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## Product Change Notification - CYER-22OEVB041

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**Date:** 08 Nov 2010

**Product Category:** Memory; RF and Security; 8-bit Microcontrollers; Analog (Thermal, Power Management & Safety)

**Device Family:** 

**Notification subject:** CCB 990.04: Qualification of 8L SOIJ package with SG-8300GM mold compound at MTAI assembly site.

**Notification text:**

**PCN Status:**  
Final notification

**Microchip Part#s Affected:**  
See attachments of affected catalog part numbers (CPN) labeled as...  
PCN\_CYER-22OEVB041\_Affected\_CPN.xls  
PCN\_CYER-22OEVB041\_Affected\_CPN.pdf

**Description of Change:**  
Qualification of 8L SOIJ package with SG-8300GM mold compound at MTAI assembly site.

**Pre Change:**  
G600V

**Post Change:**  
SG-8300GM

**Impacts to Data Sheet:**  
None

**Reason for Change:**  
To improve productivity

**Change Implementation Status:**  
In Progress

**Estimated First Ship Date:**  
December 31, 2010 (Date code 1101)

**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:** (e.g.: Date Code, Device Marking, Ship Container Marking)  
Traceability code

**Attachment(s):** [PCN\\_CYER-22OEVB041\\_Affected\\_CPN.pdf](#)  
[PCN\\_CYER-22OEVB041\\_Affected\\_CPN.xls](#)  
[PCN\\_CYER-22OEVB041\\_Qual Report.pdf](#)

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

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Parts Affected

24AA128  
24AA256  
24AA32A  
24AA512  
24AA515  
24AA64  
24AA65  
24C65  
24FC128  
24FC256  
24FC512  
24FC515  
24FC64  
24LC1025  
24LC128  
24LC256  
24LC32A  
24LC512  
24LC515  
24LC64  
24LC65  
25AA1024  
25AA128  
25AA256  
25AA512  
25LC1024  
25LC128  
25LC256  
25LC512  
93AA46  
93LC66B  
HCS365  
HCS500  
PIC12C508  
PIC12C508A  
PIC12C509  
PIC12C509A  
PIC12C671  
PIC12C672  
PIC12CE518  
PIC12CE519  
PIC12CR509A  
PIC12F509

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CYER-22OEVB041 - CCB 990.04: Qualification of 8L SOIJ package with SG-8300GM mold compound at MTAI assembly site.

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TC4421

TC4422

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Date: Monday, November 08, 2010

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PCN# - CYER-22OEV B041
CATALOG PART NBR
24AA128-I/SM
24AA128T-I/SM
24AA128T-I/SMG
24AA256/SM
24AA256-I/SM
24AA256T/SM
24AA256T-I/SM
24AA256T-I/SMG
24AA32A/SM
24AA32A-I/SM
24AA32A-I/SMG
24AA32AT/SM
24AA32AT-I/SM
24AA512-I/SM
24AA512-I/SMG
24AA512-I/SMRVE
24AA512T-I/SM
24AA512T-I/SMRVE
24AA515-I/SM
24AA515T-I/SM
24AA64-I/SM
24AA64T-I/SM
24AA65/SM
24C65/SM
24C65-I/SM
24C65T/SM
24C65T-I/SM
24C65T-I/SMG
24FC128-I/SM
24FC128T-I/SM
24FC256-I/SM
24FC256T-I/SM
24FC512-I/SM
24FC512T-I/SM
24FC515-I/SM
24FC515T-I/SM
24FC64-I/SM
24FC64T-I/SM
24LC1025-E/SM
24LC1025T-E/SM
24LC128-E/SM
24LC128-I/SM
24LC128-I/SMG
24LC128T-E/SM
24LC128T-I/SM
24LC128T-I/SMG
24LC256-E/SM
24LC256-I/SM
24LC256-I/SM15KVAO
24LC256T-E/SM

