



Product Change Notification - KSRA-07INQY594

Date:

11 May 2020

Product Category:

AC/DC - High Side Current Monitors Products

Affected CPNs:**Notification subject:**

CCB 3653 Initial Notice: Qualification of MTAI assembly site as an additional site for Supertex HV7801K1-G and HV7801K1-G catalog part numbers (CPN) available in 5L SOT-23 package.

Notification text:**PCN Status:**

Initial notification

PCN Type:

Manufacturing Change

Microchip Parts Affected:

Please open one of the icons found in the Affected CPNs section above.

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

Description of Change:

Qualification of MTAI assembly site as an additional site for Supertex HV7800K1-G and HV7801K1-G catalog part numbers (CPN) available in 5L SOT-23 package.

Pre Change:

Assembled at CARM assembly site using QMI-519 die attach and CEL8240HF10LXC molding compound materials with 63x49 mils lead frame paddle size.

Post Change:

Assembled at CARM assembly site using QMI-519 die attach and CEL8240HF10LXC molding compound materials with 63x49 mils lead frame paddle size. or MTAI assembly site using 8390A die attach and G600V molding compound materials with 66x48 mils lead frame paddle size.

Pre and Post Change Summary:

| | Pre Change | Post Change | |
|---------------------------|---------------------------|---------------------------|---|
| Assembly Site | Carsem (M) SDN BHD / CARM | Carsem (M) SDN BHD / CARM | Microchip Technology Thailand (HQ) / MTAI |
| Wire material | Au | Au | Au |
| Die attach material | QMI-519 | QMI-519 | 8390A |
| Molding compound material | CEL8240HF10LXC | CEL8240HF10LXC | G600V |
| Lead frame material | CDA194 | CDA194 | CDA194 |
| Lead frame Paddle size | 63x49 mils | 63x49 mils | 66x48 mils |

Impacts to Data Sheet:

None

Change Impact:

None

Reason for Change:

To improve on-time delivery performance by qualifying MTAI as an additional assembly site.

Change Implementation Status:

In Progress

Estimated Qualification Completion Date:

June 2020



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. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

Time Table Summary:

| | May 2020 | | | | | June 2020 | | | | |
|--------------------------|----------|----|----|----|----|-----------|----|----|----|----|
| Workweek | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Initial PCN Issue Date | | | X | | | | | | | |
| Qual 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. If not include we can write not include or not applicable.

Revision History:

May 11, 2020: 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_KSRA-07INQY594_Qual_Plan.pdf](#)

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

Terms and Conditions:

If you wish to receive Microchip PCNs via email please register for our PCN email service at our [PCN home page](#) select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the [PCN FAQ](#) section.

If you wish to change your PCN profile, including opt out, please go to the [PCN home page](#) select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

Affected Catalog Part Numbers (CPN)

HV7800K1-G

HV7801K1-G



MICROCHIP

QUALIFICATION PLAN SUMMARY

PCN#: KSRA-07INQY594

Date:

April 15, 2020

**Qualification of MTAI assembly site as an additional site for
Supertex HV7800K1-G and HV7801K1-G catalog part numbers
(CPN) available in 5L SOT-23 package.**

Purpose: Qualification of MTAI assembly site as an additional site for Supertex HV7800K1-G and HV7801K1-G catalog part numbers (CPN) available in 5L SOT-23 package.

| | | |
|--------------------------|--------------------------|------------------|
| <u>Misc.</u> | Assembly site | MTAI |
| | BD Number | BDM-001991 rev.B |
| | MP Code (MPC) | 60AA1YC7XA00 |
| | Part Number (CPN) | HV7800K1-G |
| | CCB No. | 3653 |
| <u>Lead-Frame</u> | Paddle size | 66x48mils |
| | Material | CDA194 |
| | Surface | Ag plated |
| | Treatment | No |
| | Process | Stamped |
| | Lead-lock | No |
| | Part Number | 10100502 |
| | Lead Plating | Matte Tin |
| <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 | SOT-23 |
| | Pin/Ball Count | 5 |
| | MSL | MSL1/260 |

| 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 | 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 | | 5 | 30 bonds from a min. 5 devices. |
| 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. MSL-1 @ 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. | 77 | 5 | 3 | 246 | 0 | 10 | Spares should be properly identified. Use the parts which have gone through Pre-conditioning. |
| 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 25C temp; 3 gram force WBP, on 5 devices from 1 lot, test following Temp Cycle stress. | 77 | 5 | 3 | 246 | 0 | 15 | Spares should be properly identified. Use the parts which have gone through Pre-conditioning. |