PCN Number:	20180213000A	PCN Date:	March 13, 2018
Title:	Qualify New Assembly Material set for Selected Device(s)		
Customer Contact:	PCN Manager	Dept:	Quality Services

Change Type:

☐	Assembly Site	☐	Design	☐	Wafer Bump Site
☐	Assembly Process	☐	Data Sheet	☐	Wafer Bump Material
☒	Assembly Materials	☐	Part number change	☐	Wafer Bump Process
☐	Mechanical Specification	☐	Test Site	☐	Wafer Fab Site
☐	Packing/Shipping/Labeling	☐	Test Process	☐	Wafer Fab Materials
				☐	Wafer Fab Process

PCN Details

Description of Change:

Revision A is to remove select Group 2 devices in the Product Affected Section (with ~~strikethrough~~) and highlighted in yellow. These devices were inadvertently added and not affected by this change.

Texas Instruments is pleased to announce the qualification of new assembly material for devices listed in "Product affected" section below. Devices will remain in current assembly facility and intended piece part changes will be as follows:

Material Differences: Group 1

Material	Current	Proposed
Mount compound	4042500	4147858
Mold compound	4209002, 4206193	4211471

Material Differences: Group 2

Material	Current	Proposed
Mount compound	4042504	4208458
Mold compound	4205443	4211649
Leadframe finish	NiPdAu	Roughened NiPdAu

Reason for Change:

Continuity of supply.

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

None.

Anticipated impact on Material Declaration

☐	No Impact to the Material Declaration	☒	Material Declarations or Product Content reports are driven from production data and will be available following the production release. Upon production release the revised reports can be obtained from the TI Eco-Info website. There is no impact to the material meeting current regulatory compliance requirements with this PCN change.

Changes to product identification resulting from this PCN:

None.

Product Affected: Group 1

74ACT16244DGGR-NG	LM2737MTC/NOPB	MSP430V378IPWR	LM2727MTC/NOPB
ADS112U04IPW	LM2737MTCX/NOPB	BQ34Z950DBTR	LM2727MTCX/NOPB
ADS112U04IPWR	LM2742MTC/NOPB	BQ35100PW	MSP430V389IPW20R
ADS1219IPW	LM2742MTCX/NOPB	BQ35100PWR	MSP430V391IPW14R
ADS1219IPWR	LM2743MTC/NOPB	BQ76200PW	MSP430V403IPWR
ADS122C04IPW	LM2743MTCX/NOPB	BQ76200PWR	MSP430V590IPW14R
ADS122C04IPWR	LM2745MTC/NOPB	BQ7692000PW	MUX36D08IPW
ADS122U04IPW	LM2745MTCX/NOPB	BQ7692000PWR	MUX36D08IPWR
ADS122U04IPWR	LM2747MTC/NOPB	BQ7692001PW	MUX36S16IPW

