



Product Change Notification: DSNO-04BWYN422

Date:

08-Jun-2026

Product Category:

Low-Med Voltage Power Modules

Notification Subject:

CCB 8227 Initial Notice: Qualification of Matte Sn as a new lead plating for MIC33153-4YHJ-TR, MIC33153YHJ-TR, MIC3385-1.5YHL-TR and MIC3385YHL-TR catalog part numbers (CPN) available in 14L TDFN (3.5x3.0x1.15mm) and 14L VDFN (3.5x3.0x1.15mm) packages at UNIS assembly site.

Affected CPNs:

[DSNO-04BWYN422_Affected_CPN_06082026.pdf](#)

[DSNO-04BWYN422_Affected_CPN_06082026.csv](#)

PCN Status: Initial Notification

PCN Type: Manufacturing Change

Microchip Parts Affected: Please open one of the files found in the Affected CPNs section.

Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

Description of Change: Qualification of Matte Sn as a new lead plating for MIC33153-4YHJ-TR, MIC33153YHJ-TR, MIC3385-1.5YHL-TR and MIC3385YHL-TR catalog part numbers (CPN) available in 14L TDFN (3.5x3.0x1.15mm) and 14L VDFN (3.5x3.0x1.15mm) packages at UNIS assembly site.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change (Yes/No)
Assembly Site	Unisem (M) Berhad Perak, Malaysia (UNIS)	Unisem (M) Berhad Perak, Malaysia (UNIS)	No

Wire Material	Au	Au	No
Molding Compound Material	G770HCD	G770HCD	No
Lead-Frame Material	A194FH	A194FH	No
Lead-Frame Lead Plating Material	NiPdAu	Matte Sn	Yes
Lead-Frame Design	See Pre and Post Change Summary attachment for comparison.		

Impacts to Datasheet: Yes.

Note: Microchip will issue separate PCN for datasheet update.

Change Impact: None

Reason for Change: To improve productivity by qualifying Matte Sn as a new lead plating material.

Change Implementation Status: In Progress

Estimated Qualification Completion Date: September 2026

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Timetable Summary:

	June 2026					>	September 2026				
Work Week	23	24	25	26	27		36	37	38	39	40
Initial PCN Issue Date		x									
Qual Report Availability									x		
Final PCN Issue Date									x		

Method to Identify Change: Traceability Code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN_#_Qual_Plan.

Revision History: June 08, 2026: Issued initial notification.

Note: The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable product.

Attachments:

PCN_DSNO-04BWYN422_Pre and Post Change Summary.pdf
PCN_DSNO-04BWYN422_Qualification_Plan.pdf

Please contact your local [Microchip sales office](#) with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our [PCN home page](#) select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the [PCN FAQ](#) section.

If you wish to change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN):

MIC33153-4YHJ-TR

MIC33153YHJ-TR

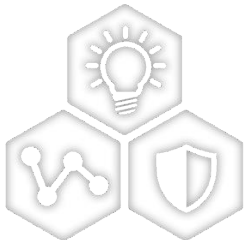
MIC3385-1.5YHL-TR

MIC3385YHL-TR

CCB 8227
Pre and Post Change Summary
PCN #: DSNO-04BWYN422

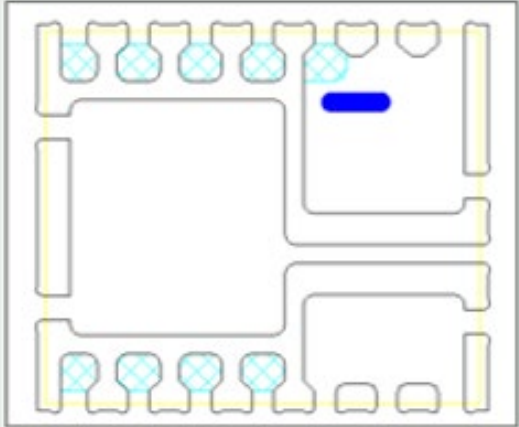
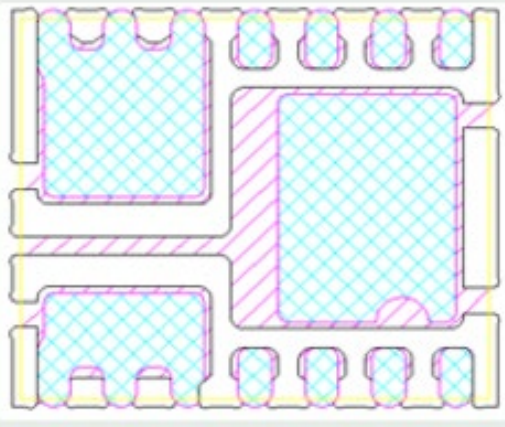
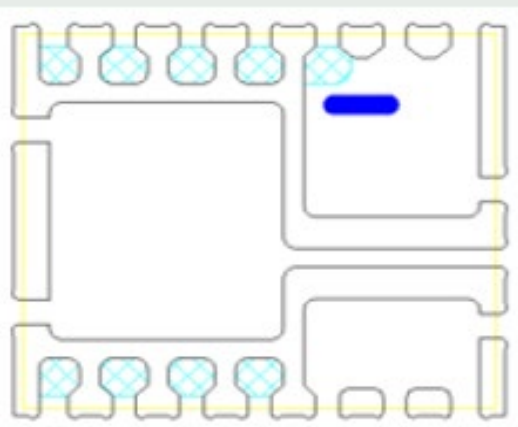
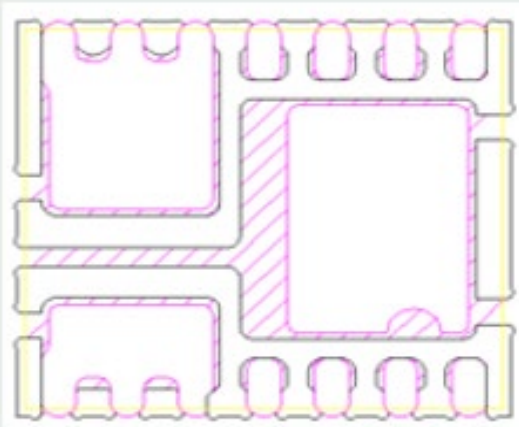


