



Product Change Notification / MFOL-05ZTBD969

Date:

12-Mar-2024

Product Category:

8-Bit Microcontrollers, Capacitive Touch Sensors

PCN Type:

Manufacturing Change

Notification Subject:

CCB 6634 Initial Notice: Qualification of Panel Level Package (PLP) packaging process technology available in 20L VQFN and 16L QFN (3x3x0.9mm), 16L QFN and 20L QFN (4x4x0.9mm), 16L VQFN and 28L VQFN (4x4x1.0mm), 40L VQFN, 40L QFN and 20L QFN (5x5x0.9mm) packages at NEPL assembly site.

Affected CPNs:

[MFOL-05ZTBD969_Affected_CPN_03122024.pdf](#)

[MFOL-05ZTBD969_Affected_CPN_03122024.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 Panel Level Package (PLP) packaging process technology available in 20L VQFN and 16L QFN (3x3x0.9mm), 16L QFN and 20L QFN (4x4x0.9mm), 16L VQFN and 28L VQFN (4x4x1.0mm), 40L VQFN, 40L QFN and 20L QFN (5x5x0.9mm) packages at NEPL assembly site.

Pre and Post Change Summary:

	Pre Change		Post Change		
Packaging Process Technology	LeadFrame Package		Panel Level Package (PLP)		
Assembly Site	Microchip Technology Thailand (Branch) (MMT)	Microchip Technology Thailand (HQ) (MTAI)	Assembly Site	Nepes Laweh Corporation (NEPL)	
Wire Material	Au or CuPdAu	Au or CuPdAu	Stud	IV9000	
Die Attach Material	3280	3280 or 8006NS	Backside Laminate (BSL)	BSP 1100	
Molding Compound Material	G700LTD	G700LTD	Molding Compound Material	X8511AU-imp1 (1st mold) / X8511CUB-AP1 (2nd mold)	EME-QXG01 (1st & 2nd mold)
Lead-Frame Material	*C194 / A194	*C194 / A194	Land Grid Array (LGA), Stump, and Redistribution Layer (RDL)	MSA100	
See attached pre and post change comparison for lead frame and panel level package.					

Note: * C194, A194 or CDA194 Lead frame material are the same, it is just a MCHP internal labelling difference.

Impacts to Data Sheet:None

Change Impact:None

Reason for Change:To improve Productivity, Manufacturability, and Cycle Time by qualifying panel level package (PLP) packaging technology at NEPL assembly site.

Change Implementation Status:In Progress

Estimated Qualification Completion Date:March 2024

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.

Time Table Summary:

	November 2023					>	March 2024				
Workweek	4 4	4 5	4 6	4 7	4 8		0 9	1 0	1 1	1 2	1 3
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:November 06, 2023: Issued initial notification.

March 12, 2024: Reissued initial notification. Updated the affected parts list. Updated the mold compound from CEL-400ZHF40-PLM2KG to X8511AU-IMP1 (1st mold) / X8511CUB-AP1 (2nd mold), and EME-QXG01 (1st & 2nd mold), and updated die attach from BSP 140 to BSP 1100 in the pre- and post- change summary table. Updated the estimated qualification completion date to be on March 2024.

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

Attachments:

[PCN_MFOL-05ZTBD969_Pre and Post_Change Summary.pdf](#)

[PCN_MFOL-05ZTBD969_Qual Plan.pdf](#)

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

Terms and Conditions:

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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)

