

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #20776Z

Generic Copy

Issue Date: 18-Feb-2015

<u>TITLE:</u> Initial Notification of ASE-SH Qualification for Assembly of the 32, 48 and 100 Lead LQFP packages.

PROPOSED FIRST SHIP DATE: 18-Feb-2016

AFFECTED CHANGE CATEGORY(S): ON Semiconductor Assembly

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 16 months prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 12 months prior to implementation of the change.

DESCRIPTION AND PURPOSE:

This is an Initial Product Change Notice to make customers aware that ASE-SH, located in Shanghai, China is being qualified as a supplemental assembly source for ON Semiconductor's 32, 48 and 100pin LQFP packages. The devices listed on this IPCN have historically been assembled at the Unisem located in Batam, Indonesia.

Device parameters will continue to meet all Datasheet specifications, and reliability will meet or exceed ON Semiconductor established standards. Upon expiration of the FINAL PCN, the affected devices may be processed at either location depending on capacity requirements.



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QUALIFICATION PLAN:

The 62274-001, NCV7517BFTR2G, NB3V8312CFAR2G and MC100EP809FAG products will be chosen as the qualification vehicles for this qualification. All reliability testing is expected to be completed by 19-Jun-2015.

Reliability Test	Specification	Comment
Moisture Preconditioning (PC)	J-STD-020 & JESD22-A113	Moisture Soak (MSL = 2) Solder Reflow (3x @ 260°C)
Delamination check (SAT)	J-STD-020	Acoustic Microscopy
HAST Unbiased (UHST)	JESD22-A118	110°C/ 85%RH for 264 hrs
Preconditioning Temperature Cycling (TC)	JESD22-A104	-55°C to 125°C for 100 cycles
Temperature Cycling (TC)	JESD22-A104	-65°C to 150°C for 500 cycles
HAST Biased (HST)	JESD22- A110	130°C to 85°C for 96 hrs
High Temperature Storage (HTS)	JESD22-A103	150°C for 1000 hrs
High Temperature Operating Life (HTOL)	JESD22-A108	125°C for 408 hrs
Early Life Failure Rate ; Burn-in (ELFR)	AEC-Q100-008	Ta = 125°C for 48 hrs
Wire Bond Shear (WBS)	AEC-Q100-001	
Wire Bond Pull Strength (WBP)	MIL- STD883 Method 2011	
Solderability (SD)	JESD22-B102	
Physical Dimensions (PD)	JESD22-B102& JESD22-B108	

List of Affected General Parts:

NCV7513BFTR2G NCV7517BFTR2G