

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:					
<input type="checkbox"/> Assembly Site	<input checked="" type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Material	
<input type="checkbox"/> Assembly Process	<input 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 type="checkbox"/> Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input checked="" type="checkbox"/>	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	J11	150mm	RFAB	TIB	300mm
The die was also changed as a result of the process change.					
Additional BOM options are noted below:					
.					
		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-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					
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:					

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](https://www.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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