



Product Change Notification / CENO-16DNCZ633

Date:

19-Oct-2022

Product Category:

8-bit Microcontrollers

PCN Type:

Manufacturing Change

Notification Subject:

CCB 5332 Initial Notice: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire material and 104x150 mils lead-frame paddle size for selected PIC16F153xx, PIC16F183xx, PIC16F184xx, PIC16LF15xx and PIC16LF18xx device families available in 14L SOIC (.150in) package.

Affected CPNs:

[CENO-16DNCZ633_Affected_CPN_10192022.pdf](#)

[CENO-16DNCZ633_Affected_CPN_10192022.csv](#)

Notification Text:

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 palladium coated copper with gold flash (CuPdAu) bond wire material and 104x150 mils lead-frame paddle size for selected PIC16F153xx, PIC16F183xx, PIC16F184xx, PIC16LF15xx and PIC16LF18xx device families available in 14L SOIC (.150in) package.

Pre and Post Change Summary:

Availability										
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:October 19, 2022: Issued initial notification.

The change described in this PCN does not alter Microchip’s current regulatory compliance regarding the material content of the applicable products.

Attachments:

- [PCN_CENO-16DNCZ633_Pre and Post Change_Summary.pdf](#)
- [PCN_CENO-16DNCZ633_Qualification Plan.pdf](#)

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

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MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: CENO-16DNCZ633

**Date:
Oct 13, 2022**

Qualification of palladium coated copper with gold flash (CuPdAu) bond wire material and 104x150 mils leadframe paddle size for selected PIC16F153xx, PIC16F183xx, PIC16F184xx, PIC16LF15xx and PIC16LF18xx device families available in 14L SOIC (.150in) package.

Purpose: Qualification of palladium coated copper with gold flash (CuPdAu) bond wire material and 104x150 mils leadframe paddle size for selected PIC16F153xx, PIC16F183xx, PIC16F184xx, PIC16LF15xx and PIC16LF18xx device families available in 14L SOIC (.150in) package.

CCB No.: 5332

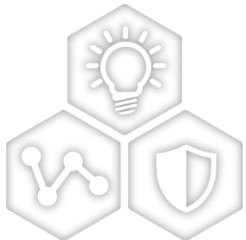
		New Data (new Qual)
<u>Misc.</u>	Assembly site	MTAI
	BD Number	BD-001057-01
	MP Code (MPC)	MV0034D3XFX6
	Part Number (CPN)	PIC16F18426-E/SL
	MSL information	MSL1
	Assembly Shipping Media (T/R, Tube/Tray)	Bakeable Tray
	Base Quantity Multiple (BQM)	57
	Reliability Site	MTAI
<u>Lead-Frame</u>	Paddle size	104 x 150 mils
	Material	A194
	Manufacturer	ASM
	DAP Surface Prep	Bare Cu
	Treatment	Roughening
	Process	Stamped
	Lead-lock	No
	Part Number	10101413
	Lead Plating	Matte tin
	Strip Size	N/A
	Strip Density	N/A
<u>Bond Wire</u>	Material	CuPdAu
	Manufacturer	MKE
<u>Die Attach</u>	Part Number	QMI519
	Conductive	Yes
<u>MC</u>	Part Number	G600V
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	14
	PKG width/size	.150IN

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	Test Site	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	1	5	0 fails after TC	5	MTAI	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5		5	MTAI	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	MTAI	
Preconditioning - Required for surface mount devices	+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 +25C MSL1/260	231	15	3	738	0	15	MTAI	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and +85	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at 25°C	77	5	3	246	0	10	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at 85C; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress.	77	5	3	246	0	15	MTAI	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

