

## Product / Process Change Notification JLIO-7KNV2E

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):  
February 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



**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

<b>Purpose</b>	To qualify 3L TO92 package with CRM-1076DJ-G die attach epoxy and G600F mold compound
<b>CN</b>	BC082530
<b>QUAL ID</b>	Q08166
<b>MP CODE</b>	Y2020SA2XA00
<b>Part No.</b>	TC32MCZB713
<b>Bonding No.</b>	A-034471 Rev. A
<b><u>Package</u></b>	
<b>Type</b>	3L TO92
<b>Package size</b>	-
<b>Die thickness</b>	8 mils
<b>Die size</b>	87.00 x 64.00 mils
<b><u>Lead Frame</u></b>	
<b>Paddle size</b>	105 x 100 mils
<b>Material</b>	Cu 194-SDI China
<b>Surface</b>	Ag plating on pad
<b>Process</b>	Stamped
<b>Lead Lock</b>	No
<b>Part Number</b>	2087
<b><u>Die attach material</u></b>	
<b>Epoxy</b>	CRM-1076DJ-G-Sumitomo Japan
<b>Wire</b>	Au wire 1.0 mil
<b>Mold Compound</b>	G600F-Sumitomo Taiwan
<b>Plating Composition</b>	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
<b>Electrical Test</b>	Electrical Test :+25°C and 85°C System: : TTS	S12/14/16  (PDC)	693(0)	11/05/08	11/18/08	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 System: : TTS  <b>Bond Strength:</b> 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
<b>Pressure Cooker</b>	<b>Stress Condition:</b> +121°C, 100% RH, 15 PSI, 96 hrs. System: TABAI ESPEC TPC-421  <b>Electrical Test:</b> +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
<b>HAST</b>	<b>Stress Condition:</b> +130 °C/85%RH, 96 hrs. System: HAST 6000X	PI-92010B		11/28/08	12/03/08	231		
	<b>Electrical Test:</b> +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
<b>Bond Strength</b>	Bond Shear (21.10 grams)	QCI-91022	30 (0) bonds	-	-	0/30	Pass	Wire pull & bond shear data assembly
<b>Data Assembly</b>	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  
MCP101-270HI/TO  
MCP101-300DI/TO  
MCP101-300HI/TO  
MCP101-315DI/TO  
MCP101-315HI/TO  
MCP101-450DI/TO  
MCP101-450HI/TO  
MCP101-460DI/TO  
MCP101-460HI/TO  
MCP101-475DI/TO  
MCP101-475HI/TO  
MCP101-485DI/TO  
MCP101-485HI/TO  
MCP102-195I/TO  
MCP102-240E/TO  
MCP102-270E/TO  
MCP102-300E/TO  
MCP102-315E/TO  
MCP102-450E/TO  
MCP102-475E/TO  
MCP111-195I/TO  
MCP111-240E/TO  
MCP111-240E/TOG  
MCP111-270E/TO  
MCP111-270E/TOG  
MCP111-290E/TO  
MCP111-290E/TOG  
MCP111-300E/TO  
MCP111-300E/TOG  
MCP111-315E/TO  
MCP111-315E/TOG  
MCP111-450E/TO  
MCP111-450E/TOG  
MCP111-475E/TO  
MCP111-475E/TOG  
MCP112-195I/TO

MCP112-240E/TO  
MCP112-270E/TO  
MCP112-290E/TO  
MCP112-300E/TO  
MCP112-315E/TO  
MCP112-450E/TO  
MCP112-475E/TO  
MCP120-270DI/TO  
MCP120-270GI/TO  
MCP120-270HI/TO  
MCP120-300DI/TO  
MCP120-300GI/TO  
MCP120-300HI/TO  
MCP120-315DI/TO  
MCP120-315GI/TO  
MCP120-315HI/TO  
MCP120-450DI/TO  
MCP120-450GI/TO  
MCP120-450HI/TO  
MCP120-460DI/TO  
MCP120-460GI/TO  
MCP120-460HI/TO  
MCP120-475DI/TO  
MCP120-475GI/TO  
MCP120-475HI/TO  
MCP120-485DI/TO  
MCP120-485GI/TO  
MCP120-485HI/TO  
MCP121-195I/TO  
MCP121-195I/TOG  
MCP121-240E/TO  
MCP121-270E/TO  
MCP121-300E/TO  
MCP121-315E/TO  
MCP121-450E/TO  
MCP121-450E/TOG  
MCP121-475E/TO  
MCP130-270DI/TO  
MCP130-270FI/TO  
MCP130-270HI/TO  
MCP130-300DI/TO  
MCP130-300FI/TO  
MCP130-300HI/TO  
MCP130-315DI/TO  
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MCP130-315HI/TO  
MCP130-450DI/TO  
MCP130-450FI/TO  
MCP130-450HI/TO  
MCP130-460DI/TO  
MCP130-460FI/TO  
MCP130-460HI/TO



MCP130-475DI/TO  
MCP130-475FI/TO  
MCP130-475HI/TO  
MCP130-485DI/TO  
MCP130-485FI/TO  
MCP130-485HI/TO  
MCP131-195I/TO  
MCP131-240E/TO  
MCP131-270E/TO  
MCP131-300E/TO  
MCP131-315E/TO  
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MCP131-475E/TO  
MCP1525-I/TO  
MCP1541-I/TO  
MCP1700-1202E/TO  
MCP1700-1202I/TO  
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MCP1700-1502I/TO  
MCP1700-1602E/TO  
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MCP1700-1802E/TO  
MCP1700-1802I/TO  
MCP1700-1902E/TO  
MCP1700-2002E/TO  
MCP1700-2102E/TO  
MCP1700-2201E/TO  
MCP1700-2202E/TO  
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MCP1700-2601E/TO  
MCP1700-2602E/TO  
MCP1700-2702E/TO  
MCP1700-2801E/TO  
MCP1700-2802E/TO  
MCP1700-2802I/TO  
MCP1700-2902E/TO  
MCP1700-3001E/TO  
MCP1700-3002E/TO  
MCP1700-3002I/TO  
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MCP1700-3102I/TO  
MCP1700-3202E/TO  
MCP1700-3202I/TO

MCP1700-3301E/TO  
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MCP1700-3402E/TO  
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MCP1700-3502E/TO  
MCP1700-3601E/TO  
MCP1700-3602E/TO  
MCP1700-3702E/TO  
MCP1700-3802E/TO  
MCP1700-3902E/TO  
MCP1700-4001E/TO  
MCP1700-4002E/TO  
MCP1700-4002I/TO  
MCP1700-4102E/TO  
MCP1700-4202E/TO  
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MCP1700-4402E/TO  
MCP1700-4502E/TO  
MCP1700-4602E/TO  
MCP1700-4702E/TO  
MCP1700-4802E/TO  
MCP1700-4902E/TO  
MCP1700-5002E/TO  
MCP1700-5002I/TO  
MCP1700T-1202E/TO  
MCP1702-1202E/TO  
MCP1702-1502E/TO  
MCP1702-1802E/TO  
MCP1702-2502E/TO  
MCP1702-2802E/TO  
MCP1702-3002E/TO  
MCP1702-3302E/TO  
MCP1702-3602E/TO  
MCP1702-4002E/TO  
MCP1702-5002E/TO  
MCP9700A-E/TO  
MCP9700-E/TO  
MCP9701A-E/TO  
MCP9701-E/TO  
TC32MCZB  
TC32MCZB713  
TC32MEZB  
TC32MEZBG