

## Product Change Notification - CYER-15WDGG555

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**Date:** 21 Oct 2013

**Notification subject:** CCB 1321 Final Notice: Qualification of 28L PDIP and 40L PDIP packages at LPI assembly site.

**Notification text:** **PCN Status:**  
Final notification

**Microchip Parts Affected:**

See attachments of affected catalog part numbers (CPN) labeled as...  
PCN\_CYER-15WDGG555\_Affected\_CPN.xls  
PCN\_CYER-15WDGG555\_Affected\_CPN.pdf

**Description of Change:**

Qualification of 28L PDIP and 40L PDIP packages at LPI assembly site.

**Impacts to Data Sheet:**

None

**Reason for Change:**

To improve productivity

**Change Implementation Status:**

In Progress

**Estimated First Ship Date:**

November 15, 2013 (date code: 1346)

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

**Markings to Distinguish Revised from Unrevised Devices:**

Traceability code

**Revision History:**

**August 20, 2013:** Issued initial notification.

**October 21, 2013:** Issued final notification.

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

**Attachment(s):** [PCN\\_CYER-15WDGG555\\_Qual Report.pdf](#)  
[PCN\\_CYER-15WDGG555\\_Affected CPN.pdf](#)  
[PCN\\_CYER-15WDGG555\\_Affected CPN.xlsx](#)

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**MICROCHIP**

**QUALIFICATION REPORT  
RELIABILITY LABORATORY**

**PCN#: CYER-15WDGG555**

Date  
October 14, 2013

Qualification of 40L PDIP package at LPI assembly site. The 28L PDIP package will qualify by similarity at LPI assembly site.

Distribution

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Chalermpon P.	S. Kelsall
	S. Melby



## MICROCHIP PACKAGE QUALIFICATION REPORT

<b>Purpose</b>	Qualification of 40L PDIP package at LPI assembly site. The 28L PDIP package will qualify by similarity at LPI assembly site.
<b>CN</b>	BC131383
<b>QUAL ID</b>	Q13097
<b>MP CODE</b>	DEDB17S2XAXF
<b>Part No.</b>	PIC18F4680-I/P
<b>Bonding No.</b>	BDM-000376 Rev. A
<b>CCB No.</b>	1321
<b><u>Package</u></b>	
<b>Type</b>	40L PDIP
<b>Package size</b>	600 mils
<b>Die thickness</b>	15 mils
<b>Die size</b>	178.0 x 185.8 mils
<b><u>Lead Frame</u></b>	
<b>Paddle size</b>	200 x 200 mils
<b>Material</b>	A194
<b>Surface</b>	Ag Spot
<b>Process</b>	Stamped
<b>Lead Lock</b>	No
<b>Part Number</b>	09P004006
<b><u>Die attach material</u></b>	
<b>Epoxy</b>	8340
<b>Wire</b>	Au wire
<b>Mold Compound</b>	G600
<b>Plating Composition</b>	Matte Tin



# MICROCHIP PACKAGE QUALIFICATION REPORT


## Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
LPI-141900108	GRSM413281371.100	1332RQE
LPI-142000001	GRSM413281371.100	1332RQG
LPI-142000002	GRSM413281371.100	1333RQH

## Result

Pass  Fail  \_\_\_\_\_

40L PDIP (.600") assembled by LPI pass reliability test per QCI-39000.

Prepared By:  Date: October 14, 2013 (Sr. Reliability Engineer)

(Mr. Udom Suksansakul)

Approved By:  Date: October 14, 2013 (Reliability Manager)

(Mr. Somnuek Thongprasert)

# PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>Electrical Test</b>	<b>Electrical Test:</b> +25 °C,85 °C,125 °C System: J750	JESD22-A113	693(0)	693		Good Devices
<b>Temp Cycle</b>	<b>Stress Condition:</b> -65 °C to +150 °C, 500 Cycles System : TABAI ESPEC TSA-70H Inspection: External crack inspection all units under 40X Optical magnification <b>Electrical Test:</b> + 85 °C and 125 °C System: J750 <b>Bond Strength:</b> Wire Pull (> 4.0 grams) Bond Shear (18.00 grams)	JESD22-A104	231(0)	231 0/231	Pass	77 units / lot
<b>UNBIASED-HAST</b>	<b>Stress Condition:</b> +130 °C/85%RH, 96 hrs. System: HAST 6000X <b>Electrical Test:</b> +25 °C System: J750	JESD22-A118	231(0)	231 0/231	Pass	77 units / lot
<b>HAST</b>	<b>Stress Condition:</b> +130 °C/85%RH, 96 hrs. <b>Bias Volt:</b> 5.5 Volts System: HAST 6000X <b>Electrical Test:</b> +25 °C ,85 °C and 125 °C System: J750	JESD22-A110	231(0)	231 0/231	Pass	77 units / lot
<b>High Temperature Storage Life</b>	<b>Stress Condition:</b> Bake 175 °C, 504 hrs System: SHEL LAB <b>Electrical Test:</b> +25 °C ,85 °C and 125 °C System: J750	JESD22-A103	45(0)	45 0/45		45 units

## PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
<b>Solderability</b> <b>Temp 245°C</b>	<b>Steam Aging:</b> Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	JESD22- B102	22 (0)	22  22 0/22	Pass	
<b>Lead Integrity</b>	45 Leads from a minimum of 5 units, 1 lot. System: Strain	JESD22- B105D	45(0) Leads	0/45	Pass	
<b>Wire sweep</b>	Wire sweep Inspection 15 Wires / lot	-	45(0) Wires	0/45		
<b>Physical Dimensions</b>	Physical Dimension, 30 units from 1 lot	JESD22- B100/B108	30(0) Units	0/30	Pass	
<b>Bond Strength</b> <b>Data Assembly</b>	Wire Pull (> 4.0 grams)  Bond Shear (18.00 grams)	M2011  JESD22- B116	30 (0) Wires  30 (0) bonds	0/30  0/30	Pass  Pass	

PCN_CYER-15WDGG555
CATALOG_PART_NBR
AY0438/P
AY0438-I/P
CF775-04/P
DSPIC30F3011-20E/P
DSPIC30F3011-20I/P
DSPIC30F3011-30I/P
DSPIC30F3014-20E/P
DSPIC30F3014-20I/P
DSPIC30F3014-30I/P
DSPIC30F4011-20E/P
DSPIC30F4011-20I/P
DSPIC30F4011-30I/P
DSPIC30F4013-20E/P
DSPIC30F4013-20I/P
DSPIC30F4013-30I/P
PIC16C55-10/P
PIC16C55-10I/P
PIC16C557-I/P
PIC16C558-ME
PIC16C55A-04/P
PIC16C55A-04I/P
PIC16C55A-20/P
PIC16C55A-20I/P
PIC16C55A-40/P
PIC16C55-HS/P
PIC16C55-HSI/P
PIC16C55-LP/P
PIC16C55-LPI/P
PIC16C55-RC/P
PIC16C55-RCI/P
PIC16C55-XT/P
PIC16C55-XTI/P
PIC16C57-10/P
PIC16C57-10I/P
PIC16C57C-04/P
PIC16C57C-04/P072
PIC16C57C-04/P073
PIC16C57C-04E/P
PIC16C57C-04I/P
PIC16C57C-04I/P027
PIC16C57C-04I/P063
PIC16C57C-04I/P069
PIC16C57C-04I/P071
PIC16C57C-04I/P077
PIC16C57C-04I/PVAO

PIC16C57C-20/P
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PIC16C57C-40/P
PIC16C57-HS/P
PIC16C57-HSE/P
PIC16C57-HSI/P
PIC16C57-LP/P
PIC16C57-LPI/P
PIC16C57-RC/P
PIC16C57-RCE/P
PIC16C57-RCI/P
PIC16C57-RCI/P175
PIC16C57-XT/P
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PIC16C57-XTI/P
PIC16C622-ME
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PIC16C71-ME/P
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PIC17C44-33I/P
PIC17LC44-08I/P
PIC18C442-I/P
PIC18C452-E/P
PIC18C452-I/P
PIC18F4220-E/P
PIC18F4220-I/P
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PIC18LC452-I/P
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PIC18LF4221-I/P
PIC18LF4320-I/P
PIC18LF4321-I/P
PIC18LF4331-I/P
PIC18LF43K22-E/P
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PIC18LF4458-I/P
PIC18LF4480-I/P
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PIC18LF46J50-I/PAQQ
PIC18LF46K22-E/P
PIC18LF46K22-I/P
PIC18LF46K80-I/P
SST89E54RDA-40-C-PIE
SST89E54RDA-40-I-PIE-ZZ131
SST89E58RDA-40-C-PIE
SST89E58RDA-40-C-PIE-ZZ132
SST89E58RDA-40-I-PIE-ZZ132
TC7106ACPL
TC7106AIPL
TC7106ARCPL
TC7106CPL
TC7106IPL
TC7106RCPL
TC7107ACPL
TC7107AIPL
TC7107ARCPL
TC7107CPL
TC7107IPL
TC7107RCPL
TC7109ACPL
TC7109ACPL514
TC7109CPL
TC7116ACPL
TC7116CPL
TC7117ACPL
TC7117CPL
TC7117RCPL
TC7126ACPL
TC7126ARCPL
TC7126CPL
TC7126IPL
TC7126RCPL
TC7129CPL
TC7135CPI
TC835CPI
TC850CPL