



## Product Change Notification

Product Change Notification Number: WC130902

Notification Date: March 11, 2013

**Title:** Adding Copper Bonding Wire Capability for Selected Microcontrollers

**Product Identification:**

| Part number       | Part number      | Part number       | Part number      |
|-------------------|------------------|-------------------|------------------|
| ATMEGA2561V-8AUR  | ATMEGA16-16AUR   | ATMEGA16-16AU     | ATMEGA64A-AU     |
| ATMEGA2561-16AUR  | ATMEGA16-16MUR   | ATMEGA16-16MU     | ATMEGA64-16AU    |
| ATMEGA1281V-8AUR  | ATMEGA8515-16MUR | ATMEGA8515-16MU   | ATMEGA64L-8AQ    |
| ATMEGA1281-16AUR  | ATMEGA2561V-8AU  | ATMEGA64A-AUR     | ATMEGA128L-8MU   |
| ATMEGA329V-8AUR   | ATMEGA2561-16AU  | ATMEGA64-16AUR    | ATMEGA128-16MU   |
| ATMEGA325V-8AUR   | ATMEGA1281V-8AU  | ATMEGA64L-8AQR    | ATMEGA128A-MU    |
| ATMEGA169PV-8AUR  | ATMEGA1281-16AU  | ATMEGA128L-8MUR   | ATMEGA169P-16MU  |
| ATMEGA169PA-AUR   | ATMEGA329V-8AU   | ATMEGA128-16MUR   | ATMEGA169PV-8MU  |
| ATMEGA169P-16AUR  | ATMEGA325V-8AU   | ATMEGA128A-MUR    | ATMEGA169PA-MU   |
| ATMEGA165P-16AUR  | ATMEGA169PV-8AU  | ATMEGA169P-16MUR  | ATMEGA329V-8MU   |
| ATMEGA128L-8AUR   | ATMEGA169PA-AU   | ATMEGA169PV-8MUR  | ATMEGA329PV-10MU |
| ATMEGA128A-AUR    | ATMEGA169P-16AU  | ATMEGA169PA-MUR   | ATMEGA329PA-MU   |
| ATMEGA128-16AUR   | ATMEGA165P-16AU  | ATMEGA329V-8MUR   | ATMEGA649V-8MU   |
| ATMEGA329P-20AUR  | ATMEGA128L-8AU   | ATMEGA329PV-10MUR | ATMEGA64A-MU     |
| ATMEGA329PV-10AUR | ATMEGA128A-AU    | ATMEGA329PA-MUR   | ATMEGA64-16MU    |
| ATMEGA329PA-AUR   | ATMEGA128-16AU   | ATMEGA649V-8MUR   | ATMEGA64L-8MQ    |
| ATMEGA645V-8AUR   | ATMEGA329P-20AU  | ATMEGA64A-MUR     | ATMEGA64L-8MU    |
| ATMEGA649V-8AUR   | ATMEGA329PV-10AU | ATMEGA64-16MUR    | ATMEGA8535-16MU  |
| ATMEGA1284-AUR    | ATMEGA329PA-AU   | ATMEGA64L-8MQR    | ATMEGA164P-20AU  |
| ATMEGA324A-AUR    | ATMEGA645V-8AU   | ATMEGA64L-8MUR    | ATMEGA164PV-10MU |
| ATMEGA324A-MUR    | ATMEGA649V-8AU   | ATMEGA8535-16MUR  | ATMEGA164P-20MU  |
| ATMEGA164A-AUR    | ATMEGA1284-AU    | ATMEGA164P-20AUR  | ATMEGA324P-20MU  |
| ATMEGA164A-MUR    | ATMEGA324A-AU    | ATMEGA164PV-10MUR | ATMEGA644P-20AU  |
| ATMEGA644A-AUR    | ATMEGA324A-MU    | ATMEGA164P-20MUR  | ATMEGA644P-20MU  |
| ATMEGA644A-MUR    | ATMEGA164A-AU    | ATMEGA324P-20MUR  | ATMEGA32L-8AU    |
| ATMEGA324P-20AUR  | ATMEGA164A-MU    | ATMEGA644P-20AUR  | ATMEGA324P-20AU  |
| ATMEGA32-16AUR    | ATMEGA644A-AU    | ATMEGA644P-20MUR  | ATMEGA32-16AU    |
| ATMEGA32-16MUR    | ATMEGA644A-MU    | ATMEGA32L-8AUR    | ATMEGA32-16MU    |

**Reason for Change:**

- ☒ Material / Composition  
☐ Processing / Manufacturing

- ☐ Design / Firmware  
☐ Logistics

- ☐ Manufacturing Location  
☐ Quality / Reliability

**Change Description:**

To increase manufacturing flexibility and ensure long-term continuity of supply, Atmel will manufacture devices listed above using both gold (Au) and copper bond (Cu) wires. Atmel reserves the right to ship devices with either gold or copper bond wires. The change does not impact reliability, soldering profiles or electrical characteristics. Qualification data is available upon request.

