



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN20220512000.1
Qualify additional Assembly sites for select VSSOP devices
Change Notification / Sample Request

Date: May 12, 2022
To: TOKYO ELECTRON DEVICE (DSTR) PCN

Dear Customer:

This is an announcement of a change to a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

Texas Instruments 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 of the change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The changes discussed within this PCN will not take effect any earlier than the proposed first ship date on Page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice or to provide acknowledgement of this PCN, you may contact your local Field Sales Representative or the PCN Team ([PCN ww admin team@list.ti.com](mailto:PCN_admin_team@list.ti.com)). For sample requests or sample related questions, contact your local Field Sales Representative.

Sincerely,

PCN Team
SC Business Services

20220512000.1
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
INA300AIDGSR	null
TPS62160DGKR	null
ADS8320E/250	null
ADS8320EB/250	null
ADS8325IBDGKT	null
LPV542DGKR	null
THVD1452DGSR	null
TLV8812DGKR	null
LPV812DGKT	null
OPA2388IDGKT	null
ADS8321E/250	null
TLV2541IDGKR	null
TMUX1136DGSR	null
TMUX154EDGSR	null
TPS62003DGSR	null
TLV1702AIDGKR	null
TLV5623IDGKR	null
TMUX1072DGSR	null
ADS8320EB/2K5	null
ADS8321EB/2K5	null
ADS8326IDGKR	null
DAC7811IDGST	null
DAC8552IDGKR	null
INA238AIDGST	null
OPA2330AIDGKR	null
OPA2388IDGKR	null
TLV2333IDGKR	null
TPS53014DGSR	null
ADS7823E/250	null
DAC7574IDGSR	null
INA381A3IDGST	null
OPA2317IDGKR	null
OPA2317IDGKT	null
TLV522DGKT	null
TPS62160DGKT	null
ADS8321EB/250	null
DAC60501MDGST	null
OPA2330AIDGKT	null
ADS7817E/2K5	null
ADS8321E/2K5	null
ADS8325IDGKT	null
ADS8320E/2K5	null
INA326EA/250	null
THVD1552DGSR	null
TMUX1204DGSR	null
DAC5574IDGSR	null
DAC8532IDGKR	null
INA381A3IDGSR	null
OPA1652AIDGKR	null
OPA2333AIDGKT	null
OPA2822E/2K5	null
THVD1512DGSR	null
TLV2333IDGKT	null
TPS53015DGSR	null
TPS62050DGSR	null
UCC25705DGKTR	null
TLV5624IDGKR	null

ADS8325IBDGKR	null
DAC7554IDGSR	null
DRV2605LDGSR	null
INA2181A1IDGSR	null
INA2181A1IDGST	null
TLV8812DGKT	null
INA238AIDGSR	null
ADS1244IDGST	null
ADS8326IDGKT	null
ADS1112IDGST	null
THVD2410DGKR	null
TLV7042DGKR	null
TLV5606IDGKR	null
UCC39002DGKR	null
OPA2822E/250	null
TLV7022DGKR	null
INA592IDGKT	null
DAC6574IDGSR	null
TLV2542IDGKR	null
OPA2333AIDGKR	null
TLV5623CDGKR	null
INA592IDGKR	null
DAC60501ZDGSR	null
DAC60501ZDGST	null
OPA875IDGKT	null
INA326EA/2K5	null
TLV7032DGKR	null
LM3401MM/NOPB	null
LM3401MMX/NOPB	null
SN1206048DGSR	null
TMUX6121DGSR	null
VCA821IDGST	null
OPA1662AIDGKR	null

