



<b>Title of Change:</b>	Addition of Backside Laminate (BSL) and Qualification of Alternative Manufacturing Sites for FAN48610UC50X	
<b>Proposed first ship date:</b>	27 May 2019	
<b>Contact information:</b>	Contact your local ON Semiconductor Sales Office or <steve.frost@onsemi.com>	
<b>Samples:</b>	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.	
<b>Additional Reliability Data:</b>	Contact your local ON Semiconductor Sales Office or <pete.moberg@onsemi.com>	
<b>Type of notification:</b>	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>	
<b>Change Part Identification:</b>	Affected products will be identified by date code	
<b>Change Category:</b>	<input type="checkbox"/> Wafer Fab Change <input checked="" type="checkbox"/> Assembly Change <input type="checkbox"/> Test Change <input type="checkbox"/> Other _____	
<b>Change Sub-Category(s):</b>	<input checked="" type="checkbox"/> Manufacturing Site Addition <input checked="" type="checkbox"/> Material Change <input type="checkbox"/> Datasheet/Product Doc change <input type="checkbox"/> Manufacturing Site Transfer <input type="checkbox"/> Product specific change <input type="checkbox"/> Shipping/Packaging/Marking <input checked="" type="checkbox"/> Manufacturing Process Change <input type="checkbox"/> Other: _____	
<b>Sites Affected:</b>	ON Semiconductor Sites: ON Cebu, Philippines	External Foundry/Subcon Sites: Amkor Taiwan, ASE-Kaoshiung
<b>Description and Purpose:</b> ON Semiconductor announces two changes affecting FAN48610UC50X:  1. Qualification of a 2 <sup>nd</sup> 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.		
	<b>Before Change Description</b>	<b>After Change Description</b>
Manufacturing Flow	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)
Other Changes	No Backside Laminate (BSL)	With Backside Laminate (BSL)
There is no product marking change as a result of this change		

**Reliability Data Summary:**

QV DEVICE NAME: FAN48680UC08X

iRel F20150542A

PACKAGE Amkor WLCSP-9

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, @Vccmax	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, 3X Reflow, pre TC, HAST, UHAST		

QV DEVICE NAME: FAN48680UC08X

iRel F20150557

PACKAGE ASE WLCSP-9

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, @Vccmax	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, 3X Reflow, pre TC, HAST, UHAST		

**Electrical Characteristic Summary:**

Electrical characteristics are not impacted.

**List of Affected Parts:**

**Note:** Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	Qualification Vehicle
FAN48610UC50X	FAN48680UC08X