CCB 5332
Pre and Post Change Summary
PCN #: CENO-16DNCZ633



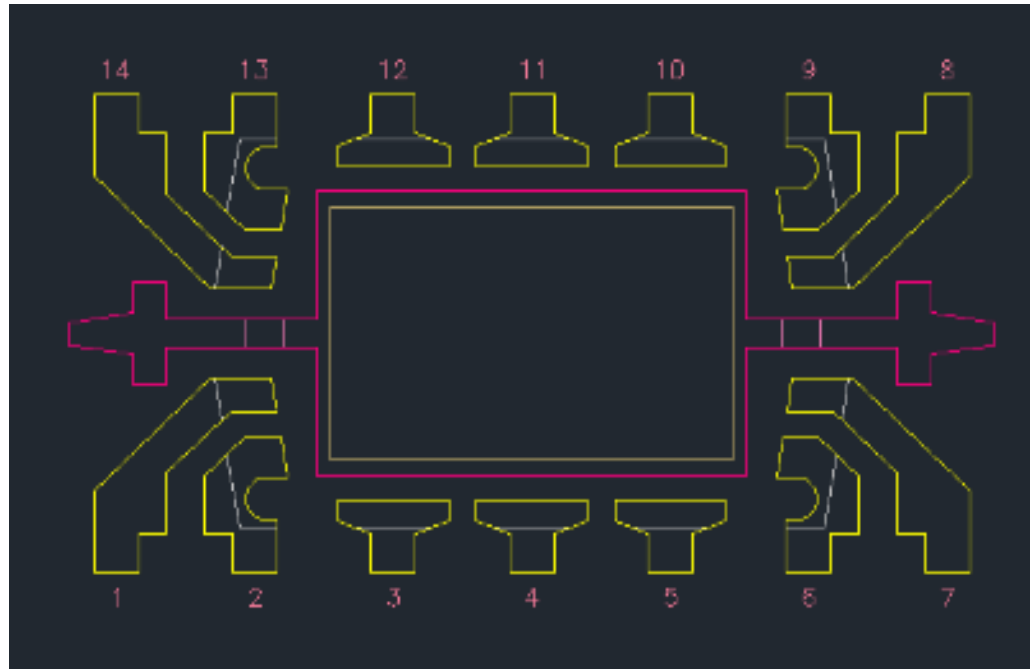
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SMART | CONNECTED | SECURE

LEAD FRAME COMPARISON

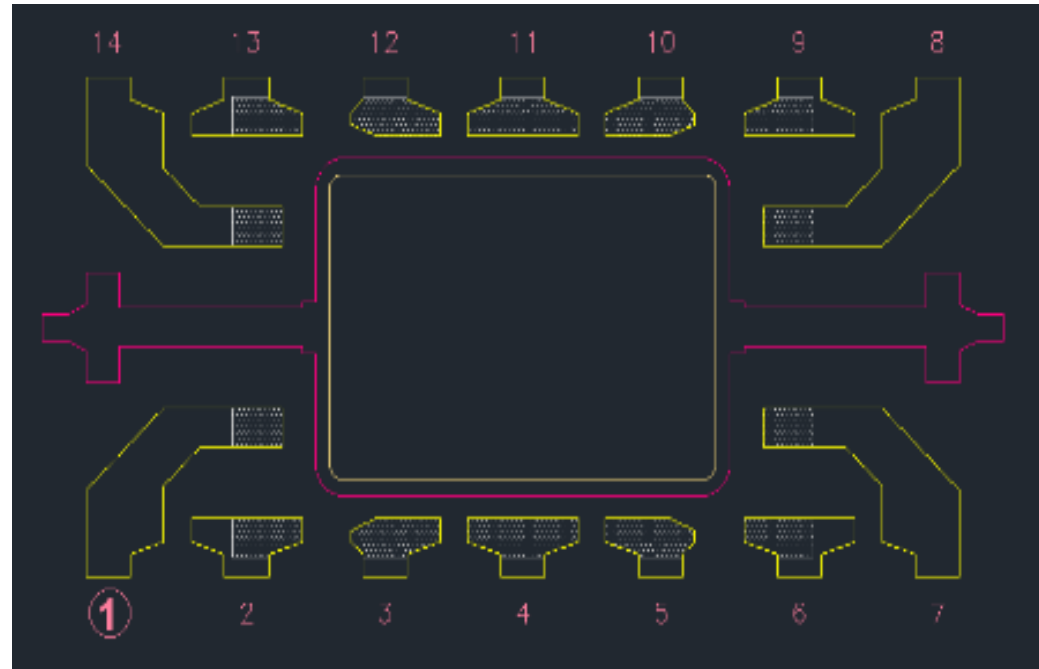
Pre Change



Note: Not to scale

Lead Frame Material	A194
Paddle size	95 x 155 mils
DAP Surface Prep	Ag
Wire Material	Au

