Microsemi Corporation

November 5, 2015

Product/Process Change Notification No: PCN1507

Change Classification: Major

Subject: ProASIC®3 and IGLOO® Devices in FG484 and FGG484 Conversion from Gold to Palladium Coated Copper (PCC) Wire

Description of Change

Qualification of Palladium Coated Copper (PCC) wire is currently underway for ProASIC3 and IGLOO devices in FG484 and FGG484. Refer to Appendix 1 for the complete list of devices.

Reason for Change

Conversion to PCC wire is aligned with the current industry trend. Our assembly vendors have extensive experience in copper bond wire assembly. Copper wire is used in high volume production by our assembly vendors, and copper wire has demonstrated equal electrical and mechanical performance to gold wire. Products assembled with copper bond wire have no changes in the product moisture sensitivity level (MSL), product functionality, performance, quality, and reliability.

Products assembled with copper wire have a different set of materials, which is more suitable for copper wire. Products built with gold wire do not have any changes to their materials. Contact Microsemi for more details on the materials for copper wire assembly.

Application Impact

There is no impact in the thermal and electrical performance of the device.

Products Affected by this Change

Refer to Appendix 1 for the list of devices.

Production Shipment Schedule

Microsemi may begin shipping the devices with PCC wire starting from **January 28, 2016**.

Microsemi reserves the right to continue the shipment of devices with Au wire following the change implementation date. Customers may receive a mix of pre-conversion (Au wire) and products with PCC wire interchangeably, following the change implementation date.

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Qualification Data

Qualification is expected to be completed by **December 15, 2015**.

The Qualification Report will be available by **December 23, 2015**.

Contact Information

If you have further questions related to this topic, contact Microsemi's Technical Support at soc_tech@microsemi.com.

Regards,

Microsemi Corporation

Any projected dates in this PCN are based on the most current product information at the time this PCN is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Microsemi Sales Office, the factory contact shown above, or your local distributor.

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Appendix A: Devices to be Converted to PCC Wire

List of Affected Devices in ProASIC3 Family			
A3P400-1FG484	A3P600-1FGG484I	A3P600L-FGG484	A3P1000-FG484I
A3P400-1FG484I	A3P600-2FG484	A3P600L-FGG484I	A3P1000-FG484M
A3P400-1FGG484	A3P600-2FG484I	A3P1000-1FG484	A3P1000-FGG484
A3P400-1FGG484I	A3P600-2FGG484	A3P1000-1FG484I	A3P1000-FGG484I
A3P400-2FG484	A3P600-2FGG484I	A3P1000-1FG484M	A3P1000-FGG484M
A3P400-2FG484I	A3P600-FG484	A3P1000-1FGG484	A3P1000L-1FG484
A3P400-2FGG484	A3P600-FG484I	A3P1000-1FGG484I	A3P1000L-1FG484I
A3P400-2FGG484I	A3P600-FGG484	A3P1000-1FGG484M	A3P1000L-1FGG484
A3P400-FG484	A3P600-FGG484I	A3P1000-2FG484	A3P1000L-1FGG484I
A3P400-FG484I	A3P600L-1FG484	A3P1000-2FG484I	A3P1000L-FG484
A3P400-FGG484	A3P600L-1FG484I	A3P1000-2FG484M	A3P1000L-FG484I
A3P400-FGG484I	A3P600L-1FGG484	A3P1000-2FGG484	A3P1000L-FGG484
A3P600-1FG484	A3P600L-1FGG484I	A3P1000-2FGG484I	A3P1000L-FGG484I
A3P600-1FG484I	A3P600L-FG484	A3P1000-2FGG484M	-
A3P600-1FGG484	A3P600L-FG484I	A3P1000-FG484	-
List of Affected Devices in ProASIC3E Family			
A3PE600-1FG484	A3PE600-FGG484M	A3PE1500-FGG484	A3PE3000-FGG484
A3PE600-1FG484I	A3PE600L-1FG484M	A3PE1500-FGG484I	A3PE3000-FGG484I
A3PE600-1FG484M	A3PE600L-1FGG484M	A3PE3000-1FG484	A3PE3000-FGG484M
A3PE600-1FGG484	A3PE600L-FG484M	A3PE3000-1FG484I	A3PE3000L-1FG484
A3PE600-1FGG484I	A3PE600L-FGG484M	A3PE3000-1FG484M	A3PE3000L-1FG484I
A3PE600-1FGG484M	A3PE1500-1FG484	A3PE3000-1FGG484	A3PE3000L-1FG484M
A3PE600-2FG484	A3PE1500-1FG484I	A3PE3000-1FGG484I	A3PE3000L-1FGG484
A3PE600-2FG484I	A3PE1500-1FGG484	A3PE3000-1FGG484M	A3PE3000L-1FGG484I
A3PE600-2FGG484	A3PE1500-1FGG484I	A3PE3000-2FG484	A3PE3000L-1FGG484M
A3PE600-2FGG484I	A3PE1500-2FG484	A3PE3000-2FG484I	A3PE3000L-FG484
A3PE600-FG484	A3PE1500-2FG484I	A3PE3000-2FGG484	A3PE3000L-FG484I
A3PE600-FG484I	A3PE1500-2FGG484	A3PE3000-2FGG484I	A3PE3000L-FG484M
A3PE600-FG484M	A3PE1500-2FGG484I	A3PE3000-FG484	A3PE3000L-FGG484
A3PE600-FGG484	A3PE1500-FG484	A3PE3000-FG484I	A3PE3000L-FGG484I
A3PE600-FGG484I	A3PE1500-FG484I	A3PE3000-FG484M	A3PE3000L-FGG484M
List of Affected Devices in ProASIC3 Family (ARM M1 Enabled)			
M1A3P400-1FG484	M1A3P600-1FG484I	M1A3P600L-1FGG484	M1A3P1000-2FGG484I
M1A3P400-1FG484I	M1A3P600-1FGG484	M1A3P600L-1FGG484I	M1A3P1000-FG484
M1A3P400-1FGG484	M1A3P600-1FGG484I	M1A3P600L-FG484	M1A3P1000-FG484I
M1A3P400-1FGG484I	M1A3P600-2FG484	M1A3P600L-FG484I	M1A3P1000-FGG484

