

Product Change Notification - JAON-19VVRT417

Date: 07 Oct 2015

Product Category: Touch Sensing Technologies; Analog (Thermal, Power Management & Safety); Analog (Linear & Mixed Signal) AND Interface; SMSC; 8-bit Microcontrollers; 16-bit Microcontrollers and Digital Signal Controllers

Notification subject: CCB 1592 Final Notice: Qualification of Ag ring plated lead-frame and G700LS Mold Compound for 20L SSOP package at ANAP 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 Ag ring plated lead-frame and G700LS Mold Compound for 20L SSOP package at ANAP assembly site.

Pre Change:

Using Spot Ag plated lead-frame and G600 mold compound.

Post Change:

Using Ag ring plated lead-frame and G700LS mold compound.

Impacts to Data Sheet:

None

Reason for Change:

To improve productivity and qualify Ag ring plated lead-frame and G700LS mold compound.

Change Implementation Status:

In Progress

Estimated First Ship Date:

October 15, 2015 (date code: 1542)

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

Markings to Distinguish Revised from Unrevised Devices:

Traceability code

Revision History:

May 27, 2015: Issued initial notification.

October 07, 2015: Issued final notification. Attached the qualification report. Updated the affected parts list.

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-19VVRT417_Qual_Report.pdf](#) [PCN_JAON-19VVRT417_Affected_CPN.pdf](#) [PCN_JAON-19VVRT417_Affected_CPN.xls](#)

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
A010201-I/SS
A010201T-I/SS
AR1100-I/SS
AR1100T-I/SS
CFPIC-I/SSC01
HA0119-I/SS
HA0120T-I/SS
HA0140-I/SS
HA0140T-I/SS
HA1027-I/SS
HA1027T-I/SS
HA1030-I/SS
HA1030T-I/SS
HA1031-I/SS
HA1031T-I/SS
HA1218-I/SS
HA1515-I/SS
HA1515T-I/SS
HA2022-I/SS
HA2022T-I/SS
HA2525-I/SS
HA2525T-I/SS
HA2580-I/SS
HA2580T-I/SS
HA5288-I/SS
HA5288T-I/SS
HS12-100P0/12PS0F
HS12-100P0/12PS0FTR
HS12-100P0/12PS15
MCP1631-E/SS
MCP1631T-E/SS
MCP1631V-E/SS
MCP1631VT-E/SS
MCP2140A-I/SS
MCP2140AT-I/SS
MCP2140-I/SS
MCP2140-I/SSRVB
MCP2140T-I/SS
MCP2140T-I/SSRVB
MCP2200-E/SS
MCP2200-I/SS
MCP2200-I/SS040
MCP2200-I/SSRVB
MCP2200T-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
MCP2200T-I/SS
MCP2200T-I/SS040
MCP2200T-I/SSRVB
MCP2210-I/SS
MCP2210T-I/SS
MCP23008-E/SS
MCP23008T-E/SS
MCP23009-E/SS
MCP23009T-E/SS
MCP23S08-E/SS
MCP23S08-E/SSAPL
MCP23S08T-E/SS
MCP23S08T-E/SSAPL
MCP3901A0-E/SS
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
MCV201B-I/SS
MCV201BT-I/SS
MCV202B-I/SS
MCV202BT-I/SS
MTCH108-I/SS
MTCH108T-I/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
PIC16C620A-04/SS
PIC16C620A-04E/SS
PIC16C620A-04I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16C620A-20/SS
PIC16C620A-20E/SS
PIC16C620A-20I/SS
PIC16C620A-40/SS
PIC16C620AT-04/SS
PIC16C620AT-04I/SS
PIC16C620AT-04I/SS043
PIC16C620AT-04I/SS060
PIC16C620AT-04I/SS063
PIC16C620AT-04I/SS071
PIC16C620AT-04I/SS073
PIC16C620AT-04I/SS075
PIC16C621A-04/SS
PIC16C621A-04E/SS
PIC16C621A-04I/SS
PIC16C621A-20/SS
PIC16C621A-20E/SS
PIC16C621A-20I/SS
PIC16C621AT-04/SS
PIC16C621AT-04I/SS082
PIC16C621AT-04I/SS083
PIC16C621AT-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/SS032
PIC16C622AT-04I/SS081
PIC16C622AT-04I/SS095
PIC16C622AT-20/SS066
PIC16C622AT-20I/SS
PIC16F1459-E/SS
PIC16F1459-I/SS
PIC16F1459T-I/SS
PIC16F1507-E/SS
PIC16F1507-I/SS
PIC16F1507T-E/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
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
PIC16F1578-E/SS
PIC16F1578-I/SS
PIC16F1578T-I/SS
PIC16F1579-E/SS
PIC16F1579-I/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
PIC16F1708T-I/SS
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

