Product Change Notification: CENO-19LKKL699

Date:

07-Mar-2025

Product Category:

Power Management - PMIC, Power Management - PWM Controllers, Switching Regulators

Notification Subject:

CCB 6619 Final Notice: Qualification of UNIG as new assembly site for selected MIC2111xx, MIC2225, MIC2285A, MIC23150, MIC232xx, MIC2800, MIC28xx and MIC2821 device families available in various packages.

Affected CPNs:

CENO-19LKKL699_Affected_CPN_03072025.pdf
CENO-19LKKL699_Affected_CPN_03072025.csv

PCN Status: Final 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 UNIG as new assembly site for selected MIC2111xx, MIC2225, MIC2285A, MIC23150, MIC232xx, MIC2800, MIC28xx and MIC2821 device families available in various packages.

Pre and Post Summary Changes:

	Pre Change	**Post Change**
Assembly Site	Unisem (M) Berhad Perak, Malaysia (UNIS)	Unisem Gopeng (UNIG)

Wire Material	Au	Au
Die Attach Material	8006NS	8006NS
Molding Compound Material	G770HCD	G770HCD
Lead-Frame Material	A194FH	A194FH

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve manufacturability by qualifying UNIG as a new assembly site.

Change Implementation Status: In Progress

Estimated First Ship Date: 16 April 2025 (date code: 2516)

Note Below EFSD: Note: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Timetable Summary:

	November 2023					**>**	**March 2025**					**April 2025**				
Work Week	44	45	46	47	48		09	10	11	12	13	14	15	16	17	18
Initial PCN Issue Date				x												
Qual Report Availability								x								
Final PCN Issue Date								x								
Estimated Implementation Date														x		

Method to Identify Change: Traceability Code

Qualification Report: Please open the attachments included with this PCN labeled as PCN_#_Qual_Report.

Revision History: November 23, 2023: Issued initial notification.
March 07, 2025: Issued final notification. Attached Qualification Report. Revised affected parts list to remove MIC2111BYMT-T5 and MIC2111CYMT-T5 catalog part numbers due to EOL. Provided Estimated First Ship Date on April 16, 2025.

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_CENO-19LKKL699_Qual Report.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)

MIC2810-44MYML-TR

MIC2811-4GMSYML-TR

MIC2810-4MSYML-TR

MIC2225-4OYMT-TR

MIC2225-GJYMT-TR

MIC2800-G4SYML-TR

MIC2810-4GMYML-TR

MIC2821-4GJLYML-TR

MIC2225-4SYMT-TR

MIC2810-1J6JYML-TR

MIC2810-1J6SYML-TR

MIC2800-G1JJYML-TR

MIC2800-G1JSYML-TR

MIC2800-G2SYML-TR

MIC2800-G8SYML-TR

MIC2800-G1JJYML-TR1

MIC23150-SYMT-TR

MIC2800-G4JYML-TR

MIC2800-A4SYML-TR

MIC2811-4GJLYML-TR

MIC2821-4GMSYML-TR

MIC23150-55YMT-TR

MIC23250-S4YMT-TR

MIC23250-SKYMT-TR

MIC23150-GYMT-TR

MIC23250-G4YMT-TR

MIC23250-M4YMT-TR

MIC2225-G4YMT-TR

MIC2225-GMYMT-TR

MIC2810-4GSYML-TR

MIC2111CYMT-TR

MIC2800-G4MYML-TR

MIC2800-GFMYML-TR

MIC2810-4GPYML-TR

MIC23250-F4YMT-TR

MIC2225-4KYMT-TR

MIC2225-GFYMT-TR

MIC2285AYMT-TR

MIC2800-D2FMYML-TR

MIC23250-W4YMT-TR

MIC2810-4LSYML-TR

MIC2810-FGSYML-TR

MIC2225-4MYMT-TR

MIC23150-4YMT-TR

MIC23150-CYMT-TR

MIC23254-GCYMT-TR

MIC2800-G7SYML-TR

MIC2810-1JGMYML-TR

MIC2800-GFSYML-TR

MIC2111BYMT-TR

MIC2800-G4KYML-TR

MIC2810-4GKYML-TR

MIC2810-CGJYML-TR

MIC2800-D24MYML-TR

QUALIFICATION REPORT SUMMARY

PCN #: CENO-19LKKL699

Date:

February 11, 2025

Qualification of UNIG as new assembly site for selected MIC2111xx, MIC2225, MIC2285A, MIC23150, MIC232xx, MIC2800, MIC28xx and MIC2821 device families available in various packages.