24LC256T-I/SM
24LC256T-I/SM15KVAO
24LC256T-I/SMG
24LC32A/SM
24LC32A-E/SM
24LC32A-I/SM
24LC32AT/SM
24LC32AT-E/SM
24LC32AT-I/SM
24LC32AT-I/SMG
24LC512-E/SM
24LC512-E/SM16KV01
24LC512-E/SM16KVAO
24LC512-I/SM
24LC512-I/SM16KVAO
24LC512-I/SMG
24LC512T-E/SM
24LC512T-E/SM16KV01
24LC512T-E/SM16KVAO
24LC512T-I/SM
24LC512T-I/SM16KV02
24LC512T-I/SM16KVAO
24LC512T-I/SMG
24LC515-I/SM
24LC515T-I/SM
24LC64-E/SM
24LC64-I/SM
24LC64-I/SMG
24LC64-I/SMRVE
24LC64T-E/SM
24LC64T-E/SM15KV03
24LC64T-I/SM
24LC64T-I/SMG
24LC64T-I/SMRVE
24LC65/SM
24LC65/SMG
24LC65-I/SM
24LC65-I/SMG
24LC65T/SM
24LC65T/SMG
24LC65T-I/SM
24LC65T-I/SMG
24LC65T-I/SMVAO
25AA1024-I/SM
25AA1024-I/SMB21
25AA1024T-I/SM
25AA1024T-I/SMB21
25AA128-I/SM
25AA128T-I/SM
25AA256-I/SM
25AA256-I/SMG
25AA256T-I/SM

25AA512-I/SM
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25AA512T-I/SM16KV01
25LC1024-E/SM
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25LC256T-I/SM16KV03
25LC512-E/SM
25LC512-I/SM
25LC512T-E/SM
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93AA46-I/SM
93LC66B/SM
93LC66B-I/SM
HCS1365T-I/SM035
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HCS500-I/SM
HCS500T/SM
MCP2110/SM
PIC12C508-04/SM
PIC12C508-04E/SM
PIC12C508-04I/SM
PIC12C508A-04/SM
PIC12C508A-04/SM022
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PIC12C508A-04/SM073
PIC12C508A-04/SM127
PIC12C508A-04/SM225

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PIC12C508AT-04I/SM030
PIC12C508AT-04I/SM060
PIC12C508AT-04I/SM112
PIC12C508AT-04I/SM137
PIC12C508AT-04I/SM142
PIC12C508AT-04I/SM144
PIC12C508AT-04I/SM145
PIC12C508AT-04I/SM194
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PIC12C508AT-04I/SM218
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PIC12LC671T-04I/SM
PIC12LC672-04/SM

PIC12LC672-04I/SM
PIC12LC672T-04/SM
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PIC12LCE518T-04/SM026
PIC12LCE519-04/SM
PIC12LCE519-04I/SM
PIC12LCE519T-04/SM
PIC12LCE519T-04I/SM
TC4421ESM
TC4421ESM713
TC4421ESM713G
TC4421ESMG
TC4422ESM
TC4422ESM713
TC4422ESMG
TC4422ESMG713



**MICROCHIP**

**QUALIFICATION REPORT**  
RELIABILITY LABORATORY

**PCN#: CYER-220EVB041**

Date  
October 21, 2010

Qualification of 8L SOIJ package with SG-8300GM mold  
compound at MTAI assembly site

Distribution

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## **MICROCHIP**

### **PACKAGE QUALIFICATION REPORT**

<b>Purpose</b>	Qualification of 8L SOIJ package with SG-8300GM mold compound at MTAI assembly site
<b>CN</b>	BC102104
<b>QUAL ID</b>	Q10082
<b>MP CODE</b>	DECR2TC3XA00
<b>Part No.</b>	25LC1024T-I/SM
<b>Bonding No.</b>	A-032157 Rev. E
<b>CCB</b>	990.04
<b><u>Package</u></b>	
<b>Type</b>	8L EIAJ
<b>Package size</b>	208 mils
<b>Die thickness</b>	15 mils
<b>Die size</b>	149.90 x 122.10 mils
<b><u>Lead Frame</u></b>	
<b>Paddle size</b>	140 x 240 mils
<b>Material</b>	CDA194
<b>Surface</b>	Ag spot
<b>Process</b>	Stamped
<b>Lead Lock</b>	No
<b>Part Number</b>	10100816
<b><u>Die attach material</u></b>	
<b>Epoxy</b>	8390A
<b>Wire</b>	Au wire
<b>Mold Compound</b>	SG-8300GM
<b>Plating Composition</b>	Matte Tin



# MICROCHIP PACKAGE QUALIFICATION REPORT

## Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Trace Code
MTAI112201059	GRSM409082727.B00	1035H7U
MTAI112201686	GRSM409082727.B00	1035JGC
MTAI112201687	GRSM409082727.B00	1035JGD

### Result

Pass     Fail     \_\_\_\_\_

8L EIAJ (.208") assembled by MTAI pass reliability test per QCI-39000. This package was qualified the Moisture/Reflow Sensitivity Classification Level 1 at 260°C reflow temperature per IPC/JEDEC J-STD-020C standard.

