



Title of Change:	Transfer of the Manufacturing of QFN20 4X4 Assembly Devices from SPEL Semiconductor Limit to UTAC Thai Limited Site 3 for Wireless Connectivity Solutions Products.
Proposed first ship date:	20 October 2018 <i>or earlier after customer approval.</i>
Contact information:	Contact your local ON Semiconductor Sales Office or <peter.vo@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.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or <Phine.Guevarra@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:	Affected parts are marked with the manufacturing site code, "G", for UTAC Thai Limited.
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 type="checkbox"/> Manufacturing Site Addition	<input checked="" type="checkbox"/> Material Change	<input type="checkbox"/> Datasheet/Product Doc change
<input checked="" type="checkbox"/> Manufacturing Site Transfer	<input type="checkbox"/> Product specific change	<input checked="" type="checkbox"/> Shipping/Packaging/Marking
<input type="checkbox"/> Manufacturing Process Change		<input type="checkbox"/> Other: _____

Sites Affected:	ON Semiconductor Sites: None	External Foundry/Subcon Sites: UTAC
------------------------	---------------------------------	--

Description and Purpose:

This final product change notification is to inform the assembly manufacturing transfer of the affected parts of package type QFN20 4X4 for Wireless Connectivity Solutions products from SPEL Semiconductor Limit to UTAC Thai Limited Site 3. This change is to allow better management of the supply chain to meet customers' demands. With the transfer, the BOM is changing from SPEL to UTAC, and the BOM at UTAC are standard material. The package case outline is not affected by this change. The product marking will change to be compliant to ON Semiconductor's marking specification as illustrated below.

Pin 1 Dot

Marking Change	Before Change Description		After Change Description		
	Assembly Site: SPEL		Assembly Site: UTAC Thai Limited Site 3		
Part Number	Line 1 Marking	Line 2 Marking	Line 1 Marking	Line 2 Marking	Line 3 Marking
AX5031-1-TA05	AX5031-1	Trace Code	AX5031	-1	Trace Code
AX5031-1-TW30	AX5031-1	Trace Code	AX5031	-1	Trace Code
AX5243-1-TA05	AX5243-1	Trace Code	AX5243	-1	Trace Code
AX5243-1-TW30	AX5243-1	Trace Code	AX5243	-1	Trace Code



Material Change	Before Change Description	After Change Description
Site	SPEL	UTAC Thailand Site 3
Leadframe	Cu	PPF
Epoxy	CRM-1076NS	8600
Wire	0.8MIL Au	0.7MIL Au
Mold	G770HCD	G700LTD
Finish Plating	Tin	NiPdAu

Reliability Data Summary:

Based on similarity on below device previously qualified at UTAC Thailand.

QV DEVICE NAME: AX8052F143-3-TX30

PACKAGE: QFN 40 7X5

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/240
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc	0/240
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/480
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 10 sec		0/45

Electrical Characteristic Summary:

Electrical characteristics are not impacted by this change.

List of Affected Parts:

Part Number	Qualification Vehicle
AX5031-1-TA05	AX8052F143-3-TX30
AX5031-1-TW30	
AX5243-1-TA05	

"Please be informed that there may be Customer Specific part/s impacted by this Notification, thus MPN & CPN info will not be reflected in the parts list of this Generic document. Instead please click the link to the addendum PCN copy provided in the email notification to see full list of affected products specific to your company."

Appendix A: Changed Products

D

Product	Customer Part Number	Qualification Vehicle
AX5031-1-TA05		AX8052F143-3-TX30
AX5031-1-TW30		AX8052F143-3-TX30
AX5243-1-TA05		AX8052F143-3-TX30
AX5243-1-TW30		AX8052F143-3-TX30