



DATE: June 2, 2026

PCN #: 2801

PCN Title: Change Lead Frame and Die Attach Epoxy Types for Select Automotive Products

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-2801-REV1

Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
June 2, 2026	September 2, 2026	Discrete Semiconductor	Assembly Bill of Materials	2801
TITLE				
Change Lead Frame and Die Attach Epoxy Types for Select Automotive Products				
DESCRIPTION OF CHANGE				
This PCN is being issued to notify customers that in order to assure continuity of supply, Diodes has qualified new lead frame and die attach epoxy types for select automotive products listed below. Full electrical characterization and high reliability testing have been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. There will be no change to Form, Fit or Function of products affected for the parts listed below.				
IMPACT				
Continuity of Supply. No change in datasheet electrical parameters and product performance.				
PRODUCTS AFFECTED				
Table 1 – Affected Part List to Change Lead Frame and Die Attach Epoxy Types Table 2 – Affected Part List to Change Lead Frame Type Table 3 – Affected Part List to Change Die Attach Epoxy Type				
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.				

Table 1 - Affected Part List to Change Lead Frame and Die Attach Epoxy Types

DMC1018UPDWQ-13	DMP2065UQ-7	DMTH10H032LFVWQ-13	DMTH4014LFVWQ-13	DMTH47M2LFVWQ-7	DMTH6016LPDWQ-13
DMN2050LQ-7	DMP3097LQ-7	DMTH10H032LFVWQ-7	DMTH4014LFVWQ-7	DMTH48M3SFVWQ-13	DMTH69M8LFVWQ-13
DMN3110SQ-7	DMP6051SFVWQ-13	DMTH10H032LPDWQ-13	DMTH4014LPDQ-13	DMTH48M3SFVWQ-7	DMTH69M8LFVWQ-7
DMNH6021SPDQ-13	DMPH4023SPDWQ-13	DMTH10H038SPDWQ-13	DMTH4014LPDWQ-13	DMTH6010LPDWQ-13	DMTH8028LFVWQ-13
DMNH6021SPDWQ-13	DMPH6050SPDQ-13	DMTH4007SPDWQ-13	DMTH46M7SFVWQ-13	DMTH6015LPDWQ-13	DMTH8028LFVWQ-7
DMNH6069SFVWQ-13	DMPH6050SPDWQ-13	DMTH4008LPDWQ-13	DMTH46M7SFVWQ-7	DMTH6016LFVWQ-13	DMTH8030LPDWQ-13
DMNH6069SFVWQ-7	DMPH6051SFVWQ-13	DMTH4011SPDWQ-13	DMTH47M2LFVWQ-13	DMTH6016LFVWQ-7	

Table 2 - Affected Part List to Change Lead Frame Type

BSN20Q-7	DMP4026SFVWQ-13	DMP4026SFVWQ-7	DMPH4026SFVWQ-13	DMPH4026SFVWQ-7	DMTH69M9LPDWQ-13
DESD24VL2BTQ-7					

Table 3 - Affected Part List to Change Die Attach Epoxy Type

DMPH4025SFVWQ-13	DMPH4025SFVWQ-7	DMTH43M8LFVWQ-13	DMTH43M8LFVWQ-7		
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Certificate of Design, Construction & Qualification

Description: Change the small die LDF type to T from R (die size<1.0*1.0mm)

