

<b>PCN Number:</b>	20150821000A		<b>PCN Date:</b>	01/27/2016												
<b>Title:</b>	Qualification of ASESH as Additional Assembly Site for Select TSSOP Package Devices															
<b>Customer Contact:</b>	<a href="#">PCN Manager</a>	<b>Dept:</b>	Quality Services													
<b>Proposed 1<sup>st</sup> Ship Date:</b>	11/24/2015	<b>Estimated Sample Availability:</b>	Date Provided at Sample request													
<b>Change Type:</b>																
<input checked="" type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>												
<input type="checkbox"/>	Design	<input type="checkbox"/>	Electrical Specification	<input type="checkbox"/>												
<input checked="" type="checkbox"/>	Test Site	<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>												
<input type="checkbox"/>	Wafer Bump Site	<input type="checkbox"/>	Wafer Bump Material	<input type="checkbox"/>												
<input type="checkbox"/>	Wafer Fab Site	<input type="checkbox"/>	Wafer Fab Materials	<input type="checkbox"/>												
<b>PCN Details</b>																
<b>Description of Change:</b>																
Revision A is to update the description of change to provide correction on the material differences table and remove select devices in the Product Affected Section (with <del>strikethrough</del> ) and highlighted in yellow. These devices were inadvertently added and not affected by this change. We apologize for any inconvenience this may have caused.																
Qualification of ASESH as Additional Assembly Site for Select TSSOP Package Devices. Assembly differences are shown in the following table:																
<table border="1"> <thead> <tr> <th>Assembly Site</th> <th>Assembly Site Origin</th> <th>Assembly Country Code</th> <th>Assembly Site City</th> </tr> </thead> <tbody> <tr> <td>TI Malaysia</td> <td>MLA</td> <td>MY</td> <td>Kuala Lumpur</td> </tr> <tr> <td><b>ASESH</b></td> <td><b>ASH</b></td> <td><b>CN</b></td> <td><b>Shanghai</b></td> </tr> </tbody> </table>					Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City	TI Malaysia	MLA	MY	Kuala Lumpur	<b>ASESH</b>	<b>ASH</b>	<b>CN</b>	<b>Shanghai</b>
Assembly Site	Assembly Site Origin	Assembly Country Code	Assembly Site City													
TI Malaysia	MLA	MY	Kuala Lumpur													
<b>ASESH</b>	<b>ASH</b>	<b>CN</b>	<b>Shanghai</b>													
<b>Material Differences:</b>																
	<b>TI Malaysia</b>	<b>ASESH</b>														
Mount Compound	4042500	EY1000063														
Mold Compound	4206193	EN2000507														
Lead Finish	NiPdAu	Matte Sn														
Upon expiration of this PCN, TI will combine lead free solutions in a single <u>standard part number</u> , for example; <u>CDCV304PW</u> - can ship with both Matte Sn and NiPdAu. When available customers may specify NiPdAu finish by ordering the part with the G4 suffix, e.g. <b>CDCV304PWG4.</b>																
<b>Reason for Change:</b>																
Continuity of Supply																
<b>Anticipated impact on Form, Fit, Function, Quality or Reliability (positive / negative):</b>																
None																
<b>Changes to product identification resulting from this PCN:</b>																

Assembly Site			
TI Malaysia	Assembly Site Origin (22L)	ASO: MLA	ECAT: G4
ASESH	Assembly Site Origin (22L)	ASO: ASH	ECAT: G3

Sample product shipping label (not actual product label)

ECAT: G4 = NiPdAu  
 ECAT: G3 = Matte Sn

ASSEMBLY SITE CODES: TI Malaysia =K, ASESH = A

**Product Affected:**

CDCV304PW	CDCV304PWG4	CDCV304PWR	CDCV304PWRG4
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# Qualification Report

## CDCV304PW: Qualification of alternative Assembly Site (ASESH)

### Product Attributes

Attributes	Qual Device: CDCV304
Assembly Site	ASE SHANGHAI (ASESH)
Package Family	TSSOP
Flammability Rating	UL 94 V-0
Wafer Fab Site	ANAM (DONGBU)
Wafer Fab Process	33C10

- QBS: Qual By Similarity
- Qual Device CDCV304 is qualified at LEVEL1-260C

### Qualification Results

Data Displayed as: Number of lots / Total sample size / Total failed

Type	Test Name / Condition	Duration	Qual Device: CDCV304
PC	PreCon Level 1	25C	1/280/0
AC	Autoclave 121C	96 Hours	1/80/0
TC	Temperature Cycle, -65/150C	500 Cycles	1/80/0
HTSL	High Temp Storage Bake 150C	1000 Hours	1/80/0
MQ	Manufacturability	(per mfg. Site specification)	Pass
ED	Electrical Characterization	Per Datasheet Parameters	1/Pass

- Preconditioning was performed for Autoclave, Unbiased HAST, THB/Biased HAST, Temperature Cycle, Thermal Shock, and HTSL, as applicable

- The following are equivalent HTOL options based on an activation energy of 0.7eV : 125C/1k Hours, 140C/480 Hours, 150C/300 Hours, and 155C/240 Hours
  - The following are equivalent HTSL options based on an activation energy of 0.7eV : 150C/1k Hours, and 170C/420 Hours
  - The following are equivalent Temp Cycle options per JESD47 : -55C/125C/700 Cycles and -65C/150C/500 Cycles
- Quality and Environmental data is available at TI's external Web site: <http://www.ti.com/>

#### Green/Pb-free Status:

Qualified Pb-Free(SMT) and Green

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	<a href="mailto:PCNAmericasContact@list.ti.com">PCNAmericasContact@list.ti.com</a>
Europe	<a href="mailto:PCNEuropeContact@list.ti.com">PCNEuropeContact@list.ti.com</a>
Asia Pacific	<a href="mailto:PCNAsiaContact@list.ti.com">PCNAsiaContact@list.ti.com</a>
Japan	<a href="mailto:PCNJapanContact@list.ti.com">PCNJapanContact@list.ti.com</a>