PIC16F1765T-I/ML
PIC16F1764T-I/ML
PIC16F1764T-E/ML
PIC16F1705T-E/ML
PIC16LF1554T-E/MLM10
PIC16LF1554-E/MLM10
PIC18LF13K50-I/MQ
PIC18LF13K50T-I/MQ
PIC18LF14K50-I/MQ
PIC18F14K50-E/MQ
PIC18F14K50-I/MQ
PIC18F13K50T-I/MQ
A010201-I/MQ
A010201T-I/MQ
PIC18F14K50T-I/MQ
PIC18F13K50-I/MQ
PIC18F14K50-I/MQ048
PIC18F14K50T-I/MQ045
PIC18F14K50T-I/MQ047
PIC18F14K50T-I/MQ048
PIC18F14K50T-I/MQ051
PIC18F14K50T-I/MQ052
PIC18F14K50T-I/MQ053
PIC18LF14K50T-I/MQ
A010201T-I/MQ050
AR1100T-I/MQ
AR1100-I/MQ
PIC18F14K50-I/MQ054
PIC18F14K50T-I/MQ054
PIC16F1779-I/MP
PIC16F1779T-I/MP
PIC16F1779-E/MP
PIC18F47Q10-I/MP
PIC18F47Q10T-I/MP
PIC18F47Q43-E/MP
PIC18F47Q43-I/MP
PIC18F47Q43T-I/MP
PIC16F1717-I/MP
PIC16F1717T-I/MP
PIC18F43K22-I/MP
PIC18F43K22T-I/MP
PIC16F1719-I/MP
PIC16F1719T-I/MP
PIC18F46Q43-I/MP
PIC18F46Q43-E/MP
PIC18F47Q10-E/MP

