

## 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.

Qualification Data for LFCSP Devices at ASE Korea

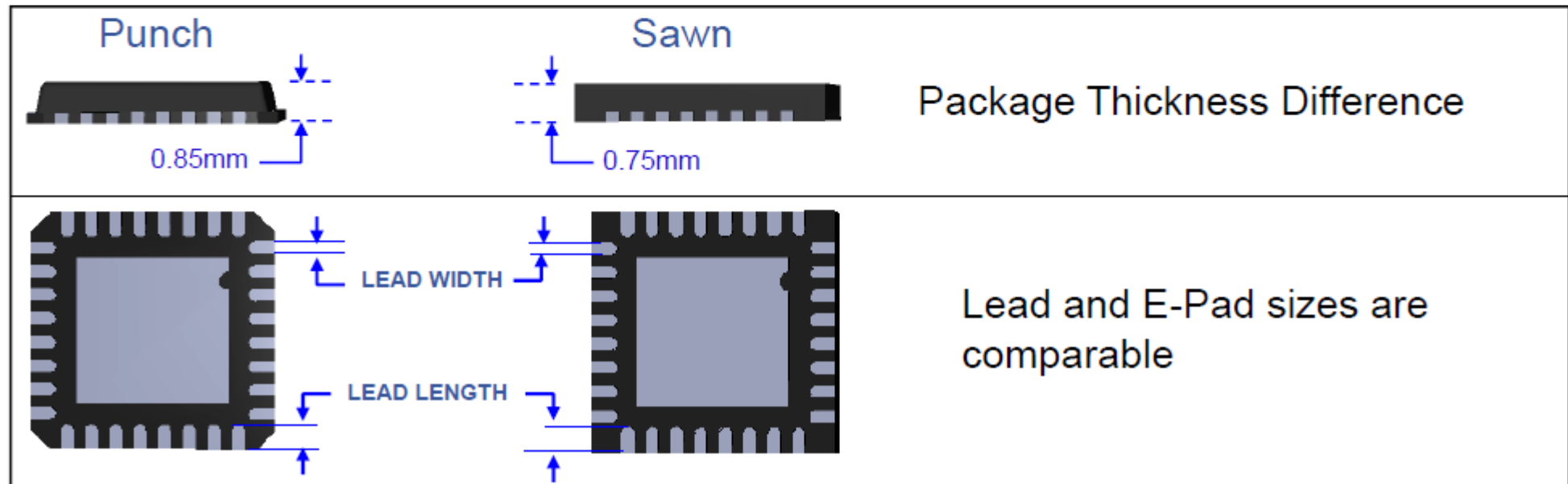
QUALIFICATION RESULTS 48-LFCSP			
TEST	CONDITIONS	SAMPLE SIZE (LOT/QTY)	RESULTS
High Temperature Storage (HTS)	JESD22-A103, 150°C, 1000 hours	1 x 45	Pass
Temperature Cycle*	JESD22-A104, -65°C to +150°C, 2 cycle per hour, 500 cycles	3 x 77	Pass
Biased HAST *	JESD22-A110, 130°C, 85% RH, 96hrs	3 x 77	Pass
Autoclave*	JESD22-A102, 121°C, 100% RH, 96hrs	3 x 77	Pass
Solder Heat Resistance (SHR)*	ADI-0049	3 x 15	Pass
Electrostatic Discharge (ESD) Field Induced Charged Device Model (FICDM)	JESD22-C101, >500V	1 x 3	Pass

QUALIFICATION RESULTS 20-LFCSP			
TEST	CONDITIONS	SAMPLE SIZE (LOT/QTY)	RESULTS
High Temperature Storage (HTS)	JESD22-A103, 150°C, 1000 hours	1 x 40	Pass
Temperature Cycle*	JESD22-A104, -65°C to +150°C, 2 cycle per hour, 500 cycles	3 x 77	Pass
Biased HAST *	JESD22-A110, 130°C, 85% RH, 96hrs	3 x 77	Pass
Autoclave*	JESD22-A102, 121°C, 100% RH, 96hrs	3 x 77	Pass
Solder Heat Resistance (SHR)*	ADI-0049	3 x 15	Pass
Electrostatic Discharge (ESD) Field Induced Charged Device Model (FICDM)	JESD22-C101, >1500V	1 x 3	Pass

