ON Semiconductor®

Initial Product/Process Change Notification

Document #:IPCN23875X
Issue Date:03 Mar 2021

Title of Change:	Qualification of Intelligent Power Module (IPM) DBC Substrate as Alternative Supplier for Substrate Material for NFAQ1060L33T / NFAQ1060L36T and NFAQ0860L33T / NFAQ0860L36T Products at ON Semiconductor Vietnam (OSV).
Proposed First Ship date:	10 Jul 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Mitsuru.Oyagi@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.
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:	Date Code
Change Category:	Supplier change of DBC Substrate
Change Sub-Category(s):	Substrate Material of Alternative supplier is the same as Source supplier.

Sites Affected:

ON Semiconductor Sites	**External Foundry/Subcon Sites**
ON Semiconductor Vietnam	None

Description and Purpose:

	Before Change Description	After Change Description
DBC Substrate Supplier	Source Supplier	Alternative Supplier
Thickness	Cu Top : 0.15mm / Cu Bottom 0.15mm / Ceramic 0.38mm	Cu Top : 0.127mm / Cu Bottom 0.127 / Ceramic 0.38mm

Qualification Plan:

QV DEVICE NAME: NFAQ1060L36T.
PACKAGE: DIP-S6

Test	Specification	Condition	Interval
H3TRB	JESD22-A101	Ta=85°C, RH=85%, VCE=480V, VGE = 0V, VDD=15.6V	1008 hours
TC	JESD22-A104, cond. G, soak mode 4	Ta=-40°C to 125°C	1000 cyc
PCT	MIL-STD-750 (M1036&M1037)	Delta Tj=100°C, (Tj max=125°C)	10k cyc
ESD	AEC Q101-001 AEC Q101-005	HBM / MM	-

Estimated date for qualification completion: 23 March 2021

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
NFAQ1060L36T	NFAQ1060L36T
NFAQ1060L33T	NFAQ1060L36T
NFAQ0860L33T	NFAQ1060L36T
NFAQ0860L36T	NFAQ1060L36T