

Product Change Notification - GBNG-06THAP224

Date: 17 Feb 2017

Product Category: Digital Potentiometers; System D/A Converters; Linear Op Amps; Linear Comparators; Real-Time Clock/Calendar; 8-bit PIC Microcontrollers; Piezoelectric Horn Drivers; Frequency-to-Voltage / Voltage-to-Frequency Converters; Capacitive Touch Sensors; KEELOQ® Encoder Devices; KEELOQ® Decoder Devices; Interface- LIN Transceiver; Touch Controllers; Interface- Infrared Products; Interface- Controller Area Network (CAN); Successive Approximation Register (SAR) A/D Converters; Sigma - Delta A/D Converters

Notification subject: CCB 2851 Initial Notice: Qualification of 98 x 235 mils lead frame paddle size available in selected 14L SOIC package at MMT assembly site.

Notification text: **PCN Status:**
Initial 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 98 x 235 mils lead frame paddle size available in selected 14L SOIC package at MMT assembly site.

Pre Change:

Assembled at MMT using lead frame with 90 x 110 mils paddle size and at MTAI using 90 x 90, 95 x 155 and 98 x 235 mils lead frame paddle sizes.

Post Change:

Assembled at MMT or MTAI using 90 x 90, 95 x 155 and 98 x 235 mils lead frame paddle sizes.

Pre and Post Change Summary:

	Pre Change		Post Change
	MTAI	MMT	MTAI or MMT
Assembly Site	MTAI	MMT	MTAI or MMT
Wire material	Au wire	Au wire	Au wire
Die attach material	8390A	8390A	8390A
Molding compound material	G600	G600	G600
Lead frame material	CDA194	CDA194	CDA194
Lead frame paddle size		90 x 110 mils	

	90 x 90 mils		90 x 90 mils
	95 x 155 mils		95 x 155 mils
	98 x235 mils		98 x235 mils

Impacts to Data Sheet:
None

Change Impact:
None

Reason for Change:
To improve productivity by qualifying 98 x 235 mils lead frame paddle size at MMT assembly site.

Change Implementation Status:
In Progress

Estimated Qualification Completion Date:
March 23, 2017

Note: Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date.

Time Table Summary:

Workweek	February					March 2017			
	05	06	07	08	09	10	11	12	13
Initial PCN Issue Date			X						
Qualification Report Availability								X	
Final PCN Issue Date								X	

Method to Identify Change:
Traceability code

Qualification Plan:
Please open the attachments included with this PCN labeled as PCN_#_Qual Plan.

Revision History:
February 17, 2017: Issued initial notification.

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_GBNG-06THAP224_Affected CPN.pdf](#)
[PCN_GBNG-06THAP224_Qual Plan.pdf](#)
[PCN_GBNG-06THAP224_Affected CPN.xlsx](#)

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

Terms and Conditions:

If you wish to change your product/process change notification (PCN) profile please log on to our website at <http://www.microchip.com/PCN> sign into myMICROCHIP to open the myMICROCHIP home page, then select a profile option from the left navigation bar.

To opt out of future offer or information emails (other than product change notification emails), click here to go to [microchipDIRECT](#) and login, then click on the "My account" link, click on "Update profile" and un-check the box that states "Future offers or information about Microchip's products or services."



[Products](#) | [Applications](#) | [Design Support](#) | [Training](#) | [Sample And Buy](#) | [About Us](#) | [Contact Us](#) | [Legal](#) | [Investors](#) | [Careers](#) | [Support](#)

©Copyright 1998-2017 Microchip Technology Inc. All rights reserved.