Category				Qual Device 1				Qual Device 2				Qual Device 3				Qual Device 4				Qual Device 5				Qual Device 6			
Product				DMN60H080DS-7				BSN20Q-7				DMP3097LQ-7				DMP2065UQ-13-A				DESD24VL2BTQ-7				ZHCS750TA			
Assembly				SSOT-23				SSOT-23				SSOT-23				SSOT-23				SSOT-23				SSOT-23			
Wafer				Die Name(s)				DF22NF0ARE				DF45N50A-BN/ON14121				AD0806AL796CXX-BN				MOSWFAI796AQXX-BN				TVB2828A750F			
Wafer				Die Size (W/L/Thickness) - After Saw				0.4*0.4mm, 158*+10µm				0.4*0.4mm, 200+10/-10µm				0.96*0.66mm, 158*+10/-10µm				0.96*0.66mm, 158*+10/-10µm				0.315*0.300*0.14mm			
Wafer				Die Process / Technology				Trench MOS				Trench MOS				Trench MOS				Trench MOS				TVS			
Wafer				Wafer FAB Site/ Location				SFAB/China				VIS / Taiwan				VIS / Taiwan				OFAB/UK				SFAB/china			
Wafer				Wafer Diameter				6 inch				8 inch				8 inch				8 inch				6inch			
Wafer				No of masks Steps				7				NA				NA				NA				3			
Wafer				Front Metal Type				AlCu				AlCu				AlCu				AlCu				AlSiCu			
Wafer				Front Metal Layer Number/ Thickness				NA				NA				NA				NA				NA			
Wafer				Front Solderable or Plated Metal Type / Thickness				1/4um				1/3.5um				1/4um				1/4um				NA			
Wafer				Back Metal Type (All Layers)				Ti/Ni/Ag				Ti/Au				Ti/Ni/Ag				Ti/Ni/Ag				TiNiVAu			
Wafer				Back Metal Thickness (All Layers)				1150A/2000A/8000A				100A/10KA				1KA/3KA/10KA				1KA/3KA/10KA				1K3K10KA			
Wafer				Die Conformal Coating (Passivation) Material				SION				SION				Oxide				Oxide				None			
Wafer				Die Conformal Coating (Passivation) Thickness Range				PETEOS3K+ SIN 7000A				PE-SION 10KA				TEOS Oxide 1.6K Nitride 3.8K				TEOS Oxide 1.6K Nitride 3.8K				None			
Assembly				Die quantity per package (e.g. single or dual dies)				1				1				1				1				1			
Assembly				Die Attach Method (DB Epoxy/Solder Type)				EPOXY				EPOXY				EPOXY				EPOXY				EPOXY			
Assembly				Die Attach Material/ Supplier				9005SP				9005SP				84-1LMISR4-TF/HENKEL				84-1LMISR4-TF				9005SP			
Assembly				Bond Wire/Clip Bond Material				Cu Wire				PdCu wire				Cu Wire				PdCu				Cu			
Assembly				Bond Wire Diameter				1.0mil				1.0mil				1.7mil				1.7mil				1.0mil			
Assembly				Bond Type (at Die)				Thermo sonic				Thermo sonic				Thermo sonic				Thermo sonic				Thermo sonic			
Assembly				Bond Type (at LF)				Thermo sonic				Thermo sonic				Thermo sonic				Thermo sonic				Thermo sonic			
Assembly				No. of bond over active area				Source: 1 wire				Gate: 1 wire				Source: 5 wires				Source: 5 wires				Die pad 2+Lead 2			
Assembly				Leadframe Type				SOT-23T				SOT-23T				SOT-23T				SOT-23T				SOT-23T			
Assembly				Leadframe Material				CDA194				CDA194				CDA194				CDA194				CDA194			
Assembly				Die Pad Plating Material				Bare Copper				Bare Copper				Bare Copper				Bare Copper				Bare Copper			
Assembly				Mold Compound Type				CEL-1700HF40SK-D3				CEL-1700HF40SK-D3				CEL-1700HF40SK-D3				CEL-1700HF40SK-D3				CEL-1700HF40SK-D3			
Assembly				Glass Transition Temp (Tg)				110°C				110°C				110°C				110°C				110°C			
Assembly				Green Compound (Yes/No)				Yes				Yes				Yes				Yes				Yes			
