### **ON Semiconductor®**



## Final Product/Process Change Notification Document # : FPCN22729ZC

Issue Date: 9 August 2019

Title of Change:	Assembly & Test site transfer of TO220 products currently manufactured in ON Semiconductor Cebu Philippines facility to ON Semiconductor Suzhou, China facility.	
Proposed Changed Material First Ship Date:	9 August 2020	
Current Material Last Order Date:	31 March 2020 Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.	
Current Material Last Delivery Date:	29 June 2020 The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory.	
Product Category:	Active components – Discrete components	
Contact information:	Contact your local ON Semiconductor Sales Office or < Peter.lee@onsemi.com>	
Samples:	Contact your local ON Semiconductor Sales Office to place sample order or < <u>PCN.samples@onsemi.com</u> Sample requests are to be submitted no later than 45 days after publication of this change notification.	
Sample Availability Date:	1 October 2019 Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.	
PPAP Availability Date:	31 July 2019	
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Frank.Tuan @onsemi.com>.	
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 12 months prior to implementation of the change or earlier upon customer approval. ON Semiconductor will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com.	
Change Category	Type of Change	
Process – Assembly	Change of direct material supplier Change of specified assembly process sequence (deletion and/or additional process step) Move of all or part of assembly to a different location/site/subcontractor. (qualification of an additional manufacturing site)	
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.	
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor	
Description and Purpose:		
	Before Change Description After Change Description	

Before Change Description	After Change Description
Hitachi	TSP
ON Cebu, Philiphines	ON Suzhou, China
ON Cebu, Philiphines	ON Suzhou, China
No	Yes
	ON Cebu, Philiphines ON Cebu, Philiphines

TO220 Package Caseoutline is exactly same between suzhou & Cebu.

	From	То
Product marking change	ON Semiconductor format	ON Semiconductor format
	Only assembly plant code change : D	Only assembly plant code change : 1

For marking, There is no change on the device marking for Suzhou. However Suzhou will use the different Date code which is ON Format. Equipment in receiving site may different with sending site, however all equipments are existing and qualified in mass production.

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Reason / Motivation for Change:	<ul> <li>It is a Part of the integration strategy.</li> <li>The motivation of change is to have better capacity support mass production</li> <li>Late release from customer has potential supply issue.</li> </ul>		
Anticipated impact on fit, form, function, reliability, product safety or manufacturability	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by ON Semiconductor in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.		
Sites Affected:	ON Semiconductor Sites: ON Suzhou, China ON Cebu, Philippines	External Foundry/Subcon Sites: None	
Marking of Parts/ Traceability of Change:	I once EPCN expire Parts from ON Semiconductor Suzhou. (Thing can be identified through product marki		

Reliability Data Summary:

#### Device: HUF76633P3-F085 PKG: TO220

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Tj = 150C, Bias = 100% of rated BV	1000hr	0/231
HTGB	JESD22-A108	Tj = 150C, Bias = 100% of rated Vgs	1000hr	0/231
тс	JESD22-A104	Temp = -55°C to +150°C, t(dwell>15 min)	1000cyc	0/231
TCDT	JESD22 A104; Q101 appendix 6 J STD 035	100% C-SAM inspection after TC, follwed by decap, inspection or wire pull on all wires from 5 parts for 5 highest delaminated parts.		0/66
HAST	JESD22-A110	85%RH, 110C, 42V	264hr	0/231
UHAST	JESD22-A118	85%RH, 110C	264hr	0/231
IOL	MIL-STD-750 Method 1037	Ta=25C DeltaTj=100C°, t(on)=t(off)= 3.5 min,	8572cyc	0/231
DPA	AEC Q101-004 Section 4	Post H3TRB or HAST and TC		0/6
PD	JESD22 B100	Verify physical dimensions to specifications		0/30
TS	MIL-STD-750 Method 2036	Evaluate lead integrity on leaded parts only		0/30
RSH	JESD22-B106	Ta=265C 10 sec dwell		0/30
SD	JSTD002 Ta=245C 10 sec dwell		0/10	

### Note: AEC 1-pager attached

To view attachments:

1. Download pdf copy of the PCN to your computer

2. Open the downloaded pdf copy of the PCN

3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field

4. Then click on the attached file/s

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**.

Current Part Number	New Part Number	Qualification Vehicle
FDP86363-F085	NA	HUF76633P3-F085