\*Preconditioned per JEDEC/IPC J-STD-020 MSL 3

# Package Dimensional Differences (Punch vs. Sawn)

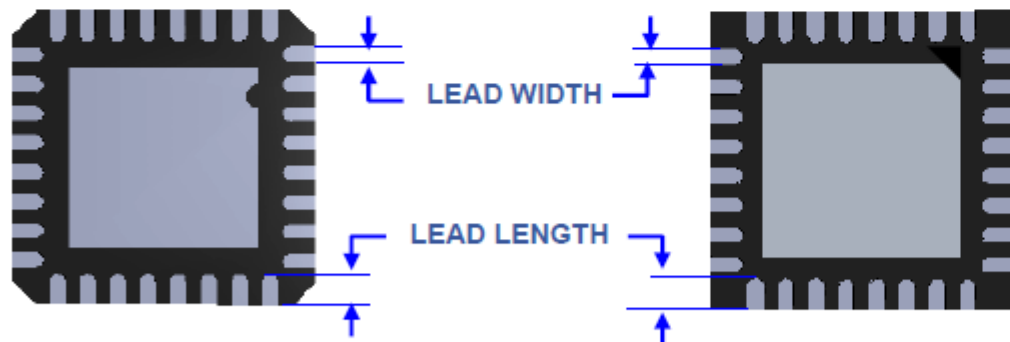
Body Size (mm)	Lead Count	Punch Type LFCSP Amkor-Korea (AK1)				Sawn Type LFCSP ASE-Korea (AEK)			
		POD Spec	E-Pad Size (mm SQ.)	Lead Length (mm)	Lead Width (mm)	POD Spec	E-Pad Size (mm SQ.)	Lead Length (mm)	Lead Width (mm)
4x4	20	CP 20-1	2.1 ± 0.15	0.60 <sup>+0.15</sup> <sub>-0.10</sub>	0.23 <sup>+0.07</sup> <sub>-0.05</sub>	CP 20-6	2.1 ± 0.10	0.60 ± 0.05	0.25 <sup>+0.05</sup> <sub>-0.07</sub>
5x5	32	CP 32-2	3.1 ± 0.15	0.40 ± 0.10	0.23 <sup>+0.07</sup> <sub>-0.05</sub>	CP 32-7	3.1 ± 0.15	0.40 ± 0.10	0.25 <sup>+0.05</sup> <sub>-0.07</sub>
7x7	48	CP 48-3	4.1 ± 0.15	0.40 ± 0.10	0.23 <sup>+0.07</sup> <sub>-0.05</sub>	CP 48-5	4.1 ± 0.10	0.40 ± 0.05	0.23 <sup>+0.07</sup> <sub>-0.05</sub>



# Package Dimensional Differences (Punch versus Sawn)



**Package Thickness Difference**



Aside from Epad dimension, change in Lead Width and Length may affect the Package to PCB solder contact. Maintaining the same dimensions avoids any risk.