Assembly				Terminal Finish (Plating) Material				100% matte Tin, annealed				100% matte Tin, annealed				100% matte Tin, annealed				100% matte Tin, annealed				100% matte Tin, annealed			
Assembly				Lead-Free (Yes/No)				Yes				Yes				Yes				Yes				Yes			
Assembly				Assembly Site/ Location				CATI/Chengdu				CATI/Chengdu				CATI/Chengdu				CATI/Chengdu				CATI/China			
Assembly				Test Site/ Location				CATI/Chengdu				CATI/Chengdu				CATI/Chengdu				CATI/Chengdu				CATI/China			
Product				Max Junction Temp				150°C				150°C				150°C				150°C				125 °C			
Product				Max Thermal resistance Junc (ambient)				174°C/W				200°C/W				82°C/W				83°C/W				500°C/W			
Product				DataSheet				DS39475				DS31898				DS42953				DS42642				DS42901			
Product				Qual Plan Number				23081101				23081101				23081101				23081101				23081101			
Reliability and Characterization Testing																											
# in AEC Q101 (E)	Test	Test Conditions	Duration / Limits	Accept on # Failed/ Sample Size per Lot	# of Lots	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = QBS Test Completed	Results Pass/Fail	X = QBS Test Completed	Results Pass/Fail	X = QBS Test Completed	Results Pass/Fail								
A1	MSL1 Pre-conditioning	Bake 125C	24 Hrs	SMD only, for Test # A2, A3, A4, A5 & C8	3 Assembly lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
		Soak 85C, 85% RH	168Hrs			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS										
		IR reflow 260C	3 cycles (First cycle can be done at PCB mounting process before Pre-conditioning)			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS										
A2 (PC)	HAST-1x	Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltage above which arcing in the chamber will likely occur (typically 42V); PER JESD22-A110	96 Hrs	0/77	3 wafer lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS			X	PASS								
	Post-1x HAST CSAM (Q006 only)	CSAM post-1X stress (required to qualify Cu/coated Cu wire for Automotive); can skip if performing to 2x	post 96 Hrs	0/22 or marked 11	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-1x HAST Ball + Stitch/Wedge pull (Q006 only)	Post-1x HAST (Max 30 wires/balls)	post 96 Hrs	0/3	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-1x HAST Ball Shear (Q006 only)	Post-1x HAST (Max 30 wires/balls)	post 96 Hrs	0/3	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-1x HAST Cross-section (Q006 only)	Post-1x HAST for initial qual of new die/package or family/technology	post 96 Hrs	0/1	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	HAST-2x (Q006 only)	Ta=130C, 85%RH, 33.3 psia 80% Bias or up to a voltage above which arcing in the chamber will likely occur (typically 42V); PER JESD22-A110 (required to qualify Cu/coated Cu wire for Automotive)	192 Hrs	0/70	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-2x HAST CSAM (Q006 only)	CSAM post-2X stress (required to qualify Cu/coated Cu wire for Automotive)	post 192 Hrs	0/22 or marked 11	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-2x HAST Ball + Stitch/Wedge pull (Q006 only)	Post-2x HAST (Max 30 wires/balls)	post 192 Hrs	0/3	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-2x HAST Ball Shear (Q006 only)	Post-2x HAST (Max 30 wires/balls)	post 192 Hrs	0/3	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	Post-2x HAST Cross-section (Q006 only)	Post-2x HAST for initial qual of new die/package or family/technology	post 192 Hrs	0/1	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
