



Title of Change:	Qualification of ON Semiconductor in Tarlac City, Philippines (SSMP) site for XDFN Package devices.
Proposed first ship date:	4 February 2016 <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 <Lalan.ortega@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:	Assembly site location can be identified by the unique Part number marking.
Change category:	<input type="checkbox"/> Wafer Fab Change <input checked="" 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 checked="" type="checkbox"/> ON Semiconductor site(s) : (SSMP) ON Tarlac City, Philippines <input type="checkbox"/> External Foundry/Subcon site(s)
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Description and Purpose:
The ON Semiconductor factory SSMP, located in Tarlac, Philippines has been qualified for the Assembly and testing of XDFN packaged devices. This location is an expansion of capacity which will supplement other existing DFN/QFN capacities.

Reliability Data Summary:

QV DEVICE NAME: NCP752AMX28TCG
PACKAGE: XDFN6 1.5x1.5mm PBF

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/239
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/252
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		
SD	JSTD002	Ta = 245C, 10 sec		0/45

QV DEVICE NAME: NCP154MX180280TAG
PACKAGE: XDFN8 1.2x1.6mm PBF

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/252
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/252
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/252
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/252
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/252
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		
SD	JSTD002	Ta = 245C, 10 sec		0/45



QV DEVICE NAME: NTNS3A67PZT5G

PACKAGE: XDFN 3 1*.6*.4MM PBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/168
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/168
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/200
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/168
AC	JESD22-A118	121°C, 100% RH, 15psig, unbiased	96 hrs	0/168
PC	J-STD-020, JESD-A113	MSL 1 @ 260 °C		0/368
SAT		Compare before and after Preconditioning		0/20
DPA	AEC Q101	Compare to AEC Criteria	500 cyc TC	0/5
			96 hrs HAST	0/5
SD	JSTD002	Ta = 245C, 10 sec		0/30
PD	JESD22-B100B	Per case outline		0/30

QV DEVICE NAME: NTNS3166NZT5G

PACKAGE: XDFN 3 1*.6*.4MM PBF

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/168
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/168
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/200
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/168
AC	JESD22-A118	121°C, 100% RH, 15psig, unbiased	96 hrs	0/168
PC	J-STD-020, JESD-A113	MSL 1 @ 260 °C		0/368
SAT		Compare before and after Preconditioning		0/20
DPA	AEC Q101	Compare to AEC Criteria	500 cyc TC	0/5
			96 hrs HAST	0/5
SD	JSTD002	Ta = 245C, 10 sec		0/30
PD	JESD22-B100B	Per case outline		0/30

Electrical Characteristic Summary:

Electrical characteristics are not impacted by the new SSMP location.



List of Affected Standard Parts:

Part Number		Qualification Vehicle
NCP120AMX080TCG	NCP152MX300180TCG	NCP752AMX28TCG, NCP154MX180280TAG
NCP120AMX105TCG	NCP152MX300280TCG	
NCP120AMX110TCG	NCP152MX300300TCG	
NCP120AMX115TCG	NCP152MX330180TCG	
NCP120AMX120TCG	NCP152MX330280TCG	
NCP120AMX150TCG	NCP152MX330300TCG	
NCP120AMX180TCG	NCP152MX330330TCG	
NCP120AMX210TCG	NCP154MX100180TAG	
NCP120BMX080TCG	NCP154MX150280TAG	
NCP120BMX105TCG	NCP154MX180270TAG	
NCP120BMX110TCG	NCP154MX180280TAG	
NCP120BMX115TCG	NCP154MX180290TAG	
NCP120BMX120TCG	NCP154MX180300TAG	
NCP120BMX150TCG	NCP154MX280270TAG	
NCP120BMX180TCG	NCP154MX280280TAG	
NCP120BMX210TCG	NCP154MX300180TAG	
NCP121AMX140TCG	NCP154MX300300TAG	
NCP121AMX145TCG	NCP154MX310310TAG	
NCP121AMX160TCG	NCP154MX330180TAG	
NCP121AMX165TCG	NCP154MX330280TAG	
NCP121AMX170TCG	NCP154MX330285TAG	
NCP121AMX173TCG	NCP154MX330300TAG	
NCP121AMX175TCG	NCP154MX330330TAG	
NCP121AMX185TCG	NCP160AMX180TBG	
NCP130AMX080TCG	NCP160AMX250TBG	
NCP130AMX105TCG	NCP160AMX280TBG	
NCP130AMX110TCG	NCP160AMX300TBG	
NCP130AMX115TCG	NCP160AMX320TBG	
NCP130AMX120TCG	NCP160AMX330TBG	
NCP130AMX150TCG	NCP160AMX350TBG	
NCP130AMX180TCG	NCP160AMX450TBG	
NCP130AMX210TCG	NCP160AMX500TBG	
NCP130BMX080TCG	NCP160AMX514TBG	
NCP130BMX110TCG	NCP160BMX180TBG	
NCP130BMX115TCG	NCP160BMX250TBG	
NCP130BMX120TCG	NCP160BMX280TBG	
NCP130BMX150TCG	NCP160BMX285TBG	
NCP130BMX180TCG	NCP160BMX300TBG	
NCP130BMX210TCG	NCP160BMX330TBG	



