

**Automotive Qualification Results Summary of 10x10 TQFP_EP
Using G700L/3230 at Amkor Philippines**

QUALIFICATION RESULTS			
TEST	SPECIFICATION	SAMPLE SIZE	RESULTS
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 77	Pass
Unbiased HAST (uHAST)*	JEDEC <i>JESD22-A102</i>	3 x 77	Pass
Solder Heat Resistance (SHR)*	JEDEC/IPC <i>J-STD-020</i>	3 x 11	Pass
High Temperature Storage Life (HTSL)	JEDEC <i>JESD22-A103</i>	1 x 45	Pass
Electrostatic Discharge <i>Field-Induced Charged Device Model</i>	JEDEC <i>JESD22-C101</i>	3/Voltage	Pass 750V
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3 x 77	Pass

* These samples were subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test. Level 3 preconditioning consists of the following: 1. Bake – 24 hours at 125°C; 2. Soak – unbiased soak for 192 hours at 30°C, 60%RH; 3. Reflow – three passes through a reflow oven with a peak temperature of 260°C. TC samples were subjected to wire-pull test after 500 cycles with results within specification limits.

FG Model	Pkg Type	Body Size	PkgLead Count	WIRE DIA. (BEFORE)	WIRE DIA. (AFTER)	EPOXY (BEFORE)	EPOXY (AFTER)	MOLD (BEFORE)	MOLD (AFTER)	MOLD GATE POSITION (BEFORE)	MOLD GATE POSITION (AFTER)
AD8284WCSVZ	TQFP_EP	10X10X1.0	64	1	1	3230	3230	G700L	G700L	Pkg Corner	Pkg Corner
AD8284WCSVZ-RL	TQFP_EP	10X10X1.0	64	1	1	3230	3230	G700L	G700L	Pkg Corner	Pkg Corner
ADAU1442YSVZ-3A	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADAU1442YSVZ-3A-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80001YSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80001YSVZ-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80009BSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80009BSVZ-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80000YSVZ	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark
ADW80000YSVZ-RL	TQFP_EP	14X14X1.0	100	1	1	3230	3230	G700L	G631HQ	Pkg Corner	Package top side, opposite corner of Pin 1 mark

Automotive 14x14 TQFP_EP Using G631HQ/3230 at Amkor Philippines

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

* These samples will be subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test. Level 3 preconditioning consists of the following: 1. Bake – 24 hours at 125°C; 2. Soak – unbiased soak for 192 hours at 30°C, 60%RH; 3. Reflow – three passes through a reflow oven with a peak temperature of 260°C. TC samples will be subjected to wire-pull test after 500 cycles