	A2alt (PC)	H3TRB-1x	Ta=85°C, 85% RH, with 80% Maximum Reverse Bias or up to a maximum of 100V or limit of chamber. JESD22A-101	168 Hrs 500 Hrs 1000 Hrs	0/77 0/77 0/77	3 wafer lots											X	PASS	X	PASS							
		Post-1x H3TRB CSAM (Q006 only)	CSAM post-1X stress (required to qualify Cu/coated Cu wire for Automotive); can skip if performing to 2x	post 1000 Hrs	0/22 or marked 11	3 wafer lots											X	PASS	X	PASS							
Post-1x H3TRB Ball + Stitch/Wedge pull (Q006 only)		Post-1x H3TRB (Max 30 wires/balls)	post 1000 Hrs	0/3	3 wafer lots											X	PASS										
Post-1x H3TRB Ball Shear (Q006 only)		Post-1x H3TRB (Max 30 wires/balls)	post 1000 Hrs	0/3	3 wafer lots											X	PASS										
Post-1x H3TRB Cross-section (Q006 only)		Post-1x H3TRB for initial qual of new die/package or family/technology	post 1000 Hrs	0/1	3 wafer lots											X	PASS										
H3TRB-2x (Q006 only)		Ta=85°C, 85% RH, with 80% Maximum Reverse Bias or up to a maximum of 100V or limit of chamber. JESD22A-101 (required to qualify Cu/coated Cu wire for Automotive)	2000 Hrs	0/70	3 wafer lots											X	PASS										
Post-2x H3TRB CSAM (Q006 only)		CSAM post-2X stress (required to qualify Cu/coated Cu wire for Automotive)	post 2000 Hrs	0/22 or marked 11	3 wafer lots											X	PASS										
Post-2x H3TRB Ball + Stitch/Wedge pull (Q006 only)		Post-2x H3TRB (Max 30 wires/balls)	post 2000 Hrs	0/3	3 wafer lots											X	PASS										
Post-2x H3TRB Ball Shear (Q006 only)		Post-2x H3TRB (Max 30 wires/balls)	post 2000 Hrs	0/3	3 wafer lots											X	PASS										
Post-2x H3TRB Cross-section (Q006 only)		Post-2x H3TRB for initial qual of new die/package or family/technology	post 2000 Hrs	0/1	3 wafer lots											X	PASS										
A3 (PC)		uHAST	Ta=130°C/85%RH/33.3 psia, 96Hrs for release; PER JESD22-A118, or 264 hours at Ta=110°C/85%RH	96 Hrs	0/77	3 Assembly lots											X	PASS									
A3alt (PC)		PCT/AC	Ta=121°C 15PSIG 100%RH; PER JESD22-A102	96 Hrs	0/77	3 Assembly lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS			X	PASS							
A4 (PC)	TC ^(nom) -1x	Ta=55C to 150C or Max Tj, PER JESD22A-104	168 Cycles 500 Cycles 1000 Cycles	0/77 0/77 0/77	3 Assembly lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
	Post-1x TC CSAM (Q006 only)	CSAM post-1X stress (required to qualify Cu/coated Cu wire for Automotive)	post 1000 Cycles	0/22 or marked 11	3 Assembly lots			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
	Post-1x TC Ball + Stitch/Wedge pull (Q006 only)	Post-1x TC (Max 30 wires/balls)	post 1000 Cycles	0/3	3 Assembly lots			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
	Post-1x TC Ball Shear (Q006 only)	Post-1x TC (Max 30 wires/balls)	post 1000 Cycles	0/3	3 Assembly lots			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
