

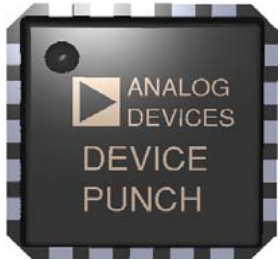

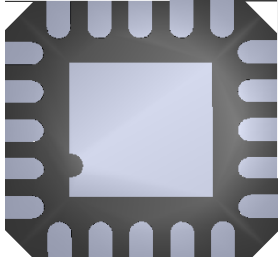
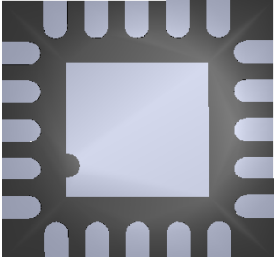


Bill of Materials and Package Configuration

Material	FROM	TO	Remarks
	Amkor - Korea	Amkor - Philippines	
Die Attach	Ablestik 8290	Ablestik 3230	Same Resin Base
Wire	Au	Au	Same
Mold Compound	Sumitomo G700	Sumitomo G700	Same
Leadframe	C194	C194	Same
Package: Side			Punch: Flange Sawn: Square
Top			Sawn: • Pin 1 is Laser Marked • Square Edge
Bottom			Same Foot Print

Package Outline Drawing (POD) Dimensional Analysis

Body Size (mm)	Lead Count	Punch Type LFCSP				Sawn Type LFCSP			
		POD Spec	E-Pad Size (mm SQ.)	Lead Length (mm)	Lead Width (mm)	POD Spec	E-Pad Size (mm SQ.)	Lead Length (mm)	Lead Width (mm)
6 x 6	36	CP 36-1	3.7 ± 0.15	0.60 ^{+0.15} _{-0.10}	0.28 ^{+0.07} _{-0.05}	CP 36-4	3.7 ^{+0.15} _{-0.10}	0.60 ^{+0.15} _{-0.10}	0.23 ^{+0.07} _{-0.05}
	40	CP 40-8	3.1 ± 0.15	0.40 ± 0.10	0.23 ^{+0.07} _{-0.05}	CP 40-16	3.1 ± 0.15	0.40 ± 0.10	0.23 ^{+0.07} _{-0.05}
		CP 40-1	4.1 ± 0.15	0.40 ± 0.10	0.23 ^{+0.07} _{-0.05}	CP 40-9	4.1 ± 0.15	0.40 ± 0.10	0.25 ^{+0.05} _{-0.07}
7 x 7	48	CP 48-3	4.1 ± 0.15	0.40 ± 0.10	0.23 ^{+0.07} _{-0.05}	CP 48-5	4.1 ± 0.15	0.40 ± 0.05	0.23 ^{+0.07} _{-0.05}
		CP 48-1	5.1 ± 0.15	0.40 ± 0.10	0.23 ^{+0.07} _{-0.05}	CP 48-4	5.1 ± 0.10	0.40 ± 0.05	0.23 ^{+0.07} _{-0.05}

Reliability Qualification Results of Sawn LFCSP package using Sumitomo G700/Ablestik 3230 at Amkor Philippines

QUALIFICATION RESULTS OF LFCSP			
TEST	CONDITIONS	SAMPLE SIZE	RESULTS
Highly Accelerated Stress Test (HAST)*	JEDEC <i>JESD22-A110</i>	3 x 77	Pass
Temperature Cycle (TC)*	JEDEC <i>JESD22-A104</i>	3 x 77	Pass
Autoclave (AC)*	JEDEC <i>JESD22-A102</i>	3 x 77	Pass
Solder Heat Resistance (SHR)*	<i>JEDEC/IPC J-STD-020</i>	3 x 11	Pass

*These samples were subjected to preconditioning (per J-STD-020 Level 3) prior to the start of the stress test. Level 1 preconditioning consists of the following: Bake: 24 hrs @ 125°C, Soak: Unbiased Soak: 192 hrs @ 30°C, 60%RH, Reflow: 3 passes through an oven with a peak temperature of 260°C. TCT samples passed wire-pull test post 500cycles.