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
CAP1206-1-SL
CAP1206-1-SL-TR
CAP1206-2-SL-TR
CAP1208-1-SL
CAP1208-1-SL-TR
CAP1208-2-SL-TR
CAP1296-1-SL
CAP1296-1-SL-TR
CAP1296-2-SL-TR
CAP1298-1-SL
CAP1298-1-SL-TR
CAP1298-2-SL-TR
HA1086-I/SL
HA1086T-I/SL
HA1504-I/SL
HA1504T-I/SL
HA2038-I/SL
HA2089-I/SL
HA2089-I/SL108
HA2089-I/SL109
HA2089T-I/SL
HA2089T-I/SL040
HA2089T-I/SL043
HA2089T-I/SL054
HA2089T-I/SL057
HA2089T-I/SL077
HA2089T-I/SL086
HA2089T-I/SL097
HA2089T-I/SL100
HA2089T-I/SL103
HA2089T-I/SL104
HA2089T-I/SL106
HA2089T-I/SL108
HA2089T-I/SL109
HCS370/SL
HCS370-I/SL
HCS370T/SL
HCS370T-I/SL
HCS515/SL
HCS515-I/SL
HCS515-I/SLA56
HCS515T/SL
HCS515T-I/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
MCP2022-330E/SL
MCP2022-500E/SL
MCP2022A-330E/SL
MCP2022A-500E/SL
MCP2022AT-330E/SL
MCP2022AT-500E/SL
MCP2022P-330E/SL
MCP2022P-500E/SL
MCP2022PT-330E/SL
MCP2022PT-500E/SL
MCP2022T-330E/SL
MCP2022T-500E/SL
MCP2036-I/SL
MCP2036T-I/SL
MCP2050-330E/SL
MCP2050-500E/SL
MCP2050T-330E/SL
MCP2050T-500E/SL
MCP2120-I/SL
MCP2120T-I/SL
MCP25612FD-E/SL
MCP25612FD-H/SL
MCP25612FDT-E/SL
MCP25612FDT-H/SL
MCP3204-BI/SL
MCP3204-CI/SL
MCP3204T-BI/SL
MCP3204T-CI/SL
MCP3424-E/SL
MCP3424T-E/SL
MCP3428-E/SL
MCP3428T-E/SL
MCP4231-103E/SL
MCP4231-104E/SL
MCP4231-502E/SL
MCP4231-503E/SL
MCP4231T-103E/SL
MCP4231T-104E/SL
MCP4231T-502E/SL
MCP4231T-503E/SL
MCP4241-103E/SL
MCP4241-104E/SL
MCP4241-502E/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
MCP4241-503E/SL
MCP4241T-103E/SL
MCP4241T-104E/SL
MCP4241T-502E/SL
MCP4241T-503E/SL
MCP4251-103E/SL
MCP4251-104E/SL
MCP4251-502E/SL
MCP4251-503E/SL
MCP4251T-103E/SL
MCP4251T-104E/SL
MCP4251T-502E/SL
MCP4251T-503E/SL
MCP4261-103E/SL
MCP4261-104E/SL
MCP4261-502E/SL
MCP4261-503E/SL
MCP4261T-103E/SL
MCP4261T-104E/SL
MCP4261T-502E/SL
MCP4261T-503E/SL
MCP4902-E/SL
MCP4902T-E/SL
MCP4912-E/SL
MCP4912T-E/SL
MCP4922-E/SL
MCP4922T-E/SL
MCP6004-E/SL
MCP6004-I/SL
MCP6004-I/SLB21
MCP6004T-E/SL
MCP6004T-I/SL
MCP6004T-I/SLB21
MCP6034-E/SL
MCP6034T-E/SL
MCP6034T-E/SLV01
MCP6044-E/SL
MCP6044-E/SLBAA
MCP6044-I/SL
MCP6044T-E/SL
MCP6044T-E/SLBAA
MCP6044T-I/SL
MCP604-E/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
MCP604-I/SL
MCP604T-E/SL
MCP604T-I/SL
MCP6054-E/SL
MCP6054T-E/SL
MCP6064-E/SL
MCP6064T-E/SL
MCP6074-E/SL
MCP6074T-E/SL
MCP6234-E/SL
MCP6234T-E/SL
MCP6244-E/SL
MCP6244T-E/SL
MCP624-E/SL
MCP624T-E/SL
MCP6274-E/SL
MCP6274-E/SLB21
MCP6274T-E/SL
MCP6274T-E/SLB21
MCP6284-E/SL
MCP6284-E/SLDAA
MCP6284T-E/SL
MCP6284T-E/SLDAA
MCP6294-E/SL
MCP6294T-E/SL
MCP634-E/SL
MCP634T-E/SL
MCP6404-E/SL
MCP6404-H/SL
MCP6404T-E/SL
MCP6404T-H/SL
MCP6409-H/SL
MCP6409T-H/SL
MCP654-E/SL
MCP654T-E/SL
MCP6564-E/SL
MCP6564T-E/SL
MCP6569-E/SL
MCP6569T-E/SL
MCP660-E/SL
MCP660T-E/SL
MCP664-E/SL
MCP664T-E/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
MCP6H04-E/SL
MCP6H04T-E/SL
MCP6H74-E/SL
MCP6H74T-E/SL
MCP6H84-E/SL
MCP6H84T-E/SL
MCP6H94-E/SL
MCP6H94T-E/SL
MCP6L04T-E/SL
MCP6L4T-E/SL
MCP6L74T-E/SL
MCP6L94T-E/SL
MCP795W10-I/SL
MCP795W10T-I/SL
MCP795W11-I/SL
MCP795W11T-I/SL
MCP795W12-I/SL
MCP795W12T-I/SL
MCP795W20-I/SL
MCP795W20T-I/SL
MCP795W21-I/SL
MCP795W21T-I/SL
MCP795W22-I/SL
MCP795W22T-I/SL
MCV14A-I/SL
MCV14A-I/SL029
MCV14A-I/SL032
MCV14A-I/SL037
MCV14A-I/SL038
MCV14A-I/SL039
MCV14A-I/SL040
MCV14A-I/SL042
MCV14A-I/SL043
MCV14A-I/SL044
MCV14A-I/SL045
MCV14A-I/SL046
MCV14A-I/SL049
MCV14A-I/SL050
MCV14A-I/SL051
MCV14A-I/SL052
MCV14A-I/SL054
MCV14A-I/SL060
MCV14A-I/SL062

