Final Product/Process Change Notification

Document #:FPCN25661X
Issue Date:14 Oct 2024

Title of Change:	Wafer Fab Capacity Expansion for Trench 6 MOSFET Technology at Powerchip in Taiwan
Proposed First Ship date:	21 Jan 2025 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Devaki.Suppiah@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 Robert.Baran@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:	Material will be traceable with onsemi lot trace code & tracking
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	Powerchip, Taiwan

Description and Purpose:

This final notification is to inform the customer that onsemi is adding wafer fabrication capacity for 40V Trench 6 MOSFET technology products. This addition involves the Powerchip located in Taiwan, which will be used for the manufacturing of these products.

There is no change to the orderable part number.

There is no product marking change as a result of this change.

	Before Change Description	**After Change Description**
Wafer Fabrication Site	onsemi Aizu, Japan onsemi Gresham, US onsemi EFK, US	onsemi Aizu, Japan onsemi Gresham, US onsemi EFK, US Powerchip, Taiwan

Reliability Data Summary:

QV DEVICE NAME: NTMFSC0D9N04CL
RMS: F92943
PACKAGE: PQFN5x6 Dual Cool

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Tj=175°C, 100% max rated V	1008 hrs	0/231
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/231
High Temperature Storage Life	JESD22-A103	Ta=175°C	1008 hrs	0/231
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	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

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
NTMFS5C404NLT1G	NTMFSC0D9N04CL
NTMFSC0D9N04CL	NTMFSC0D9N04CL
NTMFS5C410NLT1G	NTMFSC0D9N04CL
NTMFS5C410NT3G	NTMFSC0D9N04CL
NTMFS5C442NT1G	NTMFSC0D9N04CL
NTMFS5C430NT1G	NTMFSC0D9N04CL
NTMFS5C430NLT1G	NTMFSC0D9N04CL