACN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RGC/64	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.15 Mil Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L3-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	125C,1000Hrs	140/0	-	-
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Biased HAST	130C/85%RH,96 Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	81/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Solderability	Steam age, 8 hours	22/0	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
Salt Atmosphere	24 Hrs	22/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-3/260C	22/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-3/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 8 月 13 日
信頼性試験 — 試料構成詳細				
Qual Device:SH6966ACC0RGCRG4 (Cu-Wire)				
Die Size (mm):	2.78 X 2.78	Die Protective Coating:	10KACN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RGC/64	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.15Mil Dia., Cu	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L3-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	125C,1000Hrs	140/0	140/0	141/0
**High Temp. Storage Bake	170C,420Hrs	77/0	77/0	77/0
**Biased HAST	130C/85%RH,96 Hrs	77/0	77/0	77/0
**Autoclave	121C,96Hrs	77/0	77/0	77/0
**T/C	-65C/150C,500Cyc	87/0	82/0	87/0
Visual / Mechanical	Performed during Assembly MQ	Approved		
Solderability	Steam age, 8hours	22/0	22/0	22/0
Physical Dimensions	per mechanical drawing	5/0	5/0	5/0
Bond Pull	76 ball bonds, min. 3 units	76/0	76/0	76/0
Bond Shear	76 ball bonds, min. 3 units	76/0	76/0	76/0
Die Shear	-	10/0	10/0	10/0
Manufacturability, Assembly	per mfg. Site specification	Approved		
**Thermal Shock	-65C/150C,500Cyc	77/0	77/0	77/0
Salt Atmosphere	24 Hrs	22/0	22/0	22/0
X-ray	top side only	5/0	5/0	5/0
Moisture Sensitivity	JEDEC Level-3/260C	22/0	22/0	22/0
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-3/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 — 試料構成詳細				
Qual Device:SN65LVCP40RGZ				
Die Size (mm):	2.26 X 2.36	Die Protective Coating:	10KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/ RGZ/48	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	0.96 Mil Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L3-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	155C,240Hrs	116/0	-	-
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Biased HAST	130C/85%RH,96 Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	82/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-3/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-3/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 — 試料構成詳細				
Qual Device:TPA5050RSA				
Die Size (mm):	2.34 X 2.03	Die Protective Coating:	OxyNitride	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RSA/16	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	0.96 Mil Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	140C,480hrs	116/0	-	-
**Biased HAST	130C/85%RH,96Hrs	80/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 — 試料構成詳細				
Qual Device:TPS2231RGPR (Au-Wire)				
Die Size (mm):	2.54 X 1.4	Die Protective Coating:	11.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RGP/20	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	2.0 Mil Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	155C,240Hrs	77/0	-	-
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	87/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Solderability	Steam age, 8 hours	22/0	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
Salt Atmosphere	24 Hrs	22/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 8 月 13 日
信頼性試験 - 試料構成詳細				
Qual Device:TPS2231RGPR (Cu-Wire)				
Die Size (mm):	2.54 X 1.4	Die Protective Coating:	11.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/ RGP/20	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	2.0 Mil Dia., Cu	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp Operating Life	155C,240Hrs	77/0	77/0	77/0
**High Temp. Storage Bake	170C,420Hrs	77/0	77/0	77/0
**Autoclave	121C,96Hrs	77/0	77/0	77/0
**T/C	-65C/150C,500Cyc	87/0	87/0	87/0
Visual / Mechanical	Performed during Assembly MQ	Approved		
Solderability	Steam age, 8 hours	22/0	22/0	22/0
Physical Dimensions	per mechanical drawing	5/0	5/0	5/0
Bond Pull	76 ball bonds, min. 3 units	76/0	76/0	76/0
Bond Shear	76 ball bonds, min. 3 units	76/0	76/0	76/0
Die Shear	-	10/0	10/0	10/0
Manufacturability, Assembly	per mfg. Site specification	Approved		
