

DATE: May 8, 2026

PCN #: 2826

PCN Title: Change to Bump Process – Remove Ni

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of notification by contacting your local Diodes sales representative. If you require samples for evaluation purposes, please submit a corresponding request within 30 days as well. Otherwise, samples may not be built prior to the implementation of the announced change(s).

The change(s) announced in this PCN will not be implemented prior to the target implementation date, i.e. 90 days from the stated notification date, unless Diodes receives written customer approval before that date.

Previously agreed upon customer specific product and/or process change requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



PRODUCT CHANGE NOTICE**PCN-2826-REV1**

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
May 8, 2026	August 7, 2026	Analog	Change to Bump Process – Remove Ni	2826
TITLE				
Change to Bump Process – Remove Ni				
DESCRIPTION OF CHANGE				
This PCN is being issued to notify customers that Diodes is making a change to the bump process with the removal of Ni.				
Full electrical characterization and reliability testing have been completed on representative part numbers to ensure there is no change to product reliability, device functionality or electrical specifications in the datasheet unless specified.				
IMPACT				
Continuity of Supply - There will be no change to the Form, Fit, or Function of affected products unless specified.				
PRODUCTS AFFECTED				
AP61300Z6-7, AP61302Z6-7				
WEB LINKS				
Manufacturer’s Notice:	https://www.diodes.com/quality/product-change-notices/diodes-product-change-notices/			
For More Information Contact:	https://www.diodes.com/about/contact-us/contact-sales/			
Data Sheet:	https://www.diodes.com/catalog/			
DISCLAIMER				
Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days from the notification date of this PCN, all changes described in this announcement are considered approved.				

Certificate of Design, Construction & Qualification



Description: 1.package qual for AP61302Q with new bump structure, remove Ni layer from pillar.(bump site and A/T site: CAT).
2.other parts have the same bump structure in CAT,will QBS to AP61302Q.

	General	Part Number	Do not remove these columns	Qual Device 1	Qual Device 2	Qual Device 3
		Grade 0, 1, 2, 3, 4		AP61302QZ6-7	AP61302QZ6-7	AP61302QZ6-7
		PG #		Grade1	Grade1	Grade1
		Die Revision		PG2.6	PG2.6	PG2.6
		Package		A07	A07	A07
		Wire Bond, Cu Piller, Bump, CSP		FC-SOT-563	FC-SOT-563	FC-SOT-563
		MSL Level		Cu pillar	Cu pillar	Cu pillar
		Package Size		MSL1	MSL1	MSL1
		Die Name(1)		1.6mm*1.6mm*0.6mm	1.6mm*1.6mm*0.6mm	1.6mm*1.6mm*0.6mm
		Die Size (W/L/Thickness)		AD0455A07-SP	AD0455A07-SP	AD0455A07-SP
		Die Process / Technology		0.91mm*1.2mm*0.14mm	0.91mm*1.2mm*0.14mm	0.91mm*1.2mm*0.14mm
	Fab	Wafer FAB		SP18BC	SP18BC	SP18BC
		Wafer FAB Location		SPFAB	SPFAB	SPFAB
		Bump or Piller or RDL		Maine	Maine	Maine
		Bump/Piller/RDL Site (Name and phy location)		Bump	Bump	Bump
		Bump/Piller/RDL Dia and Composition		CAT	CAT	CAT
		Wafer Diameter		95um	95um	95um
		Wafer Thickness		8 inch	8 inch	8 inch
		Top Metal Type/Bond Pad Composition		725um	725um	725um
		Top Metal Thickness		AlCu	AlCu	AlCu
		Die passivation thickness range		2.7um	2.7um	2.7um
		Glass Transistion Temp		SiN 5000A +/- 500A; 8000 SiO2 +/- 800A.	SiN 5000A +/- 500A; 8000 SiO2 +/- 800A.	SiN 5000A +/- 500A; 8000 SiO2 +/- 800A.
		Max Junction Temp		130 degree C	130 degree C	130 degree C
		Max Thermal resistance Junc (case)		150 degree C	150 degree C	150 degree C
		Max Thermal resistance Junc (amibent)		60 °C/W	60 °C/W	60 °C/W
		Metal Layers		130°C/W	130°C/W	130°C/W
		Maximum Power Consumptionin in Watts		3	3	3
	Package	BackgrindThinkness		0.887W	0.887W	0.887W
		Backgrind Location		0.14mm	0.14mm	0.14mm
		Die Attach Material		CAT	CAT	CAT
		Leadframe Type		TF38	TF38	TF38
		Molding Compound Type		SOT-563 FC-B	SOT-563 FC-B	SOT-563 FC-B
	Molding Compound Manufacturer	CEL-1700HF40SK-D3	CEL-1700HF40SK-D3	CEL-1700HF40SK-D3		
	Green Compound (Yes/No)	SD	SD	SD		
	Lead-Free (Yes/No)	Yes	Yes	Yes		
	Solder Ball Diameter	Yes	Yes	Yes		
AT/Rel	Assembly Site	95um	95um	95um		
	FT Test Site	CAT	CAT	CAT		
	Realibility Test Site	CAT	CAT	CAT		
	Qual Plan #	BCD	BCD	BCD		
	Realibility Testing	#26010601	#26010601	#26010601		

