




Product/ Process Change Notification

| | |
|--|--|
| 1. PCN No.: | QPCN12002-2 |
| 2. Subject: | Vacuum Packing for Moisture Sensitive Products |
| 3. To: | Customers |
| 4. Issued by: | PMD PM |
| 5. Issue date: | 2012-05-18 |
| 6. Proposed first ship date for change: | 2012-06-21 |
| 7. Affected Product Identification | |
| Power Management Products with SMD (surface mount device) package type (see appendix A affect package type) | |
| 8. Change Description : (OLD Vs. NEW Comparison) | |
| Old: | New: |
| <p>➤ Anti-static bag</p>  | <p>➤ Vacuum Packing by aluminium bag</p>  |
| 9. Reason for Change: | |
| Enhancement for the shipping quality | |
| 10. Anticipated Impact: (form, fit, function, quality or reliability) | |
| 1. Data sheet: No Change 2. Reliability/performance: No Change 3. Packing code (order code): No Change 4. Inner construction: No Change | |
| 11. Qualification plan/result: | |
| Vacuum packing information list in appendix B. | |
| 12. Sample availability Date: | Please contact your regional Taiwan Semiconductor Sales office |
| 13. Tentative implementation date: | 2012-05-18 |
| 14. Remarks | |
| There will be no electrical effect and change to the products. | |
| 15. Customer feedback required latest: (should we receive no feedback; the change will be deemed as accepted!) | 2012-06-21 |
| 16. Approved by: |  |

Product/ Process Change Notification Customer Approval Form

(Please tick the field what is valid for you!)

| | |
|--------------------------|--|
| <input type="checkbox"/> | We agree with this proposed change and its schedule. |
| <input type="checkbox"/> | We have objections |
| <input type="checkbox"/> | We need more information: |
| <input type="checkbox"/> | We need sample: |
| Company: | |
| Name: | |
| Address: | |
| Signature: | <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 40%;"></div> <div style="width: 20%; text-align: center;">Date:</div> <div style="width: 40%;"></div> </div> |

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Appendix A

AFFECTED PACKAGE TYPE

| | | | |
|-----------------|-----------------|------------------|------------------|
| DFN 2x2 | MSOP-8 | SOT-23 | TO-252-3L |
| DFN 3x3 | SOP-8 | SOT-25 | TO-252-4L |
| QFN 4x4 | SOP-8-EP | SOT-25 | TO-252-5L |
| TDFN 2x2 | SOP-14 | SOT-26 | TO-263-3L |
| TDFN 3x3 | SOP-16 | SOT-89 | TO-263-5L |
| | TSSOP-8 | SOT-89-5L | |
| | | SOT-223 | |

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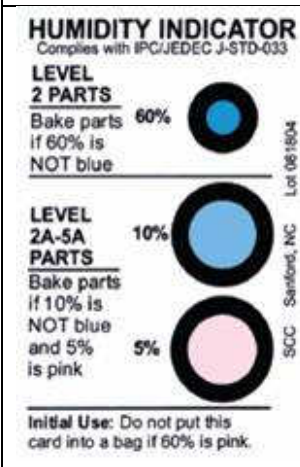
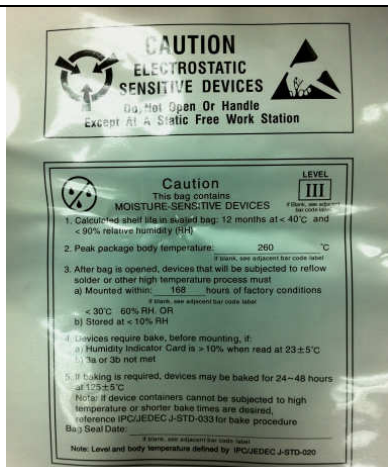
Appendix B

VACUUM PACKING INFORMATION

| No. | 項目 (Item) | 包裝材料/規格 (Packing Material / spec) |
|-----|---------------------------------|-----------------------------------|
| 1 | 捲盤 (Blue Lock Reel) | 13" |
| 2 | 承載帶 (Carrier Tape) | 導電材質 |
| 3 | 密封帶 (Cover Tape) | 熱封材質 (Hot Sealed) |
| 4 | 保護帶 (Protective Tape) | 導電材質 |
| 5 | 乾燥劑 (Drying Agent) | 20g~30g |
| 6 | 濕度指示卡 (Humidity indicator Card) | 3 or 6 點式 (3 / 6 dot) |
| 7 | 鋁箔袋 (Aluminum Bag) | 400*430*0.15 mm * |
| 8 | MSL標籤 (MSL Label) | 100*100 mm (+/- 10 mm) * |
| 9 | 披薩盒 (pizza box) | 345*345*50 mm (+/- 10 mm) * |
| 10 | 外箱 (Carton) | 380*360*310 mm (+/- 10 mm) * |

| No. | 項目 (Item) | 包裝材料/規格 (Packing Material / spec) |
|-----|---------------------------------|-----------------------------------|
| 1 | 捲盤 (Black Lock Reel) | 7" |
| 2 | 承載帶 (Carrier Tape) | 導電材質 |
| 3 | 密封帶 (Cover Tape) | 熱封材質 (Hot Sealed) |
| 4 | 保護帶 (Protective Tape) | 導電材質 (Conduct electricity) |
| 5 | 乾燥劑 (Drying Agent) | 10g~15 g |
| 6 | 濕度指示卡 (Humidity indicator Card) | 3 or 6 點式 (3 / 6 dot) |
| 7 | 鋁箔袋 (Aluminum Bag) | 239*225*0.15 mm * |
| 8 | MSL標籤 (MSL Label) | 100*100 mm (+/- 10 mm) * |
| 9 | 內箱 (Inner Box) | 185*185*85 mm (+/- 10 mm) * |
| 10 | 外箱 (Carton) | 380*320*390 mm (+/- 10 mm) * |

*尺寸為參考值 Reference Values

| ● HUMIDITY INDICATOR CARD | ● MSL LABEL |
|--|---|
|  <p>HUMIDITY INDICATOR Complies with IPC/JEDEC J-STD-033</p> <p>LEVEL 2 PARTS Bake parts if 60% is NOT blue</p> <p>LEVEL 2A-5A PARTS Bake parts if 10% is NOT blue and 5% is pink</p> <p>Initial Use: Do not put this card into a bag if 60% is pink.</p> <p>Lot 061804 Sanford, NC SCC</p> |  <p>CAUTION ELECTROSTATIC SENSITIVE DEVICES Do Not Open Or Handle Except At A Static Free Work Station</p> <p>Caution This bag contains MOISTURE SENSITIVE DEVICES</p> <ol style="list-style-type: none"> 1. Calculate shelf life in sealed bag: 12 months at < 40°C, and < 90% relative humidity (RH). 2. Peak package body temperature: 260 °C. (Furnace are subject for oven time) 3. After bag is opened, devices that will be subjected to reflow solder or other high temperature process must be mounted within 168 hours of factory conditions. <ul style="list-style-type: none"> a) If stored at < 30°C 60% RH, OR b) Stored at < 10% RH 4. Devices require bake, before mounting, if: <ul style="list-style-type: none"> a) Humidity Indicator Card is > 10% when read at 23±5°C b) 3a or 3b not met 5. If baking is required, devices may be baked for 24-48 hours at 125±5°C. <ul style="list-style-type: none"> Note: If device containers cannot be subjected to high temperature or shorter bake times are desired, reference IPC/JEDEC J-STD-033 for bake procedure <p>Bag Seal Date: _____</p> <p>Note: Level and body temperature defined by IPC/JEDEC J-STD-033</p> |

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