



Final Product/Process Change Notification

Document # : FPCN21520XA

Issue Date: 9 January 2017

Title of Change:	Qualification of AFSM (Aizu Fujitsu Semiconductor Manufacturing) located in Aizuwakamatsu, Japan as Wafer Fab for processing ONC25 Technology.
Proposed first ship date:	10 April 2017 Or earlier upon customer approval
Contact information:	Contact your local ON Semiconductor Sales Office or <alan.garlington@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <tomas.vajter@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:	Shipments made after workweek 3 – 2017 may contain die sourced from either the AFSM Fab or the Gresham Fab. This can be found in the device date code.
Change category:	<input checked="" type="checkbox"/> Wafer Fab Change <input type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____
Change Sub-Category(s):	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Manufacturing Process Change </div> <div style="width: 33%;"> <input type="checkbox"/> Material Change <input type="checkbox"/> Product specific change </div> <div style="width: 33%;"> <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____ </div> </div>
Sites Affected:	<input type="checkbox"/> All site(s) <input type="checkbox"/> not applicable <input type="checkbox"/> ON Semiconductor site(s) : <input checked="" type="checkbox"/> External Foundry/Subcon site(s) AFSM (Aizu Fujitsu Semiconductor Manufacturing) Aizu, Japan
Description and Purpose:	<p>The AFSM (Aizu Fujitsu Semiconductor Manufacturing) Wafer Fab located at Aizuwakamatsu, Japan has been qualified to process the ONC25 CMOS process. The exact same process technology has been transferred as is currently running in the ON Semiconductor Wafer fab located at Gresham, Oregon, US. Tool sets are different but the exact same masking layers and steps are being used in the AFSM Fab.</p> <p>This is a capacity expansion to supplement the existing ON semiconductor wafer fab. The parts being qualified are dual sourced and may be processed at either wafer fab in the future.</p> <p>Additional part families will be announced in a future PCN once qualifications of those parts are completed.</p> <p>This PCN will apply to future Regulator output voltage versions of the part families listed below.</p>

**Reliability Data Summary:**

QV DEVICE NAME: NCP160/1BFCSxxxT2G
NCP160/1BFCTxxxT2G NCP160/1A/BMXxxxTBG

PACKAGE:

FCDCA Bump

XDFN4 LDSS 1*1*.4mm PPF

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc = 6v	1008 hrs	0/336
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/251
TC	JESD22-A104	Ta= -40°C to +125°C	1000 cyc	0/334
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/336
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/336
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		Pass
ESD	JEDEC Electrostatic Discharge	HBM MM	2 KV 200v	0/6 0/6
LU	AEC 300	Latch Up		0/ 6

Electrical Characteristic Summary:

There is no change to any Electrical Parameter. All Data Sheet specifications remain the same.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
NCP114ASN120T1G	NCP160/1BFCSxxxT2G NCP160/1BFCTxxxT2G NCP160/1A/BMXxxxTBG
NCP114ASN180T1G	
NCP114ASN250T1G	
NCP114ASN260T1G	
NCP114ASN270T1G	
NCP114ASN280T1G	
NCP114ASN290T1G	
NCP114ASN300T1G	
NCP114ASN330T1G	