ADS1282HIPW	LM2747MTCX/NOPB	BQ7692001PWR	MUX36S16IPWR
ADS1282HIPWR	LM3447MT/NOPB	BQ7692002PW	MUX506IPW
ADS7253IPW	LM3447MTE/NOPB	BQ7692002PWR	MUX506IPWR
ADS7253IPWR	LM3447MTX/NOPB	BQ7692003PW	MUX507IPW
ADS7254IPW	LM3450AMT/NOPB	BQ7692003PWR	MUX507IPWR
ADS7254IPWR	LM3450AMTX/NOPB	BQ7692004PW	OPA1679IPWR
ADS7853IPW	LM3450MT/NOPB	BQ7692004PWR	OPA4316IPW
ADS7853IPWR	LM3450MTX/NOPB	BQ7692005PW	OPA4316IPWR
ADS7854IPW	LM5025AMTC/NOPB	BQ7692005PWR	OPA4317IPW
ADS7854IPWR	LM5025AMTCX/NOPB	BQ7692006PW	OPA4317IPWR
ADS8354IPW	LM5025BMTC/NOPB	BQ7692006PWR	PGA281AIPW
ADS8354IPWR	LM5025BMTCX/NOPB	BQ7692007PW	PSN74AVC8T245PWR-P
ADS8661IPW	LM5025CMTC/NOPB	BQ7692007PWR	PSN74AVC8T245SSPWR
ADS8661IPWR	LM5025CMTCE/NOPB	BQ7790400PW	PTCA9538PWR
ADS8665IPW	LM5025CMTCX/NOPB	BQ7790400PWR	RF430CL330HCPWR
ADS8665IPWR	LM5025MTC/NOPB	BQ7790500PW	RF430CL331HIPWR
ADS8671IPW	LM5025MTCX/NOPB	BQ7790500PWR	SN0402096BPWR
ADS8671IPWR	LM5026MT/NOPB	BQ7790501PW	SN1301037PWR
ADS8675IPW	LM5026MTX/NOPB	BQ7790501PWR	SN1305002PWR
ADS8675IPWR	LM5071MT-50/NOPB	BQ7790502PW	SN1401039PW
ADS8681IPW	LM5071MT-80/NOPB	BQ7790502PWR	SN33100PW
ADS8681IPWR	LM5071MTX-50/NOPB	BQ7790503PW	SN33100PWR
ADS8685IPW	LM5071MTX-80/NOPB	BQ7790503PWR	SN5534DGGR
ADS8685IPWR	LM5574MT/NOPB	BQ7790505PW	SN5538DGGR
ADS8689IPW	LM5574MTX/NOPB	BQ7790505PWR	SN63201PW
ADS8689IPWR	LME49743MTX/NOPB	BQ7790508PW	SN63201PWR
ADS8691IPW	LMH6644MT/NOPB	BQ7790508PWR	SN63202PW
ADS8691IPWR	LMH6644MTX/NOPB	BQ7790509PW	SN63202PWR
ADS8695IPW	LMH6683MT/NOPB	BQ7790509PWR	SN63203PW
ADS8695IPWR	LMH6683MTX/NOPB	BQ7790511PW	SN63203PWR
ADS8699IPW	LMV324MT/NOPB	BQ7790511PWR	SN63204PW
ADS8699IPWR	LMV324MTX/NOPB	BQ7790512PW	SN63204PWR
AM26LV32EIPWR-P	LMV344MT/NOPB	BQ7790512PWR	SN65LVDS391PW-P
BQ20695ADBT-V700R1	LMV344MTX/NOPB	BQ77905PWR-00	SN65LVDT390PW-P
BQ20695ADBT-V700R2	LMV604MT/NOPB	BQ78300DBT	SN74AVC16245DGG-P
BQ20695ADBT-V700R3	LMV604MTX/NOPB	BQ78300DBTR	SN74AVC8T245PWR-P
BQ20695ADBTRV700R1	LMV614MT/NOPB	BQ78350DBT	SN74AVC8T245SSPWR
BQ20695ADBTRV700R2	LMV614MTX/NOPB	BQ78350DBT-R1	SN74CB3T16210GR-P
BQ20695ADBTRV700R3	LMV774MT/NOPB	BQ78350DBTR	SN74CB3T16211GR-P
BQ20Z451DBT-R7	LMV774MTX/NOPB	BQ78350DBTR-R1	SN74HC74PW-P
BQ20Z451DBTR-R7	LMV824MT/NOPB	CD4067BPWR	SN74LVC16244ADGG-P
BQ20Z45DBT-V500	LMV824MTX/E7000973	CD4503BPWR	SN75101PWR
BQ20Z45DBTR-V500	LMV824MTX/NOPB	CDCEL824PWR	SN75C3221PW-P
BQ30423DBT-R1	LMV824MTX/S7001910	CLVCHR16245AGR-NG	SN75LVDS83BDGGR
BQ30695ADBT	LMV934MT/NOPB	DAC1282AIPW	SN8765DBT
BQ30695ADBTR	LMV934MTX/NOPB	DAC1282AIPWR	SN8765DBTR
BQ30Z552DBTR	LV16000MTX/NOPB	DAC80005IPW	TAS3150PW
BQ30Z554DBT-R1	MSP430G2444IDA38	DIR9001PW-P	TAS3150PWR
BQ30Z554DBTR-R1	MSP430G2444IDA38R	DIR9001PWR-P	TDC7200PW
BQ30Z555DBT-R5	MSP430G2544IDA38	DPA02260IPWR	TDC7200PWR
BQ30Z555DBTR-R5	MSP430G2544IDA38R	DRV642PW	TL064IPWR
BQ30Z55DBT-R3	MSP430G2744IDA38	DRV642PWR	TLC6C5912PWR
BQ30Z55DBT-R4	MSP430G2744IDA38R	DRV8833PW	TLC6C598PWR
BQ30Z55DBT-V100R2	MSP430G2755IDA38	DRV8833PWR	TLV4313IPWR
BQ30Z55DBTR-R3	MSP430G2755IDA38R	DRV8860APW	TLV4314IPWR
BQ30Z55DBTR-R4	MSP430G2855IDA38	DRV8860APWR	TLV4333IPWR
BQ30Z55DBTR-V100R2	MSP430G2855IDA38R	DRV8860PW	TLV6004IPWR
BQ34110PW	MSP430G2955IDA38	DRV8860PWR	TPIC2040DBTRG4
BQ34110PWR	MSP430G2955IDA38R	GD75232PWR-ND	TPS2411BPWR
BQ34Z100PW-G1	MSP430TCH5EPW	HPA02272DGGR	TRS3232EIPWR-NG
BQ34Z100PWR-G1	MSP430TCH5EPWR	LM25574MT/NOPB	UCC28251PW
BQ34Z950DBT	MSP430V376IPWR	LM25574MTX/NOPB	UCC28251PWR

