

Product Change Notification - JAON-14TQBC849

Date:	24 Feb 2017
Product Category:	8-bit PIC Microcontrollers; Touch Controllers; Power Management - PWM Controllers; Interface-Infrared Products; Interface- Serial Peripherals; Energy Measurement; Capacitive Touch Sensors; 16-Bit - Microcontrollers and Digital Signal Controllers; 32-bit PIC Microcontrollers; Piezoelectric Horn Drivers
Notification subject:	C CB 2818 Final Notice: Qualification of silver (Ag)-on-leads plated lead frame for selected products available in 20L SSOP package at MTAI assembly site.
Notification text:	PCN Status: Final notification

Microchip Parts Affected:

Please open the attachments found in the attachments field below labeled as PCN_#_Affected_CPN.

NOTE: For your convenience Microchip includes identical files in two formats (.pdf and .xls).

Description of Change:

Qualification of silver (Ag)-on-leads plated lead frame for selected products available in 20L SSOP package at MTAI assembly site.

Pre Change:

Lead frame with silver (Ag) spot plating

Post Change:

Lead frame with silver (Ag)-on-leads plating

Pre and Post Change Summary:

	Pre Change	Post Change
Assembly Site	MTAI	MTAI
Wire material	Au wire	Au wire
Die attach material	8390A	8390A
Molding compound material	G600	G600
Lead frame material	CDA194	CDA194
Lead Frame Surface	Ag spot plating	Ag on leads plating

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve productivity and qualifying lead frame with silver (Ag)-on-leads plating.

Change Implementation Status:

In Progress

Estimated First Ship Date:

March 24, 2017 (date code: 1712)

NOTE: Please be advised that after the estimated first ship date customers may receive pre and post change parts.

Time Table Summary:

	December 2016					->	February 2017				March 2017				
Workweek	48	49	50	51	52		05	06	07	08	09	10	11	12	13
Initial PCN Issue Date				X											
Qual Report Availability										X					
Final PCN Issue Date										X					
Estimated Implementation Date														X	

Method to Identify Change:

Traceability code

Qualification Report:

Please open the attachments included with this PCN labeled as PCN_#_Qual Report.

Revision History:

December 22, 2016: Issued initial notification.

February 24, 2017: Issued final notification. Attached the qualification report. Provided estimated first ship date to be on March 24, 2017

The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable products.

Attachment(s):

- [PCN_JAON-14TQBC849_Qual Report.pdf](#)
- [PCN_JAON-14TQBC849_Affected CPN.pdf](#)
- [PCN_JAON-14TQBC849_Affected CPN.xls](#)

