



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

**PCN# 20251103001.1
Qualify MLA as an additional Assembly site for select devices
Change Notification / Sample Request**

Date: November 03, 2025

To: MOUSER 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 60 days of the date of this notice. Lack of acknowledgement of this notice within 60 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 60 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 change management team.

For sample requests or sample related questions, contact your local Field Sales Representative.

TI values customer engagement and feedback related to TI changes. Customers should contact TI if there are questions or concerns regarding a change notification.

Sincerely,

Change Management Team
SC Business Services

20251103001.1
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
INA2181A1IDGSR	INA2181A1IDGSR
INA239AIDGSR	NULL
INA381A4IDGSR	INA381A4IDGSR
INA2181A3IDGSR	INA2181A3IDGSR
INA220BIDGSR	NULL
INA229AIDGSR	NULL
INA228AIDGSR	NULL
INA237AIDGSR	NULL
INA238AIDGSR	NULL
INA381A1IDGSR	INA381A1IDGSR
INA204AIDGSR	NULL
INA220AIDGSR	NULL

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

PCN Number:	20251103001.1		PCN Date:	November 03, 2025
Title:	Qualify MLA as an additional Assembly site for select devices			
Customer Contact:	Change Management team		Dept:	Quality Services
Proposed 1st Ship Date:	February 01, 2026		Sample requests accepted until:	January 02, 2026*
*Sample requests received after January 02, 2026 will not be supported.				
Change Type:				
<input checked="" type="checkbox"/> Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/> Assembly Process	<input type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/> Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/> Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Material
<input checked="" type="checkbox"/> Packing/Shipping/ Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the qualification of TI Malaysia (MLA) as an additional Assembly site for the list of devices shown below. Material differences between sites are as follows.

Group 1 Device

	Current site				Additional site
Assembly site	ASESH	UTL2	HFTF	HNA	MLA
Wire diam/type	1.0mil Au, 1.0mil Cu	1.0mil Cu	1.0mil Au	1.0mil Au	1.0mil Cu
Mold compound	SID#EN2000515 EME-G700LY	SID#CZ0094 EME-G600	SID#R-30 EME-G700QB	SID#450179 EME-G600	4211880 EME-G633C
Mount compound	SID#EY1000063 EN-4900GC	SID#PZ0013 ABLEBOND 2200D	SID#A-18 CRM-1076NS	SID#400180 ABLEBOND 2200D	4147858 QMI505MT

Group 2 Device

	Current site		Additional site
Assembly site	ASESH	UTL2	MLA
Wire diam/type	1.0mil Au, 1.0mil Cu	1.0mil Au	1.0mil Cu
Mold compound	SID#EN2000515 EME-G700LY	SID#CZ0094 EME-G600	4211880 EME-G633C
Mount compound	SID#EY1000063 EN-4900GC	SID#PZ0013 ABLEBOND 2200D	4147858 QMI505MT

Group 3 Device

	Current site		Additional site
Assembly site	ASESH	HFTF	MLA
Wire diam/type	0.8mil Au	0.8mil Au	0.8mil Cu
Mold compound	SID#EN2000515 EME-G700LY	SID#R-30 EME-G700QB	4228573 EME-G700QB
Mount compound	SID#EY1000063 EN-4900GC	SID#A-18 CRM-1076NS	4211470 CRM1076WD

Qual details are provided in the Qual Data Section.

Reason for Change:

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	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
ASESH	ASH	CHN	Shanghai
UTL2	NS2	THA	Bangpakong
HFTF	HFT	CHN	Hefei
HNA	HNT	THA	Ayutthaya
TI Malaysia	MLA	MYS	Kuala Lumpur

Sample product shipping label (not actual product label)



Group 1 Product Affected:

INA2181A1IDGSR	INA2181A4IDGSR	INA300AIDGSR	INA381A3IDGSR
INA2181A2IDGSR	INA220AIDGSR	INA381A1IDGSR	INA381A4IDGSR
INA2181A3IDGSR	INA220BIDGSR	INA381A2IDGSR	

Group 2 Product Affected:

INA203AIDGSR	INA206AIDGSR
INA204AIDGSR	INA207AIDGSR
INA205AIDGSR	INA208AIDGSR

Group 3 Product Affected:

