

Final Product/Process Change Notification

Document #:FPCN22746XC Issue Date:21 Dec 2020

Title of Change:	Capacity Expansion of Assembly and Test operations of ON Suzhou for D2PAK package to ON Seremban, Malaysia.			
Proposed First Ship date:	30 Mar 2021 or earlier	earlier if approved by customer		
Contact Information:	Contact your local ON S	Semiconductor Sales Office or MohdHezri.AbuBakar@onsemi.com		
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.</pcn.samples@onsemi.com>			
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or MohdHairwan.MdNor@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			
Marking of Parts/ Traceability of Change:	Affected products will be identified by Marking code.			
Change Category:	Assembly Change, Test	Assembly Change, Test Change		
Change Sub-Category(s):	Material Change, Shipping/Packaging/Marking, Manufacturing Site Addition			
Sites Affected:				
ON Semiconductor Sites		External Foundry/Subcon Sites		
ON Semiconductor Seremban, Malaysia		None		
ON Semiconductor Suzhou, China				

Description and Purpose:

This is the final product change notification (FPCN) of IPCN22746X announcing that ON Semiconductor is expanding Assembly and Test Operations of ON Suzhou for D2PAK package to ON Seremban, Malaysia.

No change on existing OPN. There will be two separate BOMs for ON Suzhou, China and ON Seremban, Malaysia.

	Before Change Description	After Change Description		
Assembly Site	ON Semiconductor Suzhou, China	ON Semiconductor Suzhou, China	ON Semiconductor Seremban, Malaysia	
LeadFrame	TSP	TSP	SDI	
Die Attach	PB92.5,SN5AG2.5 PB93.5SN5AG1.5	PB92.5,SN5AG2.5 PB93.5SN5AG1.5	Pb95Sn5	
Bond Wire	Heraeus 99.99% Aluminium wire	Heraeus 99.99% Aluminium wire	Tanaka 99.99% Aluminum wire	
Mold Compound	CEL8240HF10FC EME6600CS SG8200DL	CEL8240HF10FC EME6600CS SG8200DL	G700HF	

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Reliability Data Summary:

QV DEVICE NAME: FQB7N60TM RMS: 56053, 64328, 71808 PACKAGE: D2PAK

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta = 150 °C, bias = 80% of rated V	1008 hrs	0/231
HTGB	JESD22-A108	Ta = 150 °C, bias = 80% of rated V	1008 hrs	0/231
HTSL	JESD22-A103	Ta = 150 °C	1008 hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, deltaTj=100°C max, Ton = Toff = 3.5min	8572 cyc	0/231
TC	JESD22-A104	Ta = -55°C to +150°C	1000 сус	0/231
UHAST	JESD22-A118	85°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
H3TRB	JESD22-A101	85°C, 85% RH, bias = 80% of rated V or up to maximum 100V	1008 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 245 °C		0/924
RSH	JESD22- B106	Ta = 265°C, 10 sec		0/90
SD	JSTD002	Ta = 245°C, 10 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
FQB8N60CTM	FQB7N60TM
FQB11N40CTM	FQB7N60TM
FQB1P50TM	FQB7N60TM
FQB9N50CTM	FQB7N60TM
FQB6N40CTM	FQB7N60TM
FQB5N50CTM	FQB7N60TM
FQB5N60CTM-WS	FQB7N60TM
FQB7N60TM	FQB7N60TM
FDB12N50FTM-WS	FQB7N60TM
FDB12N50TM	FQB7N60TM

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Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FQB5N60CTM-WS		FQB7N60TM	NA	
FQB8N60CTM		FQB7N60TM	NA	
FQB11N40CTM		FQB7N60TM	NA	
FQB1P50TM		FQB7N60TM	NA	
FQB9N50CTM		FQB7N60TM	NA	
FQB7N60TM		FQB7N60TM	NA	
FDB12N50FTM-WS		FQB7N60TM	NA	
FQB5N50CTM		FQB7N60TM	NA	