



Final Product/Process Change Notification

Document #:FPCN24540X

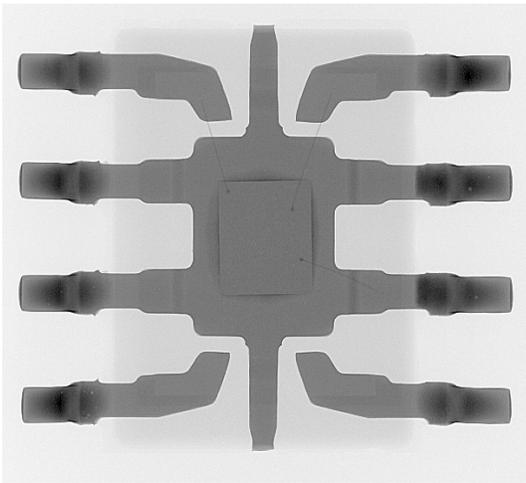
Issue Date: 14 Mar 2022

Title of Change:	TL431 SOIC-8 Turnkey Qualification to ASEKS.		
Proposed First Ship date:	21 Jun 2022 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or Scott.Brow@onsemi.com		
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
Additional Reliability Data:	Contact your local onsemi Sales Office or Chiello.Basa@onsemi.com		
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com		
Marking of Parts/ Traceability of Change:	ON the label and the box and reel, the ASSY LOC: AK will indicate that the product was assembled in ASEKS. Please see the sample label on Page 2 at the following URL: http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC callout.		
Change Category:	Test Change, Assembly Change		
Change Sub-Category(s):	Manufacturing Site Addition		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Carmona, Philippines		ASEKS, China	
Description and Purpose:			
Previously in FPCN23369X, onsemi notified customers of qualification of ASE Kunshan, China (now known as ATX Semiconductor (Kunshan) Co., LTD) for the assembly and test of the TL431 SOIC-8 products listed in this Final Product Change Notification (FPCN).			
Unfortunately, due to a human error, the wrong lead frame was connected to the BOM (Bill of Materials) of the device, which resulted in a recall notification for all product assembled out of this new site.			
If you have questions on this recall, please contact either Stephen Ng (Stephen.Ng@onsemi.com) or Scott Brow (Scott.Brow@onsemi.com).			
Customers who still have material built from ASE Kunshan built between date code 2102 and 2120, should return to onsemi.			
	Before Change Description	After Change Description	
Assy Site	onsemi Carmona, Philippines	onsemi Carmona, Philippines	ASE Kunshan, China
Test Site	onsemi Carmona, Philippines	onsemi Carmona, Philippines	ASE Kunshan, China
LeadFrame	Cu with Ag Spotted 70x90 with fused leads on Pin 2,3,6,7	Cu with Ag Spotted 70x90 with fused leads on Pin 2,3,6,7	Cu with Ag Spotted 90x90 with fused leads on Pin 2,3,6,7
Die Attach	CRM-1076WB	CRM-1076WB	Hitachi EN4900
Mold Compound	Sumitomo G600	Sumitomo G600	Hitachi CEL9240HF10AK
Test Platform	DTS	DTS	ETS-88

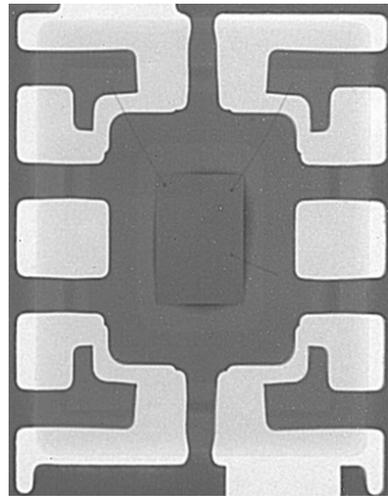
	From	To	
Site	onsemi Carmona, Philippines	onsemi Carmona, Philippines	ASE Kunshun, China
Product Marking Change	Assy Location: P	Assy Location: P	Assy Location: AK

As an assurance that the lead frame is correct for this product change that resulted in the need to recall, the following x-ray images are provided:

OSPI:



ASEKS: (Correct lead frame with fused leads)



As the images show above, pins 2, 3, 6 and 7 are fused to the flag for both OSPI and ASEKS.

Reliability Data Summary:

QV DEVICE NAME:
LM317LBDR2G

RMS:
O76727

PACKAGE:
SOIC 8

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -65°C to + 150°C	1000 cyc	0/77
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/77

Electrical Characteristics Summary:

Electrical characteristics are not impacted.



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List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Part Number	Qualification Vehicle
TL431IDR2G	LM317LBDR2G
TL431AIDG	LM317LBDR2G
TL431BCDR2G	LM317LBDR2G
TL431AIDR2G	LM317LBDR2G
TL431BIDR2G	LM317LBDR2G
TL431CDR2G	LM317LBDR2G
TL431ACDG	LM317LBDR2G
TL431BIDG	LM317LBDR2G
TL431ACDR2G	LM317LBDR2G
TL431BVDR2G	LM317LBDR2G

Appendix A: Changed Products

PCN#: FPCN24540X
Issue Date: Mar 14, 2022

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
TL431IDR2G		LM317LBDR2G		
TL431BCDR2G		LM317LBDR2G		
TL431AIDR2G		LM317LBDR2G		
TL431BIDR2G		LM317LBDR2G		
TL431CDR2G		LM317LBDR2G		
TL431ACDG		LM317LBDR2G		
TL431BIDG		LM317LBDR2G		
TL431ACDR2G		LM317LBDR2G		
TL431BVDR2G		LM317LBDR2G		
TL431AIDG		LM317LBDR2G		