Test Group	Test	Test Conditions	Duration / Limits	Test Method	Fail/SS	Lots Required	Test Temp	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail
	Test Group A - Accelerated Environment Stress Tests												
A1	MSL1 Pre-cond	(JESD22-A113) Bake 125C	24 Hrs	JESD22 A113 JEDC J-STD-020	0/154	3 Assy lots	Room	X	PASS	X	PASS	X	PASS
A1		Soak 85C, 85% RH	168Hrs		0/154	3 Assy lots		X	PASS	X	PASS	X	PASS
A1		IR reflow 260C	3 cycles		0/154	3 Assy lots		X	PASS	X	PASS	X	PASS
A4	Temp Cycle (TC)	(JESD22-A104) -65C-150C Mounted on PCB Board (Daughter Card)	500 cycles	JEDD22 A104	0/77	3 Assy lots	Room/Hot	X	PASS	X	PASS	X	PASS
A4			1000 cycles		0/77	3 Assy lots		X	PASS	X	PASS	X	PASS
A4	Post TC Cu Pillar Cross Section	Post TC (5 Cu Pillars from 5 Devices)	post 1000 cyc	0/5 from 5 Devices				X	PASS	X	PASS	X	PASS
A4	Post TC Bump Cross Section	Post TC (5 Bumps from 5 Devices)	post 1000 cyc	0/5 from 5 Devices									
A2	HAST	JESD22-A101/A110 130C, 85%RH 33.3 psia Vcc = Op Max or up to a voltage above which arcing in the chamber will likely occur (typically 42V).; PER JESD22-A110	96 Hrs	JESD22-A110	0/77	3 Assy lots	Room/Hot	X	PASS	X	PASS	X	PASS
A3	UHASt	JESD22-A118 130C, 85%RH 33.3 psia	96 Hrs	JEDD22 A118	0/77	3 Assy lots	Room	X	PASS	X	PASS	X	PASS
A6	HTSLHigh Temperature Storage	(JESD22-A103) Ta>150C Ta=175C for Grade 0	168 Hrs	JESD A103	0/45	3 Assy lots	Room/Hot	X	PASS	X	PASS	X	PASS
A6			500 Hrs		0/45	3 Assy lots		X	PASS	X	PASS	X	PASS
A6			1000 Hrs		0/45	3 Assy lots		X	PASS	X	PASS	X	PASS
	Summary: Submitted By: Alice Sun 2026/1/5 Approved By: Daniel LI01 03/30/2026												