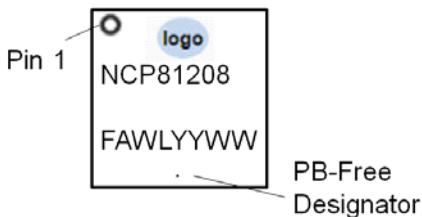




| <b>Title of Change:</b>                                                                                                                                                                                                                                                                                                                                                                                                    | Adding Advanced Semiconductor Engineering Shanghai as a qualified assembly site for NCP81208 products                                                                                                                                                                                                                                                                                                                                                          |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------|-----------------------------------|--------------|------------------------|--------------|-----------------------------|--------------|-----------------------|
| <b>Proposed first ship date:</b>                                                                                                                                                                                                                                                                                                                                                                                           | 13 March 2017                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Contact information:</b>                                                                                                                                                                                                                                                                                                                                                                                                | Contact your local ON Semiconductor Sales Office or <david.short@onsemi.com>                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Samples:</b>                                                                                                                                                                                                                                                                                                                                                                                                            | Contact your local ON Semiconductor Sales Office                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Additional Reliability Data:</b>                                                                                                                                                                                                                                                                                                                                                                                        | Contact your local ON Semiconductor Sales Office or <david.short@onsemi.com>.                                                                                                                                                                                                                                                                                                                                                                                  |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Type of notification:</b>                                                                                                                                                                                                                                                                                                                                                                                               | This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change.<br>ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.                                                                                                                              |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Change Part Identification:</b>                                                                                                                                                                                                                                                                                                                                                                                         | <p>ASE-SH assembled parts will have assembly site designator on the bottom line.</p>  <table border="1" data-bbox="453 1018 1177 1150"> <tr> <td><b>Trace Code Legend - Front</b></td><td> F: Fab Site<br/> A: Assembly Site<br/> WL: Wafer Lot Number<br/> YY: Year of Production, Last Two Numbers<br/> WW: Work Week Number </td></tr> </table> <p>For ASE-SH 'A' = AS</p> |  |  | <b>Trace Code Legend - Front</b> | F: Fab Site<br>A: Assembly Site<br>WL: Wafer Lot Number<br>YY: Year of Production, Last Two Numbers<br>WW: Work Week Number |              |                                   |              |                        |              |                             |              |                       |
| <b>Trace Code Legend - Front</b>                                                                                                                                                                                                                                                                                                                                                                                           | F: Fab Site<br>A: Assembly Site<br>WL: Wafer Lot Number<br>YY: Year of Production, Last Two Numbers<br>WW: Work Week Number                                                                                                                                                                                                                                                                                                                                    |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Change category:</b>                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____                                                                                                                                                                                                                                                                                        |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Change Sub-Category(s):</b>                                                                                                                                                                                                                                                                                                                                                                                             | <input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change<br><input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking<br><input type="checkbox"/> Other: _____                                                                                   |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Sites Affected:</b>                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) :<br><input checked="" type="checkbox"/> External Foundry/Subcon site(s)<br>Advanced Semiconductor Engineering<br>Shanghai                                                                                                                                                                                                      |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <b>Description and Purpose:</b>                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| Adding ASE-SH as another assembly site option for NCP81208. This will help ensure supply chain for all customers.                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| <table border="1" data-bbox="370 1722 1261 1917"> <thead> <tr> <th>Package Kit</th><th>Description</th></tr> </thead> <tbody> <tr> <td>1LF120000612</td><td>Lead Frame - QFN48 6x6 .4 Ag Ring</td></tr> <tr> <td>1EY010000063</td><td>Epoxy - HITACHI EN4900</td></tr> <tr> <td>1CW010000002</td><td>Wire - EX1 PD COPPER 0.8MIL</td></tr> <tr> <td>1EN020000639</td><td>Mold Compound - G631H</td></tr> </tbody> </table> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  | Package Kit                      | Description                                                                                                                 | 1LF120000612 | Lead Frame - QFN48 6x6 .4 Ag Ring | 1EY010000063 | Epoxy - HITACHI EN4900 | 1CW010000002 | Wire - EX1 PD COPPER 0.8MIL | 1EN020000639 | Mold Compound - G631H |
| Package Kit                                                                                                                                                                                                                                                                                                                                                                                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| 1LF120000612                                                                                                                                                                                                                                                                                                                                                                                                               | Lead Frame - QFN48 6x6 .4 Ag Ring                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| 1EY010000063                                                                                                                                                                                                                                                                                                                                                                                                               | Epoxy - HITACHI EN4900                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| 1CW010000002                                                                                                                                                                                                                                                                                                                                                                                                               | Wire - EX1 PD COPPER 0.8MIL                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |
| 1EN020000639                                                                                                                                                                                                                                                                                                                                                                                                               | Mold Compound - G631H                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |                                  |                                                                                                                             |              |                                   |              |                        |              |                             |              |                       |

**Reliability Data Summary:****NCP81208MNTXG & NCP81218MNTXG**

| Test     | Specification       | Condition                         | Interval | Results |
|----------|---------------------|-----------------------------------|----------|---------|
| PC       | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                    | -        | -       |
| PC+TC    | JESD22-A104         | Ta= -65°C to +150°C               | 500cyccs | 0/80    |
| PC+uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96hrs    | 0/80    |
| RSH      | JESD22- B106        | Ta = 265C, 10 sec                 | Post RSH | 0/30    |

**NCP81206MNTXG – Generic Reliability Data**

| Test     | Specification       | Condition                         | Interval | Results |
|----------|---------------------|-----------------------------------|----------|---------|
| HTOL     | JESD22-A108         | Ta=125°C, 100 % max rated Vcc     | 504hrs   | 0/240   |
| HTSL     | JESD22-A103         | Ta= 150°C                         | 1008hrs  | 0/240   |
| PC       | J-STD-020 JESD-A113 | MSL 1 @ 260 °C                    | -        | -       |
| PC+TC    | JESD22-A104         | Ta= -65°C to +150°C               | 500cyccs | 0/240   |
| PC+HAST  | JESD22-A110         | 130°C, 85% RH, 18.8psig, bias     | 96hrs    | 0/240   |
| PC+uHAST | JESD22-A118         | 130°C, 85% RH, 18.8psig, unbiased | 96hrs    | 0/240   |
| RSH      | JESD22- B106        | Ta = 265C, 10 sec                 | Post RSH | 0/90    |

**Electrical Characteristic Summary:** Electrical characteristics are not impacted.

**List of affected Standard Parts:**

| Part Number    | Qualification Vehicle                           |
|----------------|-------------------------------------------------|
| NCP81208MNTXG  | NCP81208MNTXG<br>NCP81218MNTXG<br>NCP81206MNTXG |
| NCP81208TMNTXG |                                                 |
| NCP81208AMNTXG |                                                 |