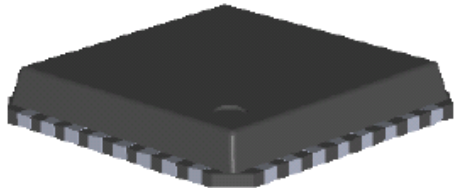
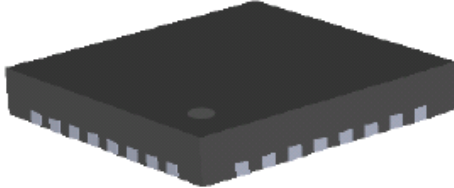


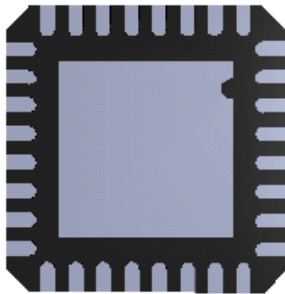
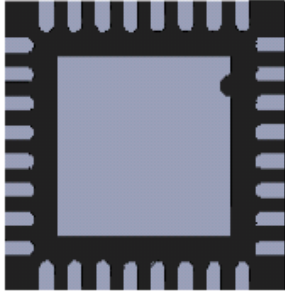










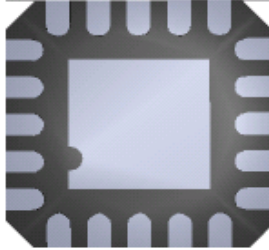
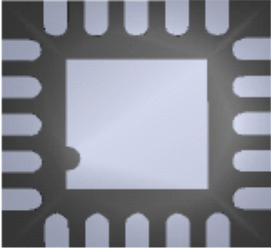
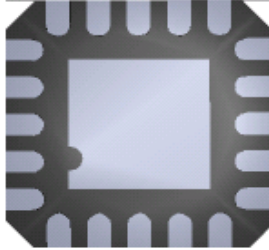
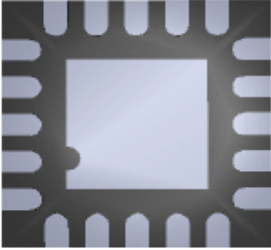
## Bill of Materials:

Package	Body Size	Material	Amkor	ASE-Korea	Remarks
LFCSP	7x7 mm	Die Attach	Ablestik 8290	Hitachi EN-4900GC	
		Wire	1.0 mil	0.8/1.0 mil	
	5x5 mm	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 and 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		TO		Remarks
	Amkor - Korea	Amkor - Philippines	Amkor - Korea	Amkor - Philippines	
Die Attach	Ablestik 8290	Ablestik 8290	Ablestik 8290	Ablestik 8290	Same
Wire	Au	Au	Au	Au	Same
Mold Compound	Sumitomo G700	Sumitomo G700	Sumitomo G700	Sumitomo G700	Same
Leadframe	C194	C194	C194	C194	Same
<b>Package:</b> Side					<b>Punch:</b> Flange <b>Sawn:</b> Square
Top					<b>Sawn:</b> • Pin 1 is Laser Marked • Square Edge
Bottom					Same Foot Print

## Reliability Qualification Results of 4x4 sawn LFCSP package at ATP

QUALIFICATION RESULTS			
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)*	JEDEC/IPC <i>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.