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

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
CFPIC-I/SSC01
HA0119-I/SS
HA0120T-I/SS
HA0140-I/SS
HA0140T-I/SS
HA1030-I/SS
HA1030T-I/SS
HA1031-I/SS
HA1031T-I/SS
HA1218-I/SS
HA1515-I/SS
HA1515T-I/SS
HA2580-I/SS
HA2580T-I/SS
HA5288-I/SS
HS12-100P0/12PS0F
HS12-100P0/12PS0FTR
HS12-100P0/12PS15
MCP1631-E/SS
MCP1631HV-330E/SS
MCP1631HV-500E/SS
MCP1631HVT-330E/SS
MCP1631HVT-500E/SS
MCP1631T-E/SS
MCP1631V-E/SS
MCP1631VHV-330E/SS
MCP1631VHV-500E/SS
MCP1631VHVT-330E/SS
MCP1631VHVT-500E/SS
MCP1631VT-E/SS
MCP2140A-I/SS
MCP2140AT-I/SS
MCP2140-I/SS
MCP2140-I/SSRVB
MCP2140T-I/SS
MCP2140T-I/SSRVB
MCP23009-E/SS
MCP23009T-E/SS
MCP23S08-E/SS
MCP23S08-E/SSAPL
MCP23S08T-E/SS
MCP23S08T-E/SSAPL
MCP3901A0-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
MCP3901A0-I/SS
MCP3901A0T-E/SS
MCP3901A0T-I/SS
MCP3910A1-E/SS
MCP3910A1T-E/SS
MCP3911A0-E/SS
MCP3911A0T-E/SS
MCP3918A1-E/SS
MCP3918A1T-E/SS
MCP39ITR10-E/SS
MCP39ITR10T-E/SS
MTCH108-I/SS
MTCH108T-I/SS
PIC16C54-10/SS
PIC16C54-10I/SS
PIC16C54A-04/SS
PIC16C54A-04I/SS
PIC16C54A-10/SS
PIC16C54A-10I/SS
PIC16C54A-20/SS
PIC16C54A-20I/SS
PIC16C54AT-04I/SS
PIC16C54C-04/SS
PIC16C54C-04E/SS
PIC16C54C-04I/SS
PIC16C54C-04I/SS102
PIC16C54C-04I/SS121
PIC16C54C-20/SS
PIC16C54C-20E/SS
PIC16C54C-20I/SS
PIC16C54CT-04I/SS
PIC16C54CT-20/SS
PIC16C54-HS/SS
PIC16C54-LP/SS
PIC16C54-LPI/SS
PIC16C54-RC/SS
PIC16C54-RCI/SS
PIC16C54T-XT/SS
PIC16C54-XT/SS
PIC16C54-XTI/SS
PIC16C554-04/SS
PIC16C554-04I/SS
PIC16C554-20/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16C554-20I/SS
PIC16C554T-04/SS
PIC16C558-04/SS
PIC16C558-04E/SS
PIC16C558-04I/SS
PIC16C558-20/SS
PIC16C558-20I/SS
PIC16C56-10/SS
PIC16C56-10I/SS
PIC16C56-HS/SS
PIC16C56-HSI/SS
PIC16C56-LP/SS
PIC16C56-LPI/SS
PIC16C56-RC/SS
PIC16C56-RCI/SS
PIC16C56-XT/SS
PIC16C56-XTI/SS
PIC16C58B-04/SS
PIC16C58B-04I/SS
PIC16C58B-20/SS
PIC16C58B-20I/SS
PIC16C58B-40/SS
PIC16C620-04/SS
PIC16C620-04E/SS
PIC16C620-04I/SS
PIC16C620-20/SS
PIC16C620-20I/SS
PIC16C620A-04/SS
PIC16C620A-04E/SS
PIC16C620A-04I/SS
PIC16C620A-20/SS
PIC16C620A-20E/SS
PIC16C620A-20I/SS
PIC16C620AT-04/SS
PIC16C620AT-04I/SS
PIC16C620AT-04I/SS043
PIC16C621-04/SS
PIC16C621-04I/SS
PIC16C621-20/SS
PIC16C621-20I/SS
PIC16C621A-04/SS
PIC16C621A-04E/SS
PIC16C621A-04I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16C621A-20/SS
PIC16C621A-20E/SS
PIC16C621A-20I/SS
PIC16C621AT-04/SS
PIC16C621AT-04I/SS082
PIC16C621AT-04I/SS083
PIC16C621AT-20I/SS
PIC16C621T-20/SS
PIC16C622-04/SS
PIC16C622-04E/SS
PIC16C622-04I/SS
PIC16C622-20/SS
PIC16C622-20E/SS
PIC16C622-20I/SS
PIC16C622A-04/SS
PIC16C622A-04E/SS
PIC16C622A-04I/SS
PIC16C622A-20/SS
PIC16C622A-20E/SS
PIC16C622A-20I/SS
PIC16C622A-20I/SSHXX
PIC16C622AT-04/SS
PIC16C622AT-04E/SS
PIC16C622AT-04E/SS082
PIC16C622AT-04I/SS
PIC16C622AT-04I/SS081
PIC16C622AT-04I/SS095
PIC16C622AT-20I/SS
PIC16C622T-20I/SS
PIC16C710-04/SS
PIC16C710-04I/SS
PIC16C710-20/SS
PIC16C710-20I/SS
PIC16C710T-04/SS
PIC16C712-04/SS
PIC16C712-04E/SS
PIC16C712-04I/SS
PIC16C712-20/SS
PIC16C712-20E/SS
PIC16C712-20I/SS
PIC16C712T-04/SS
PIC16C712T-20I/SS
PIC16C715-04/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16C715-04E/SS
PIC16C715-04I/SS
PIC16C715-20/SS
PIC16C715-20I/SS
PIC16C715T-04/SS
PIC16C715T-04E/SS
PIC16C715T-04I/SS
PIC16C715T-20/SS
PIC16C715T-20I/SS
PIC16C716-04/SS
PIC16C716-04E/SS
PIC16C716-04I/SS
PIC16C716-20/SS
PIC16C716-20E/SS
PIC16C716-20I/SS
PIC16C716T-04E/SS
PIC16C716T-20I/SS
PIC16F1459-E/SS
PIC16F1459-I/SS
PIC16F1459T-I/SS
PIC16F1507-E/SS
PIC16F1507-I/SS
PIC16F1507T-E/SS
PIC16F1507T-I/SS
PIC16F1508-E/SS
PIC16F1508-I/SS
PIC16F1508T-E/SS
PIC16F1508T-I/SS
PIC16F1508T-I/SS020
PIC16F1508T-I/SS031
PIC16F1509-E/SS
PIC16F1509-I/SS
PIC16F1509-I/SS021
PIC16F1509-I/SSC02
PIC16F1509T-E/SS
PIC16F1509T-I/SS
PIC16F1509T-I/SS021
PIC16F1509T-I/SS023
PIC16F1509T-I/SSC02
PIC16F15345-E/SS
PIC16F15345-I/SS
PIC16F15345T-I/SS
PIC16F1578-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16F1578-I/SS
PIC16F1578T-I/SS
PIC16F1579-E/SS
PIC16F1579-I/SS
PIC16F1579T-E/SS
PIC16F1579T-I/SS
PIC16F1618-E/SS
PIC16F1618-I/SS
PIC16F1618T-I/SS
PIC16F1619-E/SS
PIC16F1619-I/SS
PIC16F1619T-E/SS
PIC16F1619T-I/SS
PIC16F1707-E/SS
PIC16F1707-I/SS
PIC16F1707T-I/SS
PIC16F1708-E/SS
PIC16F1708-I/SS
PIC16F1708-I/SS031
PIC16F1708T-I/SS
PIC16F1708T-I/SS031
PIC16F1709-E/SS
PIC16F1709-I/SS
PIC16F1709T-E/SS
PIC16F1709T-I/SS
PIC16F1768-E/SS
PIC16F1768-I/SS
PIC16F1768T-I/SS
PIC16F1769-E/SS
PIC16F1769-I/SS
PIC16F1769T-I/SS
PIC16F18344-E/SS
PIC16F18344-I/SS
PIC16F18344T-I/SS
PIC16F18345-E/SS
PIC16F18345-I/SS
PIC16F18345T-E/SS
PIC16F18345T-I/SS
PIC16F18346-E/SS
PIC16F18346-I/SS
PIC16F18346T-I/SS
PIC16F1847-E/SS
PIC16F1847-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16F1847T-E/SS
PIC16F1847T-I/SS
PIC16F527-E/SS
PIC16F527-I/SS
PIC16F527-I/SSC01
PIC16F527-I/SSC03
PIC16F527T-I/SS
PIC16F527T-I/SS021
PIC16F527T-I/SSC01
PIC16F527T-I/SSC03
PIC16F627A-E/SS
PIC16F627A-I/SS
PIC16F627AT-E/SS
PIC16F627AT-I/SS
PIC16F628A-E/SS
PIC16F628A-I/SS
PIC16F628AT-E/SS
PIC16F628AT-I/SS
PIC16F631-E/SS
PIC16F631-I/SS
PIC16F631T-E/SS
PIC16F631T-I/SS
PIC16F648A-E/SS
PIC16F648A-I/SS
PIC16F648A-I/SSC06
PIC16F648AT-E/SS
PIC16F648AT-I/SS
PIC16F677-E/SS
PIC16F677-I/SS
PIC16F677T-E/SS
PIC16F677T-E/SS028
PIC16F677T-I/SS
PIC16F677T-I/SS030
PIC16F677T-I/SS032
PIC16F677T-I/SS034
PIC16F677T-I/SS036
PIC16F685-E/SS
PIC16F685-I/SS
PIC16F685T-E/SS
PIC16F685T-I/SS
PIC16F685T-I/SS021
PIC16F687-E/SS
PIC16F687-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16F687T-E/SS
PIC16F687T-I/SS
PIC16F687T-I/SS039
PIC16F687T-I/SS040
PIC16F689-E/SS
PIC16F689-I/SS
PIC16F689-I/SS050
PIC16F689T-E/SS
PIC16F689T-I/SS
PIC16F689T-I/SS034
PIC16F689T-I/SS035
PIC16F690-E/SS
PIC16F690-I/SS
PIC16F690-I/SS025
PIC16F690-I/SSC05
PIC16F690-I/SSC11
PIC16F690T-E/SS
PIC16F690T-E/SS049
PIC16F690T-I/SS
PIC16F690T-I/SS026
PIC16F690T-I/SS029
PIC16F690T-I/SS033
PIC16F690T-I/SS038
PIC16F690T-I/SS039
PIC16F690T-I/SS041
PIC16F690T-I/SSC11
PIC16F690T-I/SSC13
PIC16F716-E/SS
PIC16F716-I/SS
PIC16F716-I/SS067
PIC16F716T-E/SS
PIC16F716T-I/SS
PIC16F716T-I/SS045
PIC16F716T-I/SS056
PIC16F716T-I/SS060
PIC16F716T-I/SS062
PIC16F716T-I/SS063
PIC16F716T-I/SS064
PIC16F716T-I/SS065
PIC16F716T-I/SS067
PIC16F716T-I/SS068
PIC16F716T-I/SS069
PIC16F716T-I/SS070

