12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20241217010.1
Qualification of RFAB using qualified Process Technology, Die Revision, and additional Assembly site (HFTF) & BOM options for select devices
Change Notification / Sample Request

Date: December 18, 2024
To: MOUSER PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments (TI). The details of this change are on the following pages, and are in alignment with our standard product change notification (PCN) process.

TI requires acknowledgement of receipt of this notification within 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 30 days of this notification, given that samples are not built ahead of the change.

The Proposed First Ship date in this PCN letter is the earliest possible date that customers could receive the changed material. It is our commitment that the changed device will not ship before that date. If samples are requested within the 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

Changes outlined in this notification underscore our commitment to product longevity and supply continuity, as well as our continued efforts to transition to newer, more efficient manufacturing processes and technologies. Specifically, this particular notification is related to TI’s multiyear transition plan for our two remaining 150-millimeter production lines (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). SFAB closure activities are expected to begin by the end of 2025. DFAB will remain open with a smaller set of 200mm technologies and GaN.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the Change Management team. For sample requests or sample related questions, contact your local Field Sales Representative. As always, we thank you for your continued business.

Change Management Team
SC Business Services

20241217010.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TLV341IDCKR	NULL
TLV341AIDCKR	NULL
LMV341IDCKR	NULL

Technical details of this Product Change follow on the next page(s).

PCN Number:	20241217010.1	**PCN Date:**	December 18, 2024
Title:	Qualification of RFAB using qualified Process Technology, Die Revision, and additional Assembly site (HFTF) & BOM options for select devices		
Customer Contact:	Change Management Team	**Dept:**	Quality Services
Proposed 1st Ship Date:	March 18, 2025	**Sample requests accepted until:**	January 17, 2025*

＊Sample requests received after January 17, 2025 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 its RFAB fabrication facility as an additional Wafer Fab option in addition to an Assembly site (HFTF) and BOM options for the devices listed below.

Current Fab Site			Additional Fab Site		
Fab Site	**Process**	**Wafer Diameter**	**Fab Site**	**Process**	**Wafer Diameter**
DL-LIN	A21	150 mm	RFAB	LBC9	300 mm

The die was also changed as a result of the process change.

Construction differences are as follows:

What	**UTL2**	**HNA**	**HFTF**
Lead Finish	NiPdAu	NiPdAu	Matte Sn
Bond Wire composition, diameter	Au, 1.0 mil	Au, 0.8 mil	Cu, 0.8 mil
Mold Compound	SID#CZ0096	SID#450179	SID#R-27
Mount Compound	SID#PZ0037	SID#400194	SID#A-03

Upon expiry of this PCN, TI will combine lead finish solutions in a single standard part number. For example, a customer order for 7500 units of a specific TI part number with 2500 units SPQ (Standard Pack Quantity per reel) may be fulfilled in the following ways:

- 3 reels of NiPdAu finish.
- 3 reels of Matte Sn finish
- 2 reels of Matte Sn and 1 reel of NiPdAu finish
- 2 reels of NiPdAu and 1 reel of Matte Sn finish

Test coverage, insertions, conditions will remain consistent with current testing and verified with test MQ

Qual details are provided in the Qual Data Section.

Reason for Change:

These changes are part of our multiyear plan to transition products from our 150-millimeter factories to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and 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:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
DL-LIN	DLN	USA	Dallas
RFAB	**RFB**	**USA**	**Richardson**

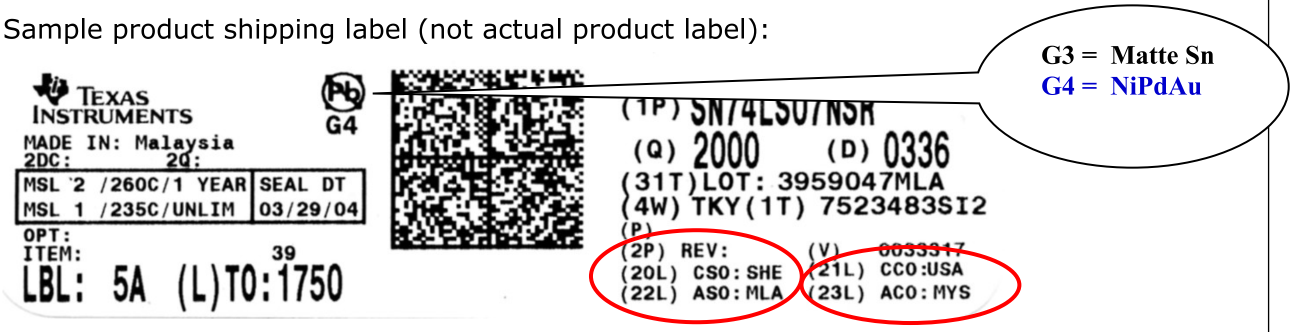
Die Rev:

Current	**New**
Die Rev [2P]	**Die Rev [2P]**
-	**A**

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
UTL2	NS2	THA	Bangpakong, Chachoengsao
HNA	HNT	THA	Ayutthaya
HFTF	**HFT**	**CHN**	**Hefei**

Sample product shipping label (not actual product label):



TEXAS INSTRUMENTS
G4
MADE IN: Malaysia
2DC: 2Q:

MSL 2 /260C/1 YEAR	SEAL DT
MSL 1 /235C/UNLIM	03/29/04

OPT:
ITEM: 39
LBL: 5A (L)TO: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

G3 = Matte Sn
G4 = NiPdAu

Product Affected:

LMV341IDCKR*	TLV341AIDCKR	TLV341IDCKR*

* G4 part numbers are available and will remain on NiPdAu flows. This PCN does not apply to existing G4 materials. Please visit TI's labeling and symbolization page for more information on material designators.

For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Report

LMV341IDCKR [ROLO]
Approve Date 16-JULY -2024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LMV341IDCKR	QBS Product/Package Reference: OPA310SQDCKRQ1	QBS Process Reference: TLV7031QDCKRQ1	QBS Package Reference: OPA992QDCKRQ1	QBS Package Reference: TPS22919QDCKRQ1
HAST	A2	Biased HAST	110C/85%RH	264 Hours	-	1/77/0	-	1/77/0	-
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	1/77/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	-	3/231/0
UHAST	A3	Unbiased HAST	110C/85%RH	264 Hours	-	1/77/0	-	1/77/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/231/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	1/77/0	3/231/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/231/0	1/45/0	3/135/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	1/45/0	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: LMV341IDCKR	QBS Product/Package Reference: OPA310SQDCKRQ1	QBS Process Reference: TLV7031QDCKRQ1	QBS Package Reference: OPA992QDCKRQ1	QBS Package Reference: TPS22919QDCKRQ1
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0	-	1/77/0
HTOL	B1	Life Test	150C	300 Hours	-	1/77/0	-	1/77/0	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-	1/15/0
PD	C4	Physical Dimensions	Cpk>1.67	-	-	1/10/0	3/30/0	1/10/0	3/30/0
ESD	E2	ESD CDM	-	1500 Volts	-	-	-	-	1/3/0
ESD	E2	ESD CDM	-	500 Volts	-	1/3/0	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	1/3/0	1/3/0	-
ESD	E2	ESD HBM	-	3000 Volts	-	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	1/6/0	1/6/0	1/6/0
CHAR	E5	Electrical Distributions	Per datasheet limits	-	-	3/90/0	3/90/0	1/30/0	3/90/0
FTY	E6	Final Test Yield	-	-	1/Pass	-	-	-	-

- QBS: Qual By Similarity
- Qual Device LMV341IDCKR is qualified at MSL1 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/

TI Qualification ID: R-CHG-2305-082

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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