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

Continuity of Supply							
Anticipated impact on Fit, Form, 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:							
Assembly Site							
ASESH	Assembly Site Origin (22L)	ASO: ASH					
HNA	Assembly Site Origin (22L)	ASO: HNT					
UTAC	Assembly Site Origin (22L)	ASO: NS2					
TI Melaka (TIEM)	Assembly Site Origin (22L)	ASO: CU6					
TIM (Malaysia)	Assembly Site Origin (22L)	ASO: MLA					
HFTF	Assembly Site Origin (22L)	ASO: HFT					
Sample product shipping label (not actual product label)							
 TEXAS INSTRUMENTS MADE IN: Malaysia 2DC: 2Q: <table border="1"> <tr> <td>MSL '2 / 260C/1 YEAR</td> <td>SEAL DT</td> </tr> <tr> <td>MSL 1 / 235C/UNLIM</td> <td>03/29/04</td> </tr> </table> OPT: ITEM: 39 LBL: 5A (L)T0:1750  E4/G4: NiPdAu E3/G3: Matte Sn (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				MSL '2 / 260C/1 YEAR	SEAL DT	MSL 1 / 235C/UNLIM	03/29/04
MSL '2 / 260C/1 YEAR	SEAL DT						
MSL 1 / 235C/UNLIM	03/29/04						
Product Affected:							
ADS1112IDGSR	DRV2605LDGST	OPA2316SIDGSR	TLV522DGKT				
ADS1112IDGST	INA155E/250	OPA2317IDGKR	TLV5606CDGKR				
ADS1244IDGSR	INA155EA/250	OPA2317IDGKT	TLV5606IDGKR				
ADS1244IDGST	INA155EA/2K5	OPA2330AIDGKR	TLV5616IDGKR				
ADS1245IDGST	INA156EA/250	OPA2330AIDGKT	TLV5623CDGKR				
ADS7817E/250	INA156EA/2K5	OPA2333AIDGKR	TLV5623IDGKR				
ADS7817E/2K5	INA2181A1IDGSR	OPA2333AIDGKT	TLV5624CDGKR				
ADS7817EB/250	INA2181A1IDGST	OPA2334AIDGSR	TLV5624IDGKR				
ADS7817EB/2K5	INA2181A2IDGSR	OPA2334AIDGST	TLV5636CDGKR				
ADS7817EC/250	INA2181A2IDGST	OPA2341DGSA/250	TLV5636IDGKR				
ADS7817EC/2K5	INA2181A3IDGSR	OPA2355DGSA/250	TLV7012DGKR				
ADS7823E/250	INA2181A3IDGST	OPA2357AIDGSR	TLV7022DGKR				
ADS7823E/2K5	INA2181A4IDGSR	OPA2357AIDGST	TLV7032DGKR				
ADS7823EB/250	INA2181A4IDGST	OPA2363AIDGSR	TLV7042DGKR				
ADS7823EB/2K5	INA228AIDGSR	OPA2363AIDGST	TLV8802DGKR				
ADS8320E/250	INA228AIDGST	OPA2363IDGSR	TLV8802DGKT				
ADS8320E/2K5	INA229AIDGSR	OPA2363IDGST	TLV8812DGKR				

ADS8320EB/250	INA229AIDGST	OPA2373AIDGSR	TLV8812DGKT
ADS8320EB/2K5	INA237AIDGSR	OPA2373AIDGST	TMUX1072DGSR
ADS8321E/250	INA237AIDGST	OPA2380AIDGKR	TMUX1104DGSR
ADS8321E/2K5	INA238AIDGSR	OPA2380AIDGKT	TMUX1136DGSR
ADS8321EB/250	INA238AIDGST	OPA2381AIDGKR	TMUX1204DGSR
ADS8321EB/2K5	INA239AIDGSR	OPA2381AIDGKT	TMUX154EDGSR
ADS8324E/250	INA239AIDGST	OPA2388IDGKR	TMUX6121DGSR
ADS8324E/2K5	INA300AIDGSR	OPA2388IDGKT	TMUX6122DGSR
ADS8324EB/2K5	INA300AIDGST	OPA2683IDGST	TMUX6123DGSR
ADS8325IBDGKR	INA326EA/250	OPA2725AIDGKR	TPS2390DGKR
ADS8325IBDGKT	INA326EA/2K5	OPA2725AIDGKT	TPS2391DGKR
ADS8325IDGKR	INA327EA/250	OPA2726AIDGST	TPS2399DGKR
ADS8325IDGKT	INA327EA/2K5	OPA2734AIDGSR	TPS53014DGSR
ADS8326IBDGKR	INA330AIDGST	OPA2734AIDGST	TPS53015DGSR
ADS8326IBDGKT	INA337AIDGKR	OPA2822E/250	TPS62002DGSR
ADS8326IDGKR	INA337AIDGKT	OPA2822E/2K5	TPS62003DGSR
ADS8326IDGKT	INA338AIDGST	OPA2889IDGSR	TPS62004DGSR
BQ2057CDGKR	INA381A1IDGSR	OPA2889IDGST	TPS62005DGSR
BUF04701AIDGSR	INA381A1IDGST	OPA2890IDGSR	TPS62006DGSR
DAC5574IDGSR	INA381A2IDGSR	OPA2890IDGST	TPS62008DGSR
DAC60501MDGSR	INA381A2IDGST	OPA615IDGSR	TPS62050DGSR
DAC60501MDGST	INA381A3IDGSR	OPA615IDGST	TPS62160DGKR
DAC60501ZDGSR	INA381A3IDGST	OPA695IDGKR	TPS62160DGKT
DAC60501ZDGST	INA381A4IDGSR	OPA695IDGKT	UCC25705DGKTR
DAC6574IDGSR	INA381A4IDGST	OPA875IDGKT	UCC2809P-1
DAC70501MDGSR	INA592IDGKR	SN1001030DGKR	UCC2809P-2
DAC70501MDGST	INA592IDGKT	SN1206048DGSR	UCC2809PTR-1
DAC70501ZDGSR	INA597IDGKR	THVD1452DGSR	UCC2809PTR-2
DAC70501ZDGST	INA597IDGKT	THVD1512DGSR	UCC29002DGKR
DAC7554IDGSR	LM3401MM/NOPB	THVD1552DGSR	UCC3809P-1
DAC7574IDGSR	LM3401MMX/NOPB	THVD2410DGKR	UCC3809P-2
DAC7811IDGSR	LPV542DGKR	THVD2450DGKR	UCC3809PTR-1
DAC7811IDGST	LPV542DGKT	TLC2551CDGKR	UCC3809PTR-2
DAC80501MDGSR	LPV802DGKR	TLC3541IDGKR	UCC38C40DGKR
DAC80501MDGST	LPV802DGKT	TLC4541IDGKR	UCC38C42DGKR
DAC80501ZDGSR	LPV812DGKR	TLC5615CDGKR	UCC38C44DGKR
DAC80501ZDGST	LPV812DGKT	TLV1702AIDGKR	UCC38C45DGKR
DAC8532IDGKR	OPA1652AIDGKR	TLV2333IDGKR	UCC39002DGKR
DAC8552IDGKR	OPA1662AIDGKR	TLV2333IDGKT	VCA820IDGSR
DAC8552IDGKT	OPA2156IDGKR	TLV2541CDGKR	VCA820IDGST
DAC8571IDGKR	OPA2156IDGKT	TLV2541IDGKR	VCA821IDGST
DRV2604LDGSR	OPA2180IDGKR	TLV2542CDGKR	VCA822IDGST
DRV2604LDGST	OPA2300AIDGSR	TLV2542IDGKR	VCA824IDGST
DRV2605LDGSR	OPA2300AIDGST	TLV522DGKR	