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M1A3P400-2FG484	M1A3P600-2FG484I	M1A3P600L-FGG484	M1A3P1000-FGG484I
M1A3P400-2FG484I	M1A3P600-2FGG484	M1A3P600L-FGG484I	M1A3P1000L-1FG484
M1A3P400-2FGG484	M1A3P600-2FGG484I	M1A3P1000-1FG484	M1A3P1000L-1FG484I
M1A3P400-2FGG484I	M1A3P600-FG484	M1A3P1000-1FG484I	M1A3P1000L-1FGG484
M1A3P400-FG484	M1A3P600-FG484I	M1A3P1000-1FGG484	M1A3P1000L-1FGG484I
M1A3P400-FG484I	M1A3P600-FGG484	M1A3P1000-1FGG484I	M1A3P1000L-FG484
M1A3P400-FGG484	M1A3P600-FGG484I	M1A3P1000-2FG484	M1A3P1000L-FG484I
M1A3P400-FGG484I	M1A3P600L-1FG484	M1A3P1000-2FG484I	M1A3P1000L-FGG484
M1A3P600-1FG484	M1A3P600L-1FG484I	M1A3P1000-2FGG484	M1A3P1000L-FGG484I
List of Affected Devices in ProASIC3E Family (ARM M1 Enabled)			
M1A3PE600-1FG484	M1A3PE1500-1FG484	M1A3PE3000-1FG484	M1A3PE3000L-1FG484
M1A3PE600-1FG484I	M1A3PE1500-1FG484I	M1A3PE3000-1FG484I	M1A3PE3000L-1FG484I
M1A3PE600-1FGG484	M1A3PE1500-1FGG484	M1A3PE3000-1FGG484	M1A3PE3000L-1FG484M
M1A3PE600-1FGG484I	M1A3PE1500-1FGG484I	M1A3PE3000-1FGG484I	M1A3PE3000L-1FGG484
M1A3PE600-2FG484	M1A3PE1500-2FG484	M1A3PE3000-2FG484	M1A3PE3000L-1FGG484I
M1A3PE600-2FG484I	M1A3PE1500-2FG484I	M1A3PE3000-2FG484I	M1A3PE3000L-1FGG484M
M1A3PE600-2FGG484	M1A3PE1500-2FGG484	M1A3PE3000-2FGG484	M1A3PE3000L-FG484
M1A3PE600-2FGG484I	M1A3PE1500-2FGG484I	M1A3PE3000-2FGG484I	M1A3PE3000L-FG484I
M1A3PE600-FG484	M1A3PE1500-FG484	M1A3PE3000-FG484	M1A3PE3000L-FG484M
M1A3PE600-FG484I	M1A3PE1500-FG484I	M1A3PE3000-FG484I	M1A3PE3000L-FGG484
M1A3PE600-FGG484	M1A3PE1500-FGG484	M1A3PE3000-FGG484	M1A3PE3000L-FGG484I
M1A3PE600-FGG484I	M1A3PE1500-FGG484I	M1A3PE3000-FGG484I	M1A3PE3000L-FGG484M
List of Affected Devices in ProASIC3 Family (ARM M7 Enabled)			
M7A3P400-1FG484	M7A3P400-FG484I	M7A3P600-2FGG484	M7A3P1000-1FGG484I
M7A3P400-1FG484I	M7A3P400-FGG484	M7A3P600-2FGG484I	M7A3P1000-2FG484
M7A3P400-1FGG484	M7A3P400-FGG484I	M7A3P600-FG484	M7A3P1000-2FG484I
M7A3P400-1FGG484I	M7A3P600-1FG484	M7A3P600-FG484I	M7A3P1000-2FGG484
M7A3P400-2FG484	M7A3P600-1FG484I	M7A3P600-FGG484	M7A3P1000-2FGG484I
M7A3P400-2FG484I	M7A3P600-1FGG484	M7A3P600-FGG484I	M7A3P1000-FG484
M7A3P400-2FGG484	M7A3P600-1FGG484I	M7A3P1000-1FG484	M7A3P1000-FG484I
M7A3P400-2FGG484I	M7A3P600-2FG484	M7A3P1000-1FG484I	M7A3P1000-FGG484
M7A3P400-FG484	M7A3P600-2FG484I	M7A3P1000-1FGG484	M7A3P1000-FGG484I
List of Affected Devices in ProASIC3E Family (ARM M7 Enabled)			
M7A3PE600-1FG484	M7A3PE600-FG484I	M7A3PE1500-2FGG484	M7A3PE3000-1FGG484I
M7A3PE600-1FG484I	M7A3PE600-FGG484	M7A3PE1500-2FGG484I	M7A3PE3000-2FG484
M7A3PE600-1FGG484	M7A3PE600-FGG484I	M7A3PE1500-FG484	M7A3PE3000-2FG484I
M7A3PE600-1FGG484I	M7A3PE1500-1FG484	M7A3PE1500-FG484I	M7A3PE3000-2FGG484
M7A3PE600-2FG484	M7A3PE1500-1FG484I	M7A3PE1500-FGG484	M7A3PE3000-2FGG484I