Post Change



Note: Not to scale

Lead Frame Material	A194
Paddle size	104 x 150 mils
DAP Surface Prep	Bare Cu
Wire Material	CuPdAu

CENO-16DNCZ633 · PIC16F183xx

PIC16F184 PIC16LF15xx and PIC16LF18xx device families available in

Affected Catalog Part Numbers(CPN)

PIC16F18324-E/SL024
PIC16F18324-E/SL
PIC16LF18324-E/SL
PIC16F18324-E/SLVAO
PIC16F18324-I/SL
PIC16LF18324-I/SL
PIC16F18324-I/SLVAO
PIC16LF18324T-I/SL020
PIC16F18324T-I/SL027
PIC16F18324T-I/SL028
PIC16F18324T-I/SL
PIC16LF18324T-I/SL
PIC16F18324T-I/SLVAO
PIC16F18324T-E/SL024
PIC16F18324T-E/SL
PIC16F18324T-E/SLVAO
PIC16F18325-E/SL
PIC16LF18325-E/SL
PIC16F18325-E/SLVAO
PIC16F18325-I/SL
PIC16LF18325-I/SL
PIC16F18325T-I/SL
PIC16LF18325T-I/SL
PIC16F18325T-E/SLVAO
PIC16LF18323-E/SL
PIC16F18323-E/SL
PIC16F18323-E/SLVAO
PIC16LF18323-E/SLVAO
PIC16LF18323-I/SL
PIC16F18323-I/SL
PIC16F18323-I/SLVAO
PIC16LF18323T-I/SLC01
PIC16LF18323T-I/SL
PIC16F18323T-I/SL
PIC16F18323T-I/SLVAO
PIC16LF18323T-E/SL
PIC16F18323T-E/SL
PIC16F18323T-E/SLVAO
PIC16LF18323T-E/SLVAO
PIC16F18424-E/SL
PIC16F18425-E/SL
PIC16LF18424-E/SL

PIC16LF18425-E/SL
PIC16F18424-I/SL
PIC16F18425-I/SL
PIC16LF18424-I/SL
PIC16LF18425-I/SL
PIC16F18425-I/SLVAO
PIC16F18424T-I/SL
PIC16F18425T-I/SL
PIC16LF18424T-I/SL
PIC16LF18425T-I/SL
PIC16F18424T-E/SL
PIC16F18446-XPRESS
PIC16F18426-E/SL
PIC16LF18426-E/SL
PIC16F18426-I/SL
PIC16LF18426-I/SL
PIC16F18426T-I/SL
PIC16LF18426T-I/SL
PIC16F18326-E/SL
PIC16LF18326-E/SL
PIC16F18326-E/SLVAO
PIC16F18326-I/SL
PIC16LF18326-I/SL
PIC16F18326T-I/SL
PIC16LF18326T-I/SL
PIC16F18326T-E/SLVAO
PIC16F15325-E/SL
PIC16LF15325-E/SL
PIC16F15325-E/SLVAO
PIC16F15325-I/SL
PIC16LF15325-I/SL
PIC16F15325-I/SLVAO
PIC16F15325T-I/SL
PIC16LF15325T-I/SL
PIC16F15325T-E/SLVAO
PIC16F15324-E/SL
PIC16LF15324-E/SL
PIC16F15324-E/SLVAO
PIC16F15324-I/SLC02
PIC16F15324-I/SL
PIC16LF15324-I/SL
PIC16F15324-I/SLVAO
PIC16LF15324-I/SLVAO
PIC16F15324T-I/SLC02
PIC16F15324T-I/SL
PIC16LF15324T-I/SL
PIC16F15324T-E/SL

PIC16F15324T-E/SLVAO

PIC16F15323-E/SL

PIC16LF15323-E/SL

PIC16F15323-E/SLVAO

PIC16F15323-I/SL

PIC16LF15323-I/SL

PIC16F15323T-I/SL

PIC16LF15323T-I/SL