Bottom Package Pin 1 indicator  
Change from half Moon to Chamfered Corner

**Analog Devices, Inc. PCN Material Report (Proprietary Information)**

GENERIC NUMBER	MATERIAL NUMBER	WIRE DIAMETER	GENERIC NUMBER	MATERIAL NUMBER	WIRE DIAMETER
AD53538	ADCMP567BCPZ	1 mil	ADF4110	ADF4110BCPZ-RL	1 mil
AD5424	AD5424YCPZ	0.8 mil	ADF4110	ADF4110BCPZ-RL7	1 mil
AD5424	AD5424YCPZ-REEL7	0.8 mil	ADF4112	ADF4112BCPZ	1 mil
AD5445	AD5445YCPZ	0.8 mil	ADF4112	ADF4112BCPZ-RL	1 mil
AD7490	AD7490BCPZ	1 mil	ADF4112	ADF4112BCPZ-RL7	1 mil
AD7490	AD7490BCPZ-REEL7	1 mil	ADF4113HV	ADF4113HVBCPZ	1 mil
AD7625	AD7625BCPZ	1 mil	ADF4113HV	ADF4113HVBCPZ-RL	1 mil
AD7625	AD7625BCPZRL7	1 mil	ADF4113HV	ADF4113HVBCPZ-RL7	1 mil
AD7626	AD7626BCPZ	1 mil	ADF4154	ADF4154BCPZ	1 mil
AD7626	AD7626BCPZ-RL7	1 mil	ADF4154	ADF4154BCPZ-RL	1 mil
AD8376	AD8376ACPZ-R7	1 mil	ADF4154	ADF4154BCPZ-RL7	1 mil
AD9235	AD9235BCPZ-40	1 mil	ADF4156	ADF4156BCPZ	1 mil
AD9235	AD9235BCPZRL7-40	1 mil	ADF4156	ADF4156BCPZ-RL	1 mil
AD9236	AD9236BCPZ-80	1 mil	ADF4156	ADF4156BCPZ-RL7	1 mil
AD9236	AD9236BCPZRL7-80	1 mil	ADF4157	ADF4157BCPZ	1 mil
AD9237	AD9237BCPZ-40	1 mil	ADF4157	ADF4157BCPZ-RL	1 mil
AD9237	AD9237BCPZ-65	1 mil	ADF4157	ADF4157BCPZ-RL7	1 mil
AD9237	AD9237BCPZRL7-40	1 mil	ADF4212L	ADF4212LBCPZ	1 mil
AD9237	AD9237BCPZRL7-65	1 mil	ADF4212L	ADF4212LBCPZ-RL	1 mil
AD9245	AD9245BCPZ-20	1 mil	ADF4212L	ADF4212LBCPZ-RL7	1 mil
AD9245	AD9245BCPZ-40	1 mil	ADF4360-5	ADF4360-5BCPZ	1 mil
AD9245	AD9245BCPZ-65	1 mil	ADF4360-5	ADF4360-5BCPZRL	1 mil
AD9245	AD9245BCPZ-80	1 mil	ADF4360-5	ADF4360-5BCPZRL7	1 mil
AD9245	AD9245BCPZRL7-20	1 mil	ADF7021-V	ADF7021-VBCPZ	1 mil
AD9245	AD9245BCPZRL7-40	1 mil	ADF7021-V	ADF7021-VBCPZ-RL	1 mil
AD9245	AD9245BCPZRL7-65	1 mil	ADF7025	ADF7025BCPZ	1 mil
AD9245	AD9245BCPZRL7-80	1 mil	ADF7025	ADF7025BCPZ-RL	1 mil
AD9552	AD9552BCPZ	1 mil	ADF7025	ADF7025BCPZ-RL7	1 mil
AD9552	AD9552BCPZ-REEL7	1 mil	ADG2108	ADG2108BCPZ-HS-RL7	1 mil
AD9629	AD9629BCPZ-40	0.8 mil	ADG2128	ADG2128BCPZ-HS-RL7	1 mil
AD9629	AD9629BCPZRL7-40	0.8 mil	ADG2128	ADG2128BCPZ-REEL	1 mil
AD9742	AD9742ACPZ	1 mil	ADG2128	ADG2128BCPZ-REEL7	1 mil
AD9742	AD9742ACPZRL7	1 mil	ADG2128	ADG2128YCPZ-REEL	1 mil
AD9744	AD9744ACPZ	1 mil	ADG2128	ADG2128YCPZ-REEL7	1 mil
AD9744	AD9744ACPZRL7	1 mil	ADG3245	ADG3245BCPZ	1 mil
AD9748	AD9748ACPZ	1 mil	ADG758	ADG758BCPZ	1 mil
AD9748	AD9748ACPZRL7	1 mil	ADG758	ADG758BCPZ-REEL7	1 mil
ADF4002	ADF4002BCPZ	0.8 mil	ADG759	ADG759BCPZ	1 mil
ADF4002	ADF4002BCPZ-RL	0.8 mil	ADG759	ADG759BCPZ-REEL	1 mil
ADF4002	ADF4002BCPZ-RL7	0.8 mil	ADG759	ADG759BCPZ-REEL7	1 mil
ADF4007	ADF4007BCPZ	1 mil	ADG781	ADG781BCPZ	1 mil
ADF4007	ADF4007BCPZ-RL	1 mil	ADG781	ADG781BCPZ-REEL	1 mil
ADF4007	ADF4007BCPZ-RL7	1 mil	ADG781	ADG781BCPZ-REEL7	1 mil
ADF4108	ADF4108BCPZ	1 mil	ADG782	ADG782BCPZ	1 mil
ADF4108	ADF4108BCPZ-RL	1 mil	ADG782	ADG782BCPZ-REEL7	1 mil
ADF4108	ADF4108BCPZ-RL7	1 mil	ADG783	ADG783BCPZ	1 mil
ADF4110	ADF4110BCPZ	1 mil	ADG783	ADG783BCPZ-REEL	1 mil



