MICROCHIP

Date:	27 Oct 2011
Product Category:	Analog (Thermal, Power Management & Safety)
Device Family:	
Notification subject:	CCB 1102.01 Initial Notification: Qualification of 3L SOT-23A at LPI assembly site.
Notification text:	PCN Status: Initial notification

Microchip Parts Affected:
See attachments of affected catalog part numbers (CPN) labeled as…
PCN_CYER-21CNBF769_Affected_CPN.xls
PCN_CYER-21CNBF769_Affected_CPN.pdf

Description of Change:
Qualification of 3L SOT-23A at LPI 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, 2011 (date code: 1147)

NOTE: Please be advised that during the transition period customers may receive pre and post change parts, due to existing inventory of the pre changed parts.

Markings to Distinguish Revised from Unrevised Devices:
Traceability code

Revision History:
October 27, 2011: Issued initial notification.

Attachment(s):

PCN_CYER-21CNBF769_Affected_CPN.pdf PCN_CYER-21CNBF769_Affected_CPN.xls
PCN_CYER-21CNBF769_Qual Plan.pdf

Please contact your local Microchip sales office with questions or concerns regarding this notification.

Terms and Conditions:

If you wish to change your product/process change notification (PCN) profile please log on to our website at http://www.microchip.com/PCN sign into myMICROCHIP to open the myMICROCHIP home page, then select a profile option from the left navigation bar.

To opt out of future offer or information emails (other than product change notification emails), click here to go to microchipDIRECT and login, then click on the "My account" link, click on "Update profile" and un-check the box that states "Future offers or information about Microchip's products or services."

Product Change Notification - CYER-21CNBF769

Parts Affected

MCP1702
MCP1703
MCP1754S

PCN_CYER-21CNBF769
CATALOG_PART_NBR
MCP1702T-1202E/CB
MCP1702T-1502E/CB
MCP1702T-1802E/CB
MCP1702T-2102E/CB
MCP1702T-2202E/CB
MCP1702T-2302E/CB
MCP1702T-2502E/CB
MCP1702T-2702E/CB
MCP1702T-2802E/CB
MCP1702T-3002E/CB
MCP1702T-3302E/CB
MCP1702T-3602E/CB
MCP1702T-4002E/CB
MCP1702T-4101E/CB
MCP1702T-4502E/CB
MCP1702T-4702E/CB
MCP1702T-5002E/CB
MCP1702T-5102E/CB
MCP1703T-1202E/CB
MCP1703T-1502E/CB
MCP1703T-1802E/CB
MCP1703T-2402E/CB
MCP1703T-2402E/CBV03
MCP1703T-2502E/CB
MCP1703T-2502E/CBV04
MCP1703T-2802E/CB
MCP1703T-3002E/CB
MCP1703T-3002E/CBVAO
MCP1703T-3302E/CB
MCP1703T-3302E/CBV05
MCP1703T-3602E/CB
MCP1703T-4002E/CB
MCP1703T-4502E/CB
MCP1703T-5002E/CB
MCP1703T-5002E/CBV01
MCP1703T-5002E/CBV06
MCP1754ST-1802E/CB
MCP1754ST-3302E/CB
MCP1754ST-5002E/CB

QUALIFICATION PLAN

PCN #: CYER-21CNBF769

Date:
October 20, 2011

Qualification of 3L SOT-23A at LPI assembly site.

Distribution

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Purpose:________________Qualification of 3L SOT-23A at LPI assembly site.
MP code:________________ HBAA1YM7XA50
Part No.: ________________ MCP1702
CCB No: ________________ 1102.01

<u>Package:</u>

Type ___________________3L SOT-23A
Die thickness: ___________8 mils
Die size: ________________ 46.5 x 42.5 mils

<u>Lead frame:</u>

Paddle size: _____________59 x 47 mils / ASM (Hong Kong)
Material_________________EFTEC64T
Surface_________________Full Au plating
Process ________________Stamp
Lead Lock ______________No
Part Number_____________092000305

<u>Wire:</u>

Material_________________Au / MEM (Malaysia)

<u>Die Attach Epoxy:</u>

Part Number_____________EM-700J (DAF)
Conductive______________No

<u>Mold Compound:</u> __________G600 Sumitomo (Taiwan)

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
Standard Pb-free Solderability	JESD22B-102E; Perform 8 hour steam aging for Matte tin finish and 1 hour steam aging for NiPdAu finish prior to testing. Standard Pb-free: Matte tin/ NiPdAu finish, SAC solder, wetting temp 245°C for both SMD & through hole packages.	22	5	1	27	> 95% lead coverage	5	
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.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
Lead Integrity	JESD22 B105	5	0	1	5	0 (No lead breakage or cracks)	5	10 leads from each of 5 parts.
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.	45	5	1	50	0	10	
Preconditioning – Required for surface mount devices	+150C bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per JEDEC-STD-020C for package type: Electrical test pre and post stress at +25C. Perform SAM analysis using the standard sample size. MSL-1 @ 260C.	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST. Autoclave and temp cycle test.

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
HAST	+130°C/85% RH for 96 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.
Unbiased HAST	+130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs	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; 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.