Purpose: Qualification of UNIG as new assembly site for selected MIC2111xx, MIC2225, MIC2285A, MIC23150, MIC232xx, MIC2800, MIC28xx and MIC2821 device families available in various packages.

I. Summary:

The purpose of this qualification is to evaluate Reliability performance COL (Chip on lead) package at Unisem Gopeng per CCB 6619, following guidelines established in Microchip specification QCI-39000, "Worldwide Quality Conformance Requirements".

Conclusion:

Based on successful Reliability stress results on test device MIC2800-G1JJYML-TR assembled in 16-lead VQFN, COL (Chip on lead) package at Unisem Gopeng is qualified for production as per guidelines established in Microchip specification QCI-39000, "Worldwide Quality Conformance Requirements.

II. Device Description:

Device	MIC2800-G1JJYML-TR
Product	Digital Power Management 2 MHz, 600 mA DC/DC with Dual Low VIN LDOs
Document Control Number	ML0220257329
Document Revision	A
CCB No.	6619

III. Package Qualification Material:

Test Lot	Lot 1	Lot 2	Lot 3
WAFER LOT	TMPE224275707.110	TMPE224275707.110	TMPE224275707.110
ASSEMBLY LOT	UNIG252400001.000	UNIG252400002.000	UNIG252400003.000.000
PACKAGE	VQFN-16L 3x3x0.90mm	VQFN-16L 3x3x0.90mm	VQFN-16L 3x3x0.90mm
QUAL TESTS	HTSL, HAST, UHAST, TC	HTSL, HAST, UHAST, TC	HTSL, HAST, UHAST, TC

IV. Package BOM

Misc.	Assembly site	UNIG
	BD Number	A-062015
	MP Code (MPC)	22837YN8AA21
	Part Number (CPN)	MIC2800-G1JJYML-TR
	MSL information	MSL 2, 260°C
	Assembly Shipping Media (T/R, Tube/Tray)	T&R
	Base Quantity Multiple (BQM)	5000
	Reliability Site	UNIS, SJ
Lead-Frame	Paddle size	85x85mils
	Material	A194FH
	DAP Surface Prep	NiPdAu
	Treatment	No
	Process	Etch
	Lead-lock	Yes
	Part Number	40000469
	Lead Plating	NiPdAu
	Strip Size	70x250mm
	Strip Density	960
Bond Wire	Material	Au
Die	Part Number	8006NS
	Conductive	No
MC	Part Number	G770HCD
PKG	Package Type	VQFN
	Pin/Ball Count	16
	PKG width/size	3x3x0.90mm

V. Qualification Data:

Package Preconditioning:

Test Method/Condition	JEDEC J-STD-020 and JESD22-A113, MSL Level 2 soak at +85°C/60%RH/168hrs, 3x at 260°C peak Reflow Temperature
Lot #	ATE Test Results (Fail/Sample Size)
Lot 1	0/246,
Lot 2	0/246,
Lot 3	0/255,

Pre and Post testing was conducted at +25◦C

HAST Post MSL2 Preconditioning.

Test Method/Condition	JESD22-A110, VIn = +5.5V, Ta = +130°C/85%RH, 96 hrs. Minimum sample size = 77
Lot #	Results (Fail/Sample Size) minimum sample size = 77
Lot 1	0/81
Lot 2	0/82
Lot 3	0/82

Pre and Post testing was conducted at +25◦C

Unbiased HAST post MSL2 Precondition.

Test Method/Condition	JESD22-A118, Ta = +130°C/85%RH, 96hrs. Minimum sample size = 77
Lot #	Results (Fail/Sample Size)
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

Pre and Post testing was conducted at +25

Temperature Cycling post MSL2 Preconditioning

Test Method/Condition	JESD22-A104, Ta = -65°C/+150 °C, 500 cycles. Minimum sample size = 77
Lot #	Results (Fail/Sample Size)
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

Pre and Post testing was conducted at +25◦C

High Temperature Storage Life

Test Method/Condition	JESD22-A103, Ta = +150 °C, 1000 hrs
Lot #	Results (Fail/Sample Size) minimum sample size = 45
Lot 1	0/82
Lot 2	0/82
Lot 3	0/82

Pre and Post testing was conducted at +25◦C