Product Change Notification: CENO-27ETAY200

Date:

02-Apr-2025

Product Category:

AC/DC - High Side Current Monitors Products

Notification Subject:

CCB 7364.026 Initial Notice: Qualification of Microchip Technology Colorado – Fab 5 (MCSO) as a new fabrication location for HV7802MG-G, HV7801K1-G and HV7800K1-G catalog part numbers (CPN) of S8_ 800V (60K) technology available in 8L MSOP (3x3mm) and 5L SOT-23 packages.

Affected CPNs:

CENO-27ETAY200_Affected_CPN_04022025.pdf
CENO-27ETAY200_Affected_CPN_04022025.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 Microchip Technology Colorado – Fab 5 (MCSO) as a new fabrication location for HV7802MG-G, HV7801K1-G and HV7800K1-G catalog part numbers (CPN) of S8_ 800V (60K) technology available in 8L MSOP (3x3mm) and 5L SOT-23 packages.

Pre and Post Summary Changes:

	Pre Change	Post Change
Fabrication Site*	Microchip Technology Tempe – Fab 2 (TMGR)	Microchip Technology Colorado (MCSO)
Wafer Size	8"	6"

Impacts to Datasheet: None

Change Impact: None

Reason for Change: To improve manufacturability and on time delivery performance by qualifying a new fabrication location (MCSO - FAB 5), which is a Microchip-owned facility that offers significant expansion potential to better meet future client demand. *Note: The attached file called Tempe_Fab2_IATF_Decertification is for the manufacturing site deactivation of Microchip Technology Tempe – Fab 2 (TMGR), contact your local Microchip sales office for inquiries.

Change Implementation Status: In Progress

Estimated Qualification Completion Date: October 2025

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:

	April 2025					**>**	**October 2025**				
Work Week	14	15	16	17	18		40	41	42	43	44
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: April 02, 2025: 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_CENO-27ETAY200 Qualification Plan.pdf
Tempe_Fab2_IATF_Decertification.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.

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Affected Catalog Part Numbers (CPN)

HV7802MG-G

HV7801K1-G

HV7800K1-G

Date: Wednesday, April 2, 2025

QUALIFICATION PLAN SUMMARY

PCN #: CENO-27ETAY200

Date:
March 21, 2025

Qualification of Microchip Technology Colorado – Fab 5 (MCSO) as a new fabrication location for HV7802MG-G, HV7801K1-G and HV7800K1-G catalog part numbers (CPN) of S8_ 800V (60K) technology available in 8L MSOP (3x3mm) and 5L SOT-23 packages.

PROCESS QUALIFICATION

Purpose: Qualification of Microchip Technology Colorado – Fab 5 (MCSO) as a new fabrication location for HV7802MG-G, HV7801K1-G and HV7800K1-G catalog part numbers (CPN) of S8_ 800V (60K) technology available in 8L MSOP (3x3mm) and 5L SOT-23 packages.

CCB No. 7364.026

Test/Conditions	Lot Qty	# units/lot	Total Samples
HTOL 1000HRS at +125°C.	3	77	231
ESD/HBM	1	12	12
Latch Up	1	12	12

PACKAGE QUALIFICATION

Purpose: Qualification of Microchip Technology Colorado – Fab 5 (MCSO) as a new fabrication location for HV7802MG-G, HV7801K1-G and HV7800K1-G catalog part numbers (CPN) of S8_ 800V (60K) technology available in 8L MSOP (3x3mm) and 5L SOT-23 packages.

CCB No. 7428.021

Misc.	Assembly site	MTAI
	BD Number	A-067562
	MP Code (MPC)	60AA1YC7XA00
	Part Number (CPN)	HV7800K1-G
	MSL information	MSL-1
	Assembly Shipping Media	T/R
	Base Quantity Multiple (BQM)	3000
	Reliability Site	MTAI
Lead-Frame	Paddle size	66 x 48 mils
	Material	CDA194
	DAP Surface Prep	Ag
	Treatment	No
	Process	Stamp
	Lead-lock *(Locking Hole, Half Etched, Dimple, etc. If none, please put No or N/A)*	No
	Part Number	10100502
	Lead Plating	Matte Tin
	Strip Size	228.288x50.800mm
	Strip Density	192units/strip
Bond Wire	Material	Au
Die Attach	Part Number	8390A
	Conductive	Yes
MC	Part Number	G600V
PKG	Package Type	SOT-23
	Pin/Ball Count	5L

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	Special Instructions
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.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
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	
Preconditioning - Required for surface mount devices	JESD22-A113. +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type; Electrical test pre and post stress at +25°C. Precon at MSL-1	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, uHAST, Temp Cycle test.
HAST	JESD22-A110. +130°C/85% RH for 96 hours or 110°C/85%RH for 264 hours. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A118. +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs. Electrical test pre and post stress at +25°C	77	5	3	246	0	10	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 at +25°C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Date: January 30, 2025

RE: Tempe (Fab 2) Wafer Fabrication Facility ISO/IATF Decertification

IATF Certificate: 08435-2002-AQ-HOU-IATF-33RSTM

On December 2, 2024, Microchip announced manufacturing restructuring plans that include the closure of the Tempe (Fab 2) Wafer Fabrication Facility.

This memo is to further announce that as part of the facility closure, its active IATF-16949 certificate will be withdrawn, in early Q3, 2025. Additionally, the facility will be removed from Microchip's Corporate ISO-9001 certificate by the end of 2025.

Microchip is committed to ensuring product quality during the entire time that Fab 2 remains operational. All established and certified process control measures remain in place and adherence to these practices will continue for the life of the fab, regardless of the status of IATF-16949 certification. Additionally, all Microchip devices are 100% electrically tested, with only known good products shipped to customers.

Please contact your local **Microchip Sales Office** with questions or concerns regarding this notification.

Regards,

Microchip Corporate Quality Systems