Product Affected: Group 2			
~~BUF07704AIPWP~~	TPA6011A4PWPR	TLC5929PWP	TPS54425PWP
~~BUF07704AIPWPR~~	TPA6012A4PWP	TLC5929PWPR	TPS54425PWP-P
~~BUF12800AIPWP~~	TPA6012A4PWPR	TLC5942PWP	TPS54425PWPR
~~BUF12800AIPWPR~~	TPA6013A4PWP	TLC5943PWP	TPS54425PWPR-P
DRV8833LPWPR	TPA6013A4PWPR	TLC5943PWPR	TPS54426PWP
DRV8833PWP	TPA6017A2PWP	TLC5944PWP	TPS54426PWPR
DRV8833PWPR	TPA6017A2PWPR	TLC5944PWPR	TPS54429EPWP
DRV8848LPWPR	TPA6019A4PWPR	TLC59461PWP	TPS54429EPWPR
DRV8848PWP	TPS2231PWP	TLC59461PWPR	TPS54429PWP
DRV8848PWPR	TPS2231PWPR	TLC5946PWP	TPS54429PWPR
PTLS2605DCARG4	TPS53114PWP	TLC5946PWPR	TPS54525PWP
~~PTPS65291PWPT~~	TPS53114PWPR	TLC5948APWP	TPS54525PWP-P
SN0701064PWPR	TPS54225PWP	TLC5948APWPR	TPS54525PWPR
SN0910037PWPR	TPS54225PWPR	TLC5948PWPR	TPS54525PWPR-P
SN0910038PWPR	TPS54226PWP	TLC5949PWP	TPS54526PWP
SN1011047PWPR	TPS54226PWPR	TLC5949PWPR	TPS54526PWPR
SN1110021PWPR	TPS54294PWP	~~TLS2601HDCARG4~~	~~TPS56520PWP~~
SN1111015PWPR	TPS54294PWPR	TLS2602TDCARG4	~~TPS56520PWPR~~
THS6204IPWP	TPS54295PWP	TLS2605RDCARG4	~~TPS56920PWP~~
THS6214IPWP	TPS54295PWPR	TPA0212PWP	~~TPS56920PWPR~~
THS6214IPWPR	TPS54325PWP	TPA0212PWPR	TPS56921PWP
TLC5926IPWPR	TPS54325PWP-P	TPA0312PWP	TPS56921PWPR
TLC5927IPWP-P	TPS54325PWPR	TPA2000D2PWP	TPS65161PWPR
TLC5927IPWPR	TPS54325PWPR-P	TPA2000D2PWPR	TPS65270PWPR
TLC5928PWP	TPS54326PWP	TPA3110D2PWPR	~~TPS65291PWPR~~
TLC5928PWPR	TPS54326PWPR	TPA6011A4PWP	~~TPS65291PWPT~~

Qualification Report: Group 1

Mold Compound 4211471 and Mount Compound 4147858 Qualification for TSSOP/TVSOP Packages in TIM and TITL

Approve Date 26-Aug-2016

Product Attributes

Attributes	Qual Device: 8BT245MDGGEP	Qual Device: 8X512DGGR	Qual Device: ADS1259BIPWR	Qual Device: CLVC374APWR	Qual Device: E8722DGGR	Qual Device: SN200708045DAR	Qual Device: SN65MLVD129DGG
Assembly Site	MLA (TIM)	MLA (TIM)	MLA (TIM)	MLA (TIM)	MLA (TIM)	TAI (TITL)	TAI (TITL)
Package Family	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	FFAB	FFAB	DMOS5	FFAB	FFAB	DMOS5	FFAB
Wafer Fab Process	ASL3C	ASL2BSE	50HPA07	ASL3C	ACTPI	LBC5X3	RF_BICMOS1

