



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16730Generic Copy

Issue Date: 28-Sep-2011

TITLE: Release of an additional tester platform (Micro Flex) for the C623-NQ Package (currently tested on TMT tester platform)

PROPOSED FIRST SHIP DATE: 28-Jan-2012 or sooner upon customer approval

AFFECTED CHANGE CATEGORY(S): Final test and QC insertions

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Xavier Van Esch <Xavier.VanEsch@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is 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.

DESCRIPTION AND PURPOSE:

Release of Micro FLEX tester platform for Final Test and QC to improve tester capacity balancing and loading.

Qualification data:

QC ambient correlation data between the source tester (TMT) and the target tester (Micro FLEX) will be provided in a separate qualification report together with the Final PCN.

The correlation procedure will be used, like done as in previous PCN's covering the release of additional tester platforms

- 2 correlation units will be serialized and datalogged in 30 loops using the source tester platform where the device is already qualified. The test will be done at room temperature, using the QC program.
 - Then, the same correlation units will be used to gather data on target tester microFLEX.
 - The same datalogging procedure used for TMT will be followed for microFLEX.

Full parametric correlation will be performed and for every test the shift will be evaluated as follows:



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$$\Delta\text{mean} = \text{abs}(\text{mean}(\text{ref}) - \text{mean}(\text{qual}))$$

$$\Delta\text{sigma} = 0$$

$$\Delta\text{sigma} = \text{sigma}(\text{qual}) - \text{sigma}(\text{ref})$$

if $\text{sigma}(\text{qual}) < \text{sigma}(\text{ref})$

if $\text{sigma}(\text{qual}) > \text{sigma}(\text{ref})$

$$\text{shift} = \Delta\text{mean} + 4 * \Delta\text{sigma}$$

If $\text{shift} < \max(5\% \text{ specwidth}, 6 * \text{sigma}(\text{ref}))$ then correlation is OK for this test,
else correlation is NOK for this test

Any parameter that is NOK is independently analyzed and explained.

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical Performance will continue to meet specifications.

List of affected Customer Specific Parts:

Internal ONSEMI sellable code	External ONSEMI part number
0C623-011-XTD	AMIS30623C623BG
0C623-011-XTP	AMIS30623C623BRG