



## PCN / EOL Notification

**Product Change Notification Number: CC071002**

**Date\*:** March 13, 2007

**Title:** AT24C1024 DIE SHRINK

**Product Identification:**

All Wafers, Packages and Voltages of the AT24C1024, Industrial Temperature Grade (-40C to +85C)

[See Attachment A](#)

**Reason for Change:**

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

**Change Description:**

Atmel has performed a die size reduction of the AT24C1024 in the Industrial Temperature (-40 to +85C). The new version device will be manufactured utilizing the .25u process versus the .35u process for the current AT24C1024. A NEW part number will be created by adding "B" to the suffix of the part identifier for the shrink: AT24C1024B.

Atmel has introduced a NEW 1.8V version for this AT24C1024B device. Atmel has also expanded the package offerings to include JEDEC SOIC and is first to market with an 8-lead TSSOP 1Mbit two-wire product offering. The clock frequency is optimized at lower Vcc, and the new AT24C1024B will operate at 400kHz at 1.8V & 1MHz at 2.5V versus 400kHz at 2.7V for the current AT24C1024 device. Note: we do not offer Vcc < 2.7V for the current version.

In addition, an extra device address pin (A2) has been added for expanded cascading, which allows up to 4 devices (maximum serial EEPROM density) to share a common two-wire bus.

The new packaged devices will be offered in 1.8 and 2.5 voltages: (1.8V to 3.6V) and (2.5V to 5.5V). The dBGA2, die, and wafer sales will only be offered in 1.8V.

To accommodate the growing movement to Lead-Free products, the new shrink will ONLY be available in Pb-Free (Green) / Halogen-Free, and RoHS compliant packaging. The 8-SOIC, 8-TSSOP, and 8-ULTRA THIN SAP packages with NiPdAu lead finish will be designated by "H" in the catalogue part number. The 8-lead PDIP and dBGA2 with the Matte Tin lead finish will be designated by "U" in the catalogue part number.

**New physical part marking scheme:**

**8 - SOIC (1.8V)**

<p><b>TOP MARK</b></p> <p>Seal Year</p> <p>  Seal Week</p> <p>     </p> <p> --- --- --- --- --- --- --- --- </p> <p>A T M L H Y W W</p> <p> --- --- --- --- --- --- --- --- </p> <p>2 G B 1</p> <p> --- --- --- --- --- --- --- --- </p> <p>* Lot Number</p> <p> --- --- --- --- --- --- --- --- </p> <p> </p> <p>Pin 1 Indicator (Dot)</p>	<p>Y = SEAL YEAR</p> <p>6: 2006 0: 2010</p> <p>7: 2007 1: 2011</p> <p>8: 2008 2: 2012</p> <p>9: 2009 3: 2013</p> <p>WW = SEAL WEEK</p> <p>02 = Week 2</p> <p>04 = Week 4</p> <p>:: : :::: :</p> <p>:: : :::: ::</p> <p>50 = Week 50</p> <p>52 = Week 52</p> <p>Lot Number to Use ALL Characters in Marking</p> <p><b>BOTTOM MARK</b></p> <p>No Bottom Mark</p>
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**8-SOIC (2.5V)**

**TOP MARK**

```

Seal Year
| Seal Week
| | |
|---|---|---|---|---|---|---|---|
 A T M L H Y W W
|---|---|---|---|---|---|---|---|
 2 G B 2
|---|---|---|---|---|---|---|---|
 * Lot Number
|---|---|---|---|---|---|---|---|
|
Pin 1 Indicator (Dot)

```

Y = SEAL YEAR WW = SEAL WEEK

6: 2006	0: 2010	02 = Week 2
7: 2007	1: 2011	04 = Week 4
8: 2008	2: 2012	:: : :::: :
9: 2009	3: 2013	:: : :::: ::
		50 = Week 50
		52 = Week 52

Lot Number to Use ALL Characters in Marking

**BOTTOM MARK**

No Bottom Mark

**8-TSSOP (1.8V)**

**TOP MARK**

```

Pin 1 Indicator (Dot)
|
|---|---|---|---|
 * H Y W W
|---|---|---|---|
 2 G B 1
|---|---|---|---|

```

Y = SEAL YEAR WW = SEAL WEEK

6: 2006	0: 2010	02 = Week 2
7: 2007	1: 2011	04 = Week 4
8: 2008	2: 2012	:: : :::: :
9: 2009	3: 2013	:: : :::: ::
		50 = Week 50
		52 = Week 52

**BOTTOM MARK**

```

|---|---|---|---|---|---|---|
 P H
|---|---|---|---|---|---|---|
 A A A A A A A
|---|---|---|---|---|---|---|
 <- Pin 1 Indicator

```

**8-TSSOP (2.5V)**

**TOP MARK**

```

Pin 1 Indicator (Dot)
|
|---|---|---|---|
 * H Y W W
|---|---|---|---|
 2 G B 2
|---|---|---|---|

```

Y = SEAL YEAR WW = SEAL WEEK

6: 2006	0: 2010	02 = Week 2
7: 2007	1: 2011	04 = Week 4
8: 2008	2: 2012	:: : :::: :
9: 2009	3: 2013	:: : :::: ::
		50 = Week 50
		52 = Week 52

**BOTTOM MARK**

```

|---|---|---|---|---|---|---|
 P H
|---|---|---|---|---|---|---|
 A A A A A A A
|---|---|---|---|---|---|---|
 <- Pin 1 Indicator

```





**Quantifiable Impact on Quality & Reliability:**

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

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**Proposed First Ship Date:** June 25, 2007  
**Last Time Buy Date:** September 25, 2007  
**Last Ship Date:** March 25, 2008

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

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

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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**

Current Part Number	Replacement Part Number
AT24C1024-10PU-2.7	AT24C1024B-PU25 (Bulk Only)
AT24C1024-W2.7-11	AT24C1024B-W-11
AT24C1024-W2.7-13	AT24C1024B-W-11
AT24C1024-W2.7-7	AT24C1024B-W-11
AT24C1024W-10SU-2.7 BULK	AT24C1024BW-SH25-B
AT24C1024W-10SU-2.7 SL383 (T&R)	AT24C1024BW-SH25-T (2k per reel)
AT24C1024C1-10CU-2.7 SL383 (T&R)	AT24C1024BY7-YH25-T (3k per reel) *Recommend SAP (Y7) package for replacement
AT24C1024Y4-10YU-2.7 SL383 (T&R)	AT24C1024BY7-YH25-T (3k per reel)