



PCN / EOL Notification

URGENT QUALIFICATION REQUIRED DUE TO LFOUNDRY CLOSURE (NO LTB DATE)
 (Refer to Adesto Document # AD011014 <http://www.adestotech.com/pcns>)

Product Change Notification Number: PDF013-A

Notification Date: January 16, 2014

Title: 32-Mbit DataFlash® (AT45DB321D) Process Geometry Shrink and Device Enhancement

Product Identification:

All wafer and package options of the Industrial Temperature grade (-40°C to +85°C) AT45DB321D

Reason for Change:	<input type="checkbox"/> Material / Composition	<input checked="" type="checkbox"/> Design / Firmware	<input checked="" type="checkbox"/> Manufacturing Location
	<input checked="" type="checkbox"/> Processing / Manufacturing	<input type="checkbox"/> Logistics	<input type="checkbox"/> Quality/Reliability

Change Description:

Adesto has performed a process geometry shrink and feature set enhancement of the 32-Mbit AT45DB321D DataFlash®. **Due to the closure of LFoundry there is NO LTB DATE available.** The catalog part number AT45DB321D will be replaced by AT45DB321E (see Table 1). The new AT45DB321E devices are pin-to-pin and functionally backward compatible with the current AT45DB321D devices with the following exceptions and enhancements. **(The Device ID is corrected below).**

Extended-VCC Operation

Adesto has designed the AT45DB321E devices to operate over a 2.3V to 3.6V range versus the previous 2.5V to 3.6V range options on the D series devices.

“Power of 2” binary page size option

The “power of 2” binary page size option can still be ordered as a factory-configured option. However, the catalog part number suffixes of SL954 and SL955 for the factory-configured option will no longer be used. The new Binary Page Mode option will be defined by the ordering code suffix ‘2B’ incorporated into the base part number. As part of this part number change Binary Page mode options will be limited to T&R orders only. Please refer to Table 1 for the new catalog part number for the factory-programmed “power of 2” binary page size option.

Migration to a 5-byte Manufacturer and Device ID

The length of the complete Manufacturer and Device ID string has been extended from 4 bytes to 5 bytes to provide space for additional device information. The ID methodology still complies with the JEDEC standard and now utilizes the Extended Device Information (EDI) field. The Manufacturer and Device ID string changes as follows:

AT45DB321D: 1Fh + 27h + 01h + 00h

AT45DB321E: 1Fh + 27h + 01h + 01h + 00h

Lead Finish

The lead finish has been changed from Matte Sn to NiPdAu.

Identification Method:

New catalog part numbers use an "E" suffix for device revision (AT45DB321D changes to AT45DB321E).

Table 1:

EOL Part Number	Replacement Part Number	Carrier Type
AT45DB321D-CU	AT45DB321E-CCUF-T*	T for T/R
AT45DB321D-MU	AT45DB321E-MHF-Y	Y for Tray
	AT45DB321E-MHF-T	T for T/R
AT45DB321D-MU-SL954	AT45DB321E-MHF2B-T	Only T/R offered
AT45DB321D-MU-SL955		
AT45DB321D-MU-2.5	AT45DB321E-MHF-Y	Y for Tray
	AT45DB321E-MHF-T	T for T/R
AT45DB321D-MWU	AT45DB321E-MWHF-Y	Y for Tray
	AT45DB321E-MWHF-T	T for T/R
AT45DB321D-MWU-SL954	AT45DB321E-MWHF2B-T	Only T/R offered
AT45DB321D-MWU-SL955		
AT45DB321D-SU	AT45DB321E-SHF-B	B for Bulk
	AT45DB321E-SHF-T	T for T/R
AT45DB321D-SU SL954	AT45DB321E-SHF2B-T	Only T/R offered
AT45DB321D-SU SL955		
AT45DB321D-SU-2.5	AT45DB321E-SHF-B	B for Bulk
	AT45DB321E-SHF-T	T for T/R
AT45DB321D-TU	No offering in TSOP. Recommend SOIC	EOL
AT45DB321D-DWF	AT45DB321E-DWF	Whole Wafer, No Back Grind

Notes:

* BGA package changed from 24-Ball BGA for the 45DB321D to a 9-Ball BGA for the 45DB321E. The 9-Ball BGA utilizes the same center 9 balls (3 x 3 ball matrix) of the 24-Ball BGA footprint. Therefore, no PCB change is required.

Qualification Data:	<input checked="" type="checkbox"/> Available	<input type="checkbox"/> Will be available (mm/dd/yr):	<input type="checkbox"/> Not Applicable
Samples:	<input checked="" type="checkbox"/> Available	<input type="checkbox"/> Will be available (mm/dd/yr):	<input type="checkbox"/> Not Applicable
Quantifiable Impact on Quality & Reliability:			
None			
Forecasted Availability Date (AT45DB321E): Now			
Last Time Buy Date (AT45DB321D): Due to the closure of LFoundry, Adesto cannot guarantee availability of the affected products. No Last Time Buy is available. Contact Adesto Sales. (Refer to Adesto Document # AD011014 http://www.adeptotech.com/pcns).			
Adesto Contact: PCNsupport@adeptotech.com			

Information provided here in is in connection with Adesto product sand this information is provided "AS IS". Adesto assumes no responsibility for any errors that may appear in this document. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document. Except as provided in Adesto's Terms and Conditions of Sale for such products, Adesto assumes no liability whatsoever, and Adesto disclaims any express or implied warranty, including liability or warranties relating to fitness for a particular purpose, merchantability, or non-infringement of any patent, copyright or other intellectual property right. Adesto products are not intended for use in a product or system intended to support or sustain life which, if it fails, can be reasonably expected to result in significant personal injury. Adesto may make changes to specifications and product descriptions at any time, without notice.

Attention Distributors: Product(s) identified in this notification will become obsolete and as such this EOL notification will act as the official written notification. All obsolete products will be listed in the next published quarterly distributor price book, following a PCN/EOL change, and listed on the obsolescence form which accompanies said price book. Within thirty (30) days from the published date of the price book, Distributor shall notify Adesto in writing of Distributor's then current inventory of the obsolete product.

CUSTOMER ACKNOWLEDGEMENT OF RECEIPT: Adesto requests you acknowledge receipt of this PCN / EOL. Please complete and email to the Adesto Contact listed above. In your acknowledgement, you can grant approval or request additional information. **Adesto will deem this change accepted unless specific conditions of acceptance are provided in writing within 30 days from the date of this notice.**

Company:	
Name:	
Title:	
Date:	
Email Address:	
Location:	
Comments:	

©2014 Adesto Technologies Corporation. All rights reserved.

Adesto®, the Adesto logo, CBRAM®, and DataFlash® are registered trademarks or trademarks of Adesto Technologies. All other marks are the property of their respective owners.