

### Final Product/Process Change Notification Document #:FPCN25064X

Issue Date:09 Aug 2023

Title of Change:	TO 3P_Assembly and Test Qualification to Suzhou Goodark Co.Ltd., China for Capacity Expansion		
Proposed First Ship date:	14 Nov 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or Jeanie.Wang@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 Harper.Pan@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:	The traceability of marking will be maintained by assembly plant code , date code and lot code.		
Change Category:	Assembly Change, Test Change		
Change Sub-Category(s):	Manufacturing Site Transfer		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	

onsemi Sites	External Foundry/Subcon Sites
None	Good-Ark, China

#### **Description and Purpose:**

This Product Change Notification is to announce qualification of TO3P assembly and test sites at Good-Ark, China. There are no changes in product electrical performances and specifications.

	Before Change Description	After Change Description
Assembly Site	onsemi Suzhou (ONSZ)	Suzhou Goodark
Test Site	onsemi Suzhou (ONSZ)	Suzhou Goodark
Die attach	PB93.5SN5AG1.5	PB92.5SN5AG2.5

	From	То
Product marking change	Existing Line 1: Internal traceability	Corporate marking style Line 1& Line 2: device marking
3 3	Line 2 & Line 3: device marking	Line 3: Internal traceability (AYWWZZ)

The traceability of marking will be maintained by assembly plant code, date code and lot code.

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

**QV DEVICE NAME: FCA47N60** 

RMS: U86585 PACKAGE: TO3P

Test	Specification	Condition	Interval	Result
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs	0/77
High Temperature Gate Bias	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/77
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/77
Highly Humidity High Temperature Reverse Bias	JESD22-A110	85°C, 85% RH, 18.8psig, bias	1008 hrs	0/77
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	end points	0/30
Solderability	JSTD002	Ta = 245°C, 5 sec	end points	0/15
Lead integrity	JESD22-B105	Lead Tension test for 10pcs units. Lead Bending test for 10pcs units. Lead Fatigue test for 10pcs units.	end points	0/30

#### **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
FCA47N60F	FCA47N60
FCA47N60-F109	FCA47N60
FCA47N60	FCA47N60
FCA20N60F	FCA47N60
FCA20N60-F109	FCA47N60
FCA20N60	FCA47N60
FQA140N10	FCA47N60
FQA70N10	FCA47N60
FQA8N100C	FCA47N60

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FDA69N25	FCA47N60
FDA59N25	FCA47N60
FDA38N30	FCA47N60
FDA24N50F	FCA47N60
FDA24N40F	FCA47N60
FDA16N50-F109	FCA47N60
FDA032N08	FCA47N60

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