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
MCV14A-I/SL063
MCV14A-I/SL064
MCV14A-I/SL065
MCV14A-I/SL066
MCV14AT-I/SL
MCV14AT-I/SL021
MCV14AT-I/SL025
MCV14AT-I/SL029
MCV14AT-I/SL032
MCV14AT-I/SL035
MCV14AT-I/SL037
MCV14AT-I/SL038
MCV14AT-I/SL039
MCV14AT-I/SL040
MCV14AT-I/SL042
MCV14AT-I/SL043
MCV14AT-I/SL044
MCV14AT-I/SL045
MCV14AT-I/SL046
MCV14AT-I/SL049
MCV14AT-I/SL050
MCV14AT-I/SL051
MCV14AT-I/SL052
MCV14AT-I/SL054
MCV14AT-I/SL055
MCV14AT-I/SL057
MCV14AT-I/SL058
MCV14AT-I/SL060
MCV14AT-I/SL062
MCV14AT-I/SL063
MCV14AT-I/SL064
MCV14AT-I/SL065
MCV14AT-I/SL066
PIC16C505-04/SL
PIC16C505-04/SLC01
PIC16C505-04E/SL
PIC16C505-04I/SL
PIC16C505-20/SL
PIC16C505-20E/SL
PIC16C505-20I/SL
PIC16C505T-04/SL
PIC16C505T-04/SL098
PIC16C505T-04E/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16C505T-04E/SL115
PIC16C505T-04I/SL
PIC16C505T-04I/SL060
PIC16C505T-04I/SL111
PIC16C505T-04I/SL137
PIC16C505T-20/SL
PIC16C505T-20E/SL
PIC16C505T-20I/SL
PIC16F1454-E/SL
PIC16F1454-I/SL
PIC16F1454-I/SLC01
PIC16F1454T-I/SL
PIC16F1454T-I/SL023
PIC16F1454T-I/SLC01
PIC16F15325-E/SL
PIC16F15325-I/SL
PIC16F15325T-I/SL
PIC16F1613-E/SL
PIC16F1613-I/SL
PIC16F1613T-I/SL
PIC16F1703-E/SL
PIC16F1703-I/SL
PIC16F1703T-I/SL
PIC16F1823-E/SL
PIC16F1823-I/SL
PIC16F1823-I/SL024
PIC16F1823-I/SL037
PIC16F1823-I/SLC04
PIC16F1823T-E/SL
PIC16F1823T-I/SL
PIC16F1823T-I/SL024
PIC16F1823T-I/SL025
PIC16F1823T-I/SL026
PIC16F1823T-I/SL037
PIC16F1823T-I/SLC04
PIC16F1824-E/SL
PIC16F1824-I/SL
PIC16F1824-I/SLC09
PIC16F1824T-E/SL
PIC16F1824T-I/SL
PIC16F1824T-I/SL021
PIC16F1824T-I/SL023
PIC16F1824T-I/SL024

