12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20250115000.1
Qualification of FFAB using qualified Process Technology, Die Revision and Datasheet update for select devices
Change Notification / Sample Request

Date: January 17, 2025
To: Newark/Farnell 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

20250115000.1
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
LM317LIPK	NULL

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

PCN Number:	20250115000.1	PCN Date:	January 17, 2025
Title:	Qualification of FFAB using qualified Process Technology, Die Revision and Datasheet update for select devices		
Customer Contact:	Change Management Team	Dept:	Quality Services
Proposed 1st Ship Date:	April 17, 2025	Sample requests accepted until:	March 18, 2025*

***Sample requests received after March 18, 2025 will not be supported.**

Change Type:

☐	Assembly Site	☒	Design	☐	Wafer Bump Material
☐	Assembly Process	☒	Data Sheet	☐	Wafer Bump Process
☐	Assembly Materials	☐	Part number change	☒	Wafer Fab Site
☐	Mechanical Specification	☐	Test Site	☒	Wafer Fab Material
☐	Packing/Shipping/Labeling	☒	Test Process	☒	Wafer Fab Process

PCN Details

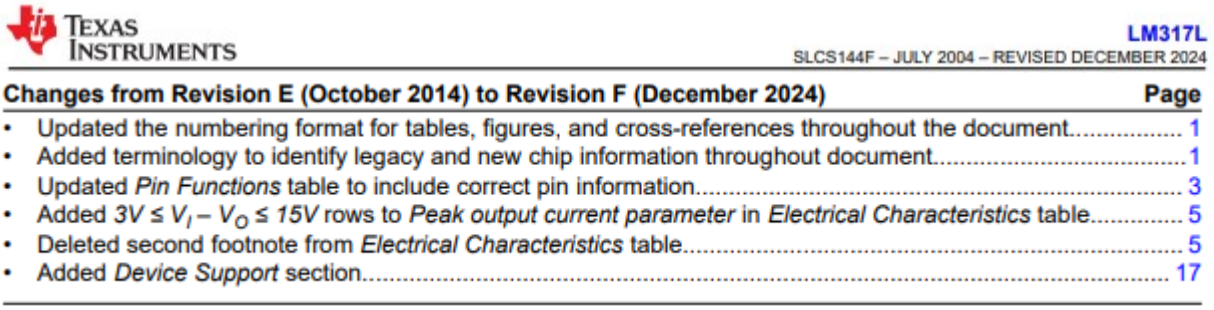
Description of Change:

Texas Instruments is pleased to announce the qualification of its FFAB fabrication facility as an additional Wafer Fab option for the devices listed below.

Current Fab Site			Additional Fab Site		
Current Fab Site	Process	Wafer Diameter	Additional Fab Site	Process	Wafer Diameter
SFAB	JI1	150 mm	FFAB	SLM	200 mm

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

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.



TEXAS INSTRUMENTS — LM317L
SLCS144F – JULY 2004 – REVISED DECEMBER 2024

Changes from Revision E (October 2014) to Revision F (December 2024) — **Page**

- Updated the numbering format for tables, figures, and cross-references throughout the document ... 1
- Added terminology to identify legacy and new chip information throughout document ... 1
- Updated *Pin Functions* table to include correct pin information ... 3
- Added $3V \le V_I - V_O \le 15V$ rows to *Peak output current parameter* in *Electrical Characteristics* table ... 5
- Deleted second footnote from *Electrical Characteristics* table ... 5
- Added *Device Support* section ... 17

Product Folder	Current Datasheet Number	New Datasheet Number	Link to full datasheet
LM317L	SLCS144E	**SLCS144F**	http://www.ti.com/product/LM317L

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):

None

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]**
-	**C**

Sample product shipping label (not actual product label):

Product Affected:

LM317LCPK	LM317LCPKG3	LM317LIPK	LM317LIPKG3

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: LM317LCPK	Qual Device: LM317LIPK	Process QBS Reference: THS3491IDDAR	Package QBS Reference: SN74LVC1G07QDCKRQ1
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/231/0	3/231/0
UHAST	A3	Autoclave	121C/15psig	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	3/231/0
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/231/0	-
HTSL	A6	High Temperature Storage Life	175C	500 Hours	-	-	-	1/45/0
HTOL	B1	Life Test	150C	408 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	-
SD	C3	PB Solderability	Precondition w.155C Dry Bake (4 hrs +/- 15 minutes)	-	-	-	-	1/15/0

Type	#	Test Name	Condition	Duration	Qual Device: LM317LCPK	Qual Device: LM317LIPK	Process QBS Reference: THS3491IDDAR	Package QBS Reference: SN74LVC1G07QDCKRQ1
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	-	500 Volts	1/3/0	-	3/9/0	1/3/0
ESD	E2	ESD HBM	-	2000 Volts	1/3/0	-	3/9/0	1/3/0
LU	E4	Latch-Up	Per JESD78	-	1/6/0	-	3/18/0	1/6/0
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	-	3/90/0	-
CHAR	E5	Electrical Distributions	Cpk>1.67 Room, hot, and cold	-	-	-	-	3/90/0
FTY	E6	Final Test Yield	-	-	1/All/0	1/All/0	-	-

- QBS: Qual By Similarity, also known as Generic Data
- Qual Device LM317LCPK is qualified at MSL2 260C
- Qual Device LM317LIPK 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-2312-032

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