



Customer Information Notification

201506023I

Issue Date: 27-Jun-2015

Effective Date: 27-Jul-2015

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QUALITY

Management Summary

Notify customers of pending replacement of the PCA9956ATW with the PCA9956BTW due to a POR issue. Also a datasheet update to clarify group dimming functionality.

Change Category

<input type="checkbox"/> Wafer Fab process	<input type="checkbox"/> Assembly Process	<input type="checkbox"/> Product Marking	<input checked="" type="checkbox"/> Design
<input type="checkbox"/> Wafer Fab materials	<input type="checkbox"/> Assembly Materials	<input type="checkbox"/> Electrical spec./Test coverage	<input type="checkbox"/> Mechanical Specification
<input type="checkbox"/> Wafer Fab location	<input type="checkbox"/> Assembly Location	<input type="checkbox"/> Test Location	<input type="checkbox"/> Packing/Shipping/Labeling

PCA9956ATW-PCA9956ATWS911-PCU9956ATW Part change notification

Information Notification

This is to inform our customers of our intension to discontinue the PCA9956ATW and to recommend the replacement part PCA9956BTW.

The PCA9956ATW has a design issue with the power on reset circuitry, where it has been validated not to function over all power-up and power-down conditions.

In addition to the Power-on reset fix, a datasheet update relative to the group dimming feature will be implemented,

The part performance is not changing, the actual behaviour is being clarified.

In Section 7.3.3 the following notation will be added:

Remark: Setting the device in low power mode while being on group dimming/blinking mode may cause the LED output state to be in an unknown state after the device is set back to normal mode. The device must be reset and all register values reprogrammed.

A preliminary datasheet is attached. The final datasheet will be available upon release.

Why do we issue this Information Notification

The PCA9956ATW has been redesigned to correct the design issue found and being replaced by the PCA9956BTW.

The I2C interface may not be initialized and the device will be in an unknown state at power up.

Hardware reset will not work when the device is under these conditions.

A screen for these conditions was developed. However, there is a risk of 0.33% failures in the screened parts that will still show this behaviour.

The issue is process-dependent (not systematic in all samples) and temperature-dependent.

For the datasheet update NXP wants to provide customer clarification in the group dimming function to avoid customer application issues

Identification of Affected Products

PCA9956ATW will be replaced with the PCA9956BTW

Impact

Customers that are in the process of qualifying the PCA9956ATW in their application need to move to the PCA9956BTW.

The PCA9956BTW is drop in compatible to PCA9956ATW

Data Sheet Revision

A new datasheet will be issued

Disposition of Old Products

Existing inventory of unused material may be/ is recommended to be returned and scrapped.

Contact and Support

For all inquiries regarding the ePCN tool application or access issues, please contact NXP "Global Quality Support Team".

For all Quality Notification content inquiries, please contact your local NXP Sales Support team.

For specific questions on this notice or the products affected please contact our specialist directly:

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Position Quality Engineer

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NXP Quality Management Team.

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