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PIC18F44Q71-E/MP

PIC18F45Q71-E/MP

PIC16F1939T-I/MP

PIC16F1937-I/MP

PIC16F1937T-I/MP

PIC16F15376T-I/MP

PIC16F15376-I/MP

PIC18F46Q43T-I/MP

PIC18F44Q71T-I/MP

PIC18F45Q71T-I/MP

PIC18F46Q71-E/MP

PIC18F46Q71-I/MP

PIC18F46Q71T-I/MP

PIC18F44Q71-I/MP

PIC18F45Q71-I/MP

PIC16F1939T-I/MPC03

PIC18F45Q43-I/MP

PIC18F45Q43T-I/MP

PIC18F45Q43-E/MP

PIC18F45Q24-E/MP

PIC18F46Q24-E/MP

PIC18F45Q24-I/MP

PIC18F46Q24-I/MP

PIC18F45Q24T-I/MP

PIC18F46Q24T-I/MP

PIC16LF18326T-I/7N

PIC18F47Q84T-I/NHX

PIC18F47Q84-E/NHX

PIC18F46Q84-I/NHX

PIC18F46Q83-I/NHX

PIC18F46Q83-E/NHX

PIC18F46Q84-E/NHX

PIC18F47Q84-I/NHX

PIC18F47Q83-E/NHX

PIC18F47Q83-I/NHX

PIC18F47Q83T-I/NHX

PIC18F47Q84T-E/NHX

PIC18F46Q83T-I/NHX

PIC18F46Q84T-I/NHX

PIC16LF1847-I/STX

PIC16F18455-I/STX

PIC16F18456-I/STX

PIC16LF18455-I/STX

PIC16LF18456-I/STX

PIC16LF18856-E/STX

PIC16LF18856-I/STX

PIC16F18856-E/STX

PIC16F18856-I/STX

PIC18F24Q10-I/STX

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PIC18F25Q10-I/STX

PIC18F27Q10-I/STX

PIC18F26Q10-I/STX

PIC16F15356-I/STX

PIC16F15356T-I/STX

PIC18F26Q10-E/STX

PIC16F18455-E/STX

PIC16F18456-E/STX

PIC16LF18455-E/STX

PIC16LF18456-E/STX

PIC18F26Q10T-I/STX

PIC18F27Q43T-I/STX

PIC16F1938T-I/STXPAX

PIC16LF1847T-I/STX

PIC16F18856T-I/STX

PIC16F18856T-I/STXJUUL

PIC16LF18856T-I/STX

PIC16F18455T-I/STX

PIC16F18456T-I/STX

PIC18F27Q10T-I/STX

PIC18F24Q10T-I/STX

PIC18F25Q10T-I/STX

PIC16LF18455T-I/STX

PIC16LF18456T-I/STX

PIC18F27Q10-E/STX

PIC18F24Q10-E/STX

PIC18F25Q10-E/STX

PIC18F27Q43-E/STX

PIC18F27Q43-I/STX

PIC18F26Q43-E/STX

PIC18F26Q43-I/STX

PIC18F26Q43T-I/STX

PIC18F26Q43T-E/STX

PIC18F26Q71-E/STX

PIC18F24Q71-E/STX

PIC18F26Q71-I/STX

PIC18F24Q71-I/STX

PIC18F25Q71-I/STX

PIC18F25Q71-E/STX

PIC18F27Q10T-E/STX

PIC18F26Q71T-I/STX

PIC18F24Q71T-I/STX

PIC18F25Q71T-I/STX

PIC18F25Q43-E/STX

PIC18F25Q43-I/STX

PIC18F25Q43T-I/STX

PIC18F24Q24-E/STX

PIC18F25Q24-E/STX

PIC18F26Q24-E/STX

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PIC18F24Q24-I/STX

PIC18F25Q24-I/STX

PIC18F26Q24-I/STX

PIC18F24Q24T-I/STX

PIC18F25Q24T-I/STX

PIC18F26Q24T-I/STX

PIC18F16Q41-E/REB

PIC18F16Q40-E/REB

PIC18F16Q40T-E/REB

PIC18F14Q40-E/REB

PIC18F15Q40-E/REB

PIC18F14Q41-E/REB

PIC18F15Q41-E/REB

PIC18F16Q20-I/REB

PIC18F16Q20T-I/REB

PIC18F16Q20-I/REBC01

PIC18F16Q20T-I/REBC01

PIC16F13145-I/REB

PIC16F13143T-I/REB

PIC16F13144T-I/REB

