PCN Number:	20240612000.1	PCN Date:	June 14, 2024
Title:	Qualify New Assembly Material set for Selected Device(s)		
Customer Contact:	Change Management team	Dept:	Quality Services
Proposed 1st Ship Date:	September 12, 2024	Sample requests accepted until:	July 14, 2024*

*Sample requests received after July 14, 2024 will not be supported.

Change Type:

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

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of new mount compound material for the devices listed below. Devices will remain at the current assembly site.

	Current	Proposed
Mount compound	4208458	4211470

Qual details are provided in the Qual Data Section.

Reason for Change:

Supply Continuity

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

None

Impact on Environmental Ratings

Checked boxes indicate the status of environmental ratings following implementation of this change. If below boxes are checked, there are no changes to the associated environmental ratings.

RoHS	REACH	Green Status	IEC 62474
☒ No Change	☒ No Change	☒ No Change	☒ No Change

Changes to product identification resulting from this PCN:

None

Product Affected: Group 1

SN0910037PWPR	TPS54425PWPR-P	TPS54525PWPR-P	TPS16637PWPR
LM5177DCPR	DRV8436PWPR	DRV8256PPWPR	TPS26637PWPR
DRV8426EPWPR	DRV8452DDWR	TPS26636PWPR	DRV8461SPWPR
TPS54526PWPR	TPS8801DCPR	TPS54429PWPR	TPS54312PWPR
DRV8424PPWPR	LM5122ZAPWPR	TLC5948APWPR	TPS54314PWPR
TPS56920PWP	TLC5929PWP	TPS54294PWP	TPS54325PWPR-P
DRV8962DDWR	TPS65270PWPR	DRV8434PWPR	DRV8848PWPR
TPS56920PWPR	TPS65291PWPR	LM98555CCMH/NOPB	TPS54426PWPR
DRV8833LPWPR	TPS54295PWP	SN0910038PWPR	DRV8461PWPR

DRV8425EPWPR	TPS54226PWP	TPS26631PWPR	TPS54313PWPR
DRV8935PPWPR	TPS7A7833PWPT	TPS54316PWPRG4	DRV8424PWPR
DRV8425PWPR	TPS54325PWP	TPIC2060ASDFDRG4	TPS54325PWP-P
TPS54615PWPR	TPS54310PWPRG4	DRV8452PWPR	TPS54226PWPR
TPS54616PWPR	TPS92633MPWPR	DRV8262DDWR	TPS54429EPWP
TLS2602TDCARG4	TPS26633PWPT	DRV8256EPWPR	SN1011047PWPR
DRV8436EPWPR	TPS26631PWPT	TPS54312PWPRG4	TPS7A7850PWPR
TPS54326PWP	DRV8955PPWPR	LM98555CCMHX/NOPB	DRV8426PWPR
TPS65291PWPT	DRV8848LPWPR	TPS54314PWPRG4	TPS56520PWP
TPS56520PWPR	DRV8461DDWR	DRV8425PPWPR	TPS54294PWPR
TAS880021ADCAR	TPS54525PWPR	LM5122ZAPWPT	DRV8462DDWR
DRV8962DDVR	DRV8952DDWR	TPS54525PWP-P	TAS5822MDCPR
TPS26636PWPT	TAS85807MDCPR	DRV8434EPWPR	TPS54315PWPR
DRV8434PPWPR	DRV8434SPWPR	DRV8428PWPR	TPS54429PWP
PDRV8932PPWPR	DRV8426PPWPR	TPS7A7836PWPT	LM25185PWPR
TLC5949PWPR	TPS16530PWPR	TPS54225PWP	TPS16630PWPR
DRV8428EPWPR	DRV8847PWPR	DRV8428PPWPR	TPS54295PWPR
TPS54612PWPR	TLC5948APWP	SN005826MDCPR	DRV8452SPWPR
TPS54610PWPRG4	DRV8424EPWPR	TPS54310PWPR	SN1110021PWPR
TPS54613PWPR	DRV8434APWPR	LM5185PWPR	TPS54525PWP
TPS54610PWPR	TPS54326PWPR	TPS54425PWP	TPS54316PWPR
TPS54612PWPRG4	TPS7A7836PWPR	TPS54425PWP-P	TPS8804DCPR
TPS54426PWP	TPS7A7833PWPR	TPS7A7850PWPT	TPS54526PWP
TPS54425PWPR	DRV8436PPWPR	TLC5929PWPR	TPS16630PWPT
DRV8833PWPR	PDRV8935PPWPR	TLC5949PWP	TPS26633PWPR
DRV8932PPWPR	TPS54429EPWPR	TPS54614PWPR	

Qualification Report

Approve Date 27-February-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: DRV8412DDWR	Qual Device: PCM1690DCAR	QBS Reference: LP8880DCPRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	1/77/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	1/22/0	1/22/0	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	3/30/0
ESD	E2	ESD CDM	-	500 Volts	-	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	3/90/0

QBS: Qual By Similarity

Qual Device DRV8412DDWR is qualified at MSL3 260C
Qual Device PCM1690DCAR is qualified at MSL3 260C
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/

Qualification Report

Approve Date 30-May-2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: DRV8462DDWR	QBS Reference: DRV8812PWPR	QBS Reference: LM46002PWPR	QBS Reference: LP8880DCPRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	3/231/0	3/231/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	3/231/0	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	3/231/0	3/231/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	3/135/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	-	1/77/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	1/22/0	-	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	-	3/30/0
ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	-	-	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	3/90/0	1/30/0	1/30/0	3/90/0

QBS: Qual By Similarity
Qual Device DRV8462DDWR is qualified at MSL3 260C
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/

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