



Initial Product/Process Change Notification

Document #: IPCN25064X

Issue Date: 14 Dec 2022

Title of Change:	TO 3P_Assembly and Test Qualification to Suzhou Goodark Co.Ltd., China for Capacity Expansion
Proposed First Ship date:	31 Oct 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.
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan. The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change. In case of questions, 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:	Test Change, Assembly Change
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

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

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



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Qualification Plan:

QV DEVICE NAME: FGA40N65SMD

PACKAGE: TO3P

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=175°C, 80% max rated V	1008hrs
HTGB	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008hrs
HTSL	JESD22-A103	Ta= 175°C	1008hrs
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
UHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	
LI	JESD22 - B105		

QV DEVICE NAME: FCA47N60

PACKAGE: TO3P

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008hrs
HTGB	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008hrs
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
UHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	
LI	JESD22 - B105		



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QV DEVICE NAME: FJA4313OTU
PACKAGE: TO3P

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 80% max rated V	1008 hrs
HTSL	JESD22-A103	Ta= 150 °C	1008 hrs
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
UHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
RSH	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	
SD	JSTD002	Ta = 245°C, 5 sec	
LI	JESD22 - B105		

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
FGA40N65SMD	FGA40N65SMD
FGA40T65SHD	FGA40N65SMD
FGA40T65SHD-01	FGA40N65SMD
FGA40T65SHDF-01	FGA40N65SMD
FGA60N65SMD	FGA40N65SMD
FGA3060ADF-01	FGA40N65SMD
FDA032N08	FCA47N60
FDA16N50-F109	FCA47N60
FDA24N40F	FCA47N60
FDA24N50F	FCA47N60
FDA28N50	FCA47N60
FDA28N50F	FCA47N60
FDA38N30	FCA47N60
TIP147TU	FJA4313OTU
FJA4313OTU	FJA4313OTU



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2SC5242OTU	FJA4313OTU
FCA47N60F	FCA47N60
FCA47N60-F109	FCA47N60
FCA47N60	FCA47N60
FCA20N60F	FCA47N60
FCA20N60-F109	FCA47N60
FCA20N60	FCA47N60
FQA140N10	FCA47N60
FQA70N10	FCA47N60
FQA40N25	FCA47N60
FQA36P15	FCA47N60
FQA24N60	FCA47N60
FQA13N80-F109	FCA47N60
FQA8N100C	FCA47N60
FDA69N25	FCA47N60
FDA59N30	FCA47N60
FDA59N25	FCA47N60

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FGA40N65SMD		FGA40N65SMD		
FGA40T65SHD		FGA40N65SMD		
FGA60N65SMD		FGA40N65SMD		
FDA16N50-F109		FCA47N60		
FDA24N40F		FCA47N60		
FDA24N50F		FCA47N60		
FDA28N50		FCA47N60		
FDA28N50F		FCA47N60		
FDA38N30		FCA47N60		
TIP147TU		FJA4313OTU		
FJA4313OTU		FJA4313OTU		
2SC5242OTU		FJA4313OTU		
FCA47N60F		FCA47N60		
FCA47N60-F109		FCA47N60		
FCA47N60		FCA47N60		
FCA20N60F		FCA47N60		
FQA140N10		FCA47N60		
FQA70N10		FCA47N60		
FQA40N25		FCA47N60		
FQA36P15		FCA47N60		
FQA24N60		FCA47N60		
FQA13N80-F109		FCA47N60		
FQA8N100C		FCA47N60		
FDA69N25		FCA47N60		
FDA59N30		FCA47N60		
FDA59N25		FCA47N60		
FDA032N08		FCA47N60		