INA228AIDGSR	INA238AIDGSR
INA229AIDGSR	INA239AIDGSR
INA237AIDGSR	

Group 1 Qualification Report

Approve Date 22-May-2025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: INA220AIDGSR	QBS Reference: AD51251B1W00H000A	QBS Reference: SN7E1K05124500505R	QBS Reference: CLXCE124500050501	QBS Reference: SN7E1V174500050501	QBS Reference: TLV8820DKR	QBS Reference: LSP108DGR	QBS Reference: AMC1195M4500H00A	QBS Reference: SN7E4C124500050501	QBS Reference: SN7E4C124500050501	QBS Reference: INA220AIDGSR
HAST	A2	Biased HAST	110C/BSWRH	264 Hours	-	3/231/0	-	-	-	-	-	-	-	-	-
HAST	A2	Biased HAST	130C/BSWRH	96 Hours	-	-	-	1/77/0	1/77/0	-	-	3/231/0	1/77/0	1/77/0	1/77/0
UHAST	A3	Autoclave	121C/Spig	96 Hours	-	3/231/0	1/77/0	-	-	-	-	3/231/0	-	-	-
UHAST	A3	Unbiased HAST	130C/BSWRH	96 Hours	1/77/0	-	-	1/77/0	1/77/0	-	1/77/0	-	1/77/0	1/77/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0	1/77/0	3/231/0	1/77/0	-	1/77/0	3/231/0	1/77/0	1/77/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	3/231/0	-	1/45/0	-	-	-	-	-	1/45/0	1/45/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	-	-	-	1/77/0	-	-	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	-	1/45/0	-	-	1/45/0	1/45/0	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	-	1/77/0	-	-	-	-	1/77/0	-	1/80/1
HTOL	B1	Life Test	150C	300 Hours	-	-	-	-	1/77/0	-	-	-	-	-	-
HTOL	B1	Life Test	150C	408 Hours	-	-	-	-	-	-	3/231/0	-	-	-	-
ELFR	B2	Early Life Failure Rate	150C	24 Hours	-	-	-	-	-	-	3/2400/0	-	-	-	-
WBS	C1	Ball Shear	76 balls, 3 units/min	Wires	-	-	1/76/0	-	-	-	-	-	-	-	-
WBP	C2	Bond Pull	76 Wires, 3 units/min	Wires	-	-	1/76/0	-	-	-	-	-	-	-	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-	1/15/0	-	-	-	-	-	-	-
SD	C3	PB Solderability	Steam Age, 8 Hours	-	-	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	-	-	-	1/15/0	1/15/0	-	1/15/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes), PB-Free Solder	-	1/22/0	-	-	-	-	1/22/0	-	-	-	-	-
SD	C3	PB-Free Solderability	Steam Age, 8 Hours	-	-	1/15/0	-	1/15/0	-	-	-	1/15/0	1/15/0	-	1/15/0
PD	C4	Physical Dimensions	Gpk<1.67	-	-	3/30/0	-	3/30/0	1/10/0	-	-	3/30/0	1/10/0	1/10/0	1/10/0
ESD	E2	ESD COM	-	1000 Volts	-	1/3/0	-	-	-	-	-	-	-	-	-
ESD	E2	ESD COM	-	250 Volts	1/3/0	-	1/3/0	-	-	1/3/0	-	-	-	-	-
ESD	E2	ESD COM	-	500 Volts	-	-	-	1/3/0	1/3/0	-	-	1/3/0	1/3/0	1/3/0	1/3/0
ESD	E2	ESD COM	-	750 Volts	-	-	-	-	-	-	1/3/0	-	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	-	-	1/3/0	-	-	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	-	1/3/0	1/3/0	-	-	1/3/0	-	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD078	-	-	1/6/0	-	1/6/0	1/6/0	-	1/3/0	1/6/0	-	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-	-	1/30/0	1/30/0	-	-	-	-
CHAR	E5	Electrical Distributions	Cpk<1.67 Room, hot and cold	-	-	3/9/0	-	3/9/0	3/9/0	-	-	3/9/0	1/30/0	1/30/0	3/9/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device INA220AIDGSR 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-2408-061

Group 2 Qualification Report

Approve Date 01-August-2025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: INA203AIDGSR	Qual Device: INA208AIDGSR	QBS Reference: TPE58111LOGGSR01	QBS Reference: TPE52753APW
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psi	96 Hours	-	-	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/135/0	1/45/0
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/231/0	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	3/2400/0
SD	C3	PB Solderability	Precondition w/150C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-
SD	C3	PB-Free Solderability	Precondition w/150C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	1/15/0	-
PD	C4	Physical Dimensions	CpN=1.67	-	-	-	3/90/0	2/90/0
ESD	E2	ESD CDM	-	150 Volts	1/0/0	-	-	-
ESD	E2	ESD CDM	-	500 Volts	-	-	-	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/0/0	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	-	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/0/0	-	-	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/0/0	1/0/0	-	-
CHAR	E6	Electrical Distributions	CpN=1.67 Room, hot, and cold	-	-	-	3/90/0	3/90/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device [INA203AIDGSR](#) is qualified at MSL2 260C

Qual Device [INA208AIDGSR](#) is qualified at MSL2 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-2311-027

Group 3 Qualification Report

Approve Date 02-October-2025

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: INA229AIDGSR	QBS Reference: INA229AQDGSRQ1	QBS Reference: INA229AQDGSRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	1/77/0	3/231/0	3/231/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	1/77/0	3/231/0	3/231/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/135/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	Per QSS-009-018	1000 Step	1/77/0	-	-

HTOL	B1	Life Test	125C	1000 Hours	-	3/231/0	3/231/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	3/2400/0	-
SD	C3	PB-Free 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); PB-Free Solder;	-	1/22/0	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	3/30/0	3/30/0
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-
ESD	E2	ESD CDM	-	500 Volts	-	1/3/0	1/3/0
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	-	1/6/0	1/3/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	3/90/0	3/90/0

QBS: Qual By Similarity, also known as Generic Data

Qual Device INA229AIDGSR 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-2408-062

In performing change qualifications, Texas Instruments follows integrated circuit industry standards in performing defect mechanism analysis and failure mechanism-based accelerated environmental testing to ensure wafer fab process, assembly process and product quality and reliability. As encouraged by these standards, TI uses both product-specific and generic (family) data in qualifying its changes. For devices to be categorized as a 'product qualification family' for generic data purposes, they must share similar product, wafer fab process and assembly process elements. The applicability of generic data (also known at TI as Qualification by Similarity (QBS)) is determined by the Reliability Engineering function following these industry standards. Generic data is shown in the qualification report in columns titled "QBS Process" (for wafer fab process), "QBS Package" (for assembly process) and "QBS Product" (for product family).

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

IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or

other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale (www.ti.com/legal/termsofsale.html) or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.