PCN / EOL Notification

Product Change Notification Number: CC123803A (REVISED 11/28/12) **Notification Date:** November 26, 2012

Corrected Part Number Typo Error in Table 1

Title: 1-Kbit & 2-Kbit Two-wire interface Industrial Temperature Grade (-40C to 85C) Serial EEPROM (AT24C01B & AT24HC02B) Process Geometry Shrink and Device Enhancement

Product Identification:

All Packages of the Industrial Temperature Grade (-40C to +85C) AT24C01B and AT24HC02B

Reason for Change:	☒ Material / Composition	☒ Design / Firmware	☐ Manufacturing Location
	☐ Processing / Manufacturing	☐ Logistics	☐ Quality / Reliability

Change Description:

Atmel has performed a process geometry shrink of the Serial EEPROM Industrial Temperature Grade (-40C to +85C) AT24C01B and AT24HC02B devices (Two-wire interface, 1-Kbit density and 2-Kbit density) from .35µ to .25µ. The catalog part number AT24C01B and AT24HC02B will be replaced by AT24C01C and AT24HC02**C** respectively (see Table 1). The new devices are pin-to-pin and functionally backward compatible with the current AT24C01B and AT24HC02B devices with the following exception and enhancement.

Extended-VCC Operation

With a growing number of application segments moving to lower supply voltages, Atmel is developing next generation devices to meet the needs of these lower voltages. These voltage ranges are used by various MCUs, SoCs, and ASICs as process lithographies for such products continue to reduce. To address these voltage requirements, Atmel has designed the AT24C01**C** and AT24HC02**C** devices to operate over a **1.7V** to **5.5V** range versus the previous 1.8V to 5.5V range.

Copper (Cu) bond wire usage

In order to increase manufacturing flexibility and to ensure a long-term continuity of supply, Atmel will manufacture (SOIC, TSSOP, SOT23 and UDFN) packages using both gold (Au) and copper bond (Cu) wires. In addition, Atmel will add ASE to its list of qualified UDFN assembly and test location to enhance capacity. Atmel reserves the right to ship devices with either gold or copper bond wires.

Identification Method to Distinguish Change:

NEW catalog part numbers of AT24C01B and AT24HC02B changes to AT24C01**C** and AT24HC02**C** respectively. Please refer to Attachment A for part marking scheme.

Table 1

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	Replace Part Number	Package	Carrier Type
AT24C01B-PU	AT24C01C-PUM	PDIP	Bulk
AT24C01BN-SH-B	AT24C01C-SSHM-B	JEDEC SOIC	Bulk
AT24C01BN-SH-T	AT24C01C-SSHM-T	JEDEC SOIC	T/R, 4K per reel
AT24C01B-TH-B	AT24C01C-XHM-B	TSSOP	Bulk
AT24C01B-TH-T	AT24C01C-XHM-T	TSSOP	T/R, 5K per reel
AT24C01BY6-YH-T	AT24C01C-MAHM-T	UDFN	T/R, 5K per reel
AT24C01B-TSU-T	AT24C01C-STUM-T	SOT23	T/R, 5K per reel
AT24C01BU3-UU-T	AT24C01C-CUM-T	VFBGA	T/R, 5K per reel
AT24C01B-W-11	AT24C01C-WWU11M	Wafer Sales	

EOL Part Number	Replace Part Number	Package	Carrier Type
AT24HC02B-PU	AT24HC02C-PUM	PDIP	Bulk
AT24HC02BN-SH-B	AT24HC02C-SSHM-B	JEDEC SOIC	Bulk
AT24HC02BN-SH-T	AT24HC02C-SSHM-T	JEDEC SOIC	T/R, 4K per reel
AT24HC02B-TH-B	AT24HC02C-XHM-B	TSSOP	Bulk
AT24HC02B-TH-T	AT24HC02C-XHM-T	TSSOP	T/R, 5K per reel
AT24HC02B-W-11	AT24HC02C-WWU11M	Wafer Sales	

Qualification Data:	☒ Available	☐ Will be available (mm/dd/yr):	☐ Not Applicable
Samples:	☒ Available	☒ Will be available (mm/dd/yr): Q4 2012 (Copper bond wired UDFN sample)	☐ Not Applicable

Quantifiable Impact on Quality & Reliability:

None

Forecasted Availability Date: Available now

Last Time Buy Date: May 26, 2013

Last Ship Date: November 26,, 2013

**The Proposed First Ship Date is the forecasted date that a customer may expect to receive changed product. This is determined by the estimated date of inventory depletion on the PCN issue date. This may be affected by fluctuations in supply and demand. Consequently, although customers should be prepared to receive changed product on this date, Atmel will continue to ship pre-changed product until a time in which inventory has been depleted. This may result in pre-changed product being shipped to customers after this forecasted date.*

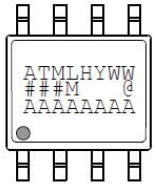
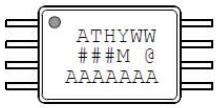
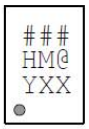
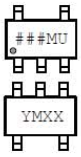
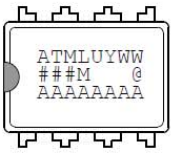
Atmel Contact: Please contact your Atmel Sales Representative or Distributor for additional information (when replying via e-mail please include PCN number in subject line).

CUSTOMER ACKNOWLEDGEMENT OF RECEIPT: Atmel requests you acknowledge receipt of this PCN. Please complete and email to pcnadm@atmel.com and the Atmel Contact listed above. In your acknowledgement, you can grant approval or request additional information. **Atmel 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:	

Attachment A

AT24C01C and AT24C02C: Package Marking Information

8-lead SOIC	8-lead TSSOP	8-lead UDFN
		2.0 x 3.0 mm Body 
8-ball VFBGA	**5-lead SOT-23**	**8-lead PDIP**
2.35 x 3.73 mm Body 	 Top Mark Bottom Mark	

Note 1: ● designates pin 1
Note 2: Package drawings are not to scale

Catalog Number Truncation			
AT24C01C		Truncation Code ###: 01C	
AT24C02C		Truncation Code ###: 02C	
Date Codes			**Voltages**
Y = Year	M = Month	WW = Work Week of Assembly	M: 1.7V min
2: 2012 6: 2016 3: 2013 7: 2017 4: 2014 8: 2018 5: 2015 9: 2019	A: January B: February ... L: December	02: Week 2 04: Week 4 ... 52: Week 52	
Country of Assembly	**Lot Number**		**Grade/Lead Finish Material**
@ = Country of Assembly	AAA...A = Atmel Wafer Lot Number		U: Industrial/Matte Tin H: Industrial/NiPdAu
Trace Code			**Atmel Truncation**
XX = Trace Code (Atmel Lot Numbers Correspond to Code) Example: AA, AB.... YZ, ZZ			AT: Atmel ATM: Atmel ATML: Atmel

3/6/12

Package Mark Contact: DL-CSO-Assy_eng@atmel.com	TITLE	DRAWING NO.	REV.
	24C01-02CSM, AT24C01C and AT24C02C Package Marking Information	24C01-02CSM	A