

PCN# 20250618000.1**Qualification of FFAB using qualified Process Technology, Die Revision, Datasheet
and additional Assembly Site & BOM options for select devices
Change Notification / Sample Request****Date:** June 18, 2025**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 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, 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 60 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.

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

Change Management Team
SC Business Services

20250618000.1
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
LM317KTTR	LM317KTTR
LM317DCYRG3	NULL
LM317KTTRG3	LM317KTTR
LM317DCYG3	LM317DCY
LM317DCYR	NULL

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

PCN Number:	20250618000.1	PCN Date:	June 18, 2025
Title:	Qualification of FFAB using qualified Process Technology, Die Revision, Datasheet and additional Assembly Site & BOM options for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	September 16, 2025	Sample requests accepted until:	August 17, 2025*

***Sample requests received after August 17, 2025 will not be supported.**

Change Type:

<input checked="" type="checkbox"/>	Assembly Site	<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material
<input checked="" type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Process
<input checked="" type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input checked="" type="checkbox"/>	Wafer Fab Site
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input checked="" type="checkbox"/>	Wafer Fab Material
<input checked="" type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input checked="" type="checkbox"/>	Wafer Fab Process

PCN Details

Description of Change:

Texas Instruments is pleased to announce the addition of FFAB using the SLM qualified process technology and additional Assembly Site (TIEM) and BOM options for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
SFAB	J11	150 mm	FFAB	SLM	200 mm

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

Construction differences are as follows:

Group 1 device (DCY):

	Current		Additional
Assembly site	TFME	JCET	TIEM
Wire diam/type	1.98mil Cu	2.0mil Cu	1.5mil Cu
Mount compound	SID# A-06	S#011204001902	8075331
Mold compound	SID#R-28	S#013101006201	8096890
Topside marking	L3 YM	L3 YM	YMLL L3 Pin 1 embossed/ dot

Group 2 device (KTT):

	Current		Additional
Assembly site	GTBF	TFME	TIEM
Wire diam/type	1.98mil Cu	2.0mil Au	1.5mil Cu
Mount compound	SID#EY0000006	SID#A-05	8052550
Mold compound	SID#EN0000030	SID# R-07	8096890
Topside marking	TI/YMLLLLS LM317	TI/YMLLLLT LM317	TI/YMLLLLP LM317 Pin 1 dimple
EPOD dwg	KTT0003A (4200577)	KTT0003A (4200577)	KTT0003B (4215105)

The datasheets will be changing as a result of the above mentioned changes. The datasheet change details can be reviewed in the datasheet revision history. The links to the revised datasheets are available in the table below.

Changes from Revision Y (April 2020) to Revision Z (April 2025)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Added new silicon devices to document.....	1
• Added new silicon curves to <i>Typical Characteristics</i> section	1
• Changed <i>Features, Applications, and Description</i> sections.....	1
• Added <i>LM317 (New Chip)</i> column to <i>Device Comparison Table</i>	4
• Changed DCY pinout drawing and INPUT and OUTPUT description in <i>Pin Functions</i> table.....	5
• Added <i>Power dissipation</i> row to <i>Absolute Maximum Ratings</i> table.....	6
• Added new chip information to <i>ESD Ratings</i> table.....	6
• Added <i>Thermal Information (New Chip)</i> table.....	7
• Changed <i>Electrical Characteristics</i> table.....	8
• Changed ADJUST pin current discussion in second paragraph of <i>Overview</i> section.....	13
• Added effect of C_{ADJ} on ripple rejection discussion to second bullet of <i>Design Requirements</i>	15
• Added new silicon curves to <i>Application Curves</i>	16
• Deleted $-10V$ from Equation 2.....	19
• Changed <i>The NPNs</i> to <i>The PNP (2N2905)</i> and <i>NPN (2N6486)</i> in <i>High-Current Adjustable Regulator Circuit</i> section.....	22
• Added <i>Thermal Considerations</i> section and subsections.....	23

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
LM317	SLVS044Y	SLVS044Z	http://www.ti.com/product/LM317

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):

See datasheet for specification differences between new and legacy chip.