PIC16F13145T-I/REB

PIC16F13143-E/REB

PIC16F13144-E/REB

PIC16F13145-E/REB

PIC16F13143-I/REB

PIC16F13144-I/REB

PIC18F14Q40-I/REB

PIC18F15Q40-I/REB

PIC18F14Q41-I/REB

PIC18F15Q41-I/REB

PIC18F14Q40T-I/REB

PIC18F15Q40T-I/REB

PIC18F14Q41T-I/REB

PIC18F15Q41T-I/REB

PIC18F16Q40T-I/REB020

PIC18F16Q41-I/REB

PIC18F16Q40-I/REB

PIC18F16Q41T-I/REB

PIC18F16Q40T-I/REB

PIC16LF1828-E/ML

PIC16LF1828-I/ML

PIC16LF720-I/ML

PIC16LF720-E/ML

PIC16F721-I/ML

PIC16F720-I/ML

PIC16LF1507-I/ML

PIC18F14K22-E/ML

PIC16LF1507-E/ML

PIC18F13K22-E/ML

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PIC18F13K22-I/ML

PIC16F1459-I/ML

PIC16F1828-E/ML

PIC16F1828-E/MLC02

PIC16F1828-I/ML

PIC18F14K22-I/ML

PIC16LF1459-E/ML

PIC16LF1459-I/ML

PIC16F1459-E/ML

PIC16LF1829-E/ML

PIC16LF1829-I/ML

PIC16F1707-E/ML

PIC16F1707-I/ML

PIC16LF1709-I/ML

PIC16LF1769-E/ML

PIC16LF1768-E/ML

PIC16LF1619-E/ML

PIC16LF1619-I/ML

PIC16LF1618-E/ML

PIC16F1619-E/ML

PIC16LF1769-I/ML

PIC16F1619-I/ML

PIC16LF1768-I/ML

PIC16LF1709-E/ML

PIC16LF1618-I/ML

PIC16F1708-I/ML

PIC16LF1708-I/ML

PIC16F1708-E/ML

PIC16F1709-E/ML

PIC16F1709-I/ML020

PIC16F1709-I/ML

PIC16LF1559-E/ML

PIC16LF1559-I/ML

PIC16F1708-E/ML034

PIC16F1708-E/ML035

PIC18LF14K22-I/ML

PIC16F1769-E/ML

PIC16F1768-E/ML

PIC16F1769-I/ML

PIC16F1768-I/ML

PIC16F1829-H/ML

PIC18LF14K22-E/ML

PIC16LF1508-E/ML

PIC16LF1559T-I/ML

PIC18LF14K22T-I/ML

PIC18LF13K22T-I/ML023

PIC18LF13K22T-I/ML024

PIC18LF13K22T-I/ML

PIC16LF1509-E/ML

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PIC16LF1508-I/ML
PIC16LF1509-I/ML
PIC18F14K22T-I/ML
PIC18F14K22T-E/ML
PIC18F13K22T-I/ML020
PIC18F13K22T-I/ML
PIC16F1709T-I/ML020
PIC16F1709T-I/ML
PIC16LF1828T-I/ML
PIC16LF1709T-I/ML
PIC16F1619T-I/ML
PIC16LF1619T-I/ML
PIC16F1618T-I/ML
PIC16LF1618T-I/ML
PIC16F1769T-I/ML
PIC16F1768T-I/ML
PIC16F1769T-E/ML
PIC16F1768T-E/ML
PIC16LF1769T-I/ML
PIC16LF1768T-I/ML
PIC16F1829-E/ML
PIC16F1829-I/ML031
PIC16F1829-I/ML
PIC16F1509T-I/ML045
PIC16LF1508T-I/ML
PIC16LF1509T-I/ML
PIC16F1459T-I/ML020
PIC16F1708T-E/ML027
PIC16F1708T-E/ML030
PIC16F1708T-E/ML034
PIC16F1708T-E/ML035
PIC16F1708T-E/ML037
PIC16F1708T-E/ML038
PIC16F1708T-E/ML
PIC16F1508T-I/ML
PIC16F1509T-I/ML
PIC16F1508T-I/MLOPP
PIC16F1508T-E/ML
PIC16F1509T-E/ML
PIC16F1459T-I/ML
PIC16LF1459T-I/MLC01
PIC16LF1459T-I/MLC03
PIC16LF1459T-I/MLC05
PIC16F1708T-I/ML
PIC16LF1708T-I/ML
PIC16F721T-I/ML
PIC16LF720T-I/ML
PIC16F1828T-I/ML
PIC16F1828T-E/ML