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16F1824T-I/SL027
PIC16F1824T-I/SL032
PIC16F1824T-I/SLC09
PIC16F18323-E/SL
PIC16F18323-I/SL
PIC16F18323-I/SLJIN
PIC16F18323T-E/SL
PIC16F18323T-I/SL
PIC16F18324-E/SL
PIC16F18324-I/SL
PIC16F18324T-I/SL
PIC16F18325-E/SL
PIC16F18325-I/SL
PIC16F18325T-I/SL
PIC16F18326-E/SL
PIC16F18326-I/SL
PIC16F18326T-I/SL
PIC16F505-E/SL
PIC16F505-I/SL
PIC16F505-I/SL023
PIC16F505-I/SL033
PIC16F505-I/SL059
PIC16F505T-E/SL
PIC16F505T-I/SL
PIC16F505T-I/SL020
PIC16F505T-I/SL029
PIC16F505T-I/SL033
PIC16F505T-I/SL039
PIC16F505T-I/SL054
PIC16F505T-I/SL055
PIC16F505T-I/SL056
PIC16F505T-I/SL058
PIC16F505T-I/SL059
PIC16F505T-I/SLC03
PIC16F506-E/SL
PIC16F506-I/SL
PIC16F506T-I/SL
PIC16F506T-I/SL021
PIC16F506T-I/SL030
PIC16F506T-I/SL034
PIC16F506T-I/SL039
PIC16F506T-I/SL042
PIC16F506T-I/SL043

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16F506T-I/SL044
PIC16F506T-I/SL047
PIC16F526-E/SL
PIC16F526-I/SL
PIC16F526-I/SLC03
PIC16F526-I/SLC04
PIC16F526-I/SLC06
PIC16F526T-I/SL
PIC16F526T-I/SL033
PIC16F526T-I/SL034
PIC16F526T-I/SL053
PIC16F526T-I/SL061
PIC16F526T-I/SLC04
PIC16F526T-I/SLC06
PIC16F610-E/SL
PIC16F610-I/SL
PIC16F610T-I/SL
PIC16F616-E/SL
PIC16F616-E/SL087
PIC16F616-H/SL
PIC16F616-I/SL
PIC16F616-I/SL063
PIC16F616-I/SL068
PIC16F616T-E/SL
PIC16F616T-E/SL040
PIC16F616T-E/SL072
PIC16F616T-E/SL083
PIC16F616T-E/SL084
PIC16F616T-E/SL087
PIC16F616T-I/SL
PIC16F616T-I/SL029
PIC16F616T-I/SL033
PIC16F616T-I/SL038
PIC16F616T-I/SL048
PIC16F616T-I/SL050
PIC16F616T-I/SL054
PIC16F616T-I/SL055
PIC16F616T-I/SL063
PIC16F616T-I/SL064
PIC16F616T-I/SL068
PIC16F616T-I/SL069
PIC16F616T-I/SL074
PIC16F616T-I/SL077

