

PCN Number: NC133602
Notification Date*: September 10, 2013
Title: Technology Shrink of Automotive Microcontrollers Product ATmega48/88/168 and ATmega164P/324P

Product Identification:

Discontinued Product	New Product	Discontinued Product	New Product
ATmega48-15MT	ATmega48PA-15MZ	ATmega48-15AZ	ATmega48PA-15AZ
ATmega48-15MT1	ATmega48PA-15MZ	ATmega88-15AT	ATmega88PA-15AZ
ATmega48-15MZ	ATmega48PA-15MZ	ATmega88-15AT1	ATmega88PA-15AZ
ATmega88-15MT	ATmega88PA-15MZ	ATmega88-15AZ	ATmega88PA-15AZ
ATmega88-15MT1	ATmega88PA-15MZ	ATmega168-15AT	ATmega168PA-15AZ
ATmega88-15MZ	ATmega88PA-15MZ	ATmega168-15AT1	ATmega168PA-15AZ
ATmega168-15MT	ATmega168PA-15MZ	ATmega168-15AZ	ATmega168PA-15AZ
ATmega168-15MT1	ATmega168PA-15MZ	ATmega164P-A15MZ	ATmega164P-B15MZ
ATmega168-15MZ	ATmega168PA-15MZ	ATmega324P-A15MZ	ATmega324P-B15MZ
ATmega48-15AT	ATmega48PA-15AZ	ATmega164P-A15AZ	ATmega164P-B15AZ
ATmega48-15AT1	ATmega48PA-15AZ	ATmega324P-A15AZ	ATmega324P-B15AZ

Reason for Change:

- | | |
|---|---|
| ☐ Material / Composition | ☐ Manufacturing Location |
| ☐ Processing / Manufacturing | ☐ Quality / Reliability |
| ☒ Design / Firmware | ☐ Logistics |
| ☐ Datasheet | ☐ Other: |

Change Description:

Optimized std logic cells and metal interconnection width reduction. Resulting is reduced die size. Replacements are: pin-to-pin and backward compatible; production tested using similar automotive test programs; meet similar datasheet specifications as the current products.

Summarised as: same technology, different std cells, smaller die.

	<u>Current Product</u>	<u>New Product</u>
Technology	0.35µm 6"	Same
Wafer Production	Atmel, CSO	Same
Voltage Range	2.7V to 5.5V	Same
Package Type	QFN/TQFP	Same
Packaging Location	Multiple (see PPAP)	Same
Plating Type	Sn Matte	Same
Pin Positioning	Per datasheet	Same
Functionality	Per datasheet	Same
Docs provided as part of PCN process		Datasheet PPAP Packaging Spec

See product datasheet (available on Atmel website) for details of electrical characteristics.

Identification Method to Distinguish Change: New catalog part number.			
Qualification Data:	☒ Available	☐ Will be available (mm/dd/yr):	☐ Not Applicable
Samples:	☒ Available	☐ Will be available (mm/dd/yr):	☐ Not Applicable
Quantifiable Impact on Quality & Reliability: None			
Forecasted Availability Date: September 15, 2013 Last Time Buy Date: March 15, 2014 Last Ship Date: September 15, 2014 <i>*All orders placed after the notification date are non-cancellable and non-returnable (NCNR).</i>			
Atmel Contact: Please contact your Atmel Sales Representative or Distributor for additional information (when replying via e-mail please include the PCN number in subject line).			
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☐ Approved

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Company:

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