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PIC16F1829T-I/ML

PIC16F1829T-I/ML031

PIC16F1829T-I/ML

PIC16LF1829T-I/ML

PIC16LF1507T-I/ML

PIC16LF1828T-I/ML025

PIC16F1829T-E/ML

PIC18LF13K22-I/ML

PIC16F1618-E/ML

PIC16F1618-I/ML

PIC18LF13K22-I/ML023

PIC16F1508-I/ML

PIC16F1509-I/ML

PIC16F1508-E/ML

PIC16F1509-E/ML

PIC16F18346T-I/MLC01

PIC16F18346T-I/ML

PIC16F18346-I/MLC01

PIC16F18346-I/ML

PIC16LF1559T-I/MLM10

PIC16LF1559-I/MLM10

PIC16F1507-E/ML

PIC16F1507-I/ML

PIC16F1507T-I/ML

PIC16LF721T-I/ML025

PIC16LF721T-I/ML028

PIC16LF721T-I/ML030

PIC16LF721-E/ML

PIC16LF721-I/ML

PIC16LF721T-I/ML

PIC16F15344-I/MLC01

PIC16F15344-I/ML

PIC16LF15344-I/ML

PIC16F15344-E/ML

PIC16LF15344-E/ML

PIC16F15344T-I/MLC01

PIC16F15344T-I/ML

PIC16LF15344T-I/ML

PIC16LF1559T-E/MLM10

PIC16LF1559-E/MLM10

PIC16LF1503-E/MG

PIC16LF1503-I/MG

PIC16LF1503T-I/MG

PIC16F1503T-E/MG039

PIC16LF1503T-E/MG

PIC16F1503T-I/MG027

PIC16F1503T-I/MG028

PIC16F1503T-I/MG029

PIC16F1503T-I/MG030

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PIC16F1503T-I/MG031

PIC16F1503T-I/MG032

PIC16F1503T-I/MG035

PIC16F1503T-I/MG043

PIC16F1503T-I/MG048

PIC16F1503-I/MG031

PIC16F1503-E/MG087

PIC16F1503-E/MG

PIC16F1503-I/MG

PIC16F1503T-I/MG

PIC16F1503T-E/MG033

PIC16F1503T-E/MG

PIC16F1503T-E/MG087

PIC16LF1503-I/ARC

PIC16LF1503T-I/ARC

PIC16F18023-E/MG

PIC16F18024-E/MG

PIC16F18023-I/MG

PIC16F18024-I/MG

PIC16F18023T-I/MG

PIC16F18024T-I/MG

PIC16F18023T-E/MG

PIC16F18024T-E/MG

PIC16F1824-E/ML

PIC16LF1823-I/ML

PIC16LF1823T-I/ML

PIC16LF1823-E/ML

PIC16F1823T-E/ML

PIC16F1823-I/ML

PIC16F1823T-I/ML

PIC16F1825T-I/ML

PIC16F1825T-E/ML

PIC16F1823-E/ML

PIC16F1825-E/ML

PIC16F1825-I/ML

PIC16F1824T-E/ML

PIC16LF1613T-I/ML

PIC16LF1613-I/ML

PIC16F1703-I/ML

PIC16F1613-I/ML

PIC16LF1613-E/ML

PIC16F1613T-I/ML

PIC16LF1615-E/ML

PIC16LF1615T-I/ML

PIC16LF1615-I/ML

PIC16F1704-I/ML

PIC16F1704T-I/ML

PIC16F1704T-E/ML

PIC16F1704-E/ML

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PIC16F1705-E/ML

PIC16F1705-I/ML

PIC16F1705T-I/ML

PIC16LF1554T-I/ML

PIC16LF1554-E/ML

PIC16LF1554-I/ML

PIC16LF1705-E/ML

PIC16LF1705-I/ML

PIC16LF1705T-I/ML

PIC16LF1705T-E/ML

PIC16LF1823-I/MLC04

PIC16LF1823T-I/MLC04

PIC16LF1554T-I/ML025

PIC16LF1613T-E/ML

PIC16F1613-E/ML

MTCH105T-I/ML

MTCH105-I/ML

PIC16F1824-I/ML

PIC16F1824T-I/ML

PIC16LF1825T-I/ML

PIC16LF1825T-E/ML

PIC16LF1554T-I/ML030

PIC16LF1554T-I/ML031

PIC16LF1825-E/ML

PIC16LF1825-I/ML

PIC16LF1765-E/ML

PIC16LF1764-E/ML

PIC16LF1765-I/ML

PIC16LF1764-I/ML

PIC16LF1765T-I/ML

PIC16LF1764T-I/ML

PIC16LF1704-E/ML

PIC16LF1704-I/ML

PIC16LF1704T-I/ML

PIC16F1615-E/ML

PIC16F1615-I/ML

PIC16F1454-I/ML

PIC16F1455-I/ML

PIC16F1615T-I/ML

PIC16F1615T-E/ML

PIC16F1454T-I/ML

PIC16F1455T-I/ML

PIC16F1614-E/ML

PIC16F1614-I/ML

PIC16F1614T-I/ML

PIC16LF1454-I/ML

PIC16LF1454T-I/ML

PIC16LF1614-E/ML

PIC16LF1614-I/ML

MFOL-05ZTBD969 - CCB 6634 Initial Notice: Qualification of Panel Level Package (PLP) packaging process technology available in 20L VQFN and 16L QFN (3x3x0.9mm), 16L QFN and 20L QFN (4x4x0.9mm), 16L VQFN and 28L VQFN (4x4x1.0mm), 40L VQFN, 40L QFN and 20L QFN (5x5x0.9mm) packages at NEPL assembly site.

PIC16LF16141-I/ML

PIC16F1823T-I/ML029

PIC16F1613T-I/ML023

PIC16F1823-I/ML029

PIC16LF1554T-I/ML023

PIC16LF1554T-I/MLM10

PIC16LF1554-I/MLM10

PIC16F1454-E/ML

PIC16F1455-E/ML

PIC16LF1824-E/ML

PIC16LF1824-I/ML

PIC16LF1824T-I/ML

PIC16LF1704T-I/ML023

PIC16F1765-E/ML

PIC16F1764-E/ML

PIC16F1765-I/ML

PIC16F1764-I/ML