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PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16F1769T-I/SS
PIC16F1826-E/SS
PIC16F1826-I/SS
PIC16F1826-I/SSC03
PIC16F1826T-E/SS
PIC16F1826T-I/SS
PIC16F1826T-I/SSC03
PIC16F1827-E/SS
PIC16F1827-I/SS
PIC16F1827T-E/SS
PIC16F1827T-I/SS
PIC16F1827T-I/SS026
PIC16F1828-E/SS
PIC16F1828-E/SSC05
PIC16F1828-I/SS
PIC16F1828-I/SS021
PIC16F1828-I/SS027
PIC16F1828-I/SSC01
PIC16F1828T-E/SS
PIC16F1828T-E/SS026
PIC16F1828T-E/SSC05
PIC16F1828T-I/SS
PIC16F1828T-I/SS020
PIC16F1828T-I/SS021
PIC16F1828T-I/SS022
PIC16F1828T-I/SS023
PIC16F1828T-I/SS024
PIC16F1828T-I/SS027
PIC16F1828T-I/SSC01
PIC16F1829-E/SS
PIC16F1829-H/SS
PIC16F1829-I/SS
PIC16F1829T-E/SS
PIC16F1829T-H/SS
PIC16F1829T-I/SS
PIC16F1829T-I/SS029
PIC16F1847-E/SS
PIC16F1847-I/SS
PIC16F1847T-E/SS
PIC16F1847T-I/SS
PIC16F527-E/SS
PIC16F527-I/SS
PIC16F527-I/SSC01
PIC16F527-I/SSC03

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
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
PIC16F631T-I/SS020
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
PIC16F687T-E/SS
PIC16F687T-I/SS
PIC16F687T-I/SS039
PIC16F687T-I/SS040
PIC16F689-E/SS
PIC16F689-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
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-I/SS
PIC16F690T-I/SS026
PIC16F690T-I/SS029
PIC16F690T-I/SS033
PIC16F690T-I/SS038
PIC16F690T-I/SS039
PIC16F690T-I/SS041
PIC16F690T-I/SSC11
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
PIC16F716T-I/SS071
PIC16F720-E/SS
PIC16F720-I/SS
PIC16F720-I/SS020
PIC16F720T-I/SS
PIC16F720T-I/SS020
PIC16F720T-I/SS021
PIC16F721-E/SS
PIC16F721-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16F721T-I/SS
PIC16F721T-I/SS020
PIC16F785-E/SS
PIC16F785-I/SS
PIC16F785-I/SS048
PIC16F785T-E/SS
PIC16F785T-I/SS
PIC16F785T-I/SS020
PIC16F819-I/SSTSL
PIC16F819T-I/SSTSL
PIC16HV785-E/SS
PIC16HV785-I/SS
PIC16HV785T-E/SS
PIC16HV785T-I/SS
PIC16LC54C-04/SS
PIC16LC54C-04I/SS
PIC16LC620A-04/SS
PIC16LC620A-04E/SS
PIC16LC620A-04I/SS
PIC16LC620A-04I/SS070
PIC16LC620AT-04/SS
PIC16LC620AT-04I/SS
PIC16LC621A-04/SS
PIC16LC621A-04E/SS
PIC16LC621A-04I/SS
PIC16LC621AT-04/SS
PIC16LC622A-04/SS
PIC16LC622A-04E/SS
PIC16LC622A-04I/SS
PIC16LC622AT-04/SS
PIC16LC622AT-04I/SS
PIC16LF1459-E/SS
PIC16LF1459-I/SS
PIC16LF1459T-I/SS
PIC16LF1459T-I/SS020
PIC16LF1507-E/SS
PIC16LF1507-I/SS
PIC16LF1507T-I/SS
PIC16LF1508-E/SS
PIC16LF1508-I/SS
PIC16LF1508-I/SS025
PIC16LF1508T-E/SS
PIC16LF1508T-I/SS
PIC16LF1508T-I/SS022