**Thermal Shock	-65C/150C,500Cyc	77/0	77/0	77/0
Salt Atmosphere	24 Hrs	22/0	22/0	22/0
X-ray	top side only	5/0	5/0	5/0
Moisture Sensitivity	JEDEC Level-2/260C	12/0	12/0	12/0
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

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信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 — 試料構成詳細				
Qual Device:TPS61020DRC (Au-Wire)				
Die Size (mm):	1.52 X 1.98	Die Protective Coating:	10.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/DRC/10	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	0.95 MIL Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	87/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009年9月9日
信頼性試験 - 試料構成詳細				
Qual Device:TPS61020DRC (Cu-Wire)				
Die Size (mm):	1.52 X 1.98	Die Protective Coating:	10.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/DRC/10	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	0.95 MIL Dia., Cu	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	77/0	77/0
**Autoclave	121C,96Hrs	77/0	77/0	77/0
**T/C	-65C/150C,500Cyc	87/0	87/0	87/0
Visual / Mechanical	Performed during Assembly MQ	Approved		
Physical Dimensions	per mechanical drawing	5/0	5/0	5/0
Bond Pull	76 ball bonds, min. 3 units	76/0	76/0	76/0
Bond Shear	76 ball bonds, min. 3 units	76/0	76/0	76/0
Die Shear	-	10/0	10/0	10/0
Manufacturability, Assembly	per mfg. Site specification	Approved		
**Thermal Shock	-65C/150C,500Cyc	77/0	77/0	77/0
X-ray	top side only	5/0	5/0	5/0
Moisture Sensitivity	JEDEC Level-2/260C	12/0	12/0	12/0
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 — 試料構成詳細				
Qual Device:TPS62402DRCR (Au-Wire)				
Die Size (mm):	1.63 X 2.41	Die Protective Coating:	10.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/DRC/10	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.3 MIL Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500 Cyc	87/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
Salt Atmosphere	24 Hrs	22/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009 年 9 月 9 日
信頼性試験 - 試料構成詳細				
Qual Device:TPS62402DRCR (Cu-Wire)				
Die Size (mm):	1.63 X 2.41	Die Protective Coating:	10.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/DRC/10	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.3 MIL Dia., Cu	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500 Cyc	87/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
Salt Atmosphere	24 Hrs	22/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果				
信頼性試験期間	開始	—	終了	2009年9月9日
信頼性試験 - 試料構成詳細				
Qual Device:TPS650240RHBR (Au-Wire)				
Die Size (mm):	3.1 X 3.12	Die Protective Coating:	10.5KAN	
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RHB/32	
Mount Compound:	4207768	Mold Compound:	4208625	
Bond Wire:	1.3 MIL Dia., Au	Leadframe (Finish, Base):	NiPdAu, Cu	
MSL:	JEDEC,L2-260C	-	-	
信頼性試験結果				
Reliability Test	Condition / Duration	Sample Size/ Fails		
		Lot#1	Lot#2	Lot#3
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-
**Autoclave	121C,96Hrs	77/0	-	-
**T/C	-65C/150C,500Cyc	87/0	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-
Die Shear	-	10/0	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-
X-ray	top side only	5/0	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/0	-	-
Note: ** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C				

信頼性試験結果					
信頼性試験期間	開始	—	終了	2009年9月9日	
信頼性試験 - 試料構成詳細					
Qual Device:TPS650240RHBR (Cu-Wire)					
Die Size (mm):	3.1 X 3.12	Die Protective Coating:	10.5KAN		
Assembly Site:	TI Clark	Package/Code/Pins:	QFN/RHB/32		
Mount Compound:	4207768	Mold Compound:	4208625		
Bond Wire:	1.3 MIL Dia., Cu	Leadframe (Finish, Base):	NiPdAu, Cu		
MSL:	JEDEC,L2-260C	-	-		
信頼性試験結果					
Reliability Test	Condition / Duration	Sample Size/ Fails			Notes
		Lot#1	Lot#2	Lot#3	
**High Temp. Storage Bake	170C,420Hrs	77/0	-	-	-
**Autoclave	121C,96Hrs	77/0	-	-	-
**T/C	-65C/150C,500Cyc	87/0	-	-	-
Visual / Mechanical	Performed during Assembly MQ	Approved	-	-	-
Physical Dimensions	per mechanical drawing	5/0	-	-	-
Bond Pull	76 ball bonds, min. 3 units	76/0	-	-	-
Bond Shear	76 ball bonds, min. 3 units	76/0	-	-	-
Die Shear	-	10/0	-	-	-
Manufacturability, Assembly	per mfg. Site specification	Approved	-	-	-
**Thermal Shock	-65C/150C,500Cyc	77/0	-	-	-
X-ray	top side only	5/0	-	-	-
Moisture Sensitivity	JEDEC Level-2/260C	12/1	-	-	(1)
Note:					
** Must be preconditioned per the appropriate sequence, JEDEC L-2/260C					
(1) Devices saw delamination between the die and die pad. Actions have been implemented to Correct this issue.					