

# Final Product/Process Change Notification

Document #:FPCN23427X Issue Date:24 Nov 2020

Title of Change:	WDFN6L Seremban Dual Source Qualification Project.		
Proposed First Ship date:	03 Mar 2021 or earlier if approved by customer		
Contact Information:	Contact your local ON Semiconductor Sales Office or <a href="mailto:saziela.senin@onsemi.com">saziela.senin@onsemi.com</a>		
PCN Samples Contact:	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.  Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.		
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or MohdAzizi.Azman@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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>		
Marking of Parts/ Traceability of Change:	Different lot number and site codes between Cebu and Seremban.		
Change Category:	Assembly Change, Test Change		
Change Sub-Category(s):	Manufacturing Site Addition, Material Change		
Sites Affected:			
ON Semiconductor Sites		External Foundry/Subcon Sites	
ON Semiconductor Seremban, Malaysia		None	

### **Description and Purpose:**

This Product Change Notification is to announce that ON Semiconductor is expanding Assembly and Test Operations of Cebu former Fairchild Semiconductor for WDFN6L package to ON Seremban, Malaysia.

- No change on existing OPN. There will be two separate BOMs for ON Cebu, Philippines and ON Seremban, Malaysia.
- These products will continue being Pb-free, Halide free and RoHS compliant. Qualification tests are designed to show that the reliability of the impacted devices will continue to meet or exceed ON Semiconductor standards.

	Before Change Description	After Change Description
		Cebu -ETCHED LEADFRAME, PQFN, 2.0X2.0
LeadFrame	Cebu -ETCHED LEADFRAME, PQFN, 2.0X2.0	MM, 6LDS, FULL DRAIN.
Leadrianie	MM, 6LDS, FULL DRAIN.	Seremban - WDFN 2.05 x 2.05 6L 0.65P WIDE
		LEADFRAME
	Cebu-ETCHED CLIPFRAME, PQFN, 2.0 X 2.0	Cebu-ETCHED CLIPFRAME, PQFN, 2.0 X 2.0
Clip		MM POWERCLIP SINGLE.
		Seremban-Etch Clip wDFN6L 2.05x2.05 0.65P
		Cebu-DA SLDR PASTE IND 92.5Pb5Sn2.5Ag
Solder	Cebu-DA SLDR PASTE IND 92.5Pb5Sn2.5Ag	NC-SMQ75
Solder	NC-SMQ75	Seremban-DA Indium 9.72HF Type
		4/89.5%ML (Die Attach Material)
		Cebu- DA SLDR PASTE 92.5Pb5Sn2.5Ag NC-
	Cebu- DA SLDR PASTE 92.5Pb5Sn2.5Ag NC-	SMQ75 -325+500 89%mtl (Clip Attach
Solder	SMQ75 -325+500 89%mtl (Clip Attach	Material)
	Material)	Seremban-CB Indium 9.72HF Type
		3/88.5%ML (Clip Attach Material)

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Mold Compound	Cebu - MC GREEN HI CEL9240HF10LS 14MMX6.6G	Cebu - MC GREEN HI CEL9240HF10LS 14MMX6.6G Seremban- SUMITOMO EME- G770HM TYPE D
Assembly Site	ON Semiconductor Philippines - Cebu	ON Semiconductor Philippines – Cebu ON Semiconductor Malaysia – Seremban
Test Site	ON Semiconductor Philippines - Cebu	ON Semiconductor Philippines – Cebu ON Semiconductor Malaysia – Seremban

There is no product marking change as a result of this change.

#### **Reliability Data Summary:**

QV DEVICE NAME: NTLJS5D0N03CTAG

RMS: S65441

PACKAGE: WDFN6 2.05X2.05, 0.65P

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/231
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias	1008 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		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		In process
SD	JSTD002	Ta = 245C, 5 sec		0/45

#### **Electrical Characteristics 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 <u>PCN Customized Portal</u>.

Part Number Qualification Vehicle	
NTLIS5D0N03CTAG	NTLJS5D0N03CTAG
NTLIS3D9N03CTAG	NTLJS5D0N03CTAG

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## **Appendix A: Changed Products**

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTLJS5D0N03CTAG		NTLJS5D0N03CTAG		