Attributes	Qual Device: THS4524IDBTR	Qual Device: TPS2111PWR	Qual Device: TPS23861PWR	Qual Device: TPS43000PW	QBS Package Reference: SN65C1168PWR	QBS Package Reference: TAS5086DBT	QBS Package Reference: TPIC1353DBTRG4

Attributes	Qual Device: THS4524IDBTR	Qual Device: TPS2111PWR	Qual Device: TPS23861PWR	Qual Device: TPS43000PW	QBS Package Reference: SN65C1168PWR	QBS Package Reference: TAS5086DBT	QBS Package Reference: TPIC1353DBTRG4
Assembly Site	MLA (TIM)	MLA (TIM)	TAI	MLA (TIM)	MLA	TAI	TAI
Package Family	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP	TSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	FFAB	DFAB	RFAB	SFAB	SHE SFAB	DMOS5	MIHO8
Wafer Fab Process	BICOM3X	LBC4X	LBC8	IMP-PWR2	IMP-C80	1833C05	LBC7

- QBS: Qual By Similarity
- Qual Devices qualified at LEVEL1-260CG: E8722DGGR, TPS43000PW, SN200708045DAR , CLVC374APWR, TPS2111PWR, 8X512DGGR, 8BT245MDGGEP, ADS1259BIPWR
- Qual Devices qualified at LEVEL2-260CG: SN65MLVD129DGG, THS4524IDBTR, TPS23861PWR
- Device THS4524IDBTR contains multiple dies.

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: 8BT245MDGGEP	Qual Device: 8X512DGGR	Qual Device: ADS1259BIPWR	Qual Device: CLVC374APWR	Qual Device: E8722DGGR
AC	Autoclave 121C	96 Hours	3/231/0	-	-	-	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	Pass	-
HAST	Biased HAST, 130C/85%RH	192 Hours	-	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	-	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0	3/231/0
VM	Visual Quality Reliability Inspection	Post Autoclave 96 Hours	-	-	-	-	-
VM	Visual Quality Reliability Inspection	Post Biased HAST 96 Hours	-	-	-	-	-
VM	Visual Quality Reliability Inspection	Post Temp Cycle 500 Cycles	-	3/6/0	-	-	-

Type	Test Name / Condition	Duration	Qual Device: SN200708045DAR	Qual Device: SN65MLVD129DGG	Qual Device: THS4524IDBTR	Qual Device: TPS2111PWR	Qual Device: TPS23861PWR
AC	Autoclave 121C	96 Hours	3/231/0	1/77/0	3/231/0	3/231/0	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours	-	-	-	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-	3/231/0

Type	Test Name / Condition	Duration	Qual Device: SN200708045DAR	Qual Device: SN65MLVD129DGG	Qual Device: THS4524IDBTR	Qual Device: TPS2111PWR	Qual Device: TPS23861PWR
HTSL	High Temp Storage Bake 170C	420 Hours	-	-	-	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	1/77/0	3/231/0	3/231/0	-
VM	Visual Quality Reliability Inspection	Post Autoclave 96 Hours	3/6/0	-	3/6/0	3/6/0	-
VM	Visual Quality Reliability Inspection	Post Biased HAST 96 Hours	-	-	-	-	3/6/0
VM	Visual Quality Reliability Inspection	Post Temp Cycle 500 Cycles	3/6/0	-	3/6/0	3/6/0	-

Type	Test Name / Condition	Duration	Qual Device: TPS43000PW	QBS Package Reference: SN65C1168PWR	QBS Package Reference: TAS5086DBT	QBS Package Reference: TPIC1353DBTRG4
AC	Autoclave 121C	96 Hours	-	3/231/0	3/231/0	3/231/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours	-	3/227/0	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	3/227/0	3/231/0	3/231/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/231/0	3/231/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/230/0	3/231/0	3/231/0
VM	Visual Quality Reliability Inspection	Post Autoclave 96 Hours	-	-	-	-
VM	Visual Quality Reliability Inspection	Post Biased HAST 96 hours	-	-	-	-
VM	Visual Quality Reliability Inspection	Post Temp Cycle 500 Cycles	3/6/0	-	-	-