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16LF1508T-I/SS025
PIC16LF1509-E/SS
PIC16LF1509-I/SS
PIC16LF1509-I/SSC01
PIC16LF1509T-I/SS
PIC16LF1509T-I/SS026
PIC16LF1509T-I/SSC01
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
PIC16LF1826-E/SS
PIC16LF1826-I/SS
PIC16LF1826T-I/SS
PIC16LF1827/SS
PIC16LF1827/SSC01
PIC16LF1827-E/SS
PIC16LF1827-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16LF1827T/SS
PIC16LF1827T/SSC01
PIC16LF1827T-I/SS
PIC16LF1827T-I/SS020
PIC16LF1827T-I/SS021
PIC16LF1828-E/SS
PIC16LF1828-I/SS
PIC16LF1828-I/SSC01
PIC16LF1828T-I/SS
PIC16LF1828T-I/SS020
PIC16LF1828T-I/SS021
PIC16LF1829-E/SS
PIC16LF1829-E/SSC01
PIC16LF1829-I/SS
PIC16LF1829-I/SS020
PIC16LF1829-I/SS021
PIC16LF1829-I/SS022
PIC16LF1829-I/SSC01
PIC16LF1829T-E/SS
PIC16LF1829T-E/SSC01
PIC16LF1829T-I/SS
PIC16LF1829T-I/SSC01
PIC16LF1847-E/SS
PIC16LF1847-I/SS
PIC16LF1847T-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/SS061
PIC16LF628AT-I/SS071
PIC16LF648A/SS
PIC16LF648A-I/SS
PIC16LF648AT-I/SS
PIC16LF720-E/SS
PIC16LF720-I/SS
PIC16LF720T-I/SS
PIC16LF721-E/SS

JAON-19VVRT417 - CCB 1592 Final Notice: Qualification of Ag ring plated lead-frame and G700LS Mold Compound for 20L SSOP package at ANAP assembly site.

Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC16LF721-I/SS
PIC16LF721T-I/SS
PIC16LF819-I/SSTSL
PIC18F1320-E/SS
PIC18F1320-H/SS
PIC18F1320-I/SS
PIC18F1320T-I/SS
PIC18F13K22-E/SS
PIC18F13K22-I/SS
PIC18F13K22T-E/SS
PIC18F13K22T-I/SS
PIC18F13K50/SS
PIC18F13K50-E/SS
PIC18F13K50-I/SS
PIC18F13K50-I/SSC02
PIC18F13K50T/SS
PIC18F13K50T-I/SS
PIC18F13K50T-I/SS020
PIC18F13K50T-I/SS021
PIC18F14K22-E/SS
PIC18F14K22-I/SS
PIC18F14K22T-E/SS
PIC18F14K22T-I/SS
PIC18F14K50/SS
PIC18F14K50-E/SS
PIC18F14K50-I/SS
PIC18F14K50-I/SS024
PIC18F14K50T/SS
PIC18F14K50T-I/SS
PIC18F14K50T-I/SS024
PIC18F14K50T-I/SS032
PIC18F14K50T-I/SS037
PIC18LF1320-I/SS
PIC18LF1320T-I/SS
PIC18LF13K22-E/SS
PIC18LF13K22-I/SS
PIC18LF13K22T-I/SS
PIC18LF13K50-I/SS
PIC18LF13K50T-I/SS
PIC18LF14K22/SS
PIC18LF14K22-E/SS
PIC18LF14K22-I/SS
PIC18LF14K22T/SS
PIC18LF14K22T-I/SS