**Prepared By:** \_\_\_\_\_ **Date:** October 21, 2010 **(Reliability Engineer)**

(Mr. Udom Suksansakul)

**Approved By:** \_\_\_\_\_ **Date:** October 21, 2010 **(Reliability Manager)**

(Mr. Surasit Phurikhup)

## PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
<b><u>MSL</u></b>								
MSL Level 1/260°C	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 260°C max System: Vitronics Soltec MR1243 ( IPC/JEDEC J-STD-020C)	S12/14/16 (PDC)	135	08/31/10	09/08/10	0/135	Pass	
<b><u>Precondition</u></b>								
Electrical Test	Electrical Test :+25°C and 85°C System: NEXTEST_PT (Test 1 lot 125°C on MTA112201059.000)	S12/14/16 (PDC)	693(0)	08/26/10	08/30/10	693		Good Devices
Bake	Bake 150°C, 24 hrs System: CHINEE	PI-92014B		08/31/10	09/01/10	693		
Moisture Soak	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH	PI-91173B		09/01/10	09/08/10	693		
Convection-Reflow	3x Convection-Reflow 260°C max System: Vitronics Soltec MR1243	PI-91160B		09/08/10	09/08/10	693		
Electrical Test	Electrical Test :+25°C and 85°C System: NEXTEST_PT (Test 1 lot 125°C on MTA112201059.000)	S12/14/16 (PDC)		09/08/10	09/10/10	0/693	Pass	

## PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Microchip Spec	Qty. (Acc.)	Date in	Date Out	Def/SS.	Result	Remarks
<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	PI-91020B		09/20/10	09/23/10	231		Parts had been pre-conditioned at 260°C
	<b>Electrical Test:</b> +125°C System: NEXTEST_PT (Test 1 lot 125°C on MTA112201059.000)	S12/14/16 (PDC)	30(0) 231(0)	09/23/10	09/23/10	0/30	Pass	77 units / lot
	<b>Bond Strength:</b> Bond Shear (12.40 grams) Wire Pull (> 3 grams)	QCI-91022	15 (0) 15 (0)	09/24/10 09/24/10	09/25/10 09/25/10	0/15 0/15	Pass Pass	
<b>Pressure Cooker</b>	<b>Stress Condition:</b> +121°C, 100% RH, 15 PSI, 96 hrs. System: HIRAYAMA TPC-422R	PI-92013B		09/11/10	09/15/10	231		Parts had been pre-conditioned at 260°C
	<b>Electrical Test:</b> +25°C System: NEXTEST_PT	S12/14/16 (PDC)	231(0)	09/15/10	09/17/10	0/231	Pass	77 units / lot

# PACKAGE QUALIFICATION REPORT

Qual Report : Q10082

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		10/13/10	10/17/10	231		Parts had been pre-conditioned at 260°C
	<b>Electrical Test:</b> +25°C and 125°C System: NEXTEST_PT (Test 1 lot 125°C on MTA112201059.000)	S12/14/16 (PDC)	231(0)	10/17/10	10/20/10	0/231	Pass	77 units / lot
<b>High Temperature Storage Life</b>	<b>Stress Condition:</b> Bake 150°C, 504 hrs System: CHINEE	PI-92014B S12/14/16 (PDC)		08/30/10	09/23/10	45		45 units
	<b>Electrical Test:</b> +25°C and 125°C System: NEXTEST_PT		45(0)	09/23/10	09/24/10	0/45	Pass	
<b>Bond Strength Data Assembly</b>	Bond Shear (12.40 grams)		30 (0) bonds	-	-	0/30	Pass	
	Wire Pull (> 3 grams)	QCI-91022	30 (0) wires	-	-	0/30	Pass	