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Lead-Frame Comparison

Pre Change		Post Change	
Top view (selective PPF)	Bottom view (selective PPF)	Top view (selective Ag)	Bottom view (Cu)
			
Lead-Frame Material	A194FH	Lead-Frame Material	A194FH
Lead-Frame Lead Plating Material	NiPdAu	Lead-Frame Lead Plating Material	Matte Sn

***Note 1:** Leadframe Top side change from “Selective PPF” to “Selective Ag Plating”; Bottom side change from “Selective PPF” to “Bare Cu”.

Legend: Blue color = PPF, Pink color = Half etch area of lead frame.



QUALIFICATION PLAN SUMMARY

PCN #: DSNO-04BWYN422

**Date:
June 04, 2026**

Qualification of Matte Sn as a new lead plating for MIC33153-4YHJ-TR, MIC33153YHJ-TR, MIC3385-1.5YHL-TR and MIC3385YHL-TR catalog part numbers (CPN) available in 14L TDFN (3.5x3.0x1.15mm) and 14L VDFN (3.5x3.0x1.15mm) packages at UNIS assembly site.

Purpose: Qualification of Matte Sn as a new lead plating for MIC33153-4YHJ-TR, MIC33153YHJ-TR, MIC3385-1.5YHL-TR and MIC3385YHL-TR catalog part numbers (CPN) available in 14L TDFN (3.5x3.0x1.15mm) and 14L VDFN (3.5x3.0x1.15mm) packages at UNIS assembly site.

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<u>Misc.</u>	Assembly site	Unisem
	BD Number	Various
	MP Code (MPC)	Various
	Part Number (CPN)	Various
	MSL information	MSL 1, 260°C
	Assembly Shipping Media (T/R, Tube/Tray)	T/R
	Base Quantity Multiple (BQM)	5000
<u>Lead-Frame</u>	Paddle size	75 x 68mils
	Material	A194FH
	DAP Surface Prep	Cu
	Treatment	No
	Process	Etching
	Lead-lock	Yes
	Part Number	40400093
	Lead Plating	Matte Sn
	Strip Size	70 X 250 mm
	Strip Density	896
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	8290
	Conductive	Yes
<u>MC</u>	Part Number	G770HCD
<u>PKG</u>	Package Type	TDFN / VDFN
	Pin/Ball Count	14
	PKG width/size	3.5x3x1.15mm / 3.5x3.0x1mm
	Package Code	QUA / QWA

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Pkg. Type	Special Instructions
Standard Pb-free Solderability	J-STD-002D ; Perform 8 hour steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	> 95% lead coverage	5	UNIG	MSJO	TDFN	Standard Pb-free solderability is the requirement. SnPb solderability (backward solderability- SMD reflow soldering) is required for any plating related changes and highly recommended for other package BOM changes.
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5				30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5				30 bonds from a min. 5 devices.
Wire Sweep											Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	UNIG	MSJO	TDFN	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	UNIG	MSJO	TDFN	
HTSL (High Temp Storage Life)	JESD22-A103. +175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C	45	5	1	50	0	10	MSJO	MSJO	TDFN	

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	ATE Test Site	REL Test Site	Pkg. Type	Special Instructions
Preconditioning - Required for surface mount devices	JESD22-A113. +150°C Bake for 24 hours, moisture loading requirements per MSL 1, 260°C + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25°C.	144	10	3	462	0	15	MSJO	MSJO	TDFN	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
UHAST	JESD22-A118. +130°C/85% RH for 192 hrs Electrical test pre and post stress at +25°C	77	5	3	246	0	10	MSJO	MSJO	TDFN	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104. -65°C to +150°C for 500 cycles. Electrical test pre and post stress; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MSJO	MSJO	TDFN	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.