Product Change Notification: CENO-01TLJM773

Date:

06-Oct-2026

Product Category:

Ethernet Phys

Notification Subject:

CCB 8541 Final Notice: Qualification of UMC Fab 8C (U08C) an additional fabrication site for LAN8672C2-E/LNXVAO, LAN8672C2-E/LNX, LAN8672C2T-E/LNXVAO, LAN8672C2T-E/LNX, LAN8670C2-E/LMX, LAN8670C2T-E/LMXVAO, LAN8670C2T-E/LMX, LAN8670C2-E/LMXVAO, LAN8671C2-E/U3B, LAN8671C2-E/U3BVAO, LAN8671C2T-E/U3BVAO and LAN8671C2T-E/U3B catalog part numbers (CPN) available in various packages.

Affected CPNs:

CENO-01TLJM773_Affected_CPN_10062026.pdf
CENO-01TLJM773_Affected_CPN_10062026.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 UMC Fab 8C (U08C) an additional fabrication site for LAN8672C2-E/LNXVAO, LAN8672C2-E/LNX, LAN8672C2T-E/LNXVAO, LAN8672C2T-E/LNX, LAN8670C2-E/LMX, LAN8670C2T-E/LMXVAO, LAN8670C2T-E/LMX, LAN8670C2-E/LMXVAO, LAN8671C2-E/U3B, LAN8671C2-E/U3BVAO, LAN8671C2T-E/U3BVAO and LAN8671C2T-E/U3B catalog part numbers (CPN) available in various packages.

Pre and Post Summary Changes:

	Pre Change	Post Change	Change (Yes/No)

Fabrication Site	Microchip Technology Gresham – Fab 4 (GRTM)	Microchip Technology Gresham – Fab 4 (GRTM)	United Microelectronics Corporation (Fab 8C) (U08C)	Yes
Wafer Size	8"	8"	8"	No

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve productivity and on-time delivery performance by qualifying UMC Fab 8C (U08C) as an additional fabrication site.

Change Implementation Status: In Progress

Estimated First Ship Date: 18 December 2026 (date code: 2651)

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

Timetable Summary:

	October 2026					>	**December 2026**			
Work Week	40	41	42	43	44		49	50	51	52
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.
Note: This is a qualification by similarity (QBS) to CCBs# 4851 and 3762.

Revision History:

October 06, 2026: Issued final 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_CENO-01TLJM773-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):

LAN8672C2-E/LNXVAO

LAN8672C2-E/LNX

LAN8672C2T-E/LNXVAO

LAN8672C2T-E/LNX

LAN8670C2-E/LMX

LAN8670C2T-E/LMXVAO

LAN8670C2T-E/LMX

LAN8670C2-E/LMXVAO

LAN8671C2-E/U3B

LAN8671C2-E/U3BVAO

LAN8671C2T-E/U3BVAO

LAN8671C2T-E/U3B

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: CENO-01TLJM773

Date:
February 8, 2023

Qualification of UMC Fab 8C (U08C) an additional fabrication site for LAN8672C2-E/LNXVAO, LAN8672C2-E/LNX, LAN8672C2T-E/LNXVAO, LAN8672C2T-E/LNX, LAN8670C2-E/LMX, LAN8670C2T-E/LMXVAO, LAN8670C2T-E/LMX, LAN8670C2-E/LMXVAO, LAN8671C2-E/U3B, LAN8671C2-E/U3BVAO, LAN8671C2T-E/U3BVAO and LAN8671C2T-E/U3B catalog part numbers (CPN) available in various packages.

PROCESS QUALIFICATION REPORT

Purpose: Qualification of UMC Fab 8C (U08C) an additional fabrication site for LAN8672C2-E/LNXVAO, LAN8672C2-E/LNX, LAN8672C2T-E/LNXVAO, LAN8672C2T-E/LNX, LAN8670C2-E/LMX, LAN8670C2T-E/LMXVAO, LAN8670C2T-E/LMX, LAN8670C2-E/LMXVAO, LAN8671C2-E/U3B, LAN8671C2-E/U3BVAO, LAN8671C2T-E/U3BVAO and LAN8671C2T-E/U3B catalog part numbers (CPN) available in various packages. This is an AEC Q100 Grade 1 qualification.

Summary:

In keeping with guidelines established in Microchip specification QCI-39000, "Worldwide Quality Conformance Requirements" and AEC Q100 Automotive standards, 3 lots of LAN8651/LAN8650 will be used for qualification testing of the 77B04 mask set with QS set to Yes (Automotive). This memo summarizes the activities and results completed for 77B04.

Conclusion:

Based on the results, the 77B04 mask has met the reliability guidelines implemented in the qualification plan .