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16F616T-I/SL086
PIC16F616T-I/SL089
PIC16F616T-I/SL091
PIC16F616T-I/SL092
PIC16F630-C/SL
PIC16F630-E/SL
PIC16F630-I/SL
PIC16F630-I/SL036
PIC16F630-I/SL044
PIC16F630-I/SL045
PIC16F630-I/SLC03
PIC16F630T-C/SL
PIC16F630T-E/SL
PIC16F630T-E/SL072
PIC16F630T-I/SL
PIC16F630T-I/SL026
PIC16F630T-I/SL035
PIC16F630T-I/SL043
PIC16F630T-I/SL053
PIC16F630T-I/SL066
PIC16F630T-I/SL080
PIC16F630T-I/SL081
PIC16F630T-I/SL082
PIC16F636-E/SL
PIC16F636-I/SL
PIC16F636T-E/SL
PIC16F636T-I/SL
PIC16F636T-I/SL022
PIC16F676-E/SL
PIC16F676-I/SL
PIC16F676-I/SL045
PIC16F676-I/SL050
PIC16F676-I/SL051
PIC16F676T-C/SL
PIC16F676T-E/SL
PIC16F676T-I/SL
PIC16F676T-I/SL028
PIC16F676T-I/SL038
PIC16F676T-I/SL044
PIC16F676T-I/SL051
PIC16F684-E/SL
PIC16F684-I/SL
PIC16F684-I/SL105

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16F684-I/SLC15
PIC16F684-I/SLC17
PIC16F684T-E/SL
PIC16F684T-I/SL
PIC16F684T-I/SL027
PIC16F684T-I/SL028
PIC16F684T-I/SL088
PIC16F684T-I/SL091
PIC16F684T-I/SL094
PIC16F684T-I/SL095
PIC16F684T-I/SL099
PIC16F684T-I/SL105
PIC16F684T-I/SLC15
PIC16F684T-I/SLC17
PIC16F688-E/SL
PIC16F688-I/SL
PIC16F688-I/SL063
PIC16F688T-E/SL
PIC16F688T-E/SL043
PIC16F688T-I/SL
PIC16F688T-I/SL051
PIC16F688T-I/SL053
PIC16F688T-I/SL057
PIC16F688T-I/SL058
PIC16F688T-I/SL063
PIC16F753-E/SL
PIC16F753-I/SL
PIC16F753-I/SLC02
PIC16F753-I/SLPN1
PIC16F753-I/SLSM1
PIC16F753-I/SLSM2
PIC16F753T-I/SL
PIC16F753T-I/SL020
PIC16F753T-I/SLC02
PIC16F753T-I/SLHS2
PIC16F753T-I/SLPN1
PIC16F753T-I/SLSM1
PIC16F753T-I/SLSM2
PIC16HV610-E/SL
PIC16HV610-I/SL
PIC16HV610T-I/SL
PIC16HV616-E/SL
PIC16HV616-I/SL

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16HV616T-E/SL
PIC16HV616T-I/SL
PIC16HV753-E/SL
PIC16HV753-I/SL
PIC16HV753T-E/SL
PIC16HV753T-I/SL
PIC16LC505-04/SL
PIC16LC505-04I/SL
PIC16LC505T-04/SL
PIC16LC505T-04I/SL
PIC16LF1454-E/SL
PIC16LF1454-I/SL
PIC16LF1454T-I/SL
PIC16LF1455-E/SL
PIC16LF1455-I/SL
PIC16LF1455T-I/SL
PIC16LF15325-E/SL
PIC16LF15325-I/SL
PIC16LF15325T-I/SL
PIC16LF1554-E/SL
PIC16LF1554-I/SL
PIC16LF1554T-I/SL
PIC16LF1613-E/SL
PIC16LF1613-I/SL
PIC16LF1613T-I/SL
PIC16LF1703-E/SL
PIC16LF1703-I/SL
PIC16LF1703T-I/SL
PIC16LF1823-E/SL
PIC16LF1823-I/SL
PIC16LF1823-I/SLC03
PIC16LF1823T-E/SL
PIC16LF1823T-I/SL
PIC16LF1823T-I/SL023
PIC16LF1823T-I/SLC03
PIC16LF1824-E/SL
PIC16LF1824-I/SL
PIC16LF1824-I/SLC01
PIC16LF1824T-E/SL
PIC16LF1824T-I/SL
PIC16LF1824T-I/SL026
PIC16LF1824T-I/SL027
PIC16LF1824T-I/SL028

GBNG-06THAP224 - CCB 2851 Initial Notice: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