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			

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
SH-BIP-1	SHE	USA	Sherman
FR-BIP-1	TID	DEU	Freising

Die Rev:

Current	New
Die Rev [2P]	Die Rev [2P]
D	G

Assembly Site Information:

Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly City
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	(22L)	(23L)	
JCETCZ	JCC	CHN	Chuzhou
GTBF	GTF	CHN	Dong Guan
TFME	NFM	CHN	Economic Development Zone
TIEM	CU6	MYS	Melaka

Sample product shipping label (not actual product label):

TEXAS INSTRUMENTS
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)T0:1750

(1P) SN74LS07NSR
(Q) 2000 (D) 0336
(31T) LOT: 3959047MLA
(4W) TKY (1T) 7523483SI2
(P) REV: (V) 0033317
(20L) CSO: SHE (21L) CCO:USA
(22L) ASO: MLA (23L) ACO: MYS

Product Affected:

Group 1 (DCY):

LM317DCY	LM317DCY.B	LM317DCYR	LM317DCYR.B
LM317DCY.A	LM317DCYG3	LM317DCYR.A	LM317DCYRG3

Group 2 (KTT):

LM317KTRR	LM317KTRR.A	LM317KTRR.B	LM317KTRRG3
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For alternate parts with similar or improved performance, please visit the product page on TI.com

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LM317DCYR	Process QBS Reference: LM2941T	Process QBS Reference: LM2941T	Package QBS Reference: LM1117IMPX- 3.3/NO	Package QBS Reference: LM317EMP/NOBP
UHA	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	1/77/0	1/77/0
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	1/77/0	1/77/0
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	-	1/77/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	-	1/77/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	1/77/0	2/154/0	-	-
WBS	C1	Ball Shear	76 balls, 3 units min	Wires	-	-	-	3/228/0	3/228/0
WBP	C2	Bond Pull	76 Wires, 3 units min	Wires	-	-	-	3/228/0	3/228/0
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes); PB-Free Solder;	-	-	-	-	1/22/0	1/22/0
ESD	E2	ESD CDM	-	500 Volts	-	1/3/0	1/3/0	-	-

Type	#	Test Name	Condition	Duration	Qual Device: LM317DCYR	Process QBS Reference: LM2941T	Process QBS Reference: LM2941T	Package QBS Reference: LM1117IMPX-3.3/NO	Package QBS Reference: LM317EMP/NOPB
ESD	E2	ESD HBM	-	2000 Volts	-	1/3/0	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	-	1/3/0	1/3/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	1/30/0	1/30/0
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	1/30/0	2/60/0	-	-
FTY	E6	Final Test Yield	-	-	1/All/0	-	-	-	-

- QBS: Qual By Similarity
- Qual Device LM317DCYR 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-2312-060

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: LM317KTTR	Process QBS Reference: THS3491DDAR	Package QBS Reference: LM2576HVSX-5.0
HAST	A2	Biased HAST	130C/85%RH	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
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	3/231/0	-
HTOL	B1	Life Test	70C Vcc Max (self heating brings Tj up to 150C)	300 Hours	-	3/231/0	-
ELFR	B2	Early Life Failure Rate	70C (self heating brings Tj up to 150C)	24 Hours	-	3/3000/0	-
ESD	E2	ESD CDM	-	250 Volts	-	3/9/0	-
ESD	E2	ESD HBM	-	1000 Volts	-	3/9/0	-
LU	E4	Latch-Up	Per JESD78	-	-	3/18/0	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	3/90/0	-
FTY	E6	Final Test Yield	-	-	1/All/0	-	-

- QBS: Qual By Similarity
- Qual Device LM317KTTR is qualified at MSL3 245C

- 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-2401-025

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.

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