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Affected Catalog Part Numbers (CPN)

PCN_JAON-19VVRT417
CATALOG_PART_NBR
PIC24F04KA201-I/SS
PIC24F04KA201T-I/SS
PIC24F04KL101-E/SS
PIC24F04KL101-I/SS
PIC24F04KL101T-I/SS
PIC24F08KL201-E/SS
PIC24F08KL201-I/SS
PIC24F08KL201T-I/SS
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
SW1100T-I/SS



MICROCHIP

**QUALIFICATION REPORT
RELIABILITY LABORATORY**

PCN #: JAON-19VVRT417

**Date
August 27, 2015**

**Qualification of Ag ring plated lead-frame and G700LS Mold
Compound for 20L SSOP package at ANAP assembly site**

Distribution

Fernando C	Greg P
Arthur N	Vassilis D
Joe F	Wichai K
Surasit P	Somnuek T.
Mitch R	Simeon Iliev
Chaweng W	Gerry O
Chalermpon P	Arnel M
Maitree Y	Atthapong W
Sunisa K	Supakorn L
Irina K	Ponpitug Y
Jeffrey J	Marco Ho
Rhoderick O	Fannie Lin
Wichai K.	Rangsun K.

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MICROCHIP PACKAGE QUALIFICATION REPORT

Purpose	Qualification of Ag ring plated lead-frame and G700LS Mold Compound for 20L SSOP package at ANAP assembly site
CN	BC151251
QUAL ID	Q15096
MP CODE	DEBN17G3XAXF
Part No.	PIC16F685-I/SS
Bonding No.	BDM-000751 Rev.A
CCB No.	1592
<u>Package</u>	
Type	20L SSOP
Package size	209 mils
Die thickness	15 mils
Die size	86.3 x 97.5 mils
<u>Lead Frame</u>	
Paddle size	126 x 169 mils
Material	C194 with UDLF Strip
Surface	Ring Ag Plated (Bare Cu on PAD & Ag on inner lead only)
Process	Etched
Lead Lock	Yes
Part Number	101389051
Treatment	None
<u>Die attach material</u>	
Epoxy	8290
Wire	Au wire
Mold Compound	G700LS
Plating Composition	Matte Tin



MICROCHIP PACKAGE QUALIFICATION REPORT

Manufacturing Information


Assembly Lot No.	Wafer Lot No.	Date Code
ANAP161000465.000	TMPE215487341.100	1523SPS
ANAP161000466.000	TMPE215487341.100	1523SPW
ANAP161000467.000	TMPE215487341.100	1523SPY

Result Pass Fail _____

20L SSOP assembled by ANAP 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.

Prepared By:  **Date:** August 27, 2015 (Sr. Reliability Engineer)

(Mr. Udom Suksansakul)

Approved By:  **Date:** August 27, 2015 (Reliability Manager)

(Mr. Somnuek Thongprasert)

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	

Precondition Prior Perform Reliability Tests (At MSL Level 1)	Electrical Test :+25°C,85°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 ANAP161000465.000) 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 ANAP161000465.000)		231(0)	0/231	Pass	77 units / lot
	Bond Strength: System: J750 Wire Pull (> 2.3 grams) Bond Shear (>21.00 grams)		15 (0)	0/15	Pass	
			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 ANAP161000465.000) System: J750		231(0)	0/231	Pass	77 units / lot
High Temperature Storage Life	Stress Condition: Bake 175°C, 504 hrs System: SHEL LAB Electrical Test :+25°C,85°C and 125°C System: J750	JESD22- A103		45		45 units
			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 (> 2.3 grams)	M2011	30 (0) Wires	0/30	Pass	
	Bond Shear (>21.00 grams)	JESD22-B116	30 (0) bonds	0/30	Pass	