



August 19, 2021

Production Information Notice (PIN): Henkel Non-Conductive Epoxy Manufacturing Site Change

Dear Impinj Customer,

This notification is to inform our customers that Henkel, a supplier of non-conductive epoxy, is relocating their production site from Rancho Dominguez, CA, USA to Songdo, South Korea and will be providing products from the new location starting in January 2022.

Henkel is moving their facility to a location that is closer to where their customers are manufacturing their products. This change will affect the Impinj Monza X-8K Dura, Monza 4E Dura, and Monza 4QT Dura products. All three products use the Loctite ABLESTIK 8900NC epoxy.

Impinj Product Name	Impinj Part Number	Affected Epoxy	Last Time Buy from USA Site	Epoxy Available from New Site in Korea
Monza X-8K Dura	IPJ-P6005-X2BT	Loctite ABLESTIK 8900NC	10/30/2021	01/01/2022
Monza 4E Dura	IPJ-P5005			
Monza 4QT Dura	IPJ-P5003			

According to Henkel, the manufacturing site change is a Class B (minor) change and will not impact the form, fit, or function of their epoxy product. Below is Henkel's impact and risk assessment of 5M1E.

5M1E	Change (Yes/No)	If Yes, What change?	Risk (High/Medium/Low)
	Man	Yes	
Machine	No		Low: Copy exact/equivalent machine will be used.
Material	No		Low: There will be no change in raw material.
Method	No		Low: There will be no manufacturing process change.
Measurement	No		Low: Copy exact/equivalent measurement equipment will be used.
Environment	No		Low: 1. The manufacturing space will be an expanded size compared to the current facility. 2. Equivalent clean room environment control with enhanced capacity.

Henkel has stated that this minor change will not impact the form, fit, or function of their epoxy products. Impinj will conduct an evaluation of the epoxy from the new Songdo, Korea site to ensure there is no performance or reliability change from its original Rancho Dominguez, USA site. The qualification plan will include the following set of tests per AEC-Q100 and JEDEC



standards and is expected to be completed by the end of August 2021. Qualification test standards, methodologies, and conditions are shown in the following table.

Test Standard	Test Decision	Test Method	Test Conditions	Duration/Time	Sample Size/ Lot
AEC-Q100 & JEDEC Standards	Preconditioning (MSL1)	1. Temperature Cycling	-65°C/150°C	5 Cycles	280/Lot
		2. Bake	125°C	24 Hrs	
		3. Moisture Soak	85°C/85%R	168 Hrs	
		4. IR Reflow	Peak Temp = 260 ± 5°C, Ramp Up 4°C/Sec	3 Pass	
		5. Flux Immersion	Water soluble flux cleaning at room temp.	At least 10 Sec	
		6. Clean Sample	DI Water	-	
	Temperature Cycling Test (DPA & CDPA SEM)	Temperature Cycling	-65°C/150°C	500 Cycles and 1000 Cycles	77 Units/Lot
	UHAST	Unbiased HAST	130°C/85%RH	96 Hrs	77 Units/Lot
	High Temperature Storage Test	HTSL	150°C	504 Hrs and 1008 Hrs	77 Units/ Lot

If you have additional questions, please contact your Impinj sales representative or the Impinj support team (support@impinj.com).

Regards,

Martin Liebl
Senior Director, Endpoint IC Product Management