

PCN Number:	20220620002.1	PCN Date:	June 20, 2022												
Title:	Qualification of TI Malaysia as a new Assembly site for select devices														
Customer Contact:	PCN Manager	Dept:	Quality Services												
Proposed 1st Ship Date:	Sept 20, 2022	Sample requests accepted until:	Jul 20, 2022*												
*Sample requests received after (July 20 ^d 2022) will not be supported.															
Change Type:															
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design												
<input type="checkbox"/>	Assembly Process	<input type="checkbox"/>	Data Sheet												
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change												
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site												
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process												
		<input type="checkbox"/>	Wafer Bump Site												
		<input type="checkbox"/>	Wafer Bump Material												
		<input type="checkbox"/>	Wafer Bump Process												
		<input type="checkbox"/>	Wafer Fab Site												
		<input type="checkbox"/>	Wafer Fab Materials												
		<input type="checkbox"/>	Wafer Fab Process												
PCN Details															
Description of Change:															
Texas Instruments Incorporated is announcing the qualification TIM (TI Malaysia) as a new Assembly Site for select devices listed in the "Product Affected" Section. Current assembly sites and Material differences are as follows.															
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>Amkor Phil</td> <td>AKR</td> <td>PHL</td> <td>Muntinlupa City</td> </tr> <tr> <td>TI Malaysia</td> <td>MLA</td> <td>MYS</td> <td>Kuala Lumpur</td> </tr> </tbody> </table>				Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	Amkor Phil	AKR	PHL	Muntinlupa City	TI Malaysia	MLA	MYS	Kuala Lumpur
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City												
Amkor Phil	AKR	PHL	Muntinlupa City												
TI Malaysia	MLA	MYS	Kuala Lumpur												
Material Differences:															
	Amkor Phil	TI Malaysia													
Mount compound	101375281	4147858													
Mold compound	101380756	4211880													
Lead Finish	Matte Sn	NiPdAu													
MSL level	MSL-2	MSL-1													
ECAT	G3	G4													
Upon expiry of this PCN TI will combine lead free solutions in a single standard part number , for the devices in the "Product Affected" Section. For example; LM2904LVIDR – can ship with both Matte Sn and NiPdAu.															
Example:															
<ul style="list-style-type: none"> – Customer order for 7500 units of LM2904LVIDR with 2500 units SPQ (Standard Pack Quantity per Reel). – TI can satisfy the above order in one of the following ways. <ul style="list-style-type: none"> I. 3 Reels of NiPdAu finish. II. 3 Reels of Matte Sn finish III. 2 Reels of Matte Sn and 1 reel of NiPdAu finish. IV. 2 Reels of NiPdAu and 1 reel of Matte Sn finish. 															
Reason for Change:															
Continuity of supply.															
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
<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change	<input checked="" type="checkbox"/> No Change

Changes to product identification resulting from this PCN:


Assembly Site		
Amkor Phil	Assembly Site Origin (22L)	ASO: AKR
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA

Sample product shipping label (not actual product label)

G3 = Matte Sn
G4 = NiPdAu



(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



Product Affected:

LM2904LVIDR	MCP6292IDR	TLV6002HIDR	TSV912AIDR
LM358LVIDR	SN1605025DR	TLV9002IDR	
LMV358AIDR	SN1711004DR	TLV9062IDR	

Qualification Report

Approve Date 08-June-2022

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: TLV9002IDR	Qual Device: TLV9062IDR	QBS Reference: TLV1805QDBVRQ	QBS Reference: TLV9002QDRQ	QBS Reference: TLV9062QDRQ	QBS Reference: TLV9002QDRQ	QBS Reference: TLV9002QDRQ	QBS Reference: TLV9062QDRQ	QBS Reference: TLV9062QDRQ
HAST	A2	Biased HAST	130C/8 5%RH	96 Hours	-	-	3/231/0	-	-	-	-	-	-
HAST	A2	Biased HAST	130C/8 5%RH	96 Hours	-	-	-	-	-	1/77/0	3/231/0	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	3/231/0	-	-	-	-	-	-
UHAST	A3	Autoclave	121C/15psig	96 Hours	-	-	-	1/77/1 ¹	1/77/0	-	1/77/0	3/231/0	-

TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	3/231/0	-	-	-	-	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	1/77/0	1/77/0	-	1/77/0	2/154/0	1/77/0
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	3/135/0	-	-	-	-	-	-
HTOL	B1	Life Test	125C	100 Hours	-	-	3/231/0	-	-	-	-	-	-
HTOL	B1	Life Test	150C	408 Hours	-	-	-	-	-	-	1/77/0	1/77/0	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	-	3/30/0	-	-	-	-	3/30/0	-
ESD	E2	ESD CDM	-	1000 Volts	-	-	-	-	-	1/3/0	-	-	1/3/0
ESD	E2	ESD CDM	-	500 Volts	-	-	1/3/0	-	-	-	-	-	-
ESD	E2	ESD HBM	-	2000 Volts	-	-	1/3/0	-	-	-	-	-	-
ESD	E2	ESD HBM	-	4000 Volts	-	-	-	-	-	1/3/0	-	-	1/3/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	3/90/0	-	-	1/30/0	-	2/60/0	1/30/0

QBS: Qual By Similarity

Qual Device TLV9002IDR is qualified at MSL1 260C

Qual Device TLV9062IDR 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/>

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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