



Final Product/Process Change Notification

Document #:FPCN24900X

Issue Date:27 Jan 2023

Title of Change:	PQFN 5X6 Test/Pack enablement at ASEM as additional site using Accotest test platform
Proposed First Ship date:	15 May 2023 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or CheePin.Tay@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office. 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 onsemi Sales Office or songyong.sim@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. onsemi 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 parts will be identified with a cut-off date code
Change Category:	Test Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites

None

External Foundry/Subcon Sites

ASEM, Malaysia

Description and Purpose:

The purpose of this change is to expand/improve the Test capacity & shorten the cycle time for PQFN 5X6 products by qualifying Test/Pack at ASEM as additional site besides CEBU. In addition, this will help in the loading flexibility between CEBU & ASEM.

Upon FPCN expired, ASEM will have a full turnkey flow for PQFN 5X6 products listed in the affected part list.

	Before Change	After Change
Test & Pack Site	Cebu, Philippines	Cebu, Philippines ASEM, Malaysia
Tester Platform	CREDENCE ASL-1K (Cebu)	CREDENCE ASL-1K (Cebu) ACCOTEST STS8200 (ASEM)

There is no change in product, build of material, assembly process, test coverage, datasheet & product marking as a result of this change and it will not affect the form, fit & function of the products.

Reliability Data Summary:

- Product reliability qualification is not required as this is for Test site addition. All the products listed in this FPCN are existing qualify products at ASEM Assembly. There is no change in product electrical specification, assembly build of material (BOM) & process.
- Below is the Test qualification item which have been carried out at ASEM.

Test	Acceptance Criteria	Result (Pass/Fail)
1. Qual lot test yield assessment	FT Yield >= 95%	Pass
2. Cross correlation – Correlation study & GR&R	Shift < 10%, GR&R < 10%	Pass
3. Electrical distribution for key parameter	CPK > 1.67 or sameness	Pass
4. Reject bin failure analysis (if SBL fail)	Match between site (original & new)	Pass
5. Electrical QA sampling monitoring	QA Yield = 100%	Pass
6. Visual inspection (AOI)	Minimal loss	Pass
7. Handler buyoff, bin sort check & spike check	Per handler buyoff spec & voltage/current level < max rating stated in datasheet	Pass

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 [PCN Customized Portal](#).

Part Number	Qualification Vehicle
NTMFD1D1N02X	NTMFD001N03P9
NTMFD2D4N03P8	NTMFD001N03P9
NTMFD1D6N03P8	NTMFD001N03P9
NTMFD001N03P9	NTMFD001N03P9
FDPC8016S	FDPC5018SG
FDPC8016S-B801	FDPC5018SG
FDPC5030SG	FDPC5018SG
FDPC5018SG	FDPC5018SG

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NTMFD1D1N02X		NTMFD001N03P9		
FDPC8016S		FDPC5018SG		
FDPC5030SG		FDPC5018SG		
FDPC5018SG		FDPC5018SG		
NTMFD2D4N03P8		NTMFD001N03P9		