



12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250730010.1

Qualification of RFAB using qualified Process Technology, Datasheet, and alternate BOM qualification for select devices

Change Notification / Sample Request

Date: July 30, 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

20250730010.1
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
LM317MDCYRG3	LM317MDCYR
LM317MDCYG3	LM317MDCY
LM317MKVURG3	LM317MKVURG3
LM317MDCY	LM317MDCY
LM317MDCYR	LM317MDCYR

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

PCN Number:	20250730010.1	PCN Date:	July 30, 2025
Title:	Qualification of RFAB using qualified Process Technology, Datasheet, and alternate BOM qualification for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	October 28, 2025	Sample requests accepted until:	September 28, 2025*

***Sample requests received after September 28, 2025 will not be supported.**

Change Type:

<input 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 Materials
<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 qualification of its RFAB fabrication facility as an additional Wafer Fab option for the devices listed below as well as assembly and BOM options:

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
SFAB	J11	150 mm	RFAB	TIB	300 mm

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

Construction differences are as follows:

Group 1

	Current Assembly Site	
	TFME	TFME
Wire diam/type	1.98 mil Cu	1 mil Au
Mold Compound	SID#R-28	SID#R-37

Group 2

	Current Assembly Site	
	TFME	TFME
Wire diam/type	2 mil; Au	.8 mil; Cu

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.



LM317M, LM317MQ
SLVS297Q – APRIL 2000 – REVISED JULY 2025

Changes from Revision P (February 2014) to Revision Q (July 2025)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Deleted KTP package and information from document.....	1
• Changed entire document to align with current family format.....	1
• Added new silicon (M3) devices to document.....	1
• Added new silicon curves to <i>Typical Characteristics</i> section	1
• Added <i>Current Limit</i> section.....	10
• Changed <i>LM317M</i> to <i>LM317M and LM317MQ</i> in <i>Protection Diodes</i> section.....	14
• Changed <i>Power Supply Recommendations</i> section.....	18
• Added <i>Device Nomenclature</i> section.....	19



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 to The PNP (2N2905) and 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
LM317M	SLVS297P	SLVS297Q	http://www.ti.com/product/LM317M

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):

Any differences/changes between the SFAB die and RFAB die have been made in the data sheet using "Legacy Chip" and "New 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
SFAB	SHE	USA	Sherman
RFAB	RFB	USA	Richardson

Assembly Site Information:

Assembly Site	Assembly Site Origin (22L)	Assembly Country Code (23L)	Assembly City
TFME	NFM	CHN	Economic Development Zone

Sample product shipping label (not actual product label)

TEXAS INSTRUMENTS
 MADE IN: Malaysia
 2DC: 20:
 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)
 (2P) REV: (V) 0033317
 (20L) CSO: SHE (21L) CCO:USA
 (22L) ASO: MLA (23L) ACO: MYS

Product Affected- Group 1:

LM317MDCY	LM317MDCYG3	LM317MDCYR	LM317MDCYRG3
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Product Affected- Group 2:

LM317MKVURG3			
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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: <u>LM317MDCYR</u>	QBS Package Reference: <u>TPS7B8350QDCYRQ1</u>	QBS Process Reference: <u>MC33063ADR</u>	QBS Process Reference: <u>MC33063ADR</u>
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	3/231/0	-	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	3/231/0	-	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	1/45/0	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	2/154/0	1/77/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	1/800/0	2/1600/0
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-	-
SD	C3	PB-Free Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	1/15/0	-	-
PD	C4	Physical Dimensions	Cpk>1.67	-	-	3/30/0	-	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	-	-
ESD	E2	ESD HBM	-	1000 Volts	1/3/0	-	-	-

Type	#	Test Name	Condition	Duration	Qual Device: <u>LM317MDCYR</u>	QBS Package Reference: <u>TPS7B8350QDCYRQ1</u>	QBS Process Reference: <u>MC33063ADR</u>	QBS Process Reference: <u>MC33063ADR</u>
LU	E4	Latch-Up	Per JESD78	-	1/3/0	-	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	-	-

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device LM317MDCYR 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-NPD-2308-024

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: <u>LM317MKVURG3</u>	QBS Process Reference: <u>MC33063AQDRQ1</u>	QBS Process/Product Reference: <u>LM317MDCYR</u>	QBS Package Reference: <u>UA78M12CKVURG3</u>	QBS Process/Product Reference: <u>LM317MDCYR</u>
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	-	3/231/0	-
TC	A4	Temperature Cycle	-65C/150C	500 Cycles	-	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	150C	1000 Hours	-	-	-	3/231/0	-
HTOL	B1	Life Test	125C	1000 Hours	-	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); PB- Free Solder;	-	-	-	-	1/22/0	-
ESD	E2	ESD CDM	-	250 Volts	1/3/0	-	1/3/0	-	-

Type	#	Test Name	Condition	Duration	Qual Device: LM317MKVURG3	QBS Process Reference: MC33063AQDRQ1	QBS Process/Product Reference: LM317MDCYR	QBS Package Reference: UA78M12CKVURG3	QBS Process/Product Reference: LM317MDCYR
ESD	E2	ESD HBM	-	1000 Volts	-	-	1/3/0	-	-
LU	E4	Latch-Up	Per JESD78	-	-	-	1/3/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	-	-	-	-	1/30/0

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device LM317MKVURG3 is qualified at MSL3 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-NPD-2404-030

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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