NCP133AMX090TCG	NCP160BMX350TBG	NCP752AMX28TCG, NCP154MX180280TAG
NCP133AMX100TCG	NCP160BMX450TBG	
NCP133AMX105TCG	NCP160BMX500TBG	
NCP133AMX110TCG	NCP160BMX514TBG	
NCP133AMX115TCG	NCP161AMX180TBG	
NCP133AMX120TCG	NCP161AMX250TBG	
NCP133AMX125TCG	NCP161AMX280TBG	
NCP133AMX130TCG	NCP161AMX285TBG	
NCP133AMX150TCG	NCP161AMX300TBG	
NCP133AMX180TCG	NCP161AMX330TBG	
NCP133AMXADJTCG	NCP161AMX350TBG	
NCP133BMXADJTCG	NCP161AMX450TBG	
NCP152MX150280TCG	NCP161AMX500TBG	
NCP152MX180150TCG	NCP161AMX514TBG	
NCP152MX180280TCG	NCP161BMX180TBG	
NCP152MX280120TCG	NCP161BMX250TBG	
NCP152MX280180TCG	NCP161BMX280TBG	
NTNS3A65PZT5G	NCP161BMX285TBG	
NCP161BMX300TBG	NCP707CMX185TCG	
NCP161BMX330TBG	NCP707CMX250TCG	
NCP161BMX350TBG	NCP707CMX280TCG	
NCP161BMX450TBG	NCP707CMX285TCG	
NCP161BMX500TBG	NCP707CMX310TCG	
NCP161BMX514TBG	NCP707CMX320TCG	
NCP170AMX120TCG	NCP707CMX330TCG	
NCP170AMX150TCG	NCP715MX12TBG	
NCP170AMX180TCG	NCP715MX15TBG	
NCP170AMX190TCG	NCP715MX18TBG	
NCP170AMX250TCG	NCP715MX25TBG	
NCP170AMX280TCG	NCP715MX30TBG	
NCP170AMX285TCG	NCP715MX33TBG	
NCP170AMX300TCG	NCP715MX50TBG	
NCP170AMX330TCG	NCP717AMX150TCG	
NCP170AMX360TCG	NCP717AMX180TCG	
NCP170BMX120TCG	NCP717AMX185TCG	
NCP170BMX150TCG	NCP717AMX190TCG	
NCP170BMX250TCG	NCP717AMX250TCG	
NCP170BMX280TCG	NCP717AMX280TCG	
NCP170BMX285TCG	NCP717AMX285TCG	



NCP170BMX300TCG	NCP717AMX300TCG	NCP752AMX28TCG, NCP154MX180280TAG
NCP702MX18TCG	NCP717AMX310TCG	
NCP702MX28TCG	NCP717AMX330TCG	
NCP702MX30TCG	NCP717BMX150TCG	
NCP702MX33TCG	NCP717BMX180TCG	
NCP703MX18TCG	NCP717BMX185TCG	
NCP703MX28TCG	NCP717BMX190TCG	
NCP703MX30TCG	NCP717BMX250TCG	
NCP703MX33TCG	NCP717BMX280TCG	
NCP706ABMX300TAG	NCP717BMX285TCG	
NCP706AMX300TAG	NCP717BMX300TCG	
NCP706BMX300TAG	NCP717BMX310TCG	
NCP706MX21TAG	NCP717BMX330TCG	
NCP706MX22TAG	NCP717CMX150TCG	
NCP706MX295TAG	NCP717CMX180TCG	
NCP706MX300TAG	NCP717CMX185TCG	
NCP707AMX150TCG	NCP717CMX190TCG	
NCP707AMX180TCG	NCP717CMX220TCG	
NCP707AMX185TCG	NCP717CMX250TCG	
NCP707AMX250TCG	NCP717CMX280TCG	
NCP707AMX280TCG	NCP717CMX285TBG	
NCP707AMX285TCG	NCP717CMX285TCG	
NCP707AMX300TCG	NCP717CMX300TCG	
NCP707AMX310TCG	NCP717CMX310TCG	
NCP707AMX330TCG	NCP717CMX320TCG	
NCP707BMX150TCG	NCP717CMX330TCG	
NCP707BMX180TCG	NCP752AMX18TCG	
NCP707BMX185TCG	NCP752AMX28TCG	
NCP707BMX250TCG	NCP752AMX30TCG	
NCP707BMX280TCG	NCP752AMX33TCG	
NCP707BMX285TCG	NCP752BMX18TCG	
NCP707BMX300TCG	NCP752BMX28TCG	
NCP707BMX310TCG	NCP752BMX30TCG	
NCP707BMX330TCG	NCP752BMX33TCG	
NCP707CMX150TCG	NTNS3164NZT5G	
NCP707CMX180TCG	NTNS3166NZT5G	
NTNS3A67PZT5G		