	Post-1x TC Cross-section (Q006 only)	Post-1x TC for initial qual of new die/package or family/technology	post 1000 Cycles	0/1	3 Assembly lots			X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
A4a (PC)	TC Hot Test (for MOSFETs)	JESD22 A-104, Appendix 6 - Not required for Cu wire bonded parts that are qualified to Q006	125C TEST after TC using PV-determined limits at hot, followed by decap and wire pull on all wires from 5 devices with bond wire sizes < 5mil	0/77	3 Assembly lots			X	PASS	X	PASS	X	PASS	X	PASS												
A5 (PC)	IOI-1x	MIL-STD-750 Method 1037 (Not required for TVS)	2520 Cycles 7560 Cycles 15000 Cycles	0/77 0/77 0/77	3 wafer lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS			X	PASS								
	IOI-2x (Q006 only)	MIL-STD-750 Method 1037 (Not required for TVS) (required to qualify Cu/coated Cu wire for Automotive)	30000 Cycles	0/77	3 wafer lots			X	PASS	X	PASS	X	PASS	X	PASS												
C1	DPA	AEC Q101-004 SEC. 4	Post H3TRB or HAST and TC	0/2	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
C2	Package Physical Dimensions (PD)	JESD22-B100	Package Outline	0/30	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	QBS Qual Device1/2/3		QBS Qual Device1/2/3		QBS Qual Device1/2/3									
C3	Wire Bond Pull Strength (WBP)	MIL-STD-750 METHOD 2037 (JESD22-B116B)	Cpk≥1.67	0/ min of 5	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
C4	Wire Bond Shear Strength (WBS)	AEC-Q101-003	Cpk≥1.67	0/ min of 5	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
C5	Die Shear (DS)	MIL-STD-750 (2017) (Not required for soft solder die attach)	Cpk≥1.67	0/5	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
CR (PC)	RESISTANCE TO SOLDER HEAT (RSH)	JESD22 A-111 (SMD), B-106 (PTH) (260C @10S), after Pre-conditioning	PER SPEC	0/30	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
C9	THERMAL RESISTANCE (TR)	JESD 24-3, 24-4, 24-6 AS APPROPRIATE	PER SPEC	0/10	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
C10	Solderability (SD)	J-STD-002; JESD22B102 (245C +0/-5S)	5 Seconds	0/10	1 Assembly lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
D1	Dielectric Integrity (DI)	AEC-Q101-004 Section 3	Pre- & Post process change comparison for Power MOS & IGBT only	0/5	1 wafer lot			X	PASS	X	PASS	X	PASS	X	PASS			X	PASS								
E0	EXTERNAL VISUAL (EV)	MIL-STD-750 METHOD 2071	PER SPEC	All qualification parts submitted for testing		X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
E2	PARAMETRIC VERIFICATION (PV)	Test all parameters per Data Sheet including AC & DC across data sheet temperature range	Operating Range, Per Data Sheet (AC, DC)	0/25	3 wafer lots	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
E3	ESDH	HBW (AEC-Q101-001)	PER DATA SHEET	0/30	1 wafer lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
E4	ESDC	CDM (AEC-Q101-005)	PER DATA SHEET	0/30	1 wafer lot	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS	X	PASS								
Summary:																											
Submitted By/Date:		Yang Chen 11/6/2024																									
Approved By/Date:		CW Lin, 10/22/2024																									



