# **Microsemi Corporation**

# December 19, 2015

#### Product/Process Change Notification No: PCN1505A

#### **Change Classification: Major**

**Subject: Addendum to PCN 1505** - Transfer of Assembly Support for various BGA Packages from Amkor Korea (ATK4) to Amkor Philippines (ATP3)

#### **Description of Change**

Devices listed in Appendix A will have the assembly support transferred from ATK4 to ATP3 facility.

# **Reason for Change**

Microsemi's SoC assembly sub-contract facility, Amkor, will discontinue the plastic BGA packages support with Corner Gate Mold (CGM) process at its ATK4 facility, and it will consolidate BGA packages support with CGM process at its ATP3 facility from January 01, 2016.

# **Application Impact**

ATP3 and ATK4 facilities use the same set of materials, and have identical process controls.

There is no impact to end-user applications. There is no change in the form, fit, and function as a result of this assembly support transfer.

Microsemi SoC has been using both ATK4 and ATP3 for the assembly of devices in BGA packages for at least 10 years. This transfer is only to consolidate to ATP3 those devices utilizing the CGM process currently being assembled at the ATK4 facility.

# Method of Identifying Changed Product

The facility's country, from which the units were assembled, is marked on the top-side of the package. Those assembled at Korea are marked KOR while those to be built in the Philippine facility are marked PHL.

#### **Products Affected by this Change**

Refer to Appendix A for affected products.

Refer to Appendix B for additional products to be moved from ATK4 to ATP3.

# **Production Shipment Schedule**

Shipment of assembled products in the ATP3 facility may start by **January 10, 2016** for the products listed in **Appendix A** and **February 25, 2016** for the products listed in **Appendix B**. Microsemi SoC may ship products built from ATK4 and/or ATP3 based on the availability of inventory.

Full production at ATP3 is expected to start with date code: 1601. However, earlier devices use on initial assembly at ATP3 may have an earlier date code marking.

# **Qualification Data**

As per the guidance by JEDEC standard JESD47I, the movement of product manufacturing from one location to another only requires the completion of manufacturability test at the new location when the new location is already qualified for the same process and techniques.

The initial production at ATP3 will be monitored to ensure smooth transition and no manufacturability concern. The ATP3 facility has already been running for various BGA products of Microsemi SoC for many years. The products to be transferred from ATK4 to ATP3 are an addition to Microsemi devices that are already being assembled in ATP3.

# **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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#### Summary of Changes for Addendum A:

1. Updated list of devices that will move from ATK4 to ATP3.

#### Appendix A: Devices to be Supported from ATK4 to ATP3

AFS1500-1FG676	AX1000-2FG676	AX2000-2FG1152
AFS1500-1FG676I	AX1000-2FG676I	AX2000-2FG1152I
AFS1500-1FGG676	AX1000-2FG676M	AX2000-2FG1152M
AFS1500-1FGG676I	AX1000-1FG676	AX2000-FG896
AFS1500-2FG676	AX1000-1FG676I	AX2000-FG896M
AFS1500-2FG676I	AX1000-1FG676M	AX2000-1FG1152
M1AFS1500-1FGG676	AX1000-1FG896	AX2000-1FG1152I
M1AFS1500-1FGG676I	AX1000-1FG896I	AX2000-1FG1152M
AFS1500-2FGG676	AX1000-1FG896M	AX2000-1FG896
AFS1500-2FGG676I	AX1000-1FGG676	AX2000-1FG896I
AFS1500-FG676	AX1000-1FGG676I	AX2000-1FG896M
AFS1500-FG676I	AX1000-1FGG676M	AX2000-1FGG1152
AFS1500-FG676IX266	AX1000-1FGG896	AX2000-1FGG1152I
AFS1500-FGG676	AX1000-1FGG896I	AX2000-1FGG1152M
	AFS1500-1FG676I   AFS1500-1FGG676I   AFS1500-1FGG676I   AFS1500-2FG676I   AFS1500-2FG676I   M1AFS1500-1FGG676I   M1AFS1500-1FGG676I   AFS1500-2FG676I   AFS1500-2FG676I   AFS1500-1FGG676I   AFS1500-2FGG676I   AFS1500-2FGG676I   AFS1500-2FGG676I   AFS1500-FG676I   AFS1500-FG676I   AFS1500-FG676I	AFS1500-1FG676I AX1000-2FG676I   AFS1500-1FGG676 AX1000-2FG676M   AFS1500-1FGG676I AX1000-1FG676   AFS1500-2FG676 AX1000-1FG676I   AFS1500-2FG676I AX1000-1FG676M   M1AFS1500-1FGG676I AX1000-1FG896   M1AFS1500-1FGG676I AX1000-1FG896I   AFS1500-2FGG676I AX1000-1FG896I   AFS1500-2FGG676I AX1000-1FG896M   AFS1500-2FGG676I AX1000-1FG896M   AFS1500-2FGG676I AX1000-1FG896M   AFS1500-2FGG676I AX1000-1FG6676I   AFS1500-2FGG676I AX1000-1FG6676I   AFS1500-2FGG676I AX1000-1FG6676I   AFS1500-FG676I AX1000-1FGG676I   AFS1500-FG676I AX1000-1FGG676M