Affected Catalog Part Numbers (CPN)

PCN_GBNG-06THAP224
Catalog Part Numbers
PIC16LF1824T-I/SLC01
PIC16LF18323-E/SL
PIC16LF18323-I/SL
PIC16LF18323T-E/SL
PIC16LF18323T-I/SL
PIC16LF18323T-I/SLC01
PIC16LF18324-E/SL
PIC16LF18324-I/SL
PIC16LF18324T-I/SL
PIC16LF18324T-I/SL020
PIC16LF18325-E/SL
PIC16LF18325-I/SL
PIC16LF18325T-I/SL
PIC16LF18326-E/SL
PIC16LF18326-I/SL
PIC16LF18326T-I/SL
RE46C104S14F
RE46C104S14TF
RE46C105S14F
RE46C105S14TF
RE46C200S14F
RE46C200S14TF
TC9400COD
TC9400COD713
TC9400EOD
TC9400EOD713
TC9400IOD



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN #: GBNG-06THAP224

**Date:
January 26, 2017**

**Qualification of 14L SOIC package with 98 x 235 mils lead
frame paddle size for selected products at MMT assembly
site.**

Microchip Technology (Thailand) Co., Ltd.
14 Moo 1 T. Wangtakien A. Muangchacherngsao,
Chacherngsao, Thailand, 24000
Tel. (6638) 857119-45, 857311-19 ext. 1231
Fax (6638) 857149-50

Purpose: Qualification of 14L SOIC package with 98 x 235 mils lead frame paddle size for selected products at MMT assembly site.

CCB No.: 2851

<u>Misc.</u>	Assembly site	MMT
	BD Number	BDM-001273 rev A
	MP Code (MPC)	A5AJ17D3X370
	Part Number (CPN)	HCS370-I/SL
<u>Lead-Frame</u>	Paddle size	98x235 mils
	Material	CDA194
	Surface	Ag Spot
	Treatment	N/A
	Process	Stamped
	Lead-lock	No
	Part Number	10101403
	Lead Plating	Matte Tin
	LF Matrix (RowxColumn)	7x16
	Strip test capable	Yes
<u>Bond Wire</u>	Material	Au
<u>Die Attach</u>	Part Number	8390A
	Conductive	Yes
<u>MC</u>	Part Number	G600V
<u>PKG</u>	PKG Type	SOIC
	Pin/Ball Count	14
	PKG width/size	150 mils
<u>Die</u>	Die Thickness	15 mils
	Die Size	143.0x90.9 mils
MSL Classification		L1/260C

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Wire Bond Pull - WBP	Mil. Std. 883-2011	5	0	3	24	0 fails after TC	5	30 bonds from a minimum of 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001	5	0	3	24		5	30 bonds from a minimum of 5 devices.
Wire Sweep		5	0	3	15	0		Required for any reduction in wire bond thickness.
Physical Dimensions	Measure per JESD22 B100 and B108	10	0	3	30	0	5	
External Visual	Mil. Std. 883-2009/2010	All devices prior to submission for qualification testing	0	3	ALL	0	5	
HTSL (High Temp Storage Life)	+175 C for 504 hours. Electrical test pre and post stress at +25°C and hot temp.85°C. 1 lot to be tested at 85C	45	5	1	50	0	25	
Preconditioning - Required for surface mount devices	+150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020D for package type; Electrical test pre and post stress at +25°C. MSL1 @ 260°C	231	15	3	738	0	15	Spares should be properly identified. 77 parts from each lot to be used for HAST, Autoclave, Temp Cycle test.
HAST	+130°C/85% RH for 96 hours. Electrical test pre and post stress at +25°C and hot temp 1 lot to be tested at 85C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Test Name	Conditions	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Accept Qty	Est. Dur. Days	Special Instructions
Unbiased HAST	+130°C/85% RH for 96 hrs. Electrical test pre and post stress at +25°C.	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	-65°C to +150°C for 500 cycles. Electrical test pre and post stress at hot temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. 1 lot to be tested at 85C	77	5	3	246	0	15	Spares should be properly identified. Use the parts which have gone through Pre-conditioning