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16F716T-I/SS071
PIC16F716T-I/SSC10
PIC16F785-E/SS
PIC16F785-I/SS
PIC16F785-I/SS048
PIC16F785T-E/SS
PIC16F785T-I/SS
PIC16F785T-I/SS020
PIC16F84A-04/SS
PIC16F84A-04I/SS
PIC16F84A-20/SS
PIC16F84A-20I/SS
PIC16F84AT-20/SS
PIC16HV540-04/SS
PIC16HV540-04I/SS
PIC16HV540-20/SS
PIC16HV540-20I/SS
PIC16LC54A-04/SS
PIC16LC54A-04I/SS
PIC16LC54AT-04/SS
PIC16LC54AT-04I/SS
PIC16LC54C-04/SS
PIC16LC54C-04I/SS
PIC16LC554-04/SS
PIC16LC554-04I/SS
PIC16LC554T-04/SS
PIC16LC554T-04I/SS
PIC16LC558-04/SS
PIC16LC558-04I/SS
PIC16LC58B-04/SS
PIC16LC58B-04I/SS
PIC16LC58BT-04/SS074
PIC16LC620-04/SS
PIC16LC620-04I/SS
PIC16LC620A-04/SS
PIC16LC620A-04E/SS
PIC16LC620A-04I/SS
PIC16LC620AT-04/SS
PIC16LC620AT-04I/SS
PIC16LC621-04/SS
PIC16LC621-04I/SS
PIC16LC621A-04/SS
PIC16LC621A-04E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16LC621A-04I/SS
PIC16LC621AT-04/SS
PIC16LC621AT-04/SSC01
PIC16LC622-04/SS
PIC16LC622-04I/SS
PIC16LC622A-04/SS
PIC16LC622A-04E/SS
PIC16LC622A-04I/SS
PIC16LC622AT-04/SS
PIC16LC622AT-04/SSC01
PIC16LC622AT-04I/SS
PIC16LC622T-04/SS
PIC16LC710-04/SS
PIC16LC710-04I/SS
PIC16LC712-04/SS
PIC16LC712-04I/SS
PIC16LC712T-04I/SS
PIC16LC712T-04I/SS039
PIC16LC715-04/SS
PIC16LC715-04I/SS
PIC16LC715T-04/SS
PIC16LC715T-04I/SS
PIC16LC716-04/SS
PIC16LC716-04I/SS
PIC16LC716T-04/SS
PIC16LF1459-E/SS
PIC16LF1459-I/SS
PIC16LF1459T-I/SS
PIC16LF1459T-I/SS020
PIC16LF1507-E/SS
PIC16LF1507-I/SS
PIC16LF1507T-I/SS
PIC16LF1507T-I/SS020
PIC16LF1508-E/SS
PIC16LF1508-I/SS
PIC16LF1508-I/SS025
PIC16LF1508T-E/SS
PIC16LF1508T-I/SS
PIC16LF1508T-I/SS022
PIC16LF1508T-I/SS025
PIC16LF1509-E/SS
PIC16LF1509-I/SS
PIC16LF1509-I/SSC01