A54SX32A-1BGG329M	AFS1500-FGG676I	AX1000-1FGG896M	AX2000-1FGG896
A54SX32A-2BG329	M1AFS1500-1FG676	AX1000-2FGG896	AX2000-1FGG896I
A54SX32A-2BG329I	M1AFS1500-1FG676I	AX1000-2FGG896I	AX2000-1FGG896M
A54SX32A-2BGG329	M1AFS1500-2FG676	AX1000-2FG896M	AX2000-2FG896
A54SX32A-2BGG329I	M1AFS1500-2FG676I	AX1000-2FGG676	AX2000-2FG896I
A54SX32A-BG329	M1AFS1500-2FGG676	AX1000-2FGG676I	AX2000-2FG896M
A54SX32A-BG329I	M1AFS1500-2FGG676I	AX1000-2FGG896	AX2000-2FGG1152
A54SX32A-BG329M	M1AFS1500-FG676	AX1000-2FGG896I	AX2000-2FGG1152I
A54SX32A-BGG329	M1AFS1500-FG676I	AX1000-FG676	AX2000-2FGG896
A54SX32A-BGG329I	M1AFS1500-FGG676	AX1000-FG676I	AX2000-2FGG896I
A54SX32A-BGG329M	M1AFS1500-FGG676I	AX1000-FG676M	AX2000-FG1152
A54SX32-BG329	M1A3PE1500-1FG676	AX1000-FG896	AX2000-FG1152I
A54SX32-BG329I	M1A3PE1500-1FG676I	AX1000-FG896I	AX2000-FG896I
A54SX32-BG329M	M1A3PE1500-2FG676	AX1000-FG896M	AX2000-FGG1152
A54SX32-BGG329	M1A3PE1500-2FG676I	AX1000-FGG676	AX2000-FGG1152I
A54SX32-BGG329I	M1A3PE1500-FG676	AX1000-FGG676I	AX2000-FGG1152M
A54SX32-BGG329M	M1A3PE1500-FG676I	AX1000-FGG676M	AX2000-FGG896
APA600-FG676	M1A3PE1500-1FGG676	AX1000-FGG896	AX2000-FGG896I
APA600-FG676I	M1A3PE1500-1FGG676I	AX1000-FGG896I	AX2000-FGG896M
APA600-FGG676	M1A3PE1500-2FGG676	AX1000-FGG896M	AX2000-1FG896I
APA600-FGG676I	M1A3PE1500-2FGG676I	AX500-1FG676	
APA750-FG676	M1A3PE1500-FGG676	AX500-1FG676I	
APA750-FG676I	M1A3PE1500-FGG676I	AX500-1FG676M	
APA750-FGG676	A3PE1500-1FG676	AX500-2FG676	
APA750-FGG676I	A3PE1500-1FG676I	AX500-2FG676I	
APA1000-FG1152	A3PE1500-2FG676	AX500-FG676	
APA1000-FG1152I	A3PE1500-2FG676I	AX500-FG676I	
APA1000-FGG1152	A3PE1500-FG676	AX500-FG676M	
APA1000-FGG1152I	A3PE1500-FG676I	AX500-1FGG676	
	A3PE1500-1FGG676	AX500-1FGG676I	
	A3PE1500-1FGG676I	AX500-1FGG676M	
	A3PE1500-2FGG676	AX500-2FGG676	

A3PE1500-2FGG676I	AX500-2FGG676I	
A3PE1500-FGG676	AX500-FGG676	
A3PE1500-FGG676I	AX500-FGG676I	
	AX500-FGG676M	

# Appendix B: Additional Devices to be Supported from ATK4 to ATP3

APA1000-FG896	APA750-FG896
APA1000-FG896A	APA750-FG896A
APA1000-FG896I	APA750-FG896I
APA1000-FG896M	APA750-FGG896A
APA1000-FGG896	APA750-FGG896I
APA1000-FGG896A	
APA1000-FGG896I	
APA1000-FGG896M	



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