Description: Qual SDI PD5060 BF LDF type& 503HTC epoxy

	Category				Qual Device 1		Qual Device 2		Qual Device 3		
	Product	Part Number			DMNH6021SPDQ-13		DMTH10H032LPDWQ-13		DMTH69M9LPDWQ-13		
	Assembly	Package Type			SWP-POWERDI5060-8L R		SWP-POWERDI5060-8L R		SWP-POWERDI5060-8L R		
	Wafer	Die Name(s)			MOSWFSECH4-BN		MOSWFVP7635BT1Q-BN		MOSWFVP4918A-BN		
	Wafer	Die Size (W/L/Thickness) - After Saw			2.7*1.6mm,158 +10/-10µm		1.6*1.05mm,158+/-15µm		2.0*1.5mm,158±10um		
	Wafer	Die Process / Technology			Trench MOS		Trench MOSFET		Trench MOSFET		
	Wafer	Wafer FAB Site/ Location			PSMC		VIS/TW		VIS/TW		
	Wafer	Wafer Diameter			8 inch		8 inch		8 inch		
	Wafer	No of masks Steps			6		6		6		
	Wafer	Front Metal Type			AlCu		AlCu		AlCu		
	Wafer	Front Metal Layer Number/ Thickness			4um		1/4um		4um		
	Wafer	Back Metal Type (All Layers)			Ti/Ni/Ti/Ag		Ti/Ni/Ag		Ti/Ni/Ti/Ag		
	Wafer	Back Metal Thickness (All Layers)			1KA/3KA/100A/10KA		1KA/3KA/100A/10KA		1KA/3KA/100A/10KA		
	Wafer	Die Conformal Coating (Passivation) Material			Oxide		Oxide/SiN		TEOS oxide /SiN		
	Wafer	Die Conformal Coating (Passivation) Thickness Range			SIN 9000A		Oxide 4K/SiN6K		TEOS oxide 1.6K/SiN3.8K		
	Assembly	Die quantity per package (e.g. single or dual dies)			1		1		1		
	Assembly	Die Attach Method (DB Epoxy/Solder Type)			EPOXY		EPOXY		Epoxy		
	Assembly	Die Attach Material/ Supplier			503HTC / LEGEND		503HTC / LEGEND		503HTC / LEGEND		
	Assembly	Bond Wire/Clip Bond Material			Cu		Cu		Cu		
	Assembly	Bond Wire Diameter			1.7mils*26		2.0mils*16		2.0mils*18		
	Assembly	Bond Type (at Die)			Thermo sonic		Thermosonic		Thermosonic		
	Assembly	Bond Type (at LF)			Thermo sonic		Thermosonic		Thermosonic		
	Assembly	No. of bond over active area			26 wires		16 wires		18 wires		
	Assembly	Leadframe Type			PD5060 BF		PD5060 BF		PD5060 BF		
	Assembly	Leadframe Material			CDA194		CDA194		CDA194		
	Assembly	Die Pad Plating Material			Ag		Ag		Ag		
	Assembly	Mold Compound Type			CEL-9240HF10SK-M		CEL-9240HF10SK-M		CEL-9240HF10SK-M		
	Assembly	Green Compound (Yes/No)			YES		YES		YES		
	Assembly	Terminal Finish (Plating) Material			100% matte Tin		100% matte Tin		100% matte Tin		
	Assembly	Lead-Free (Yes/No)			YES		YES		YES		
	Assembly	Assembly Site/ Location			CAT / Chengdu		CAT / Chengdu		CAT / Chengdu		
	Assembly	Test Site/ Location			CAT / Chengdu		CAT / Chengdu		CAT / Chengdu		
	Product	Max Junction Temp			175°C		175°C		175°C		
	Product	Max Thermal resistance Junc (case)			2.2°C/W		3.8°C/W		2.9°C/W		
	Product	Max Thermal resistance Junc (ambient)			99°C/W		50°C/W		54°C/W		
	Product	DataSheet			DMNH6021SPDQ		DMTH10H032LPDWQ		DMTH69M9LPDWQ		
	Product	Qual Plan Number			25042805		25042805		25042805		
Reliability and Characterization Testing											
# in AEC-Q101 (F)	Test	Test Conditions	Duration / Limits	Accept on # Failed/ Sample Size per Lot	# of Lots	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail	X = Test Needed	Results Pass/Fail
A1	MSL1 Pre-conditioning	Bake 125C	24 Hrs	SMD only, for Test # A2, A3, A4, A5 & C8	3 Assembly lots	X	Pass	X	Pass	X	Pass
		Soak 85C, 85% RH	168Hrs			X	Pass	X	Pass	X	Pass
		IR reflow 260C	3 cycles (First cycle can be done at PCB mounting process before Pre-conditioning)			X	Pass	X	Pass	X	Pass