- 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: Group 2

HTSSOP UniBOM Enterprise Qualification in TIM

Approve Date 08-Jan-2018

Product Attributes

Attributes	Qual Device: TLC5926IPWPR	Qual Device: TLC5946PWPR	Qual Device: TLS2605RDCARG4	QBS Package Reference: DRV11873PWPR	QBS Package Reference: TAS3108DCPR	QBS Package Reference: TAS5162DDVR
Assembly Site	MLA	MLA	MLA	TAI	TAI	TAI
Package Family	HTSSOP	HTSSOP	HTSSOP	HTSSOP	HTSSOP	HTSSOP
Flammability Rating	UL 94 V0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	DP1DM5	DFAB	MIH08	RFAB	RFAB	DMOS 5
Wafer Process	LBC7	LBC4	LBC7	LBC7	C05.#	LBC5

Attributes	QBS Package Reference: TAS6424QDKQRQ1	QBS Package Reference: TLS2605RDCARG4	QBS Package Reference: TPS54226PWPR	QBS Package Reference: TPS65279VDAPR	QBS Package Reference: TPS653853QDCARQ1
Assembly Site	MLA	TAI	TAI	TAI	TAI
Package Family	HSSOP	HTSSOP	HTSSOP	HTSSOP	HTSSOP
Flammability Rating	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0	UL 94 V-0
Wafer Fab Supplier	MIHO8	MH8	MH8	RFAB	RFAB/DMOS6 (MFF)
Wafer Process	LBC7	LBC7	LBC7	LBC7	LBC8

- QBS: Qual By Similarity
- Qual Devices TLC5926IPWPR , TLC5946PWPR are qualified at LEVEL2-260CG
- Qual Device TLS2605RDCARG4 are qualified at LEVEL3-260CG
- QBS Device TPS65279VDAPR is qualified at LEVEL1-260CG
- QBS Devices DRV11873PWPR, TPS54226PWPR are qualified at LEVEL2-260CG
- QBS Devices TAS3108DCPR, TAS5162DDVR, TAS6424QDKQRQ1, TLS2605RDCARG4, TPS653853QDCARQ1 are qualified at LEVEL3-260CG

Qualification Results

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

Type	Test Name / Condition	Duration	Qual Device: TLC5926IPWPR	Qual Device: TLC5946PWPR	Qual Device: TLS2605RDCARG4	QBS Package Reference: DRV11873PWPR
AC	Autoclave 121C	96 Hours	3/230/0	3/231/0	3/231/0	3/231/0
ED	Auto Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	-	-
ED	Electrical Characterization	Per Datasheet Parameters	Pass	-	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours (for information)	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	-	-
HBM	ESD – HBM	4000 V	-	-	-	-
HBM	ESD – HBM	2000 V	-	-	-	-
CDM	ESD – CDM	500 V	-	-	-	-
CDM	ESD - CDM (Corner Pins Only)	1500 V	-	-	-	-
CDM	ESD - CDM (Corner Pins Only)	750 V	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	-	-

HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	-	-
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	3/229/0	3/231/0
LI	Lead Pull to Destruction	Leads	-	-	-	-
LU	Latch-up	(Per AEC Q100-004)	-	-	-	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	Pass	Pass
MQ	Manufacturability (Auto Assembly)	(per automotive requirements)	-	-	-	-
PD	Physical Dimensions (Cpk>1.67)	--	-	-	-	-
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	-	-
SD	Surface Mount Solderability	Pb Free	-	-	-	-
SD	Surface Mount Solderability.	Pb	-	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
TC-WBP	Bond Pull over Ball Post Temp. Cycle	500 Cycles	-	-	-	-
TC-WBP	Bond Pull over Stitch Post Temp. Cycle	500 Cycles	-	-	-	-
WBP	Bond Pull over Ball (Cpk>1.67)	Wires	-	-	-	-
WBP	Bond Pull over Stitch (Cpk>1.67)	Wires	-	-	-	-
WBP	Bond Pull (mid-span) (Cpk>1.67)	Wires	3/228/0	3/228/0	3/228/0	3/228/0
WBS	Bond Shear (Cpk>1.67)	Wires	3/228/0	3/228/0	3/228/0	3/228/0

