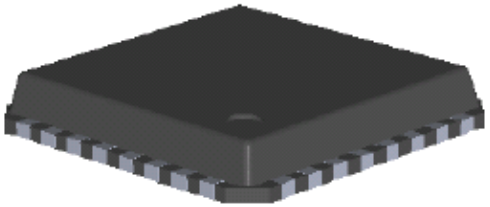
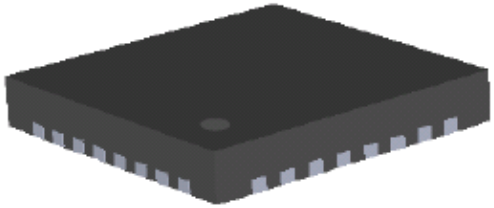
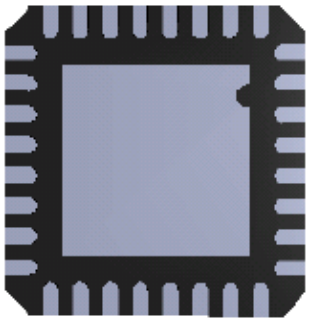
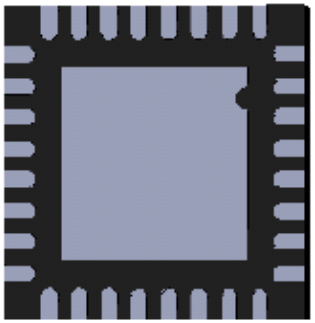
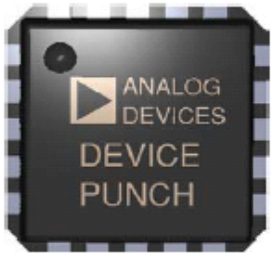
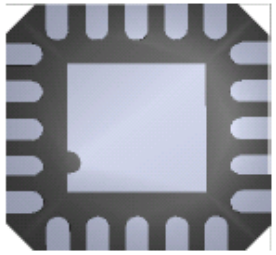
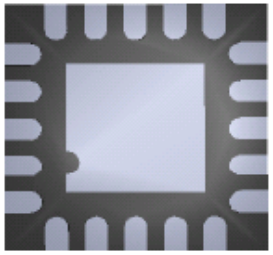
Bill of Materials

Package	Body Size	Material	Amkor	ASE-Korea	Remarks
LFCSP	7x7 mm 5x5 mm	Die Attach	Ablestik 8290	Hitachi EN-4900GC	
		Wire	1.0 mil	0.8/1.0 mil	
		Mold Compound	Sumitomo G700	Sumitomo G700	Same
		Leadframe	C194	C194	Same
	4x4 mm	Die Attach	Ablestik 8290	Ablestik 8290	Same
		Wire	1.0 mil	0.8/1.0 mil	
		Mold Compound	Sumitomo G700	Sumitomo G700	Same
		Leadframe	C194	C194	Same

Package Outline (Punch & Sawn LFCSP)

COMPARISON	CURRENT	NEW	REMARKS
Package	Punch	Sawn	
Figure			Punch has flange edges. Sawn has sharp square edges.
Thickness	0.85 mm (Nom.) 	0.75 mm (Nom.) 	Sawn is Thinner
Foot Print			Lead width and length dimensions and tolerances are the same.

Bill of Materials and Package Configuration

Material	FROM Amkor - Korea	TO Amkor - Philippines	Remarks
Die Attach	Ablestik 8290	Ablestik 8290	Same
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 48-10	5.1 ±0.10	0.40 ±0.05	0.23 +0.07 -0.05

Reliability Qualification Report Summary of LFCSP package at ATP

QUALIFICATION RESULTS OF LFCSP			
TEST	CONDITIONS	SAMPLE SIZE	RESULTS
Highly Accelerated Stress Test (HAST)*	JEDEC *JESD22-A110*	3 x 77	Pass
Temperature Cycle (TC)*	JEDEC *JESD22-A104*	3 x 77	Pass
Autoclave (AC)*	JEDEC *JESD22-A102*	3 x 77	Pass
Solder Heat Resistance (SHR)*	*JEDEC/IPC J-STD-020*	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 @ 125ºC, Soak: Unbiased Soak: 192 hrs @ 30ºC, 60%RH, Reflow: 3 passes through an oven with a peak temperature of 260ºC. TCT samples passed wire-pull test post 500cycles.