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M7A3PE600-2FG484I	M7A3PE1500-1FGG484	M7A3PE1500-FGG484I	M7A3PE3000-FG484
M7A3PE600-2FGG484	M7A3PE1500-1FGG484I	M7A3PE3000-1FG484	M7A3PE3000-FG484I
M7A3PE600-2FGG484I	M7A3PE1500-2FG484	M7A3PE3000-1FG484I	M7A3PE3000-FGG484
M7A3PE600-FG484	M7A3PE1500-2FG484I	M7A3PE3000-1FGG484	M7A3PE3000-FGG484I
List of Affected Devices in IGLOO Family			
AGL400V2-FG484	AGL600-FG484	AGL600V5-FG484	AGL1000V2-FG484
AGL400V2-FG484I	AGL600-FG484I	AGL600V5-FG484I	AGL1000V2-FG484I
AGL400V2-FGG484	AGL600-FGG484	AGL600V5-FGG484	AGL1000V2-FGG484
AGL400V2-FGG484I	AGL600-FGG484I	AGL600V5-FGG484I	AGL1000V2-FGG484I
AGL400V5-FG484	AGL600V2-FG484	AGL1000-FG484	AGL1000V5-FG484
AGL400V5-FG484I	AGL600V2-FG484I	AGL1000-FG484I	AGL1000V5-FG484I
AGL400V5-FGG484	AGL600V2-FGG484	AGL1000-FGG484	AGL1000V5-FGG484
AGL400V5-FGG484I	AGL600V2-FGG484I	AGL1000-FGG484I	AGL1000V5-FGG484I
List of Affected Devices in IGLOOE Family			
AGLE600-FG484	AGLE600V2-FGG484	AGLE3000-FG484	AGLE3000V2-FGG484
AGLE600-FG484I	AGLE600V2-FGG484I	AGLE3000-FG484I	AGLE3000V2-FGG484I
AGLE600-FGG484	AGLE600V5-FG484	AGLE3000-FGG484	AGLE3000V5-FG484
AGLE600-FGG484I	AGLE600V5-FG484I	AGLE3000-FGG484I	AGLE3000V5-FG484I
AGLE600V2-FG484	AGLE600V5-FGG484	AGLE3000V2-FG484	AGLE3000V5-FGG484
AGLE600V2-FG484I	AGLE600V5-FGG484I	AGLE3000V2-FG484I	AGLE3000V5-FGG484I
List of Affected Devices in IGLOO Family (ARM M1 Enabled)			
M1AGL400V2-FG484	M1AGL400V5-FGG484	M1AGL600V5-FG484	M1AGL1000V2-FGG484
M1AGL400V2-FG484I	M1AGL400V5-FGG484I	M1AGL600V5-FG484I	M1AGL1000V2-FGG484I
M1AGL400V2-FGG484	M1AGL600V2-FG484	M1AGL600V5-FGG484	M1AGL1000V5-FG484
M1AGL400V2-FGG484I	M1AGL600V2-FG484I	M1AGL600V5-FGG484I	M1AGL1000V5-FG484I
M1AGL400V5-FG484	M1AGL600V2-FGG484	M1AGL1000V2-FG484	M1AGL1000V5-FGG484
M1AGL400V5-FG484I	M1AGL600V2-FGG484I	M1AGL1000V2-FG484I	M1AGL1000V5-FGG484I
List of Affected Devices in IGLOOE Family (ARM M1 Enabled)			
M1AGLE3000V2-FG484	M1AGLE3000V2-FGG484	M1AGLE3000V5-FG484	M1AGLE3000V5-FGG484
M1AGLE3000V2-FG484I	M1AGLE3000V2-FGG484I	M1AGLE3000V5-FG484I	M1AGLE3000V5-FGG484I

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