12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN#20230927001.1
Qualification of additional Fab site (RFAB) using qualified Process Technology and additional BOM options for select devices
Change Notification / Sample Request

Date: September 28, 2023
To: PREMIER 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 30 days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within 30 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 30 day sample request window, customers will still have 30-days to complete their evaluation regardless of the proposed 1st ship date.

This particular PCN is related to TI's multiyear transition plan for our two remaining factories with 150-millimeter production (DFAB in Dallas, Texas, and SFAB in Sherman, Texas). DFAB will remain open, but will focus on 200-mm production, with a smaller set of technologies. SFAB will close no earlier than 2024 and no later than 2025. As referenced in the "reason for change" below, these changes are part of our multiyear plan to transition these products to newer, more efficient manufacturing processes and technologies, underscoring our commitment to product longevity and supply continuity.

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.

Change Management Team
SC Business Services

20230927001.1
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
UA78L12ACPK	null

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

PCN Number:	20230927001.1	**PCN Date:**	September 28, 2023

Title:	Qualification of additional Fab site (RFAB) using qualified Process Technology and additional BOM options for select devices

Customer Contact:	Change Management team	**Dept:**	Quality Services
Proposed 1st Ship Date:	Dec 27, 2023	**Sample Requests accepted until:**	Oct 28, 2023*

***Sample requests received after Oct 28, 2023 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 Materials
☐	Packing/Shipping/Labeling	☐	Test Process	☒	Wafer Fab Process

PCN Details

Description of Change:

Qualification of additional Fab site (RFAB) using qualified Process Technology and additional BOM options for the list of devices in the product affected section below.

Current Fab Site			Additional Fab site		
Current Fab Site	**Process**	**Wafer Diameter**	**Additional Fab site**	**Process**	**Wafer Diameter**
SH-BIP-1	JI1	150mm	RFAB	TIB	300mm

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

Additional BOM options are noted below:

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	Current	**Additional**
Mold Compound	SID#R-07	SID#R-27
Bond wire composition, diameter	Au, 1.0 mil	Au, 0.8 mil
Mount Compound	SID# A-03	SID#A-21

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-milimeter 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

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:

Fab Site Information:

Chip Site	Chip Site Origin Code (20L)	Chip Site Country Code (21L)	Chip Site City
SH-BIP-1	SHE	USA	Sherman
RFAB	**RFB**	**USA**	**Richardson**

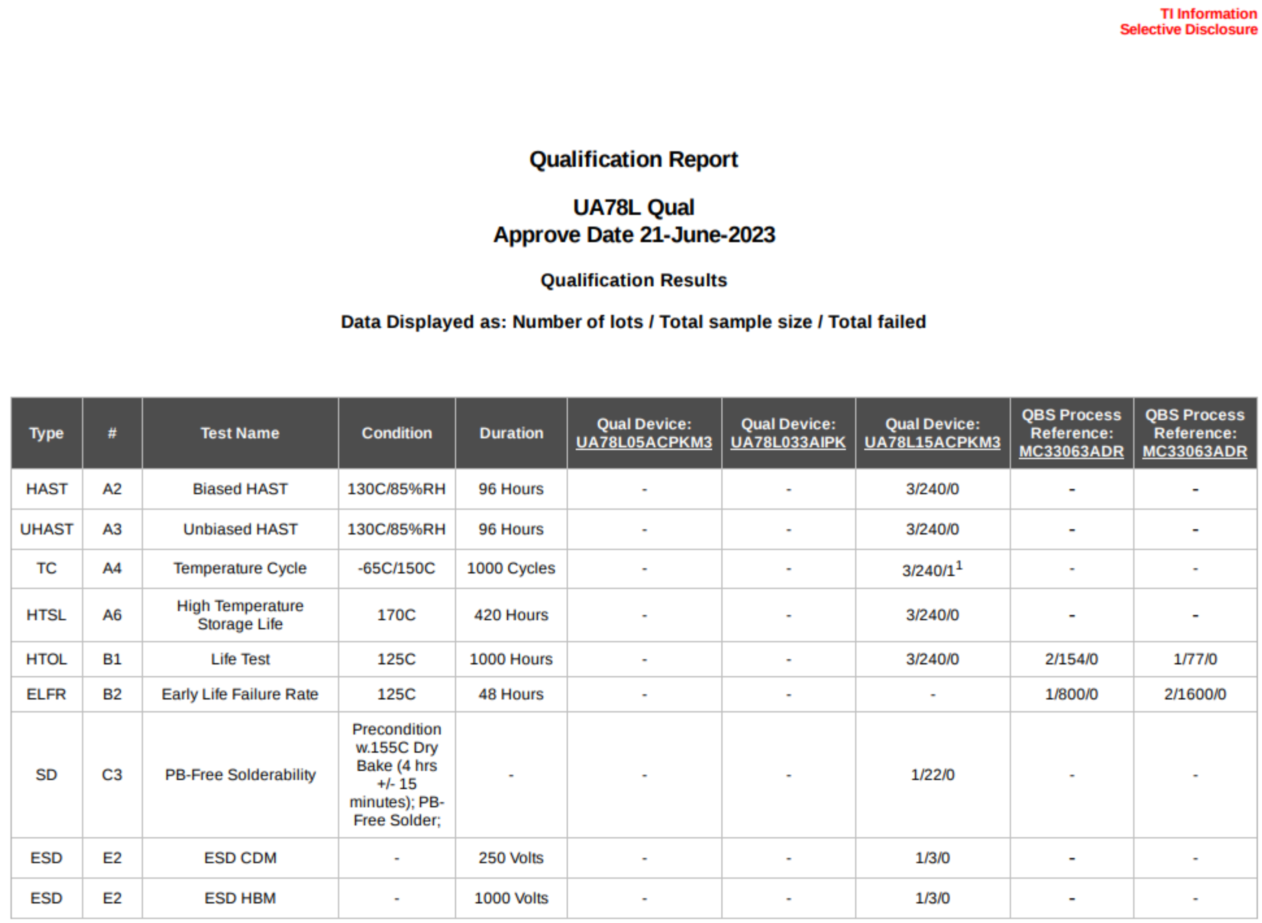
Die Rev:

