ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN21818X
Issue Date: 4 August 2017

Title of Change:	Qualify ASEKS as alternative site for assembly and test of SOIC8 devices to include changes to molding compound, leadframe, & die attach.
Proposed first ship date:	10 November 2017 or earlier upon customer approval
Contact information:	Contact your local ON Semiconductor Sales Office or < Jack.Cartwright@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Phine.Guevarra@onsemi.com>
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. 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>.
Change Part Identification:	Affected products will be identified with assembly site trace code to "AK".
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☒ Test Change ☐ Other _____

Change Sub-Category(s):

☒ Manufacturing Site Change/Addition
☐ Manufacturing Process Change
☒ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: _____

Sites Affected:

☐ All site(s) ☐ not applicable ☐ ON Semiconductor site(s) :

☒ External Foundry/Subcon site(s)
Advanced Semiconductor Engineering Kunshan

Description and Purpose:

This FPCN is announcing the Qualification of Advance Semiconductor Engineering Kunshan (ASEKS) as an alternative site for assembly and test to increase capacity of SOIC8 devices with changes on the following:

	Before Change	After Change
	Description	**Description**
Leadframe	*Ag Spotted lead frame 65 x 65 mils*	*Ag Spotted lead frame 70 x 73.4 mils*
Mold Compound	*G600*	*CEL9240*
Die Attach	*CRM-1076WB*	*EN4900*

Reliability Data Summary:

IC PCN FORMAT TEMPLATE

QV DEVICE NAME: NCP1607BDR2G/ NCP1608BDR2G
RMS: O38466/O38467
PACKAGE: SOIC 8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/80
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/80
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/80
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/80
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/240
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

IC PCN FORMAT TEMPLATE

QV DEVICE NAME: NCP1252ADR2G
RMS: O38465
PACKAGE: SOIC 8

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008hrs	0/114
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/80
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/80
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	3 cyc	0/160
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30

Electrical Characteristic Summary:

Electrical characteristics are not impacted.

List of affected Standard Parts:

Part Number	Qualification Vehicle
NCP1252ADR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1252BDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1252CDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1252DDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1252EDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1607BDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCP1608BDR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCL30000DR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G
NCL30002DR2G	NCP1252ADR2G/NCP1607BDR2G/NCP16608BDR2G