



PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT 1 - PCN # : A1207-05

PCN Type: Change of Assembly Location

Data Sheet Change: N/A. No change to the moisture performance of the packages.

Detail Of Change:

This notification is to advise our customers of the change of Assembly location from Unisem Batam, Indonesia (PTU) to Amkor Philippines (ATP) for PQFP-208 package and to Amkor Korea (ATK) for various SBGA packages (pin count 288, 320, 420 and 500). Both ATP and ATK are presently the qualified IDT Subcontractors.

The material set details of the current and new Assembly location of these packages is shown in the tables below. The die attach and mold compound used at ATP and ATK are qualified IDT materials. There is no change from the existing qualified lead frame material, lead finish, and wire type for this new added assembly site.

PQFP-208 - Qualified Material Sets, by Assembly Subcontractor

Material Set / Assembly	PTU - Unisem Batam, Indonesia	ATP - Amkor, Philippines
Die Attach	8361	3230
Mold Compound	G700	G700

SBGA-288, SBGA-320, SBGA-420, SBGA-500 - Qualified Material Sets, by Assembly Subcontractor

Material Set / Assembly	PTU - Unisem Batam, Indonesia	ATK - Amkor, Korea
Die Attach	EN4900	AMK-02
Mold Compound	CB0260 & FP4451	CB0260 & FP4451



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Qualification Information and Qualification Data:

Affected Packages: PQFP-208

Assembly Material: The affected package types are using ATP standard materials shown on page 1 of this attachment. Qualification testing was completed on the worse case package.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests¹

Qualification Vehicle: PQFP-240

Test Description	Test Method	Test Results (Rej / SS)		
¹ HAST - unbiased (130 °C/85% RH, 96 Hrs)	JESD22-A110	0 / 77	0 / 77	0 / 77
¹ Temperature Cycling (-65°C to 150°C, 500 cycles)	JESD22-A104	0 / 77	0 / 77	0 / 77
High Temperature Storage Test (150°C, 1000 hours)	JESD22-A103	0 / 77	0 / 77	0 / 77
Moisture Sensitivity Classification (MSL 3, 245 °C)	J-STD-020	0 / 77	0 / 77	0 / 77

Notes: 1. Tests were subjected to Preconditioning per JESD22-A113 @ MSL 3, 245 °C



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Qualification Information and Qualification Data:

Affected Packages: SBGA-288, SBGA-320, SBGA-420, SBGA-500

Assembly Material: The affected package types are using ATK standard materials shown on page 1 of this attachment. Qualification testing was completed on the worse case package.

Qual Plan & Results: Tests are in accordance with JEDEC47 recommended tests¹

Qualification Vehicle: SBGA-500

Test Description	Test Method	Test Results (Rej / SS)
¹ HAST - unbiased (130 °C/85% RH, 96 Hrs)	JESD22-A118	0 / 25
¹ Temperature Cycling (-55°C to 125°C, 700 cycles)	JESD22-A104	0 / 25
High Temperature Storage Test (150°C, 1000 hours)	JESD22-A103	0 / 25
Moisture Sensitivity Classification (MSL 3, 260 °C)	J-STD-020	0 / 25
Physical Dimensions	JESD22-B100	0 / 30
External Visual Inspection	JESD22-B101	0 / 25
X-ray Examination	MIL-STD-883, M 2015	0 / 45

Notes: 1. Tests were subjected to Preconditioning per JESD22-A113 @ MSL 3, 260 °C



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ATTACHMENT 2 - PCN # : A1207-05