Type	Test Name / Condition	Duration	QBS Package Reference: TAS3108DCPR	QBS Package Reference: TAS5162DDVR	QBS Package Reference: TAS6424QDKQRQ1	QBS Package Reference: TLS2605RDCARG4
AC	Autoclave 121C	96 Hours	3/231/0	3/231/0	3/231/0	3/230/0
ED	Auto Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	3/90/0	-
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	-	-
HAST	Biased HAST, 130C/85%RH	192 Hours (for information)	-	-	-	-
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0	-
HBM	ESD – HBM	4000 V	-	-	1/3/0	-
HBM	ESD – HBM	2000 V	-	-	-	-
CDM	ESD – CDM	500 V	-	-	1/3/0	-
CDM	ESD - CDM (Corner Pins Only)	1500 V	-	-	1/3/0	-
CDM	ESD - CDM (Corner Pins Only)	750 V	-	-	-	-
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0	-
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	3/231/0	-
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	3/231/0	-	3/231/0
LI	Lead Pull to Destruction	Leads	-	-	1/50/0	-
LU	Latch-up	(Per AEC Q100-004)	-	-	1/6/0	-
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	-	Pass
MQ	Manufacturability (Auto Assembly)	(per automotive requirements)	-	-	Pass	-
PD	Physical Dimensions (Cpk>1.67)	--	-	-	3/30/0	-
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	1/45/0	-
SD	Surface Mount Solderability	Pb Free	-	-	1/15/0	-
SD	Surface Mount Solderability.	Pb	-	-	1/15/0	-

TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
TC-WBP	Bond Pull over Ball Post Temp. Cycle	500 Cycles	-	-	3/90/0	-
TC-WBP	Bond Pull over Stitch Post Temp. Cycle	500 Cycles	-	-	3/90/0	-
WBP	Bond Pull over Ball (Cpk>1.67)	Wires	-	-	3/90/0	-
WBP	Bond Pull over Stitch (Cpk>1.67)	Wires	-	-	3/90/0	-
WBP	Bond Pull (mid-span) (Cpk>1.67)	Wires	3/228/0	3/228/0	-	3/228/0
WBS	Bond Shear (Cpk>1.67)	Wires	3/228/0	3/228/0	3/90/0	3/228/0

Type	Test Name / Condition	Duration	QBS Package Reference: TPS54226PWPR	QBS Package Reference: TPS65279VDAPR	QBS Package Reference: TPS653853QDCARQ1
AC	Autoclave 121C	96 Hours	3/231/0	-	3/246/0
ED	Auto Electrical Distributions	Cpk>1.67 Room, Hot, & Cold	-	-	3/90/0
ED	Electrical Characterization	Per Datasheet Parameters	-	-	-
ELFR	Early Life Failure Rate, 125C	48 Hours	-	-	3/2400/0
HAST	Biased HAST, 130C/85%RH	192 Hours (for information)	-	-	3/231/0
HAST	Biased HAST, 130C/85%RH	96 Hours	-	-	3/231/0
HBM	ESD – HBM	4000 V	-	-	-
HBM	ESD – HBM	2000 V	-	-	1/3/0
CDM	ESD – CDM	500 V	-	-	1/3/0
CDM	ESD - CDM (Corner Pins Only)	1500 V	-	-	-
CDM	ESD - CDM (Corner Pins Only)	750 V	-	-	1/3/0
HTOL	Life Test, 125C	1000 Hours	-	-	3/231/0
HTSL	High Temp Storage Bake 150C	1000 Hours	-	-	3/270/0
HTSL	High Temp Storage Bake 170C	420 Hours	3/231/0	-	-
LI	Lead Pull to Destruction	Leads	-	-	-
LU	Latch-up	(Per AEC Q100-004)	-	-	1/6/0
MQ	Manufacturability (Assembly)	(per mfg. Site specification)	Pass	Pass	-
MQ	Manufacturability (Auto Assembly)	(per automotive requirements)	-	-	Pass
PD	Physical Dimensions (Cpk>1.67)	--	-	-	3/30/0
PTC	Power Temperature Cycle, -40/125C	1000 Cycles	-	-	1/45/0
SD	Surface Mount Solderability	Pb Free	-	-	-
SD	Surface Mount Solderability.	Pb	-	-	-
TC	Temperature Cycle, -65/150C	500 Cycles	3/231/0	3/231/0	3/231/0
TC-WBP	Bond Pull over Ball Post Temp. Cycle	500 Cycles	-	-	3/90/0
TC-WBP	Bond Pull over Stitch Post Temp. Cycle	500 Cycles	-	-	3/90/0
WBP	Bond Pull over Ball (Cpk>1.67)	Wires	-	-	1/30/0
WBP	Bond Pull over Stitch (Cpk>1.67)	Wires	-	-	1/30/0
WBP	Bond Pull (mid-span) (Cpk>1.67)	Wires	3/228/0	3/228/0	-
WBS	Bond Shear (Cpk>1.67)	Wires	3/228/0	3/228/0	1/30/0

- 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

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

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Asia Pacific	PCNAsiaContact@list.ti.com

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