



# PCN / EOL Notification

**Product Change Notification Number: CC095106**

**Date\*:** February 5, 2010

**Title:** AT24C256B OPTIMIZED LAYOUT AND LOW-VOLTAGE

**Product Identification:**

All Wafers and Packages of the AT24C256B, Industrial Temperature Grade (-40C to +85C)

[See Attachment A](#)

**Reason for Change:**

- |   |  |                                    |
|---|--|------------------------------------|
| <input type="checkbox"/> Design                 | <input checked="" type="checkbox"/> Processing | <input type="checkbox"/> Logistics |
| <input type="checkbox"/> Manufacturing Location | <input type="checkbox"/> Quality/Reliability   | <input type="checkbox"/> Material  |

**Change Description:**

Atmel has optimized the layout of the AT24C256B devices. The new devices are pin-to-pin and backward compatible with the current AT24C256B devices.

The NEW part numbers will be created by adding a "C" to the suffix of the part identifier: AT24C256**C**. Vcc will be expanded down to 1.7V. The new operating range will be from 1.7V to 5.5V.

The new packaged devices offered with the AT24C256C are as the following:

- |                         |  |
|-------------------------|--|
| 8-ball VFBGA (dBGGA2):  | ROHS compliant/Lead-Free/Halogen-Free/Matte Tin plating. |
| 8-lead JEDEC SOIC:      | ROHS compliant/Lead-Free/Halogen-Free/NiPdAu plating.    |
| 8-lead TSSOP:           | ROHS compliant/Lead-Free/Halogen-Free/NiPdAu plating.    |
| 8-lead UDFN (Mini-MAP): | ROHS compliant/Lead-Free/Halogen-Free/NiPdAu plating.    |

Atmel will also support die sales shipment in Wafer Form, Tape and Reel and Bumped Wafers.

**Identification Method to Distinguish Change:**

There will be NEW part numbers created by adding a "C" to the suffix of the catalogue part number: The AT24C256B will now be AT24C256**C**.

- |                            |   |  |   |
|----------------------------|---|--|---|
| <b>Qualification Data:</b> | <input checked="" type="checkbox"/> available | <input type="checkbox"/> will be available                         | <input type="checkbox"/> not applicable |
| <b>Samples:</b>            | <input type="checkbox"/> available            | <input checked="" type="checkbox"/> will be available upon request | <input type="checkbox"/> not applicable |

**Quantifiable Impact on Quality & Reliability:**

The new devices are a form, fit and function equivalent of the current devices, which meet all databook specifications.

- |                                     |                 |
|-------------------------------------|-----------------|
| <b>Estimated Availability Date:</b> | Now             |
| <b>Last Time Buy Date:</b>          | July 8, 2010    |
| <b>Last Ship Date:</b>              | January 8, 2011 |

*\* All orders for the non shrink products placed after the notification date are non-cancellable and non-returnable (NCNR).*

**Atmel Contact:** [pcnadm@atmel.com](mailto:pcnadm@atmel.com)

Atmel will deem this change accepted unless specific conditions of acceptance are provided in writing within 30 days from the date of this notice. All correspondence must be sent to the Quality Contact e-mail address listed above.

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## Attachment A

This is the listing for standard datasheet offering, PCN also applies to all (customer specific) special CAN part numbers that are not listed in the table below:

EOL Part Number	Replacement Part Number	Carrier Type
AT24C256B-PU	None	Bulk
AT24C256B-TH-B	AT24C256C-XHL-B	Bulk
AT24C256B-TH-T	AT24C256C-XHL-T	T/R
AT24C256BN-SH-B	AT24C256C-SSHL-B	Bulk
AT24C256BN-SH-T	AT24C256C-SSHL-T	T/R
AT24C256BW-SH-B	*AT24C256C-SSHL-B	Bulk
AT24C256BW-SH-T	*AT24C256C-SSHL-T	T/R
AT24C256BY7-YH-T	*AT24C256C-MAHL-T	T/R
AT24C256BU2-UU-T	AT24C256C-CUL-T	T/R
AT24C256B-W-11	AT24C256C-WWU11L	

\*Suggested Replacement, please refer to datasheet for detailed specification.

-The PDIP is not recommended for new designs and as such will not appear on the datasheet, contact marketing to support legacy designs.

-The EIAJ wide body SOIC is no longer supported due to decreasing demand; please see the JEDEC SOIC as the replacement.

## Attachment B

### Top Side Marking

#### AT24C256C-CUL-T

TOP MARK

|---|---|---|---|

2 E C U

|---|---|---|---|

Y M T C

|---|---|---|---|

|<-- Pin 1 This Corner

Y = ONE DIGIT YEAR CODE

8: 2008 1: 2011

9: 2009 2: 2012

1: 2011 3: 2013

M = SEAL MONTH (USE ALPHA DESIGNATOR A-L)

A = JANUARY

B = FEBRUARY

" " " " " " " " " " " "

J = OCTOBER

K = NOVEMBER

L = DECEMBER

TC = TRACE CODE (ATMEL LOT  
NUMBERS TO CORRESPOND  
WITH TRACE CODE LOG BOOK)  
(e.g. XX = AA, AB...YZ, ZZ)

#### AT24C256C-MAHL-T

TOP MARK

|---|---|---|

2 E C

|---|---|---|

H L @

|---|---|---|

Y T C

|---|---|---|

\*

|

Pin 1 Indicator (Dot)

Y = YEAR OF ASSEMBLY

TC = TRACE CODE (ATMEL LOT  
NUMBERS TO CORRESPOND  
WITH TRACE CODE LOG BOOK)  
(e.g. XX = AA, AB...YZ, ZZ)

Y = SEAL YEAR

8: 2008 0: 2012

9: 2007 1: 2013

0: 2010 2: 2014

1: 2011 3: 2015

@ = Country of  
Assembly

AT24C256C-SSHL-T/B

```

Seal Year
TOP MARK      | Seal Week
              |   |   |
|---|---|---|---|---|---|---|---|
  A   T   M   L   H   Y   W   W
|---|---|---|---|---|---|---|---|
  2   E   C   L           @
|---|---|---|---|---|---|---|---|
    * Lot Number
|---|---|---|---|---|---|---|---|
  |
  Pin 1 Indicator (Dot)

```

Y = SEAL YEAR                      WW = SEAL WEEK  
 8: 2008    2: 2012                02 = Week 2  
 9: 2009    3: 2013                04 = Week 4  
 0: 2010    4: 2014                :: : :::: :  
 1: 2011    5: 2015                :: : :::: ::  
                                   50 = Week 50  
                                   52 = Week 52

@ = Country of Assembly  
 No Bottom Mark

AT24C256C-XHL-T/B

```

TOP MARK
Pin 1 Indicator (Dot)
  |
  |---|---|---|---|---|---|
  *  A   T   H   Y   W   W
  |---|---|---|---|---|---|
    2   E   C   L           @
|---|---|---|---|---|---|---|
    ATMEL LOT NUMBER
|---|---|---|---|---|---|---|

```

Y = SEAL YEAR                      WW = SEAL WEEK  
 8: 2008    2: 2012                02 = Week 2  
 9: 2009    3: 2013                04 = Week 4  
 0: 2010    4: 2014                :: : :::: :  
 1: 2011    5: 2015                52 = Week 52

@ = Country of Assembly  
 No Bottom Mark