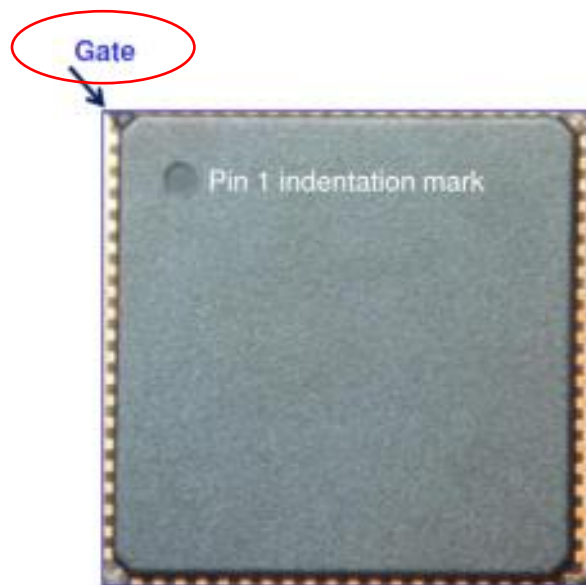
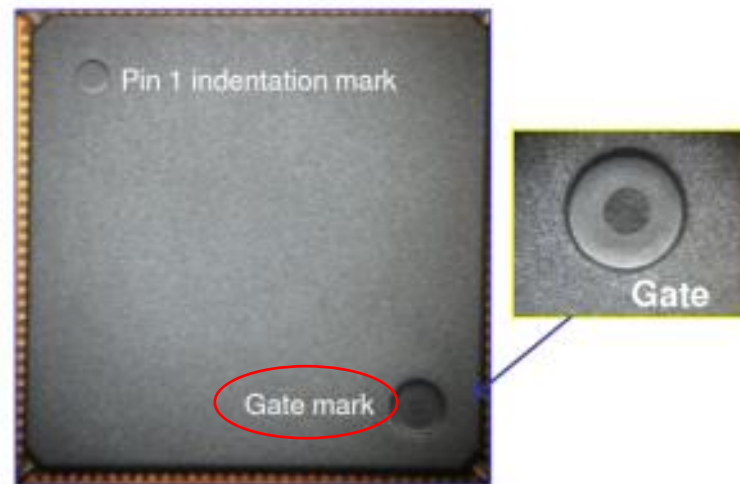


14x14 Mold Compound & Mold Gate Position Change

Change Item	AK1	AP1	Reason for Change
14BD Mold Compound	Sumitomo G700L	Sumitomo G631HQ	AP1 standard
14x14 Mold Gate Position	Package corner	Package top side, opposite corner of Pin 1 mark	AP1 standard



AK1 Example



AP1 Example



Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

Qualification Results Summary of 10x10, 12x12 TQFP_EP Using G700L/8361J at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 32	Pass
Unbiased HAST (uHAST)*	JEDEC JESD22-A118	3 x 32	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 32	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 32	Pass
Electrostatic Discharge Field-Induced Charged Device Model	JEDEC JESD22-C101	3/voltage	Pass 1250 V

*Preconditioned per JEDEC/IPC J-STD-020

Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

14x14 LQFP Using G631HQ/3230 at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 45	Dec. 2015
Autoclave (AC)*	JEDEC JESD22-A102	3 x 45	Dec. 2015
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 45	Dec. 2015
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Dec. 2015
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 45	Dec. 2015

*Preconditioned per JEDEC/IPC J-STD-020



Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

Qualification Results Summary of 14x14 LQFP Using G631HQ/3230/QMI536 at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 45	Pass
Unbiased HAST (uHAST)*	JEDEC JESD22-A118	3 x 45	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 45	Pass
Electrostatic Discharge Field-Induced Charged Device Model	JEDEC JESD22-C101	3/Voltage	Pass 1250 V

*Preconditioned per JEDEC/IPC J-STD-020

Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

14x14 LQFP_EP Using G631HQ/3230 at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	EXPECTED COMPLETION DATE
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 45	Dec. 2015
Autoclave (AC)*	JEDEC JESD22-A102	3 x 45	Dec. 2015
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 45	Dec. 2015
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Dec. 2015
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 45	Dec. 2015

*Preconditioned per JEDEC/IPC J-STD-020



Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

Qualification Results Summary of 14x14 TQFP_EP Using G631HQ/3230 at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 45	Pass
Unbiased HAST (uHAST)*	JEDEC JESD22-A118	3 x 45	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 45	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 45	Pass
Electrostatic Discharge Field-Induced Charged Device Model	JEDEC JESD22-C101	3/voltage	Pass 750 V

*Preconditioned per JEDEC/IPC J-STD-020



Assembly Transfer of Selected 14x14 LQFP, 14x14 LQFP_EP and 7x7,10x10,12x12,14x14 TQFP_EP Products to Amkor Philippines

Qualification Results Summary of 7x7, 10x10, 12x12 TQFP_EP Using G700L/3230 at Amkor Philippines

QUALIFICATION PLAN / STATUS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Temperature Cycle (TC)*	JEDEC JESD22-A104	3 x 32	Pass
Unbiased HAST (uHAST)*	JEDEC JESD22-A118	3 x 32	Pass
Highly Accelerated Stress Test (HAST)*	JEDEC JESD22-A110	3 x 32	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC J-STD-020	3 x 11	Pass
High Temperature Storage Life (HTSL)	JEDEC JESD22-A103	1 x 32	Pass
Electrostatic Discharge Field-Induced Charged Device Model	JEDEC JESD22-C101	3/voltage	Pass 500 V

*Preconditioned per JEDEC/IPC J-STD-020