



PCN / EOL Notification

PCN Number: **CC143005A (Revised 01/23/15)**

Notification Date*: July 30, 2014

Removed Material / Composition as Reason for Change

Title: AT24C16C to AT24C16D — 16-Kbit I ² C-Compatible (Two Wire Interface) Industrial Temperature Grade (-40°C to 85°C) Serial EEPROM Process Optimization and Device Enhancement		
Product Identification: All package options of the Industrial Temperature Grade (-40°C to +85°C) version of the AT24C16C		
Reason for Change:	☐ Material / Composition	☐ Manufacturing Location
	☐ Processing / Manufacturing	☐ Quality / Reliability
	☒ Design / Firmware	☐ Logistics
	☒ Datasheet	☐ Other:
Change Description: Atmel has redesigned and improved its Industrial Temperature Grade (-40°C to +85°C) version of the 16-Kbit I ² C-compatible Serial EEPROM and optimized the associated device's process. These changes have been made to enhance device performance and robustness. As a result, the Industrial Temperature Grade version of the AT24C16C is being replaced by the AT24C16D (please note the revision letter change from "C" to "D" in the base part number — see Table 2 for a list of full catalog part numbers). The AT24C16D is pin-to-pin and functionally backward compatible to the AT24C16C with the following exceptions and enhancements. In addition to the historical packages offered, the new AT24C16D is now being offered in a 4-ball Wafer Level Chip Scale Package (WLCSPP) which was not previously available on the AT24C16C. <u>Supply Voltage (V_{CC}) Range</u> With a growing number of MCUs, SoCs, and ASICs migrating to lower supply voltages as a result of process lithography reductions, and as the electronics industry in general also moves to lower supply voltages to reduce power consumption, Atmel developed the next-generation AT24C16D to enhance performance for these lower voltage requirements. Unlike the AT24C16C devices that operate over a 1.7V to 5.5V voltage range, the AT24C16D devices have been designed to operate from a 1.7V to 3.6V supply. As a result, the AT24C16D has significant improvements and advantages over the AT24C16C devices with respect to power consumption, endurance, and noise suppression (see Table 1 for all differences). <i>For applications operating at voltage levels above 3.6V, please contact Atmel (MemoryPCN@atmel.com) for details on continued availability of the AT24C16C and to request an exception to the Last Time Buy and Last Ship dates.</i>		

CUSTOMER ACKNOWLEDGEMENT OF RECEIPT: Atmel requests you acknowledge receipt of this PCN / EOL. 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.**

To be completed by customer:

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