A2 (PC)	HAST-1x	Ta=130C, 85%RH, 33.3 psia, 80% Bias or up to a voltage above which arcing in the chamber will likely occur (typically 42V).; PER JESD22-A110	96 Hrs	0/77	3 wafer lots	X	Pass	X	Pass	X	Pass
	Post-1x HAST Ball + Stitch/Wedge pull (Q006 only)	Post-1x HAST (Max 30 wires/balls)	post 96 Hrs	0/3	3 wafer lots	X	Pass	X	Pass	X	Pass
	Post-1x HAST Ball Shear (Q006 only)	Post-1x HAST (Max 30 wires/balls)	post 96 Hrs	0/3	3 wafer lots	X	Pass	X	Pass	X	Pass
	Post-1x HAST Cross-section (Q006 only)	Post-1x HAST for initial qual of new die/package or family/technology	post 96 Hrs	0/1	3 wafer lots	X	Pass	X	Pass	X	Pass
	HAST-2x (Q006 only)	Ta=130C, 85%RH 33.3 psia 80% Bias or up to a voltage above which arcing in the chamber will likely occur (typically 42V); PER JESD22-A110 (required to qualify Cu/coated Cu wire for Automotive)	192 Hrs	0/70	3 wafer lots	X	Pass	X	Pass	X	Pass
A3alt (PC)	PCT/AC	Ta=121°C 15PSIG 100%RH; PER JESD22-A102	96 Hrs	0/77	3 Assembly lots	X	Pass	X	Pass	X	Pass
A4 (PC)	TC -1x	Ta=-55C to 175C Per Datasheet Max Tj , PER JESD22A-104	200 Cycles	0/77	3 Assembly lots	X	Pass	X	Pass	X	Pass
			400 Cycles	0/77		X	Pass	X	Pass	X	Pass
	Post-1x TC CSAM	CSAM post-1X stress (required to qualify Cu/coated Cu wire for Automotive)	post 400 Cycles	0/22 or marked 11	3 Assembly lots	X	Pass	X	Pass	X	Pass
	Post-1x TC SEM Inspection (Stitch) (Q006 only)	Post-1x TC (Max 30 wires/balls) covering the parts with ground bonds and the parts showing delam at the stitch area if any	post 400 Cycles	0/1	3 Assembly lots	X	Pass	X	Pass	X	Pass
	Post-1x TC Ball + Stitch/Wedge pull	Post-1x TC (Max 30 wires/balls)	post 400 Cycles	0/3	3 Assembly lots	X	Pass	X	Pass	X	Pass
	Post-1x TC Ball Shear	Post-1x TC (Max 30 wires/balls)	post 400 Cycles	0/3	3 Assembly lots	X	Pass	X	Pass	X	Pass
A5 (PC)	IOL-1x	MIL-STD-750 Method 1037 (Not required for TVS)	2520 Cycles	0/77	3 wafer lots	X	Pass	X	Pass	X	Pass
			7560 Cycles	0/77		X	Pass	X	Pass	X	Pass
15000 Cycles			0/77	X		Pass	X	Pass	X	Pass	
C1	DPA	AEC Q101-004 SEC. 4	Post H3TRB or HAST and TC	0/2	1 Assembly lot	X	Pass	X	Pass	X	Pass
C2	Package Physical Dimenstions (PD)	JESD22-B100	Package Outline	0/30	1 Assembly lot	X	Pass	QBS Qual Device lot1		QBS Qual Device lot1	
C3	Wire Bond Pull Strength (WBP)	MIL-STD-750 METHOD 2037 (JESD22-B116B)	Cpk≥1.67	0/ min of 5	1 Assembly lot	X	Pass	X	Pass	X	Pass
C5	Die Shear (DS)	MIL-STD-750 (2017) (Not required for soft solder die attach)	Cpk≥1.67	0/5	1 Assembly lot	X	Pass	X	Pass	X	Pass
C8 (PC)	RESISTANCE TO SOLDER HEAT (RSH)	JESD22 A-111 (SMD), B-106 (PTH) (260C @10S), after Pre-conditioning	PER SPEC	0/30	1 Assembly lot	X	Pass	X	Pass	X	Pass
C9	THERMAL RESISTANCE (TR)	JESD 24-3, 24-4, 24-6 AS APPROPRIATE	PER SPEC	0/10	1 Assembly lot	X	Pass	X	Pass	X	Pass
C10	Solderability (SD)	J-STD-002; JESD22B102 (245C +0/5S)	5 Seconds	0/10	1 Assembly lot	X	Pass	X	Pass	X	Pass
E0	EXTERNAL VISUAL (EV)	MIL-STD-750 METHOD 2071	PER SPEC	All qualification parts submitted for testing		X	Pass	X	Pass	X	Pass
E2	PARAMETRIC VERIFICATION (PV)	Test all parameters per Data Sheet including AC & DC across data sheet temperature range	Operating Range, Per Data Sheet (AC, DC)	0/25	3 wafer lots	X	Pass	X	Pass	X	Pass
Summary: Submitted By/Date: Yang chen 10/14/25 Approved By/Date: CW Lin, 4/1/2026											



Certificate of Design, Construction & Qualification

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