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16LF1509T-I/SS
PIC16LF1509T-I/SS026
PIC16LF1509T-I/SSC01
PIC16LF15345-E/SS
PIC16LF15345-I/SS
PIC16LF15345T-I/SS
PIC16LF1559-E/SS
PIC16LF1559-I/SS
PIC16LF1559T-I/SS
PIC16LF1578-E/SS
PIC16LF1578-I/SS
PIC16LF1578T-I/SS
PIC16LF1579-E/SS
PIC16LF1579-I/SS
PIC16LF1579T-I/SS
PIC16LF1618-E/SS
PIC16LF1618-I/SS
PIC16LF1618T-I/SS
PIC16LF1619-E/SS
PIC16LF1619-I/SS
PIC16LF1619T-I/SS
PIC16LF1707-E/SS
PIC16LF1707-I/SS
PIC16LF1707T-I/SS
PIC16LF1708-E/SS
PIC16LF1708-I/SS
PIC16LF1708T-I/SS
PIC16LF1709-E/SS
PIC16LF1709-I/SS
PIC16LF1709T-I/SS
PIC16LF1768-E/SS
PIC16LF1768-I/SS
PIC16LF1768T-I/SS
PIC16LF1769-E/SS
PIC16LF1769-I/SS
PIC16LF1769T-I/SS
PIC16LF1828-E/SS
PIC16LF1828-I/SS
PIC16LF1828-I/SSC01
PIC16LF1828T-I/SS
PIC16LF1828T-I/SS020
PIC16LF1828T-I/SS021
PIC16LF18344-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC16LF18344-I/SS
PIC16LF18344T-I/SS
PIC16LF18345-E/SS
PIC16LF18345-I/SS
PIC16LF18345T-I/SS
PIC16LF18346-E/SS
PIC16LF18346-I/SS
PIC16LF18346T-I/SS
PIC16LF627A-I/SS
PIC16LF627AT-I/SS
PIC16LF627AT-I/SS031
PIC16LF627AT-I/SS032
PIC16LF627AT-I/SS036
PIC16LF627AT-I/SSC09
PIC16LF628A-I/SS
PIC16LF628AT-I/SS
PIC16LF628AT-I/SS053
PIC16LF628AT-I/SS054
PIC16LF628AT-I/SS071
PIC16LF648A/SS
PIC16LF648A-I/SS
PIC16LF648AT-I/SS
PIC16LF84A-04/SS
PIC16LF84A-04I/SS
PIC16LF84AT-04/SS
PIC16LF84AT-04I/SS
PIC16LV54A-02/SS
PIC16LV54A-02I/SS
PIC16LV54AT-02I/SS
PIC18F14K22-E/SS
PIC18F14K22-I/SS
PIC18F14K22T-E/SS
PIC18F14K22T-I/SS
PIC18LF13K50-I/SS
PIC18LF13K50T-I/SS
PIC24F04KA201-I/SS
PIC24F04KA201T-I/SS
PIC24F04KL101-E/SS
PIC24F04KL101-I/SS
PIC24F04KL101T-I/SS
PIC24F08KL201-E/SS
PIC24F08KL201-I/SS
PIC24F08KL201T-I/SS

