

Product / Process Change Notification JLIO-7KNV2E[Home](#)

The information below reflects a change that is being implemented.

Notice Date: 01/19/2009

Product Category: Battery Management; Power Management; Supervisor

Notification Subject: CCB#860: QUALIFICATION OF 3L TO-92 WITH G600F MOLD COMPOUND AND CRM-1076DJ-G DIE ATTACH EPOXY AT GTK ASSEMBLY

Notification Body:
Final notification

Microchip Part#s Affected (please see the link for these files at the end of this PCN):
[CCB#860_Microchip_Catalog_Part#s_Affected.xls](#)
[CCB#860_Microchip_Catalog_Part#s_Affected.pdf](#)

Description of Change:
Change in Bill Of Materials

Pre-Change:
Mold Compound: EME 1100
Die attach epoxy: 84-1 LMISR4

Post-Change:
Mold Compound: G600F
Die attach epoxy: CRM-1076DJ-G

Impacts to Data Sheet:
None

Reason for Change:
To Improve Manufacturability

Change Implementation Status:
In Progress

Estimated Change Implementation Date(s):
Feburary 20th, 2009 (Date Code: 0908)

NOTE: Please be advised that during a transition period you may receive parts with either bill of materials, due to existing inventory of the original bill of materials.

Markings to Distinguish Revised From Unrevised Devices: (e.g.: Date Code, Device Marking, Ship Container Marking)
Traceability Code

Attachment(s):

[PCN_JLIO-7KNV2E_3L TO-92 GTK_CCB860_Qual Report.pdf](#) [CCB#860_Microchip_Catalog_Part#s_Affected.xls](#)

[CCB#860_Microchip_Catalog_Part#s_Affected.pdf](#)

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MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

**Q08166
CCB#: 860
PCN#: JLIO-7KNV2E**

**Date
December 12, 2008**

**3L TO92 Package Qualification for GTK Assembly
With CRM-1076DJ-G Die Attach Epoxy and G600F Mold Compound**

Distribution

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MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	To qualify 3L TO92 package with CRM-1076DJ-G die attach epoxy and G600F mold compound
CN	BC082530
QUAL ID	Q08166
MP CODE	Y2020SA2XA00
Part No.	TC32MCZB713
Bonding No.	A-034471 Rev. A
<u>Package</u>	
Type	3L TO92
Package size	-
Die thickness	8 mils
Die size	87.00 x 64.00 mils
<u>Lead Frame</u>	
Paddle size	105 x 100 mils
Material	Cu 194-SDI China
Surface	Ag plating on pad
Process	Stamped
Lead Lock	No
Part Number	2087
<u>Die attach material</u>	
Epoxy	CRM-1076DJ-G-Sumitomo Japan
Wire	Au wire 1.0 mil
Mold Compound	G600F-Sumitomo Taiwan
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Assembly

Lot No.	WF No.	Date Code
GTK-092900003	TMPE208464957.210	084270M
GTK-092900004	TMPE208464957.210	084270P
GTK-092900005	TMPE208464957.210	084270Q

Result

Pass Fail _____

3L TO92 assembled by GTK pass reliability test per QCI-39000.

Prepared By: Thinnapol N. **Date:** December 12, 2008 (**Reliability Engineer**)

Approved By: Surasit P. **Date:** December 12, 2008 (**Reliability Manager**)

PACKAGE QUALIFICATION REPORT

Qual Report : Q08166

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
Electrical Test	Electrical Test :+25°C and 85°C System: : TTS	S12/14/16 (PDC)	693(0)	11/05/08	11/18/08	693		Good Devices
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H Inspection: External crack inspection all units under 40X Optical magnification Electrical Test: +85°C System: : TTS Bond Strength: Bond Shear (21.10 grams) Wire Pull (> 3 grams)	PI-91020B		11/20/08	12/01/08	231		
		QCI-33003	30(0)	12/01/08	12/01/08	0/30		
		S12/14/16 (PDC)	231(0)	12/01/08	12/03/08	0/231	Pass	77 units / lot
		QCI-91022	15 (0)	12/03/08	12/03/08	0/15	Pass	Wire pull & bond shear after Temp Cycle
			15 (0)	12/03/08	12/03/08	0/15	Pass	
Pressure Cooker	Stress Condition: +121°C, 100% RH, 15 PSI, 96 hrs. System: TABAI ESPEC TPC-421 Electrical Test: +25°C System: TTS	PI-92013B		11/20/08	11/25/08	231		
		S12/14/16 (PDC)	231(0)	11/25/08	11/26/08	0/231	Pass	77 units / lot

PACKAGE QUALIFICATION REPORT

Qual Report : Q08166

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
HAST	Stress Condition: +130 °C/85%RH, 96 hrs. System: HAST 6000X	PI-92010B		11/28/08	12/03/08	231		
	Electrical Test: +25 °C and 85 °C System: : TTS	S12/14/16 (PDC)	231(0)	12/03/08	12/11/08	0/231	Pass	77 units / lot
Bond Strength	Bond Shear (21.10 grams)	QCI-91022	30 (0) bonds	-	-	0/30	Pass	Wire pull & bond shear data assembly
Data Assembly	Wire Pull (> 4 grams)		30 (0) wires	-	-	0/30	Pass	

Microchip_Catalog_Part#s

MCP100-270DI/TO
MCP100-270HI/TO
MCP100-300DI/TO
MCP100-300HI/TO
MCP100-315DI/TO
MCP100-315HI/TO
MCP100-450DI/TO
MCP100-450HI/TO
MCP100-460DI/TO
MCP100-460HI/TO
MCP100-475DI/TO
MCP100-475HI/TO
MCP100-485DI/TO
MCP100-485HI/TO
MCP101-270DI/TO
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MCP1702-5002E/TO
MCP9700A-E/TO
MCP9700-E/TO
MCP9701A-E/TO
MCP9701-E/TO
TC32MCZB
TC32MCZB713
TC32MEZB
TC32MEZBG