Affected Part Number

Part Number	Part Number	Part Number	Part Number
70T3519L133DR	70T651L12DRI	70V3569L6DR	70V3579S5DRG
70T3519L133DR8	70T651L12DRI8	70V3569L6DR8	70V3579S5DRGI
70T3519L166DR	70T651L15DR	70V3569L6DR9	70V3579S5DRGI8
70T3519L166DR8	70T651L15DR8	70V3569L6DRI	70V3579S5DRI
70T3519L166DRI	70T651L15DRI	70V3569L6DRI8	70V3579S5DRI8
70T3519L166DRI8	70T651L15DRI8	70V3569L6DRI9	70V3579S5DRI9
70T3519L200DR	70T651L8DR	70V3569S4DR	70V3579S6DR
70T3519L200DR8	70T651L8DR8	70V3569S4DR8	70V3579S6DR8
70T3519S133DR	70T651S10DR	70V3569S4DR9	70V3579S6DR9
70T3519S133DR8	70T651S10DR8	70V3569S4DRG	70V3579S6DRI
70T3519S133DRI	70T651S10DRI	70V3569S4DRG8	70V3579S6DRI8
70T3519S133DRI8	70T651S10DRI8	70V3569S4DRI	70V3579S6DRI9
70T3519S166DR	70T651S12DR	70V3569S4DRI8	70V3589L133DR
70T3519S166DR8	70T651S12DR8	70V3569S4DRI9	70V3589L133DR8
70T3519S166DRG	70T651S12DRI	70V3569S5DR	70V3589L133DR9
70T3519S166DRI	70T651S12DRI8	70V3569S5DR8	70V3589L166DR
70T3519S166DRI8	70T651S15DR	70V3569S5DR9	70V3589L166DR8
70T3519S200DR	70T651S15DR8	70V3569S5DRI	70V3589L166DR9
70T3519S200DR8	70T651S15DRI	70V3569S5DRI8	70V3589L200DR
70T3589L133DRI	70T651S15DRI8	70V3569S5DRI9	70V3589L200DR8
70T3589L133DRI8	70T651S8DR	70V3569S6DR	70V3589L200DR9
70T3589L166DR	70T651S8DR8	70V3569S6DR8	70V3589S100DR
70T3589L166DR8	70T659L10DR	70V3569S6DR9	70V3589S100DR8
70T3589L166DRI	70T659L10DR8	70V3569S6DRI	70V3589S100DR9
70T3589L166DRI8	70T659L12DR	70V3569S6DRI8	70V3589S133DR
70T3589L200DR	70T659L12DR8	70V3569S6DRI9	70V3589S133DR8
70T3589L200DR8	70T659L15DR	70V3579L4DR	70V3589S133DR9
70T3589S133DR	70T659L15DR8	70V3579L4DR8	70V3589S133DRG
70T3589S133DR8	70T659L8DR	70V3579L4DR9	70V3589S133DRG8
70T3589S133DRI	70T659L8DR8	70V3579L4DRI	70V3589S133DRGI
70T3589S133DRI8	70T659S10DR	70V3579L4DRI8	70V3589S133DRGI8
70T3589S166DR	70T659S10DR8	70V3579L5DR	70V3589S133DRI
70T3589S166DR8	70T659S12DR	70V3579L5DR8	70V3589S133DRI8
70T3589S166DRI	70T659S12DR8	70V3579L5DR9	70V3589S133DRI9
70T3589S166DRI8	70T659S15DR	70V3579L5DRI	70V3589S166DR
70T3589S200DR	70T659S15DR8	70V3579L5DRI8	70V3589S166DR8
70T3589S200DR8	70T659S8DR	70V3579L6DR	70V3589S166DR9
70T3589S200DRI	70T659S8DR8	70V3579L6DR8	70V3589S166DRG
70T3589S200DRI8	70V3569L4DR	70V3579L6DR9	70V3589S166DRG8
70T3589S225DRI	70V3569L4DR8	70V3579S4DR	70V3589S166DRGI
70T3589S225DRI8	70V3569L4DR9	70V3579S4DR8	70V3589S200DR
70T3599S133DR	70V3569L4DRI	70V3579S4DR9	70V3589S200DR8
70T3599S166DR	70V3569L4DRI8	70V3579S4DRG	70V3589S200DR9
70T3599S200DR	70V3569L4DRI9	70V3579S4DRG8	70V3589S83DR
70T651L10DR	70V3569L5DR	70V3579S4DRI	70V3589S83DR8
70T651L10DR8	70V3569L5DR8	70V3579S4DRI8	70V3589S83DR9
70T651L10DRI	70V3569L5DR9	70V3579S4DRI9	70V3599L133DR
70T651L10DRI8	70V3569L5DRI	70V3579S5DR	70V3599L133DR8
70T651L12DR	70V3569L5DRI8	70V3579S5DR8	70V3599L133DR9
70T651L12DR8	70V3569L5DRI9	70V3579S5DR9	70V3599L166DR



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Affected Part Number

Part Number	Part Number	Part Number	Part Number
70V3599L166DR8	70V657S15DR	70V659L12DR	70V7519S166DR9
70V3599L166DR9	70V657S15DR8	70V659L12DR8	70V7519S166DRI
70V3599L200DR	70V657S15DR9	70V659L12DR9	70V7519S166DRI8
70V3599L200DR8	70V657S15DRI	70V659L12DRI	70V7519S200DR
70V3599L200DR9	70V657S8DR	70V659L12DRI8	70V7519S200DR8
70V3599S100DR	70V657S8DR8	70V659L15DR	70V7519S200DR9
70V3599S100DR8	70V657S8DR9	70V659L15DR8	70V7589S133DR
70V3599S100DR9	70V658L10DR	70V659L15DR9	70V7589S133DR8
70V3599S133DR	70V658L10DR8	70V659L8DR	70V7589S133DR9
70V3599S133DR8	70V658L10DR9	70V659L8DR8	70V7589S166DR
70V3599S133DR9	70V658L10DRG	70V659L8DR9	70V7589S166DR8
70V3599S133DRG	70V658L10DRG8	70V659LDRI	70V7589S166DR9
70V3599S133DRGI	70V658L12DR	70V659LDRI8	70V7589S200DR
70V3599S133DRI	70V658L12DR8	70V659S10DR	70V7589S200DR8
70V3599S133DRI8	70V658L12DR9	70V659S10DR8	70V7589S200DR9
70V3599S133DRI9	70V658L12DRG	70V659S10DR9	70V7599S133DR
70V3599S166DR	70V658L12DRG8	70V659S10DRG	70V7599S133DR8
70V3599S166DR8	70V658L15DRG	70V659S10DRG8	70V7599S133DR9
70V3599S166DR9	70V658L15DRG8	70V659S10DRGI	70V7599S166DR
70V3599S166DRG	70V658L8DR	70V659S12DR	70V7599S166DR8
70V3599S166DRI	70V658L8DR8	70V659S12DR8	70V7599S166DR9
70V3599S166DRI8	70V658L8DR9	70V659S12DR9	70V7599S200DR
70V3599S166DRI9	70V658N10DR	70V659S12DRGI	70V7599S200DR8
70V3599S200DR	70V658N10DR8	70V659S12DRGI8	70V7599S200DR9
70V3599S200DR8	70V658N10DR9	70V659S12DRI	72V71660DR
70V3599S200DR9	70V658S10DR	70V659S12DRI8	72V71660DR8
70V3599S83DR	70V658S10DR8	70V659S15DR	72V71660DRG
70V3599S83DR8	70V658S10DR9	70V659S15DR8	72V71660DRG8
70V3599S83DR9	70V658S10DRG	70V659S15DR9	82V2048EDR
70V657L10DR	70V658S10DRG8	70V659S15DRGI	82V2048EDR8
70V657L10DR8	70V658S12DR	70V659S8DR	82V9638DR
70V657L10DR9	70V658S12DR8	70V659S8DR8	82V9638DRG
70V657L12DR	70V658S12DR9	70V659S8DR9	89H16T4BG2ZABXG
70V657L12DR8	70V658S12DRG	70V7519L100DR	89H16T4BG2ZABXG8
70V657L12DR9	70V658S12DRG8	70V7519L100DR8	89H16T4BG2ZBBXG
70V657L12DRI	70V658S12DRI	70V7519L133DR	89H16T4BG2ZBBXG8
70V657L12DRI8	70V658S12DRI8	70V7519L133DR8	89HA0324APSZGBXG
70V657L8DR	70V658S15DR	70V7519L166DR	89HA0324APSZGBXG8
70V657L8DR8	70V658S15DR8	70V7519L166DR8	89HA0324PSYDBXG
70V657L8DR9	70V658S15DR9	70V7519L200DR	89HA0716PSZHBX
70V657S10DR	70V658S15DRG	70V7519L200DR8	89HA0716PSZHBX8
70V657S10DR8	70V658S15DRG8	70V7519S100DR	89HA0716PSZHBXG
70V657S10DR9	70V658S8DR	70V7519S100DR8	89HA0716PSZHBXG8
70V657S10DRG	70V658S8DR8	70V7519S133DR	89HPES16T4G2ZABX
70V657S10DRG8	70V658S8DR9	70V7519S133DR8	89HPES16T4G2ZABX8
70V657S12DR	70V659L10DR	70V7519S133DR9	89HPES16T4G2ZABXG
70V657S12DR8	70V659L10DR8	70V7519S133DRI	89HPES16T4G2ZABXG8
70V657S12DR9	70V659L10DR9	70V7519S133DRI8	89HPES16T4G2ZABXGI
70V657S12DRI	70V659L10DRI	70V7519S166DR	89HPES16T4G2ZABXI
70V657S12DRI8	70V659L10DRI8	70V7519S166DR8	89HPES16T4G2ZABXI8



