



Title of Change:	Addition of Backside Laminate (BSL) and Qualification of Alternative Manufacturing Sites for FAN48610UC50X	
Proposed First Ship date:	24 November 2018	
Contact Information:	Contact your local ON Semiconductor Sales Office or <todd.manes@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office or <PCN.Samples@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change.	
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. IPCNs are typically issued 30 days prior to the issuance of the Final Change Notice (FPCN). An IPCN is an 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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>	
Change Part Identification:	Affected products will be identified by date code (to be defined upon publication of Final PCN)	
Change Category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other _____	
Change Sub-Category(s):	☒ Manufacturing Site Addition ☒ Material Change ☐ Datasheet/Product Doc change ☐ Manufacturing Site Transfer ☐ Product specific change ☐ Shipping/Packaging/Marking ☒ Manufacturing Process Change ☐ Other: _____	
Sites Affected:	ON Semiconductor Sites: OSPI - Cebu	External Foundry/Subcon Sites: Amkor Taiwan, ASE-Kaoshiung
Description and Purpose: ON Semiconductor announces two changes affecting FAN48610UC50X: 1. Qualification of a 2nd source manufacturing flow. As indicated in the table below, the device is currently qualified for bump, test, and die sales (saw/T&R/packing) operations in Amkor-Taiwan. Upon expiration or customer approval of the Final PCN, this part will also be qualified for bump at ASE-Kaoshiung and Die Sales operations at OSPI-Cebu (Philippines). No change to the wafer fab or fab process. 2. Upon expiration or customer approval of the Final PCN, the FAN48610UC50X will be produced using Backside Laminate (BSL). Note that there will be no changes to the overall package dimensions.		
	Before Change Description	After Change Description
<i>Manufacturing Flow</i>	Wafer Fab (TSMC) → Bump (Amkor TWN) → Probe (Amkor TWN) → Saw/T&R/Pack (Amkor TWN)	Wafer Fab (TSMC) → Bump (Amkor TWN *OR* ASE-K) → Probe (Amkor TWN *OR* OSPI-Cebu Phil) → Saw/T&R/Pack (Amkor TWN *OR* OSPI-Cebu Phil)
<i>Other Changes</i>	No Backside Laminate (BSL)	With Backside Laminate (BSL)
There is no product marking change as a result of this change		

**Qualification Plan:**

The changes announced in this PCN are already qualified by similarity to other existing devices already in production.

- For Amkor:

QV DEVICE NAME FAN48680UC08X

RMS F20150542A

PACKAGE 567QW (9-ball WLCSP 3x3)

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	3 cycles	0/693
PD	JESD22-B100	--	--	0/60
Steam Aging Solderability	JESD-B100	Condition C / Condition B (245C)	8 hours 5 sec	0/33

- For ASE-Cebu

QV DEVICE NAME FAN48614BUC50X

RMS F20140263

PACKAGE 567QW (9-ball WLCSP 3x3)

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -40°C to +125°C	850 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, 0V	264 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	3 cycles	0/693
PD	JESD22-B100	--	--	0/60
Steam Aging Solderability	JESD-B100	Condition C / Condition B (245C)	8 hours 5 sec	0/33

Estimated date for qualification completion: 24 August 2018

List of Affected Parts:

Part Number	Qualification Vehicle
FAN48610UC50X	FAN48610UC50X/ FAN48680UC08X