Final Product/Process Change Notification

Document #: FPCN25156X
Issue Date: 28 Sep 2023

Title of Change:	Small Signal Transistors in WDFN6 package Assy Transfer from UTAC, Thailand to onsemi Seremban, Malaysia.
Proposed First Ship date:	05 Jan 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or BernardRajVellangani.Pelevindran@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 MohdAzizi.Azman@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:	Changed material may be identified by lot code or date code
Change Category:	Equipment Model Changes between Site for the Assembly Process, Assembly Change
Change Sub-Category(s):	Equipment Model Changes between Site for the Assembly Process, Material Change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
onsemi Seremban, Malaysia	None

Description and Purpose:

onsemi is publishing this Product Change Notification in order to notify customers of the transfer of Small Signal Transistor in WDFN6 package produced in UTAC, Thailand to onsemi Seremban, Malaysia.

onsemi Seremban, Malaysia is an existing qualified manufacturing site for onsemi which is certified with IATF 16949:2016

	From	**To**
Assembly Site	UTAC, Thailand	onsemi Seremban, Malaysia
LeadFrame	SFS Wettable Flank	Step Cut Wettable Flank
Die Attach	1. ABLETHERM 8600 CONDUCTIVE 2. EPOXY ABLESTICK 8200T	CRM1084P
Bond Wire	1.3mil Gold Wire	1.3mil Palladium Coated Copper Wire
Mold Compound	1. Sumitomo G770HCD 2. MC G700LTD	MC EME-G720D Type
Case Outline	506AN	515AM

Reliability Data Summary:

QV DEVICE NAME: NSV60101DMTWTBG
RMS: S86916, S89980
PACKAGE: WDFN6

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs	0/2400
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45

QV DEVICE NAME: NSV60200DMTWTBG
RMS: S74843, S73609
PACKAGE: WDFN6

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/231
Early Life Failure Rate	JESD22-A108	Ta=150°C, 100% max rated V	48 hrs	0/2400
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre IOL, TC, uHAST, HAST for surface mount pkgs only		0/924
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C, mount on board	1000 cyc	0/231
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/231
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only		0/90
Solderability	JSTD002	Ta = 245°C, 5 sec		0/45

Electrical Characteristics Summary:

Electrical Characteristics 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
NSS60201SMTTBG	NSV60101DMTWTBG
NSS60200SMTTBG	NSV60200DMTWTBG
NSS60200DMTTBG	NSV60200DMTWTBG
NSS60101DMTTBG	NSV60101DMTWTBG
NSS60100DMTTBG	NSV60200DMTWTBG
NSS20201DMTTBG	NSV60101DMTWTBG
NSS20200DMTTBG	NSV60200DMTWTBG