Analog Devices, Inc. PCN Material Report (Proprietary Information)

GENERIC NUMBER	MATERIAL NUMBER	WIRE DIAMETER
ADG783	ADG783BCPZ-REEL7	1 mil
ADG904	ADG904BCPZ	1 mil
ADG904	ADG904BCPZ-REEL	1 mil
ADG904	ADG904BCPZ-REEL7	1 mil
ADG936	ADG936BCPZ	1 mil
ADG936	ADG936BCPZ-RL	1 mil
ADG936	ADG936BCPZ-RL7	1 mil
ADM3307E	ADM3307EACPZ	0.8 mil
ADM3307E	ADM3307EACPZ-REEL	0.8 mil
ADM3307E	ADM3307EACPZ-REEL7	0.8 mil
ADM3310E	ADM3310EACPZ	0.8 mil
ADM3310E	ADM3310EACPZ-REEL	0.8 mil
ADM3310E	ADM3310EACPZ-REEL7	0.8 mil
ADM3311E	ADM3311EACPZ	0.8 mil
ADM3311E	ADM3311EACPZ-REEL	0.8 mil
ADM3311E	ADM3311EACPZ-REEL7	0.8 mil
ADM3312E	ADM3312EACPZ	0.8 mil
ADM3312E	ADM3312EACPZ-REEL	0.8 mil
ADM3312E	ADM3312EACPZ-REEL7	0.8 mil
ADM3315E	ADM3315EACPZ	0.8 mil
ADM3315E	ADM3315EACPZ-REEL	0.8 mil
ADM3315E	ADM3315EACPZ-REEL7	0.8 mil
ADM8832	ADM8832ACPZ	1 mil
ADM8832	ADM8832ACPZ-REEL	1 mil
ADM8832	ADM8832ACPZ-REEL7	1 mil
ADM8839	ADM8839ACPZ	1 mil
ADM8839	ADM8839ACPZ-REEL	1 mil
ADM8839	ADM8839ACPZ-REEL7	1 mil
ADN2805	ADN2805ACPZ	1 mil

GENERIC NUMBER	MATERIAL NUMBER	WIRE DIAMETER
ADN2805	ADN2805ACPZ-500RL7	1 mil
ADN2805	ADN2805ACPZ-RL7	1 mil
ADN2812	ADN2812ACPZ	1 mil
ADN2812	ADN2812ACPZ-RL	1 mil
ADN2812	ADN2812ACPZ-RL7	1 mil
ADN2814	ADN2814ACPZ	1 mil
ADN2814	ADN2814ACPZ-500RL7	1 mil
ADN2814	ADN2814ACPZ-RL7	1 mil
ADN2816	ADN2816ACPZ	1 mil
ADN2816	ADN2816ACPZ-500RL7	1 mil
ADN2816	ADN2816ACPZ-RL7	1 mil
ADN2830	ADN2830ACPZ32	1 mil
ADN2841	ADN2841ACPZ-32	1 mil
ADN2841	ADN2841ACPZ-32-RL	1 mil
ADN2841	ADN2841ACPZ-32-RL7	1 mil
ADN2847	ADN2847ACPZ-32	1 mil
ADN2847	ADN2847ACPZ-32-RL	1 mil
ADN2847	ADN2847ACPZ-32-RL7	1 mil
ADN2848	ADN2848ACPZ-32	1 mil
ADN2848	ADN2848ACPZ-32-RL	1 mil
ADN2848	ADN2848ACPZ-32-RL7	1 mil
ADN8830	ADN8830ACPZ	1 mil
ADN8830	ADN8830ACPZ-REEL	1 mil
ADN8830	ADN8830ACPZ-REEL7	1 mil
ADN8831	ADN8831ACPZ-R2	1 mil
ADN8831	ADN8831ACPZ-REEL7	1 mil
ADRF6510	ADRF6510ACPZ-R7	1 mil
ADRF6516	ADRF6516ACPZ-R7	1 mil