JAON-14TQBC849 - CCB 2818 Final Notice: Qualification of silver (Ag)-on-leads plated lead frame for selected products available in 20L SSOP package at MTAI assembly site.

Affected Catalog Part Numbers (CPN)

PCN_JAON-14TQBC849
CATALOG_PART_NBR
PIC24F08KL301-E/SS
PIC24F08KL301-I/SS
PIC24F08KL301T-I/SS
PIC24F08KL401-E/SS
PIC24F08KL401-I/SS
PIC24F08KL401T-I/SS
PIC24F16KL401-E/SS
PIC24F16KL401-I/SS
PIC24F16KL401T-I/SS
PIC32MM0016GPL020-I/SS
PIC32MM0016GPL020T-I/SS
PIC32MM0032GPL020-I/SS
PIC32MM0032GPL020T-I/SS
PIC32MM0064GPL020-I/SS
PIC32MM0064GPL020T-I/SS
RE265SS20
RE265SS20T
RE350SS20T
RE352SS20T
RE353SS20
RE353SS20T
RE46C800SS20
RE46C800SS20T



MICROCHIP

QUALIFICATION REPORT SUMMARY
RELIABILITY LABORATORY

PCN #: JAON-14TQBC849

Date
February 02, 2017

**Qualification of silver (Ag)-on-leads plated lead frame for
selected products available in 20L SSOP package at MTAI
assembly site.**