Current	**New**
Die Rev [2P]	**Die Rev [2P]**
A	**A**

Product Affected:

UA78L05ACPK	UA78L05CPK	UA78L12ACPK	UA78L15ACPK
UA78L05AIPK			

For alternate parts with similar or improved performance, please visit the product page on [TI.com](TI.com)



TI Information
Selective Disclosure

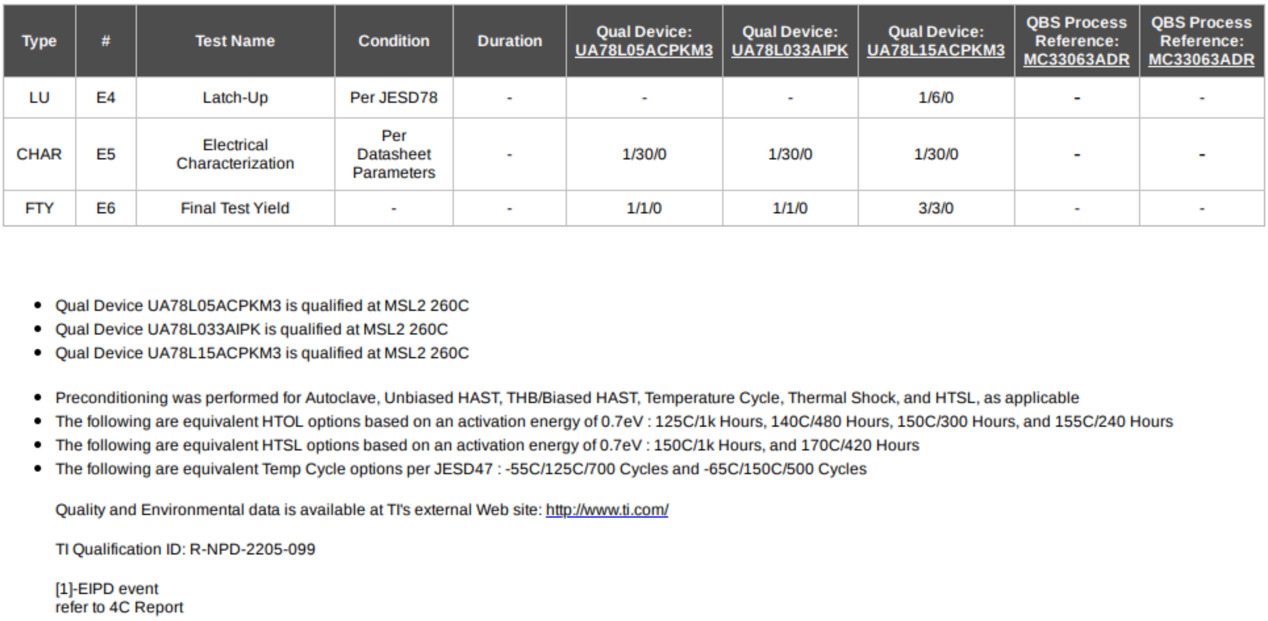
Qualification Report

UA78L Qual
Approve Date 21-June-2023

Qualification Results

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

Type	#	Test Name	Condition	Duration	Qual Device: UA78L05ACPKM3	Qual Device: UA78L033AIPK	Qual Device: UA78L15ACPKM3	QBS Process Reference: MC33063ADR	QBS Process Reference: MC33063ADR
HAST	A2	Biased HAST	130C/85%RH	96 Hours	-	-	3/240/0	-	-
UHAST	A3	Unbiased HAST	130C/85%RH	96 Hours	-	-	3/240/0	-	-
TC	A4	Temperature Cycle	-65C/150C	1000 Cycles	-	-	3/240/1[1]	-	-
HTSL	A6	High Temperature Storage Life	170C	420 Hours	-	-	3/240/0	-	-
HTOL	B1	Life Test	125C	1000 Hours	-	-	3/240/0	2/154/0	1/77/0
ELFR	B2	Early Life Failure Rate	125C	48 Hours	-	-	-	1/800/0	2/1600/0
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	-	-
ESD	E2	ESD HBM	-	1000 Volts	-	-	1/3/0	-	-



Type	#	Test Name	Condition	Duration	Qual Device: UA78L05ACPKM3	Qual Device: UA78L033AIPK	Qual Device: UA78L15ACPKM3	QBS Process Reference: MC33063ADR	QBS Process Reference: MC33063ADR
LU	E4	Latch-Up	Per JESD78	-	-	-	1/6/0	-	-
CHAR	E5	Electrical Characterization	Per Datasheet Parameters	-	1/30/0	1/30/0	1/30/0	-	-
FTY	E6	Final Test Yield	-	-	1/1/0	1/1/0	3/3/0	-	-

- Qual Device UA78L05ACPKM3 is qualified at MSL2 260C
- Qual Device UA78L033AIPK is qualified at MSL2 260C
- Qual Device UA78L15ACPKM3 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-2205-099

[1]-EIPD event
refer to 4C Report

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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