VSSOP Qualification Report

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

	Stress Test	Duration	HFTF LM5008MM/NOPB	ASESH THS4304DGK
TC	Temperature Cycling -65/150C	500 Cycles	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	3/231/0
THB	Temperature Humidity Bias, 85C/85%RH	1000 hours	-	-
HTSL	High Temp. Storage Bake 150C	1000 hours	-	-
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0	3/231/0
UHA	Unbiased HAST, 130C/85%RH	96 hours	3/231/0	-
AC	Autoclave 121C	96 hours	-	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0 (PGA308AIDGSR)	3/66/0 (THS4304DGK)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	HNA TPS77301DGK	TIEMA LM3489QMM
TC	Temperature Cycling -65/150C	500 Cycles	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	-
THB	Temperature Humidity Bias, 85C/85%RH	1000 hours	-	3/231/0
HTSL	High Temp. Storage Bake 150C	1000 hours	3/231/0	1/77/0
HTSL	High Temp. Storage Bake 170C	420 hours	-	-
UHA	Unbiased HAST, 130C/85%RH	96 hours	-	-
AC	Autoclave 121C	96 hours	3/231/0	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0 (TS5A23160DGSR)	3/66/0 (LM2660MM/NOPB)
MQ	Manufacturability	-	Pass	Pass

	Stress Test	Duration	MLA OPA2206ADGK OPA2205ADGK OPA2145IDGK	UTAC TPS22958DGK
TC	Temperature Cycling -65/150C	500 Cycles	3/231/0	3/231/0
HAST	Biased HAST 130C/85%RH	96 hours	3/231/0	3/231/0 (Note a)
THB	Temperature Humidity Bias, 85C/85%RH	1000 hours	-	-

	Stress Test	Duration	MLA OPA2206ADGK OPA2205ADGK OPA2145IDGK	UTAC TPS22958DGK
HTSL	High Temp. Storage Bake 150C	1000 hours	-	-
HTSL	High Temp. Storage Bake 170C	420 hours	3/231/0	3/231/0
UHASt	Unbiased HAST, 130C/85%RH	96 hours	3/231/0	-
AC	Autoclave 121C	96 hours	-	3/231/0
SD	Solderability	8 Hour Steam age or 155C Dry Bake	3/66/0 (LMH5485DGKSEP)	3/66/0 (TPS61085TDGKRQ1)
MQ	Manufacturability	-	Pass	Pass

LM5008MM/NOPB, THS4304DGK, TPS77301DGK, LM3489QMM, TPS22958DGK, INA159AIDGK are qualified at L1-260C MSL rating.

OPA2206ADGK, OPA2205ADGK, OPA2145IDGK are qualified at L2-260C MSL rating.

Note a – 2 lots of Biased HAST were collected on INA159AIDGK

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, and HTSL, as applicable
- The following are equivalent HTSL options based on activation energy of 0.7eV: 150C/1k Hours, and 170C/420 Hours

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.

Location	E-Mail
WW PCN Team	PCN_ww_admin_team@list.ti.com

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