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Product Change Notification - CYER-05QVMR670

Date: 08 Nov 2010
Product Category: Analog (Linear & Mixed Signal) AND Interface; 16-bit Microcontrollers and Digital Signal Controllers; 8-bit Microcontrollers
Device Family: 
Notification subject: CCB 998.01: Qualification of CRM-1064L die attach in 28L & 40L PDIP (.600) packages at the MTAI assembly site
Notification text:

PCN Status:
Initial notification

Microchip Part#s Affected:
See attachments of affected catalog part numbers (CPN) labeled as...
PCN_CYER-05QVMR670_Affected_CPN.xls
PCN_CYER-05QVMR670_Affected_CPN.pdf

Description of Change:
Qualification of CRM-1064L die attach in 28L & 40L PDIP (.600) packages at the 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:
January 30, 2011 (Date code 1106)

Markings to Distinguish:
Traceability code

Attachment(s): [PCN_CYER-05QVMR670_Affected_CPN.pdf](#)
[PCN_CYER-05QVMR670_Affected_CPN.xls](#)
[PCN_CYER-05QVMR670_Qual Plan.pdf](#)

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QUALIFICATION PLAN

RELIABILITY LABORATORY

PCN#: CYER-05QVMR670

Date:

October 28, 2010

Qualification of CRM-1064L die attach in 40L PDIP (600) package at the MTAI assembly site. The 28L PDIP (600) package will qualify by similarity

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Purpose _____ Qualification of CRM-1064L die attach in 40L PDIP (600) package at the MTAI assembly site. The 28L PDIP (600) package will qualify by similarity.

MP Code _____ A5AF11S2XC20

Part No. _____ PIC16F877

CCB No. _____ 998.01

Package Type _____ 40L PDIP 600"

Die Thickness _____ 15 mils

Lead frame _____ A194

Die Size _____ 179.2 x 199.6 mils

Paddle Size _____ 260 x 266 mils

Surface _____ Ag spot

Process _____ Stamped

Lead Lock _____ Yes

Die Attach Epoxy _____ Sumotomo CRM-1064L

Wire _____ Au

Compound _____ GE-800

Plating composition _____ Matte Sn

Test Name	Conditions	Reliability Stress Read Point -40°C to +85°C datasheet operating range (1 Temp)	Pre & Post Reliability Stress Test Temperature (°C) -40°C to +85°C datasheet operating range (1 Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (Days)	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010			All devices prior to submission for qualification testing	0	3	AL L	0	5	
HTSL (High Temp Storage Life)	+175°C	500 hrs	+25 +85	45	5	1	50	0	10	Spares should be properly identified.
HAST	+130°C/85% RH for 96 hours. 1 lot to be tested at 85 and 125C	96 hrs	+25 +85	77	5	3	24 6	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Autoclave	+121°C/15 psig for 96 hours.	96 hrs	+25	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Test Name	Conditions	Reliability Stress Read Point -40°C to +85°C datasheet operating range (1 Temp)	Pre & Post Reliability Stress Test Temperature (°C) -40°C to +85°C datasheet operating range (1 Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Duration (Days)	Special Instructions
Temp Cycle	-65°C to +150°C. 3 gram force WBP on 5 devices from 1 lot, test following Temp Cycle stress. 1 lot to be tested at 85 and 125C	500 cycles	+85	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

PCN#: CYER-05QVMR670
CATALOG_PART_NBR
AP7675/P
AY0438/P
AY0438-I/P
CF775-04/P
DSPIC30F3011-20E/P
DSPIC30F3011-20I/P
DSPIC30F3011-30I/P
DSPIC30F3014-20E/P
DSPIC30F3014-20I/P
DSPIC30F3014-30I/P
DSPIC30F4011-20E/P
DSPIC30F4011-20I/P
DSPIC30F4011-30I/P
DSPIC30F4011-30I/PV01
DSPIC30F4013-20E/P
DSPIC30F4013-20I/P
DSPIC30F4013-30I/P
PIC16C55-10/P
PIC16C55-10I/P
PIC16C557-I/P
PIC16C55A-04/P
PIC16C55A-04I/P
PIC16C55A-20/P
PIC16C55A-20I/P
PIC16C55A-40/P
PIC16C55-HS/P
PIC16C55-HSI/P
PIC16C55-LP/P
PIC16C55-LPI/P
PIC16C55-RC/P
PIC16C55-RCI/P
PIC16C55-XT/P
PIC16C55-XTI/P
PIC16C57-10/P
PIC16C57-10I/P
PIC16C57C-04/P
PIC16C57C-04/P072
PIC16C57C-04/P073
PIC16C57C-04E/P
PIC16C57C-04I/P
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PIC16C57C-04I/P063
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PIC18LF46J50-I/PAQQ
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PIC18LF46K22-I/P
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TC7106ACPL
TC7106AIPL
TC7106CPL
TC7106IPL
TC7107ACPL
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TC7109ACPL514
TC7109CPL
TC7116ACPL
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TC7126ACPL
TC7126CPL
TC7126IPL
TC7129CPL
TC850CPL