

Product Change Notification - GBNG-28HGEW988

Date:

31 Mar 2020

Product Category:

Interface- LIN Transceiver

Affected CPNs:

7

Notification subject:

CCB 3699 and 3699.001 Final Notice: Qualification of MMT as an additional assembly site for selected Atmel products of the 75K wafer technology available in 20L VQFN (5x5x1.0mm) package.

Notification text:

PCN Status:

Final 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 MMT as an additional assembly site for selected Atmel products of the 75K wafer technology available in 20L VQFN (5x5x1.0mm) package.

Pre Change:

Assembled at ASCL using palladium coated copper (PdCu) bond wire.

Post Change:

Assembled at ASCL using palladium coated copper (PdCu) bond wire or

MMT using palladium coated copper with gold flash (CuPdAu) bond wire.

Pre and Post Change Summary:

| | Pre Change | Post C | hange | | |
|---------------------------|------------------------------|------------------------------|---|--|--|
| Assembly Site | ASE Group Chung-Li (ASCL) | ASE Group Chung-Li (ASCL) | Microchip Technology Thailand (Branch) (MMT) | | |
| Wire material | PdCu | PdCu | CuPdAu | | |
| Die attach material | EN-4900 | EN-4900 | 3280 | | |
| Molding compound material | G700 | G700 | G700 | | |
| Lead frame material | A194 | A194 | A194 | | |
| Die thickness | 7 mils | 7 mils | 11 mils | | |

Impacts to Data Sheet:

Yes. POD (package outline drawing) change. See the changes below:

Affects the following products: ATA6630 and ATA6628

| All units in mi | llimeter (mm) | ASE (| Group Chur ASCL | ng-Li / | Microchip Technology Thailand (Branch) / MMT | | | | |
|-----------------|------------------|-------|--------------------|---------|---|-----|-----|--|--|
| | Dimension Limits | MIN | NOM | MAX | MIN | NOM | MAX | | |
| Number of | | | - | | | | | | |
| Terminals | Ν | | 20 | | 20 | | | | |



| Pitch | е | | 0.65 BSC | | 0.65 BSC | | | | |
|--------------------|----|-------------------|-----------|-----------|-----------|-------|------|--|--|
| Overall Height | А | 0.80 | 0.85 | 0.90 | 0.80 | 0.90 | 1.00 | | |
| Standoff | A1 | 0.00 | 0.035 | 0.05 | 0.00 | 0.035 | 0.05 | | |
| Terminal Thickness | A3 | | 0.203 REF | 0.203 REF | 0.203 REF | | | | |
| Overall Length | D | | 5.00 BSC | | 5.00 BSC | | | | |
| Exposed Pad | | | | | | | | | |
| Length | D2 | 3.00 | 3.10 | 3.20 | 3.00 | 3.10 | 3.20 | | |
| Overall Width | E | 5.00 BSC 5.00 BSC | | | | | C | | |
| Exposed Pad Width | E2 | 3.00 | 3.10 | 3.20 | 3.00 | 3.10 | 3.20 | | |
| Terminal Width | b | 0.20 | 0.25 | 0.30 | 0.20 | 0.25 | 0.30 | | |
| Terminal Length | L | 0.55 | 0.60 | 0.65 | 0.55 | 0.60 | 0.65 | | |

Affects the following products: ATA6624C, ATA6622C, and ATA6626C

| All units in mil | limeter (mm) | ASE | Group Chun ASCL | g-Li / | | Technolog ranch) / MN | | | | |
|--------------------|-------------------------|------|--------------------|--------|----------|--------------------------|------|--|--|--|
| | Dimension Limits | MIN | NOM | MAX | MIN | NOM | MAX | | | |
| Number of | | | | | | | | | | |
| Terminals | Ν | | 20 | | 20 | | | | | |
| Pitch | е | | 0.65 BSC | | 0.65 BSC | | | | | |
| Overall Height | А | 0.80 | 0.85 | 0.90 | 0.80 | 0.90 | 1.00 | | | |
| Standoff | A1 | 0.00 | 0.035 | 0.05 | 0.00 | 0.035 | 0.05 | | | |
| Terminal Thickness | A3 | 0.16 | 0.21 | 0.26 | 0.16 | 0.21 | 0.26 | | | |
| Overall Length | D | 4.9 | 5.0 | 5.1 | 4.9 | 5.0 | 5.1 | | | |
| Exposed Pad | | | | | | | | | | |
| Length | D2 | 3.00 | 3.10 | 3.20 | 3.00 | 3.10 | 3.20 | | | |
| Overall Width | E | 4.9 | 5.0 | 5.1 | 4.9 | 5.0 | 5.1 | | | |
| Exposed Pad Width | E2 | 3.00 | 3.10 | 3.20 | 3.00 | 3.10 | 3.20 | | | |
| Terminal Width | b | 0.25 | 0.30 | 0.35 | 0.20 | 0.25 | 0.30 | | | |
| Terminal Length | L | 0.55 | 0.60 | 0.65 | 0.55 | 0.60 | 0.65 | | | |

Note: These POD changes are within JEDEC limit so no significant impact other than a documentation change in the spec and/or datasheet.

Microchip will issue separate PCN for datasheet update.

Change Impact:

None.

Reason for Change:

To improve on time delivery performance by qualifying MMT as an additional assembly site. **Change Implementation Status:**

In Progress

Estimated First Ship Date:

April 30, 2020 (date code: 2018)

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

Time Table Summary:

| | N | ovei | mbei | r 2 <mark>01</mark> | 9 | Щ©Љ | March 2020 | | | | | April 2020 | | | |
|------------------------|----|------|------|---------------------|----|------|------------|----|----|----|----|------------|----|----|----|
| Workweek | 44 | 45 | 46 | 47 | 48 | ∎©�¶ | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Initial PCN Issue Date | | | | | Х | | | | | | | | | | |
| Qual Report | | | | | | | | | | | V | | | | |
| Availability | | | | | | | | | | | ^ | | | | |
| Final PCN Issue Date | | | | | | | | | | | Х | | | | |



| Estimated | | | | | | | | Y |
|---------------------|--|--|--|--|--|--|--|---|
| Implementation Date | | | | | | | | ^ |

Method to Identify Change:

Traceability code

Qualification Report:

Please open the attachments included with this PCN labeled as PCN_#_Qual Report. **Revision History**:

November 28, 2019: Issued initial notification.

March 31, 2020: Issued final notification. Attached the qualification report. Corrected the package dimension from 5x5x0.9mm to 5x5x1.0mm on the subject and description. Updated affected CPN list in reference with CCB 3699.001 as additional scope of this change. Provided estimated first ship date to be on April 30, 2020. Updated subject and description to change from new to additional assembly site. Updated impacts to datasheet to add package outline drawing (POD) comparison and identify products that will be affected with each PODs.

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-28HGEW988_Qual_Report.pdf

Please contact your local <u>Microchip sales office</u> with questions or concerns regarding this notification.

Terms and Conditions:

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Affected Catalog Part Numbers (CPN)

ATA6624C-PGQW-1 ATA6622C-PGQW-1 ATA6626C-PGQW-1 ATA6630-GLQW ATA6628-GLQW