Copper samples will be delivered in T&R only and can be ordered through Atmel Sample Centre by logging on to <https://samples.atmel.com/scripts/samplecenter.dll?atmel?cmd=menu>

Specific ordering codes for copper samples only are shown in the table below, and are available for sample orders only until the proposed first shipment date. For all production orders, only standard existing ordering codes will be accepted.

| Part number       | Copper sample ordering code |
|-------------------|-----------------------------|
| ATMEGA2561V-8AUR  | ATMEGA2561V-8AURC           |
| ATMEGA2561-16AUR  | ATMEGA2561-16AURC           |
| ATMEGA1281V-8AUR  | ATMEGA1281V-8AURC           |
| ATMEGA1281-16AUR  | ATMEGA1281-16AURC           |
| ATMEGA329V-8AUR   | ATMEGA329V-8AURC            |
| ATMEGA325V-8AUR   | ATMEGA325V-8AURC            |
| ATMEGA169PV-8AUR  | ATMEGA169PV-8AURC           |
| ATMEGA169PA-AUR   | ATMEGA169PA-AURC            |
| ATMEGA169P-16AUR  | ATMEGA169P-16AURC           |
| ATMEGA165P-16AUR  | ATMEGA165P-16AURC           |
| ATMEGA128L-8AUR   | ATMEGA128L-8AURC            |
| ATMEGA128A-AUR    | ATMEGA128A-AURC             |
| ATMEGA128-16AUR   | ATMEGA128-16AURC            |
| ATMEGA329P-20AUR  | ATMEGA329P-20AURC           |
| ATMEGA329PV-10AUR | ATMEGA329PV-10AURC          |
| ATMEGA329PA-AUR   | ATMEGA329PA-AURC            |
| ATMEGA645V-8AUR   | ATMEGA645V-8AURC            |
| ATMEGA649V-8AUR   | ATMEGA649V-8AURC            |
| ATMEGA1284-AUR    | ATMEGA1284-AURC             |
| ATMEGA324A-AUR    | ATMEGA324A-AURC             |
| ATMEGA324A-MUR    | ATMEGA324A-MURC             |
| ATMEGA164A-AUR    | ATMEGA164A-AURC             |
| ATMEGA164A-MUR    | ATMEGA164A-MURC             |
| ATMEGA644A-AUR    | ATMEGA644A-AURC             |
| ATMEGA32-16MUR    | ATMEGA32-16MURC             |

| Part number       | Copper sample ordering code |
|-------------------|-----------------------------|
| ATMEGA16-16AUR    | ATMEGA16-16AURC             |
| ATMEGA16-16MUR    | ATMEGA16-16MURC             |
| ATMEGA8515-16MUR  | ATMEGA8515-16MURC           |
| ATMEGA64A-AUR     | ATMEGA64A-AURC              |
| ATMEGA64-16AUR    | ATMEGA64-16AURC             |
| ATMEGA64L-8AQR    | ATMEGA64L-8AQR              |
| ATMEGA128L-8MUR   | ATMEGA128L-8MURC            |
| ATMEGA128-16MUR   | ATMEGA128-16MURC            |
| ATMEGA128A-MUR    | ATMEGA128A-MURC             |
| ATMEGA169P-16MUR  | ATMEGA169P-16MURC           |
| ATMEGA169PV-8MUR  | ATMEGA169PV-8MURC           |
| ATMEGA169PA-MUR   | ATMEGA169PA-MURC            |
| ATMEGA329V-8MUR   | ATMEGA329V-8MURC            |
| ATMEGA329PV-10MUR | ATMEGA329PV-10MURC          |
| ATMEGA329PA-MUR   | ATMEGA329PA-MURC            |
| ATMEGA649V-8MUR   | ATMEGA649V-8MURC            |
| ATMEGA64A-MUR     | ATMEGA64A-MURC              |
| ATMEGA64-16MUR    | ATMEGA64-16MURC             |
| ATMEGA64L-8MQR    | ATMEGA64L-8MQR              |
| ATMEGA64L-8MUR    | ATMEGA64L-8MURC             |
| ATMEGA8535-16MUR  | ATMEGA8535-16MURC           |
| ATMEGA164P-20AUR  | ATMEGA164P-20AURC           |
| ATMEGA164PV-10MUR | ATMEGA164PV-10MURC          |
| ATMEGA164P-20MUR  | ATMEGA164P-20MURC           |
| ATMEGA32L-8AUR    | ATMEGA32L-8AURC             |

|                  |                   |                  |                   |
|------------------|-------------------|------------------|-------------------|
| ATMEGA644A-MUR   | ATMEGA644A-MURC   | ATMEGA324P-20MUR | ATMEGA324P-20MURC |
| ATMEGA324P-20AUR | ATMEGA324P-20AURC | ATMEGA644P-20AUR | ATMEGA644P-20AURC |
| ATMEGA32-16AUR   | ATMEGA32-16AURC   | ATMEGA644P-20MUR | ATMEGA644P-20MURC |

Note that the **C** in sample ordering codes will not be marked on the package

**Identification Method to Distinguish Change:**

Lot tracking information can be made available upon request.

|                            |                                               |                                                        |                                         |
|----------------------------|-----------------------------------------------|--------------------------------------------------------|-----------------------------------------|
| <b>Qualification Data:</b> | <input checked="" type="checkbox"/> Available | <input type="checkbox"/> Will be available (mm/dd/yr): | <input type="checkbox"/> Not Applicable |
| <b>Samples:</b>            | <input checked="" type="checkbox"/> Available | <input type="checkbox"/> Will be available (mm/dd/yr): | <input type="checkbox"/> Not Applicable |

**Quantifiable Impact on Quality & Reliability:**

None

**Proposed First Ship Date\*:** June 1, 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).

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