

Product Change Notification Number: **PSF016-A**

Notification Date: 4/17/14

**Title:** 4Mbit Serial Flash AT25DF041A End of Life

**Product Identification:**

All wafer and package options of the Industrial Temperature grade (-40°C to +85°C) AT25DF041A

**Reason for Change:**

<input type="checkbox"/> Material / Composition	<input 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

(Refer to Adesto Document # AD011014 <http://www.adestotech.com/pcns> )

**Change Description:**

The AT25DF041A, 4Mbit Serial Flash device, all Packages, all options, and all configurations has been moved to End of Life Status effective immediately. No Last Time Buy or Last Time Ship dates can be provided due to the closure of manufacturing operations at LFoundry as explained in Adesto communication # AD011014.

**Change Description Update**

Since posting the original EOL notification, Adesto has completed the launch of the NEW AT25SF041 4Mbit Serial Flash and suggested alternative product for the EOL 25DF041A. These AT25SF041 devices are not direct drop in replacement products. The part numbers originally shown in the section 'Identification Method' have been updated to show improved Vcc and MSL specifications. This document also provides a summary of the key changes and differences between the old EOL products and the suggested alternatives.

**Replacement Devices**

Adesto Technologies is introducing a **NEW** family of Serial Flash devices throughout Q1 and Q2 2014. These devices will have the part numbers commencing AT25SF. A summary of the key differences in architecture compatibility between the old EOL 25DF041A and NEW AT25SF041 device is shown below:

*(This is not an exhaustive list, and all customers are asked to refer to the respective datasheets for the complete device details and to perform their own comparison and compliance test in their own systems).*

**Migration to 3-byte Manufacturer and Device ID**

The length of the complete Manufacturer and Device ID string has been simplified to 3 bytes for ease of use. The Manufacturer and Device ID string changes as follows:

AT25DF041A:	1Fh + 44h + 01h + 00h
AT25SF041:	1Fh + 84h + 01h

**Status Register Change**

The length of the Status Register has changed from 1 byte to 2 bytes to contain additional information.

Bit 0 (RDY/BSY) and Bit 1 (WEL) maintain the same.

Refer to datasheet for additional bit changes.

**Sequential Programming Mode Not Supported**

AT25SF041 does not support the legacy commands ADh, AFh for sequential programming. Use Byte/Page Program command 02h.

**Write Protection Scheme Change**

The Sector Protection architecture has changed for ease of use. Refer to datasheet for specific details.

AT25DF041A	Sector Protection through software
AT25SF041	Block Protection via Write Protect pin and S/W via the Status Register

**Maximum Block Erase Timing Change**

Delay periods may need to be extended if using a fixed S/W Timeout period to determine the End of Program / Erase cycles. These fixed periods may need to be extended or switch to using a S/W status register RDY / BSY Polling scheme. Code that already uses the RDY / BSY Polling code will remain unaffected.

**Maximum Block Erase Time Changes**

Command	AT25DF041A	AT25SF041
Block Erase, 4kB	200 ms max	300 ms max
Block Erase, 32kB	600 ms max	1300 ms max
Block Erase, 64kB	950 ms max	2200 ms max

**PCN P/N update : Moisture Sensitivity**

Since posting the original EOL notification, the replacement part number specified a MSL3 rating. The AT25SF041-SHD and AT25SF041-SSHD device are now MSL1 rated.

**PCN P/N Update : Operating Voltage**

Since posting the original EOL notification, the replacement part number specified a 2.7V Vcc operating range. The AT25SF041-SHD and AT25SF041-SSHD device are now rated to operate at 2.5V Minimum Vcc.

**DFN / MLF Package Options**

DFN / MLF packages are not available at this time. Expected schedules are for Q4'2014. Please contact Adesto Sales for further information and progress on availability of these package options.

**Identification Method:**

Root Part Numbers are shown in Table:

**Part Numbers have been updated to reflect improved Operating Vcc and MSL ratings.**

EOL Part Number	Replacement Part Number	Carrier Type
AT25DF041A-MH-Y	Available Q4'14	Y for Tray
AT25DF041A-MH-T	Available Q4'14	T for T/R
AT25DF041A-SSH-B	AT25SF041-SSHD-B	B for Bulk
AT25DF041A-SSH-T	AT25SF041-SSHD-T	T for T/R
AT25DF041A-SH-B	AT25SF041-SHD-B	B for Bulk
AT25DF041A-SH-T	AT25SF041-SHD-T	T for T/R
AT25DF041A-WDW11	AT25SF041-DWF	Die / Wafer
AT25DF041A-MHF-Y	No Replacement	Not applicable
AT25DF041A-MHF-T	No Replacement	Not applicable
AT25DF041A-SSHF-B	No Replacement	Not applicable
AT25DF041A-SSHF-T	No Replacement	Not applicable
AT25DF041A-SHF-B	No Replacement	Not applicable
AT25DF041A-SHF-T	No Replacement	Not applicable

Notes:

1. The carrier type is not marked on the package.
2. Table above lists standard datasheet part numbers only.
3. This PCN covers all applicable AT25DF041A SL codes, Customer Applied Numbers (CAN codes), Die, wafer sale and customer specific part numbers.

<b>Qualification Data:</b>	<input checked="" type="checkbox"/> Available Preliminary	<input checked="" type="checkbox"/> Will be available(mm/dd/yr): Final report available July 2014	<input type="checkbox"/> Not Applicable
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<b>Samples:</b>	<input checked="" type="checkbox"/> Available	<input type="checkbox"/> Will be available(mm/dd/yr):	<input type="checkbox"/> Not Applicable
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**Quantifiable Impact on Quality & Reliability:**

None

**Forecasted Availability Date :** Contact Adesto Sales

**Last Time Buy Date (AT25DF041A):** 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](mailto:PCNsupport@adeptotech.com)

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**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.**

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Comments:	

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