



Final Product/Process Change Notification

Document #:FPCN23290X

Issue Date:22 Apr 2020

Title of Change:	SMAF Rectifiers Manufacturing Site Change.
Proposed First Ship date:	29 Jul 2020 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Benjo.Rulona@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.
Additional Reliability Data:	Contact your local ON Semiconductor 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. 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:	Assembly Plant Code Marking Change from J to g
Change Category:	Wafer Fab Change, Assembly Change
Change Sub-Category(s):	Manufacturing Site Transfer

Sites Affected:

ON Semiconductor Sites	External Foundry/Subcon Sites
None	Good-Ark, China
	Panjit International Inc., Taiwan

Description and Purpose:

As part of ON Semiconductor's effort to secure available capacity and meet customer's need of a reliable source for Rectifiers in SMAF package, qualification of Good-Ark located in Suzhou, China has been undertaken.

This new sourcing is intended to meet consistent supply and service and to prevent supply disruption to our customers.

These products are currently assembled and tested in a manufacturing site located in Taiwan. A comparison of the differences between the current and new sites' built parts are presented below:

	Before Change Description	After Change Description
Wafer Fab	Pynmax, Taiwan	Suzhou Good-Ark Electronics Co. Ltd
Assembly Site	Panjit International Taiwan	Suzhou Good-Ark Electronics Co. Ltd
Topmetal/Backmetal	Au	Ni
Green Molding Compound	ELER-8-500C-S	EK1700GH/SP-G300

	From	To
Product marking change	Assembly Plant Code J	Assembly Plant Code g

**Reliability Data Summary:**QV DEVICE NAME: QV-ES1JAF and ES2DAF (QBS-ES1DAF)RMS : SYSQR200402PACKAGE : SMAF (DO-214AD)

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Tj=150°C, 100% max rated V	1008 hrs	0/240
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/240
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/120
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/120
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias 100V max	96 hrs	0/120
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/120
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	0/480
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 5 sec	-	0/45

Electrical Characteristics Summary:

Electrical Characteristics as per datasheet specifications are not impacted. Parts covered in this change are expected to have comparable performance with the current parts in terms of quality and reliability.

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
ES1DAF	ES1JAF
ES1JAF	ES1JAF
ES2DAF	ES2DAF