

Product Change Notification - CYER-29HEAX188

Date: 04 Sep 2013

Product Category: Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface

Notification subject: CCB 1330.02 Initial Notice: Qualification of 6L SOT-23 COL package and PPF lead-frame with G600V mold compound at MTAI assembly site.

Notification text: **PCN Status:**
Initial notification

Microchip Parts Affected:

See attachments of affected catalog part numbers (CPN) labeled as...

PCN_CYER-29HEAX188_Affected_CPN.xls

PCN_CYER-29HEAX188_Affected_CPN.pdf

Description of Change:

Qualification of 6L SOT-23 COL package and PPF lead-frame with G600V mold compound at MTAI assembly site.

Impacts to Data Sheet:

None

Reason for Change:

To Improve On-Time Delivery Performance

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:

September 4, 2013: 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.

Attachment(s):

[PCN_CYER-29HEAX188_Affected CPN.pdf](#) [PCN_CYER-29HEAX188_Qual Plan.pdf](#) [PCN_CYER-29HEAX188_Affected CPN.xlsx](#)

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

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PCN_CYER-29HEAX188
CATALOG_PART_NBR
MCP1623T-I/CHY
MCP1624T-I/CHY
MCP1624T-I/CHYAAB
MCP16301T-E/CHY
MCP16301T-I/CHY
MCP1640BT-I/CHY
MCP1640CT-I/CHY
MCP1640DT-I/CHY
MCP1640DT-I/CHYRB2
MCP1640T-I/CHY
MCP1640T-I/CHYAAA
MCP1640T-I/CHYRB2
MCP623T-E/CHY
MCP633T-E/CHY
MCP653T-E/CHY
MCP65R41T-1202E/CHY
MCP65R41T-2402E/CHY
MCP65R46T-1202E/CHY
MCP65R46T-2402E/CHY
MCP663T-E/CHY



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QUALIFICATION PLAN

PCN_CYER-29HEAX188

**Date:
Aug 29, 2013**

**Qualification of 6L SOT-23 COL package and PPF lead-
frame with G600V mold compound at MTAI assembly
site.**

Distribution

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Purpose: _____ Qualification of 6L SOT-23 COL package and PPF lead-frame with G600V mold compound at MTAI assembly site.

MP code: _____ GBCB4Y6AXB00

Part No.: _____ MCP663

BD No: _____ BDM-000371 rev. A

CCB No: _____ CCB 1330.02

Package:

Type _____ 6L SOT-23 COL PPF

Die thickness: _____ 8 mils

Die size: _____ 56.9 x 46.0 mils,

Lead frame:

Paddle size: _____ Chip on lead design

Material _____ A194

Surface _____ NiPdAu plate

Process _____ Etch

Lead Lock _____ No

Part Number _____ 10100604

Wire:

Material _____ Au

Die Attach Epoxy:

Part Number _____ 8006NS

Conductive _____ No

Mold Compound: _____ G600V

Reliability Test plan: _____ See attached, STD Package Reliability Test plan on each package.

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 minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	1	5	0	5	30 bonds from a minimum of 5 devices.
Lead Integrity	JESD22 B105	5	0	1	5	0 (No lead breakage or cracks)	5	10 leads from each of 5 parts. Not required for SMD, only required for through-hole.
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)	+175 C for 504 hours or 150°C for 1008 hrs. Electrical test pre and post stress at +25C and hot temp 125C.	45	5	1	50	0	10	Must be in progress at time of package release to production, but completion is not required for release to production. For hot temp testing, pre/post test 1 lot at 85°C and 125°C (if applicable)
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-020D for package type; Electrical test pre and post stress at +25°C. Perform SAM analysis using the standard sample size. MSL-1 @ 260°C	231	15	3	738	0	15	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 hot temp 125C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning. For hot temp testing, pre/post test 1 lot at 85°C and 125°C (if applicable)
Unbiased HAST	+130°C/85% RH for 96 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	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp 125C; 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. For hot temp testing, pre/post test 1 lot at 85°C and 125°C (if applicable).