

PCN Number: CC133402

Notification Date: September 11, 2013

Title: ATSHA204 Copper (CU) Bond Wire Change									
Product Identification: ATSHA204-MAH-DA-T ATSHA204-MAH-CZ-T									
Reason for Change	: 🛛 Material / Cor	nposition	Manufacturing Location						
	Processing / M	Processing / Manufacturing		Quality / Reliability					
	🗌 Design / Firm	🗌 Design / Firmware		Logistics					
	Datasheet	Datasheet		Other:					
Change Description: <u>Copper (Cu) bond wire usage</u> In order to increase manufacturing flexibility and to ensure a long-term continuity of supply, Atmel will manufacture these UDFN packages using both gold (Au) and copper bond (Cu) wires.									
These changes do not affect the form, fit or function of the device. Atmel anticipates that the vast majority of future package assembly will use copper bond wires and strongly urges all customers to qualify copper bond wire products as soon as possible. However, Atmel reserves the right to ship devices with either gold or copper bond wires as it deems necessary.									
Identification Method to Distinguish Change: Not applicable									
Qualification Data:	Available (see the attached qual report)	Will be available (mm/dd/yr):		Not Applicable					
Samples:	🛛 Available	Will be available (mm/dd/yr):		Not Applicable					
Quantifiable Impact on Quality & Reliability: None									
 Proposed First Ship Date *: December 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 the PCN number in subject line).									

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CUSTOMER ACKNOWLEDGEMENT OF RECEIPT: Atmel requests you acknowledge receipt of this PCN. Please complete and email to <u>pcnadm@atmel.com</u> 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:

Approved

Rejected (Please state reason for rejection):

Company: Name: Title: Date: Email Address: Location: Comments:

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Package Qualification Test Summary

ASEK, DFN Cu Wire Process Qualification											
<u>Test Vehicle</u> <u>Part Number/MPN:</u> SHA204/AT58955 <u>Package:</u> 8 Lead, DFN *Package MSL: 1, 168 Hours @ 85°C/85%RH, IR Ref			Family Coverage (By Similarity) Assembly Subcontractor: ASEK Location: Taiwan Die Fabrication Technology: Crypto Products Package: DFN Package, ≤ 8 Leads Lead Plating: NiPdAu Coverage (By Similarity) Ilow 260C Peak Temperature. Coverage (By Similarity)								
Test Name	Test Method	Stress Test Conditions	Duration/ Readpoints	PreCond JESA113*	SS/Lot	Lot# QAL783A	Lot# QAL783D	Lot# QAL783F			
<u>H</u> igh <u>T</u> emperature <u>S</u> torage	Unbiased Bake	150C - Unbiased	1008 Hours	NO	900	Pass 0 Failures	Pass 0 Failures	Pass 0 Failures			
HAST	JESD22A101B	130C/85%RH 5V - Static Bias	96 Hours	YES	77	Pass 0 Failures	Pass 0 Failures	Pass 0 Failures			
Extended HAST	JESD22A101B	130C/85%RH 5V - Static Bias	96 Hours (192 Hrs Cum)	YES	77	Pass 0 Failures	Pass 0 Failures	Pass 0 Failures			
Temperature Cycle	JESD22A104A	-65C/150C	500 Cycles	YES	900	Pass 0 Failures	Pass 0 Failures	Pass 0 Failures			
Autoclave	JESDA102B	100%RH/121C	96 Hours	YES	77	Pass 0 Failures	Pass 0 Failures	Pass 0 Failures			