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Affected Part Number

Part Number	Part Number	Part Number	Part Number
89HPES16T4G2ZBBX	89HPES24N3A1ZCBXI8	89HPES24N3YDBX	89HPES24T6ZABX
89HPES16T4G2ZBBX8	89HPES24N3A2ZCBX	89HPES24N3YDBXG	89HPES24T6ZABXG
89HPES16T4G2ZBBXG	89HPES24N3A2ZCBX8	89HPES24NT3ZABX	89HPES24T6ZABXGI
89HPES16T4G2ZBBXG8	89HPES24N3A2ZCBXG	89HPES24NT3ZABX8	89HPES24T6ZABXI
89HPES16T4G2ZBBXGI	89HPES24N3A2ZCBXG8	89HPES24NT3ZABXG	89HPES24T6ZCBX
89HPES16T4G2ZBBXI	89HPES24N3A2ZCBXGI	89HPES24NT3ZABXGI	89HPES24T6ZCBXG
89HPES16T4G2ZBBXI8	89HPES24N3A2ZCBXI	89HPES24NT3ZABXI	89HPES24T6ZCBXG8
89HPES16T7BX	89HPES24N3A2ZCBXI8	89HPES24NT3ZABXI8	89HPES24T6ZCBXGI
89HPES16T7BXG	89HPES24N3ABX	89HPES24NT3ZBBX	89HPES24T6ZCBXI
89HPES16T7BXGI	89HPES24N3ABXG	89HPES24NT3ZBBX8	89HPES24T6ZGBX
89HPES16T7BXI	89HPES24N3ABXGI	89HPES24NT3ZBBXG	89HPES24T6ZGBXG
89HPES16T7ZBBX	89HPES24N3ABXI	89HPES24NT3ZBBXG8	89HPES24T6ZGBXGI
89HPES16T7ZBBXG	89HPES24N3AZABX	89HPES24NT3ZBBXGI	89HPES24T6ZGBXI
89HPES16T7ZBBXGI	89HPES24N3AZABXG	89HPES24NT3ZBBXGI8	89HPES32T8BX
89HPES16T7ZBBXI	89HPES24N3AZABXGI	89HPES24NT3ZBBXI	89HPES32T8BXG
89HPES16T7ZDBX	89HPES24N3AZABXI	89HPES24NT3ZBBXI8	89HPES32T8BXGI
89HPES16T7ZDBXG	89HPES24N3AZCBX	89HPES24T61ZCBX	89HPES32T8BXI
89HPES16T7ZDBXGI	89HPES24N3AZCBXG	89HPES24T61ZCBX8	89HPES32T8ZBBX
89HPES16T7ZDBXI	89HPES24N3AZCBXGI	89HPES24T61ZCBXG	89HPES32T8ZBBXG
89HPES16T7ZHBX	89HPES24N3AZCBXI	89HPES24T61ZCBXG8	89HPES32T8ZBBXGI
89HPES16T7ZHBXG	89HPES24N3AZGBX	89HPES24T61ZCBXGI	89HPES32T8ZBBXI
89HPES16T7ZHBXGI	89HPES24N3AZGBXG	89HPES24T61ZCBXGI8	89HPES32T8ZDBX
89HPES16T7ZHBXI	89HPES24N3AZGBXGI	89HPES24T61ZCBXI	89HPES32T8ZDBXG
89HPES24N3A1ZCBX	89HPES24N3AZGBXI	89HPES24T61ZCBXI8	89HPES32T8ZDBXGI
89HPES24N3A1ZCBX8	89HPES24N3BX	89HPES24T6BX	89HPES32T8ZDBXI
89HPES24N3A1ZCBXG	89HPES24N3BXG	89HPES24T6BXG	89HPES32T8ZHBX
89HPES24N3A1ZCBXG8	89HPES24N3YBXG	89HPES24T6BXG8	89HPES32T8ZHBXG
89HPES24N3A1ZCBXGI	89HPES24N3YCBX	89HPES24T6BXGI	89HPES32T8ZHBXGI
89HPES24N3A1ZCBXI	89HPES24N3YCBXG	89HPES24T6BXI	89HPES32T8ZHBXI