Device Description:

Device	LAN8651/LAN8650
MSL	4720, 5231
Product	MC8 HV CMOS 80V SOI PLM
Document Revision	ML022023008C Rev. A
CCB No.	4851

Qualification Material:

Test Lot	Lot 1	Lot 2	Lot 3
WAFER LOT	GRSM422212743.12 1	GRSM422300715.11 0	U08C922470742.400
ASSEMBLY LOT	MMT-223601919.100	MMT-225001630.000	MMT-231101493.000
PACKAGE	32L, VQFN 5x5 WFS	32L, VQFN 5x5 WFS	32L, VQFN 5x5 WFS
QUAL TESTS	ELFR/HTOL	ELFR/HTOL	ELFR/HTOL/HBM/ CDM/LU/MM

Test Lot	Lot 4
WAFER LOT	GRSM422212743.12 0
ASSEMBLY LOT	MMT-223601980.000
PACKAGE	32L, VQFN 5x5 WFS
QUAL TESTS	HBM/CDM/LU/MM

Qualification Data:

Early Life Failure Rate (ELFR)

Test Method	AEC Q100-008
Test Condition	150°C / 24 hours
Sample Size (800 ea. min)	(Fail/Pass)
Lot 1	0/830
Lot 2	0/830
Lot 3	0/830

Pre & Post Testing was done @-40°C, +25°C, and +125°C.

High Temperature Operating Life (HTOL)

Test Method	AEC Q100-005
Test Condition	150°C / 408 hours
Sample Size (77 ea. min)	(Fail/Pass)
Lot 1	0/90
Lot 2	0/90
Lot 3	0/90

Pre & Post Testing was done @-40°C, +25°C, and +125°C.

ESD and Latch Up

Test	Reference Method	Sample Size	Highest Passing Voltage
ESD – HBM	AEC Q100-002 JS-001-2017	48/Lot 3 48/Lot 4	+/- 8000V +/- 8000V
ESD – CDM	AEC Q100-11 (ANSI/ESD S5.3.1) JS-002-2014	18/Lot 3 15/Lot 4	+/- 2000V on all pins +/- 2000V on all pins
Latch Up	AEC Q100-004 JESD78	6/Lot 3 6/Lot 3 6/Lot 4 6/Lot 4	6 Pass @ +25°C[a] 6 Pass @ +125°C[a] 6 Pass @ +25°C[a] 6 Pass @ +125°C[a]
ESD – MM	AEC Q100-003 JESD22-A115C	24/Lot 3 24/Lot 4	+/- 400V +/- 400V

All Pre & Post Testing done @ +25°C and 125°C.

[a] +/-105mA Pulse / +Overvoltage stress

PACKAGE QUALIFICATION REPORT

Purpose:

Qualification of UMC Fab 8C (U08C) an additional fabrication site for LAN8672C2-E/LNXVAO, LAN8672C2-E/LNX, LAN8672C2T-E/LNXVAO, LAN8672C2T-E/LNX, LAN8670C2-E/LMX, LAN8670C2T-E/LMXVAO, LAN8670C2T-E/LMX, LAN8670C2-E/LMXVAO, LAN8671C2-E/U3B, LAN8671C2-E/U3BVAO, LAN8671C2T-E/U3BVAO and LAN8671C2T-E/U3B catalog part numbers (CPN) available in various packages.

MP CODE:	77A11YSLBC01
Part No.:	ATA5291-GJQW
Bonding No.:	BDM-002051 rev.B
CCB No.:	3762

Lead Frame

Paddle Size:	228x228 mils
Material:	A194
DAP Surface Prep:	Ag ring plating
Process:	Etched
Lead Lock:	Yes
Lead Plating:	Matte Tin
Treatment	Roughened

Bond Wire

Wire:	CuPdAu wire

Die Attach Material

Epoxy:	3280
Conductive:	Yes

Mold Compound

Mold Compound:	G700LTD

Package

Type:	VQFN-WFS
Package Size:	7x7 mm

Manufacturing Information

Assembly Lot No.
MMT-203701255.000
MMT-203800001.000
MMT-203800003.000

Result: **Pass**

Conclusion:

Grade 1 Qualification of 77A11 (UMC) products in 48L VQFN (Wettable flank) 7x7 with CuPdAu wire (SLB package code) at pass reliability test per AEC-Q006 which was conducted at MPHL reliability lab. This package is qualified Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020E standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	**Electrical Test:** +25°C, +125°C **System:** V93K/RASCO Bake 150°C, 24 hrs System: HERAEUS 85°C/85%RH Moisture Soak 168 hrs. **System:** Climats Excal 5423-HE 3x Convection-Reflow 265°C max **System:** Mancorp CR.5000F (IPC/JEDEC J-STD-020E)	IPC/JEDEC	45 units per lot	Lot 1: 0/45, Lot 2: 0/45, Lot 3: 0/45	Pass	
Precondition Prior Perform Reliability Tests (At MSL Level 1)	**Electrical Test:** +25°C, +125°C **System:** V93K/RASCO Bake 150°C, 24 hrs System: HERAEUS 85°C/85%RH Moisture Soak 168hrs. **System:** Climats Excal 5423-HE 3x Convection-Reflow 260°C max **System:** Mancorp CR.5000F **Electrical Test:** +25°C, +125°C **System:** V93K/RASCO All units before HAST, UHAST, TCT, PTC were submitted to this MSL1 preconditioning	JESD22-A113	276 units per lot	Lot 1: 0/315, Lot 2: 0/270, Lot 3: 0/267	Pass	
Temperature Cycle	**Stress Condition:** (Standard) -65°C to +150°C, 500 cycles **System:** Votsch VTS27012 **Electrical Test:** +125°C **System:** V93K/RASCO	JESD22-A104	77 units per lot	Lot 1: 0/90, Lot 2: 0/90, Lot 3: 0/89	Pass	
Bond Strength	Wire Pull (>4.0) Bond Shear (>10.0g) Stitch Pull (>3.0g) **System:** Dage		WP, BS and SP each run on 5 units	Lot 1: 0/5, Lot 2: 0/5, Lot 3: 0/5	Pass	Per lot: 30 wires from the total samples size per test.
Temperature Cycle	**Stress Condition:** (Standard) -65°C to +150°C, 1000 Cycles **System:** Votsch VTS27012 **Electrical Test:** +125°C **System:** V93K/RASCO	JESD22-A104	70 units per lot	Lot 1: 0/79, Lot 2: 0/79, Lot 3: 0/78	Pass	
Bond Strength	Wire Pull (>4.0) Bond Shear (>10.0g) Stitch Pull (>3.0g) **System:** Dage		WP, BS and SP each run on 5 units	Lot 1: 0/5, Lot 2: 0/5, Lot 3: 0/5	Pass	Per lot: 30 wires from the total samples size per test.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
HAST	**Stress Condition:** (Standard) +130°C, 85%RH, 96hrs. BIAS **System:** HIRAYAMA HASTEST PC-422R8 **Electrical Test:** +25°C, +125°C **System:** V93K/RASCO	JESD22-A110	77 units per lot	Lot 1: 0/90, Lot 2: 0/90, Lot 3: 0/89	Pass	
Bond Strength	Wire Pull (>4.0) Bond Shear (>10.0g) Stitch Pull (>3.0g) **System:** Dage		WP, BS and SP each run on 5 units	Lot 1: 0/5, Lot 2: 0/5, Lot 3: 0/5	Pass	Per lot: 30 wires from the total samples size per test.
	Stress Condition: (Standard) +130°C, 85%RH, 192hrs. BIAS **System:** HIRAYAMA HASTEST PC-422R8 **Electrical Test:** +25°C, +125°C **System:** V93K/RASCO	JESD22-A110	70 units per lot	Lot 1: 0/73, Lot 2: 0/75, Lot 3: 0/75	Pass	
Bond Strength	Wire Pull (>4.0) Bond Shear (>10.0g) Stitch Pull (>3.0g) **System:** Dage		WP, BS and SP each run on 5 units	Lot 1: 0/5, Lot 2: 0/5, Lot 3: 0/5	Pass	Per lot: 30 wires from the total samples size per test.
UHAST	**Stress Condition:** (Standard) +130°C, 85%RH, 96hrs. NO BIAS **System:** HIRAYAMA HASTEST PC-422R8 **Electrical Test:** +25°C **System:** V93K/RASCO	JESD22-A110	77 units per lot	Lot 1: 0/90, Lot 2: 0/90, Lot 3: 0/89	Pass	
HTSL	**Stress Condition:** Bake 175°C, 500 hrs. System: HERAEUS **Electrical Test:** +25°C, +125°C **System:** V93k/RASCO	JESD22-A103		Lot 1: 0/65, Lot 2: 0/65, Lot 3: 0/65	Pass	
	Stress Condition: Bake 175°C, 1000 hrs. System: HERAEUS **Electrical Test:** +25°C, +125°C **System:** V93k/RASCO	JESD22-A103		Lot 1: 0/60, Lot 2: 0/60, Lot 3: 0/60	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Power Temperature Cycle	**Stress Condition:** (Standard) -40°C to 125°C, 1000 Cycles **System:** Votsch VTS27012 **Electrical Test:** +25°C, +125°C **System:** V93K/RASCO		45 units per lot	Lot 1: 0/45	Pass	
	Stress Condition: (Standard) -40°C to 125°C, 2000 Cycles **System:** Votsch VTS27012 **Electrical Test:** +25°C, +125°C **System:** V93K/RASCO		45 units per lot	Lot 1: 0/45	Pass	
Bond Strength: 0h data	Wire Pull (>4.0g) Bond Shear (>10.0g) Stitch Pull (>3g) **System:** Dage		WP, BS and SP each run on 5 units	Lot 1: 0/5	Pass	
Solderability	**Condition:** Aging: 155C Bake, 4h **Pot temperature:** Pb free / 245C **Dipping time:** 5+/- 0.5 sec	J-STDF-002D	22 units, 1 lot	Lot 1: 0/22	Pass	>95% lead coverage
Physical Dimension		JESD22-B100 and B108		3 Lots	Pass	Generic data from assembly