

**M/A-COM Technology Solutions Inc.**  
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July 1<sup>st</sup>, 2016

Digi-Key Corporation  
701 Brooks Ave South  
Thief River Falls, Minnesota 56701

ATTN: Quality/Purchasing Manager

**Subject: NPA1003QA manufacturer change**

**PCN #:** PCN-00890

Dear Valued Customer,

Please accept this letter as formal notification that MACOM Technology Solutions (MACOM) will switch NPA1003QA volume production to Azimuth Semiconductor Assembly located in Union City, California.

This is due to business status change of MACOM's existing manufacturer of NPA1003QA.

Comprehensive qualification tests have been planned and are currently on-going to warrant NPA1003QA manufactured in Azimuth Semiconductor Assembly meet MACOM's reliability requirements and this change have no effect in the form, fit, function, or reliability of NPA1003QA. Please refer to appendix for details of qualification tests.

According to current schedule, the proposed first ship date for NPA1003QA built by Azimuth Semiconductor Assembly will be August 15<sup>th</sup>, 2016. The final qualification data will also be available by that date.

You are receiving this notification because you have purchased NPA1003QA within past two years.

Should you have any questions or concerns in respect to this change please do not hesitate to contact me immediately for discussion.

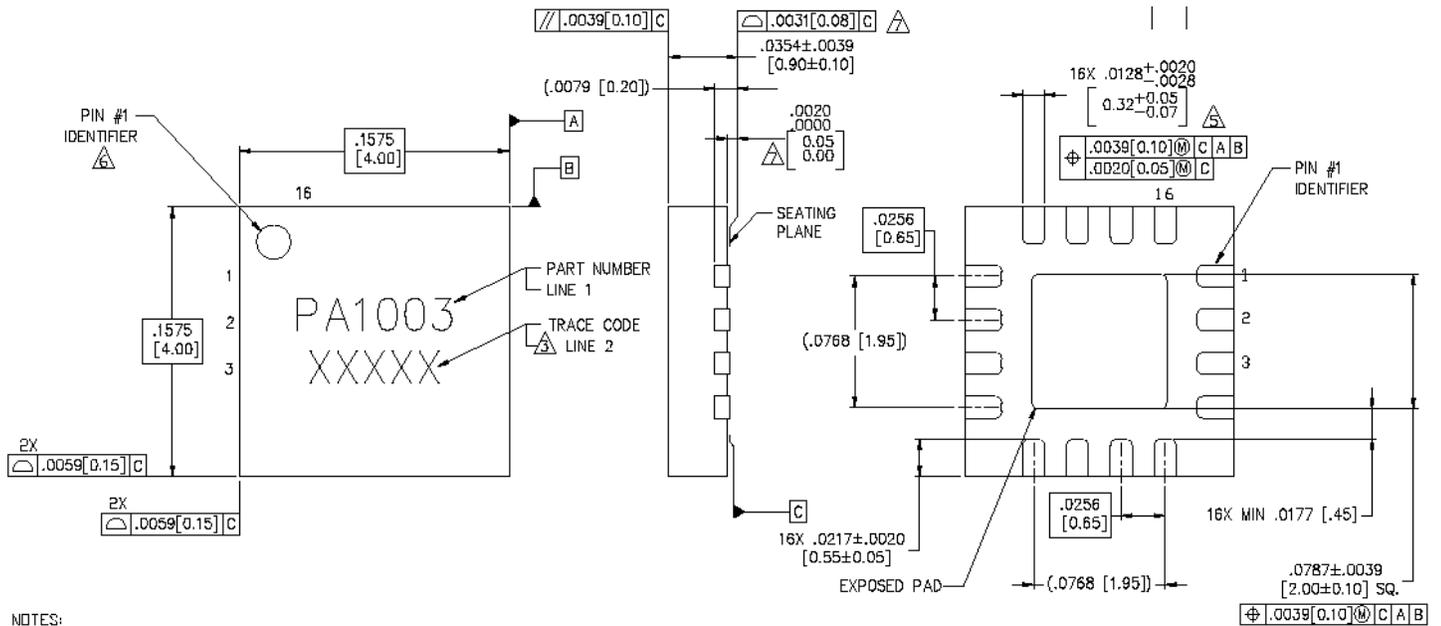
Sincerely,

**Zhuyi Wang**  
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### Qualification Test Plan

| Test  | Sample size                     | Conditions  |
|---|---------------------------------|---|
| Preconditioning<br>(JESD22-A113 )<br>(J-STD-020 )             | 120 (60 per lot<br>from 2 lots) | MSL 3<br>Bake 125°C 24Hrs<br>Moisture Soak 60°C, 60% RH, 52 Hours<br>3x Reflow                                    |
| Temperature Cycling<br>(JESD22-A104)                          | 40 (20 per lot<br>from 2 lots)  | Preconditioned<br>Condition C: -65°C to +150°C<br>Soak Mode 1<br>500 Cycles (Interim DC test after 100<br>cycles) |
| <u>uHAST</u><br>(JESD22-A118)                                 | 40 (20 per lot<br>from 2 lots)  | Preconditioned<br>130°C, 85%RH, 33.3psia, 96hrs   |
| High Temperature Storage Life<br>(JESD22-A103)                | 40 (20 per lot<br>from 2 lots)  | Preconditioned<br>150°C <u>Ambient Temperature</u><br>1000hrs   |
| Destructive Physical Analysis<br>(MIL-STD-883, Method 5009.1) | 6 (3 per lot from<br>2 lots)    | X-ray, C-SAM,<br>Visual inspection, Die shear,<br>Bond pull, <u>Solderability</u>                                 |

### Outline Drawing of NPA1003QA



NOTES: