



Title of Change:	Qualification of AFSM (Aizu Fujitsu Semiconductor Manufacturing) located in Aizuwakatmatsu, Japan as Wafer Fab for processing ONC25 Technology – Phase 1
Proposed first ship date:	9 February 2017 <i>or earlier upon customer approval.</i>
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):	<input checked="" type="checkbox"/> Manufacturing Site Change/Addition <input type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input type="checkbox"/> Other: _____
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) <u>AFSM (Aizu Fujitsu Semiconductor Manufacturing) Wafer Fab, Aizu, Japan</u>
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.</p> <p>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
NCP103AMX090TCG	NCP160/1BFCSxxxT2G NCP160/1BFCTxxxT2G NCP160/1A/BMXxxxTBG
NCP103AMX100TCG	
NCP103AMX105TCG	
NCP103AMX110TCG	
NCP103AMX125TCG	
NCP103AMX150TCG	
NCP103AMX160TCG	
NCP103AMX180TCG	
NCP103AMX185TCG	
NCP103AMX210TCG	
NCP103AMX220TCG	
NCP103AMX240TCG	
NCP103AMX260TCG	



NCP103AMX270TCG	
NCP103AMX285TCG	
NCP103AMX300TCG	
NCP103AMX310TCG	
NCP103AMX330TCG	
NCP103AMX345TCG	
NCP103AMX350TCG	
NCP103AMX360TCG	
NCP103BMX250TCG	
NCP114AMX075TCG	
NCP114AMX090TCG	
NCP114AMX100TCG	
NCP114AMX105TCG	
NCP114AMX110TBG	
NCP114AMX110TCG	
NCP114AMX115TCG	
NCP114AMX120TBG	
NCP114AMX120TCG	
NCP114AMX125TCG	
NCP114AMX130TCG	
NCP114AMX135TCG	
NCP114AMX150TCG	
NCP114AMX160TCG	
NCP114AMX180TBG	
NCP114AMX180TCG	
NCP114AMX185TCG	
NCP114AMX210TCG	
NCP114AMX220TCG	
NCP114AMX240TCG	
NCP114AMX250TBG	
NCP114AMX250TCG	
NCP114AMX260TCG	
NCP114AMX270TCG	
NCP114AMX280TBG	
NCP114AMX280TCG	
NCP114AMX285TCG	
NCP114AMX300TCG	
NCP114AMX310TBG	
NCP114AMX310TCG	
NCP114AMX320TCG	
NCP114AMX330TBG	
NCP114AMX330TCG	

NCP160/1BFCSxxxT2G
 NCP160/1BFCTxxxT2G
 NCP160/1A/BMXxxxTBG



NCP114AMX345TCG	
NCP114AMX350TCG	
NCP114AMX360TCG	
NCP114BMX075TCG	
NCP114BMX100TCG	
NCP114BMX120TCG	
NCP114BMX150TCG	
NCP114BMX180TCG	
NCP114BMX250TCG	
NCP114BMX280TCG	
NCP114BMX300TCG	
NCP114BMX330TCG	
NCP114BSN330T1G	
NCP160AFCS250T2G	
NCP160AFCS280T2G	
NCP160AFCS2925T2G	
NCP160AFCS320T2G	
NCP160AFCS330T2G	
NCP160AFCS350T2G	
NCP160AFCS370T2G	
NCP160AFCS450T2G	
NCP160AFCS500T2G	
NCP160AFCS514T2G	
NCP160AFCT250T2G	
NCP160AFCT280T2G	
NCP160AFCT330T2G	
NCP160AFCT350T2G	
NCP160AFCT450T2G	
NCP160AFCT500T2G	
NCP160AFCT514T2G	
NCP160AMX250TBG	
NCP160AMX275TBG	
NCP160AMX280TBG	
NCP160AMX290TBG	
NCP160AMX310TBG	
NCP160AMX320TBG	
NCP160AMX330TBG	
NCP160AMX350TBG	
NCP160AMX450TBG	
NCP160AMX500TBG	
NCP160AMX514TBG	
NCP160BFCS180T2G	
NCP160BFCS250T2G	

NCP160/1BFCSxxxT2G
 NCP160/1BFCTxxxT2G
 NCP160/1A/BMXxxxTBG



NCP160BFCS280T2G	NCP160/1BFCSxxxT2G NCP160/1BFCTxxxT2G NCP160/1A/BMXxxxTBG
NCP160BFCS285T2G	
NCP160BFCS2925T2G	
NCP160BFCS300T2G	
NCP160BFCS330T2G	
NCP160BFCS350T2G	
NCP160BFCS450T2G	
NCP160BFCS500T2G	
NCP160BFCS514T2G	
NCP160BFCT180T2G	
NCP160BFCT250T2G	
NCP160BFCT280T2G	
NCP160BFCT285T2G	
NCP160BFCT300T2G	
NCP160BFCT330T2G	
NCP160BFCT350T2G	
NCP160BFCT450T2G	
NCP160BFCT500T2G	
NCP160BFCT514T2G	
NCP160BMX180TBG	
NCP160BMX1825TBG	
NCP160BMX250TBG	
NCP160BMX275TBG	
NCP160BMX280TBG	
NCP160BMX285TBG	
NCP160BMX300TBG	
NCP160BMX330TBG	
NCP160BMX350TBG	
NCP160BMX450TBG	
NCP160BMX500TBG	
NCP160BMX514TBG	
NCP161AFCS250T2G	
NCP161AFCS280T2G	
NCP161AFCS320T2G	
NCP161AFCS350T2G	
NCP161AFCS450T2G	
NCP161AFCS500T2G	
NCP161AFCS514T2G	
NCP161AFCT185T2G	
NCP161AFCT250T2G	
NCP161AFCT280T2G	
NCP161AFCT350T2G	
NCP161AFCT450T2G	



NCP161AFCT500T2G	NCP160/1BFCSxxxT2G NCP160/1BFCTxxxT2G NCP160/1A/BMXxxxT2G
NCP161AFCT514T2G	
NCP161AMX250TBG	
NCP161AMX280TBG	
NCP161AMX320TBG	
NCP161AMX350TBG	
NCP161AMX450TBG	
NCP161AMX500TBG	
NCP161AMX514TBG	
NCP161BFCS250T2G	
NCP161BFCS280T2G	
NCP161BFCS285T2G	
NCP161BFCS350T2G	
NCP161BFCS450T2G	
NCP161BFCS500T2G	
NCP161BFCS514T2G	
NCP161BFCT250T2G	
NCP161BFCT280T2G	
NCP161BFCT285T2G	
NCP161BFCT350T2G	
NCP161BFCT450T2G	
NCP161BFCT500T2G	
NCP161BFCT514T2G	
NCP161BMX250TBG	
NCP161BMX280TBG	
NCP161BMX285TBG	
NCP161BMX350TBG	
NCP161BMX450TBG	
NCP161BMX500TBG	
NCP161BMX514TBG	