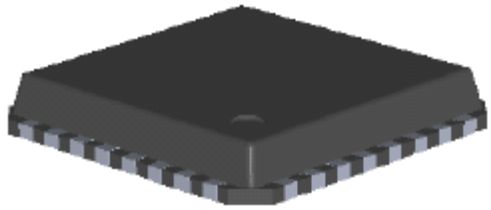
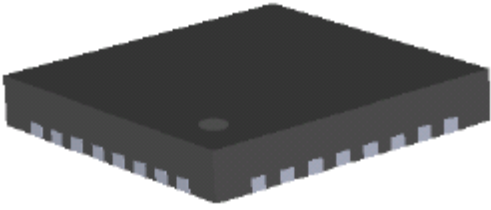


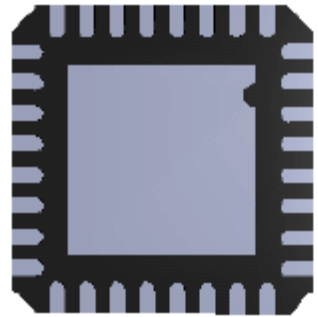
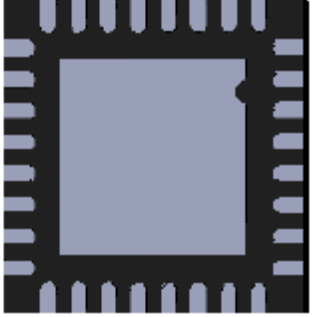


Bill of Materials

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.

Package Outline Drawing of Punch Type and Corresponding Sawn Type

Body Size (mm)	Lead Count	E-Pad Size (mm)	Punch Type POD	Sawn Type POD
4x4	20	2.10x2.10	CP-20-1	CP-20-6
5x5	32	3.10x3.10	CP-32-2	CP-32-7
7x7	48	4.10x4.10	CP-48-3	CP-48-5

NOTE: POD drawing are found in <http://www.analog.com>

Reliability Qualification Results of 5x5 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.