MICROCHIP

PACKAGE QUALIFICATION REPORT

Purpose	Qualification of silver (Ag)-on-leads plated lead frame for selected products available in 20L SSOP package at MTAI assembly site.
CN	ES084500-18044
QUAL ID	Q16204
MP CODE	DEBN14G3XAXF
Part No.	PIC16F685-E/SS
Bonding No.	BDM-001236 Rev. D
CCB No.	2818
<u>Package</u>	
Type	20L SSOP
Package size	209 mils
Die thickness	15 mils
Die size	97.50 x 86.30 mils
<u>Lead Frame</u>	
Paddle size	126 x 169 mils
Material	CDA194
Surface	Bare Cu on paddle
Process	Etched
Lead Lock	No
Part Number	10102014
Treatment	Brown Oxide Treatment
<u>Die attach material</u>	
Epoxy	8390A
Wire	Au wire
Mold Compound	G600V
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information

Assembly Lot No.	Wafer Lot No.	Date Code
MTAI173602888.000	TMPE217244270.210	1648QPG
MTAI173603473.000	TMPE217244270.210	16485HE
MTAI173603474.000	TMPE217244270.210	16485HG

Result

Pass Fail _____

20L SSOP (.209") 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-020D standard.

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS	Result	Remarks
Moisture/Reflow Sensitivity Classification Test (At MSL Level 1)	85°C/ 85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH 3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243 (IPC/JEDEC J-STD-020D)	IPC/JEDEC C J-STD-020D	135	0/135	Pass	

<u>Precondition</u> <u>Prior Perform</u> <u>Reliability Tests</u> (At MSL Level 1)	Electrical Test :+25°C and 125°C System: J750	JESD22- A113	693(0)	693	Pass	Good Devices
	Bake 150°C, 24 hrs System: CHINEE			693		
	85°C/85%RH Moisture Soak 168 hrs. System: TABAI ESPEC Model PR-3SPH			693		
	3x Convection-Reflow 265°C max System: Vitronics Soltec MR1243			693		
	Electrical Test :+25°C and 85°C (With 1 lot 125°C on MTA1173602888.000) System: J750			0/693		

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Temp Cycle	Stress Condition: -65°C to +150°C, 500 Cycles System : TABAI ESPEC TSA-70H	JESD22- A104		231		Parts had been pre-conditioned at 260°C
	Electrical Test: + 85°C (With 1 lot 125°C on MTA1173602888.000) System: J750		231(0)	0/231	Pass	77 units / lot
	Bond Strength: Wire Pull (> 2.5 grams)		15 (0)	0/15	Pass	
	Bond Shear (>15.00 grams)		15 (0)	0/15	Pass	
UNBIASED-HAST	Stress Condition: +130°C/85%RH, 96 hrs. System: HAST 6000X	JESD22- A118		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C System: J750		231(0)	0/231	Pass	77 units / lot
HAST	Stress Condition: +130°C/85%RH, 96 hrs. Bias Volt: 5.5 Volts System: HAST 6000X	JESD22- A110		231		Parts had been pre-conditioned at 260°C
	Electrical Test: +25°C, and 85°C (With 1 lot 125°C on MTA1173602888.000) System: J750		231(0)	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB	JESD22- A103		45		45 units
	Electrical Test :+25°C,85°C and 125°C System: J750		45(0)	0/45	Pass	

PACKAGE QUALIFICATION REPORT

Test Number (Reference)	Test Condition	Standard/ Method	Qty. (Acc.)	Def/SS.	Result	Remarks
Solderability Temp 215°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping: Solder Temp.215°C Solder material: SnPb Sn63,Pb37 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	JESD22B-102E	22 (0)	22 22 0/22	Pass	
Solderability Temp 245°C	Steam Aging: Temp 93°C,8Hrs System: SAS-3000 Solder Dipping:Solder Temp.245°C Solder material:Pb Free Sn 95.5Ag3.9 Cu0.6 System: ERSA RA 2200D Visual Inspection: External Visual Inspection	JESD22B-102E	22 (0)	22 22 0/22	Pass	
Bond Strength Data Assembly	Wire Pull (> 2.5 grams) Bond Shear (>15.00 grams)	M2011 JESD22-B116	30 (0) Wires 30 (0) bonds	0/30 0/30	Pass Pass	